Inquiry into Pediatric Forensic Pathology in Ontario

REPORT

Volume 1 Executive Summary

Volume 2 Systemic Review

Volume 3 Policy and Recommendations

Volume 4 Inquiry Process

The Honourable Stephen T. Goudge
Commissioner

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The Report consists of four volumes: 1 (Executive Summary), 2 (Systemic Review), 3 (Policy and Recommendations), and 4 (Inquiry Process). The table of contents in each volume is complete for that volume and abbreviated for the other three volumes.

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Abbreviations and Acronyms

AAFS	American Academy of Forensic Sciences
ABP	American Board of Pathology
ACGME	Accreditation Council for Graduate Medical Education
AFG	Affected Families Group
AIDWYC	Association in Defence of the Wrongly Convicted
ALST/NAN	Aboriginal Legal Services of Toronto and Nishnawbe Aski Nation Coalition
CAS	children's aid society
CCRC	Criminal Cases Review Commission
CCRG	Criminal Convictions Review Group
CFS	Centre of Forensic Sciences
CFSA	*Child and Family Services Act*
CHEO	Children's Hospital of Eastern Ontario
CIS	coroner's investigation statement
CLA	Criminal Lawyers' Association
CLD	Criminal Law Division
CPSO	College of Physicians and Surgeons of Ontario
CT	computerized tomography
DCI–Canada	Defence for Children International – Canada
DMJ	diploma in medical jurisprudence
DPP	Director of Public Prosecutions
FBI	Federal Bureau of Investigation
FPAC	Forensic Pathology Advisory Committee
FSAC	Forensic Services Advisory Committee
HPARB	Health Professions Appeal and Review Board
HPPC	*Health Professions Procedural Code*
IDG	Interdepartmental Group

LAO	Legal Aid Ontario
LMFFA	Laboratory Medicine Funding Framework Agreement
MCSCS	Ministry of Community Safety and Correctional Services
NAHI	non-accidental head injury
NAME	National Association of Medical Examiners
NAPS	Nishnawbe Aski Police Service
NHS	National Health Service
OACAS	Ontario Association of Children's Aid Societies
OCAA	Ontario Crown Attorneys' Association
OCCO	Office of the Chief Coroner for Ontario
OFPS	Ontario Forensic Pathology Service
OPFPU	Ontario Pediatric Forensic Pathology Unit
OPP	Ontario Provincial Police
PDRC	Paediatric Death Review Committee
PFP	pediatric forensic pathology
PFPU	Provincial Forensic Pathology Unit
SBS	shaken baby syndrome
SCAN	Suspected Child Abuse and Neglect (Program)
SickKids	Hospital for Sick Children
SIDS	sudden infant death syndrome
SUDI	sudden unexpected death in infancy
SUDS	sudden unexplained death syndrome
TPS	Toronto Police Service
VIFM	Victorian Institute of Forensic Medicine

Glossary of Medical Terms

abrasion superficial damage to the skin, generally not deeper than the epidermis (the outermost layer of the skin)

acute of recent origin

anatomical pathology a medical specialty concerned with the diagnosis of disease and gaining additional medical information based on the examination of organs, tissues, and cells

anthropology the scientific study of humans; includes the investigation of human origin and the development of physical, cultural, religious, and social attributes

artefact artificial product; in relation to autopsy, a sign or finding imitating pathology, disease, or injury occurring in life

asphyxia sudden death due to lack of oxygen such as occurs with smothering, suffocation, neck compression (e.g., strangulation), and other modes of interference with oxygen delivery in the body

Asphyxia is a complex and confusing term used in varying ways by different authors. The common notion of asphyxia is that of a mechanical interference of some sort with breathing.

mechanical asphyxia, the common understanding of the term asphyxia; mechanical interference with breathing, including smothering, choking, throttling (manual strangulation), ligature strangulation, hanging, and severe sustained compression of the chest (and abdomen) termed traumatic asphyxia

atrophy the partial or complete wasting away of a part of the body

Causes of atrophy include poor nourishment, poor circulation, loss of hormonal support to the organ, loss of nerve supply, disuse, disease, or lack of exercise.

autopsy post-mortem dissection and examination of the organs and tissues of the deceased to discover disease and injury causing or contributing to death

axon a nerve fibre

bilateral both sides (of the body)

biochemistry (biochemical) relating to the chemical substances present in living organisms and the reactions and methods used to identify or characterize them

biomechanics the application of mechanical forces to living organisms and the investigation of the effects of the interaction of force and the body or system; includes forces that arise from within and outside the body

biopsy the removal of a sample of tissue from a living person for laboratory examination

brainstem the stem-like part of the brain that connects the cerebral hemispheres with the spinal cord

bruise, bruising bleeding into tissues from damaged blood vessels, usually as a result of external injury; most commonly understood as a bruise in or under the skin but can occur in any tissue or organ (e.g., muscle, heart, liver)

burr hole surgery a form of surgery in which a hole is drilled into the skull, exposing the dura mater (the outermost layer of membrane surrounding the brain and spinal cord) in order to treat health problems; used to treat epidural and subdural hematomas and to gain surgical access for other procedures such as intracranial pressure monitoring

cardiac pertaining to the heart

cardiorespiratory arrest the cessation both of normal circulation of the blood due to failure of the heart and of normal breathing

cerebellum the portion of the brain forming the largest segment of the rhombencephalon (hind brain)

It is involved in the synergic control of skeletal muscles and plays an important role in the coordination of voluntary movements.

cerebral relating to or located in the hemispheres of the brain (cerebrum)

cerebral contusion traumatic brain injury in the form of bruised brain tissue

Often appearing as multiple microhemorrhages (small blood vessel leaks into brain tissue), they occur primarily under the site of an impact. Contusions can cause increases in intracranial pressure and damage to delicate brain tissue.

cerebral edema accumulation of excessive fluid in the substance of the brain

The brain is especially susceptible to injury from edema, because it is located within a confined space and cannot expand. Also known as brain edema, brain swelling, swelling of the brain, and wet brain.

cerebrum the largest part of the brain, consisting of two hemispheres separated by a deep longitudinal fissure

clinical relating to patients

congenital born with

congestion an excessive amount of blood in an organ or in tissue

contusion bruise

***coup/contre coup* injuries** The *coup* is the damage to the brain just beneath the site of impact. *Contre coup* is damage that may occur approximately to the opposite side of the brain as the brain bounces against the skull.

craniotomy a surgical operation in which part of the skull, called a bone flap, is temporarily removed in order to access the brain

CT (computerized tomography) CT scanning computes multiple X-ray images to generate cross-sectional and other views of the body's anatomy. It can identify normal and abnormal structures and be used to guide medical procedures.

cyanosis a bluish coloration of the skin due to the presence of deoxygenated hemoglobin in blood vessels near the skin surface, i.e., in life, a sign of oxygen deficiency

cyanosis of the nailbeds See *cyanosis*. Cyanosis of the nailbeds is less serious than central (blue lips and mucous membranes) cyanosis. Post-mortem, this is an artefact.

diagnosis the term denoting the disease or syndrome a person has or is believed to have

diastasis the separation of normally joined parts, such as the separation of adjacent bones without fracture or of certain abdominal muscles during pregnancy

Diastasis occurring with bones in the skull is a possible indication of cerebral edema.

diffuse axonal injury disruption of the axons, not necessarily directly due to trauma

duodenum the first part of the small intestine

edema an abnormal buildup of fluid between tissue cells

en bloc as a whole or en masse; used to refer to surgical excision

entomology the study of insects

epicardium the protective outer layer of the wall of the heart

epidemiology (epidemiological) the study of the distribution and determinants of health-related states and events in populations, and the application of this study to the control of health problems

Epidemiology is concerned with the traditional study of epidemic diseases caused by infectious agents, and with health-related phenomena including acci-

dents, suicide, climate, toxic agents such as lead, air pollution, and catastrophes due to ionizing radiation.

epiglottis (**epiglottic**) the flap of cartilage lying behind the tongue and in front of the entrance to the larynx (voice box) that keeps food from going into the trachea (windpipe) during swallowing

When it gets infected and inflamed, it can obstruct, or close off, the windpipe. This obstruction may be fatal unless treated quickly.

etiology the cause of a disease or the study of the causes of disease

exhumation removal of a dead body from the grave after it has been buried

exsanguination a loss of blood

filicide the killing of a child by a parent

fissure a groove, natural division, deep furrow, cleft, or tear in a part of the body

formalin an aqueous solution of 37% formaldehyde (a colourless gas with a distinctive smell that, when dissolved in water, gives a solution in which organic specimens are preserved)

fracture a break of a bone

ganglion a mass of nervous tissue composed principally of neuron cell bodies and lying outside the brain or spinal cord

general pathology the branch of medicine concerned with all aspects of laboratory investigation in health and disease

The discipline incorporates both morphological and non-morphological diagnostic techniques in the areas of anatomical pathology, medical biochemistry, medical microbiology, hematopathology, and transfusion medicine.

hematological pathology the domain of laboratory medical practice and science concerned with the study, investigation, diagnosis, and therapeutic monitoring of disorders of blood, blood-forming elements, hemostasis, and immune function in adults and children

hematoma a collection of blood, generally the result of hemorrhage/internal bleeding; usually resulting from injury (e.g., bruises in skin) but indicative of more serious injury when located within organs, most critically inside the skull, where hematomas may place pressure on the brain

hemorrhage the loss of blood from a ruptured blood vessel

Hirschsprung's disease the most common cause of lower gastrointestinal obstruction in neonates

Patients with this disease exhibit signs of an extremely dilated colon and accompanying chronic constipation, fecal impaction, and overflow diarrhea.

histology the study of tissue sectioned as a thin slice, using a microtome (a mechanical instrument used to cut biological specimens into very thin segments for microscopic examination)

histopathology a branch of pathology concerned with the study of the microscopic changes in diseased tissues

hypoxic-ischemic encephalopathy brain damage caused by a lack of oxygen and blood flow to the brain

Brain damage occurs very quickly and, once it occurs, is, effectively, irreversible.

infanticide Infanticide is defined in the *Criminal Code*, RSC 1985, c. C-46, s. 233, as follows: "A female person commits infanticide when by a wilful act or omission she causes the death of her newly-born child, if at the time of the act or omission she is not fully recovered from the effects of giving birth to the child and by reason thereof or of the effect of lactation consequent on the birth of the child her mind is then disturbed."

The term has been used historically in forensic pathology to indicate all forms of homicide of babies around the time of birth.

inflammation one mechanism the body uses to protect itself from invasion by foreign organisms and to repair tissue trauma

Its clinical hallmarks are redness, heat, swelling, pain, and loss of function of a body part. It is also marked by the migration of white blood cells into the affected area; this can be seen under the microscope.

intracranial within or introduced into the skull

intracranial pressure Increased intracranial pressure is a serious medical problem because it causes the compression of important brain structures and restricts the blood flow through blood vessels that supply the brain, possibly damaging it. Symptoms in infants include a bulging fontanelle (one of two "soft spots" on an infant's head), lethargy, and vomiting.

intrathoracic within the cavity of the chest

laceration a wound or irregular tear of the flesh caused by a blunt impact

larynx (laryngeal) also known as the voice box, a structure in the neck involved in protection of the trachea (windpipe) and in sound production

lesion a circumscribed area of pathologically altered tissue, an injury or wound, or a single patch in a skin disease

liver the largest solid organ in the body, situated on the right side below the diaphragm

The liver secretes bile (a fluid) and is the site of numerous metabolic functions.

lividity (post-mortem) a dark-blue staining of the dependent surface of a cadaver, resulting from the pooling and congestion of blood

malignant growing worse; resisting treatment (said of cancerous growths); tending or threatening to produce death

mandible (mandibular) the lower jaw

microbiology (microbiological) the scientific study of micro-organisms

neuropathologist a pathologist who specializes in the diagnosis of diseases of the brain and nervous system by microscopic examination of the tissue and other means

odontology a science dealing with the teeth, their structure and development, and their diseases

forensic odontology, a branch of forensic medicine that deals with teeth and marks left by teeth (as in identifying criminal suspects or the remains of a dead person)

osteology the science concerned with the structure and function of bones

pancreas a gland located behind the stomach

The secretions of the pancreas consist of powerful enzymes that contribute to the digestion of all food types in the small intestine.

parietal bone the main bone of the side and top of the skull

pathologist a medical professional trained to examine tissues, cells, and specimens of body fluids for evidence of disease

pathology the study of the nature and cause of disease, which involves changes in structure and function

pediatrics that branch of medicine involving the diagnosis and treatment of illness in children

petechial hemorrhage (petechiae) pinpoint hemorrhage; tiny purple or red spots that appear on the skin because of small spots of bleeding in the skin

pulmonary concerning, affecting, or associated with the lungs

pulmonary congestion a condition characterized by the engorgement of the pulmonary vessels

pulmonary pleura the portion of the pleura (the delicate membranous covering of the lungs) that covers the surface of the lungs and dips into the fissures between its lobes

radiologist a physician who uses X-rays or other sources of radiation, sound, or radio-frequencies for diagnosis and treatment

radiology the branch of medicine concerned with radioactive substances, including X-rays, and the application of this information to prevention, diagnosis, and treatment of disease

re-bleeding (of a healing subdural hemorrhage) refers to the controversy in pediatric forensic pathology about whether a relatively insignificant old or heal-

ing subdural hemorrhage can develop into a massive and life-threatening acute subdural hemorrhage as a result of normal handling or minor trauma

retinal hemorrhage bleeding onto the surface of the retina (the light-sensitive membrane in the back of the eye) caused by the rupture of the tiny blood vessels that lie on the surface of the retina

Retinal hemorrhage indicates increased pressure within the skull, possibly resulting from head trauma and bleeding. It was once believed to be pathognomonic (a sign or symptom that is so characteristic of a disease that it makes the diagnosis) of shaken baby syndrome, although this is no longer generally believed to be true.

rigor mortis the stiffening of the muscles after death

shaken baby syndrome (SBS) sometimes called shaken infant syndrome; a serious illness characterized by subdural hemorrhage, petechial and other hemorrhages in the retina, and hypoxic-ischemic encephalopathy, usually in circumstances where there is no evidence of blunt impact to the head

Injuries to the neck such as hemorrhage around cervical spine nerve roots may also be present.

skeletal survey a radiological study of the entire skeleton to look for evidence of occult fractures, multiple myeloma, metastatic tumour, or child abuse

skull sutures the fibrous joints between the bones of the skull that allow the baby's skull to expand with the growing brain

spinal cord part of the central nervous system

The spinal cord is an ovoid column of nerve tissues that extends from the medulla to the lumbar vertebrae. It is the pathway for sensory impulses to the brain and motor impulses from the brain.

spleen a dark-red, oval lymphoid organ in the upper-left abdominal quadrant, posterior and slightly inferior to the stomach

After birth, the spleen forms lymphocytes (white blood cells responsible for much of the body's immune protection).

status epilepticus continuous seizure activity without a pause, that is, without an intervening period of normal brain function

subdural hematoma (or subdural hemorrhage) caused through the stretching and tearing of small veins in the brain, most often resulting from head injury

Blood collects between the dura (the outer protective covering of the brain) and the arachnoid (the middle layer of the membranes that envelop the central nervous system), often causing an increase in intracranial pressure and possible damage to delicate brain tissue.

Onset of symptoms is slower than other types of hemorrhaging, usually occurring within 24 hours, but possibly taking up to two weeks to appear. Signs of subdural hemorrhage may include loss of consciousness or fluctuating levels of consciousness, numbness, disorientation, nausea or vomiting, personality changes, a deviated gaze, and difficulty in speaking and walking.

subgaleal bruise bruising between the galeal aponeurosis, a fibro-muscular layer effectively attaching the scalp to the skull

sudden infant death syndrome (SIDS) the sudden unexpected death of an infant under 12 months of age, with onset of the fatal episode apparently occurring during sleep, that remains unexplained after a thorough investigation, including performance of a complete autopsy and review of the circumstances of the death and clinical history

sudden unexplained death syndrome (SUDS) a broader categorization of deaths in infancy that includes unexplained deaths other than sudden infant death syndrome

SUDS is sometimes referred to slightly differently as "sudden unexpected death syndrome" or "sudden unidentified death syndrome." "Sudden unexpected death in infancy" or SUDI is also used.

surgical pathology the application of pathology procedures and techniques for investigating tissues removed surgically

thoracic involving or located in the chest

thymus a small glandular organ situated behind the top of the breastbone, consisting mainly of lymphatic tissue

toxicology the division of medical and biological science concerned with toxic substances, their detection, their avoidance, their chemistry and pharmacological actions, and their antidotes and treatment

ulcer(ation) a lesion which often heals poorly, on a surface such as skin, cornea, or mucous membrane

viscera the internal organs of the body, specifically those within the chest (e.g., the heart and lungs) or abdomen (e.g., the liver, pancreas, and intestines)

Wilms' tumour a rapidly developing tumour of the kidney that usually occurs in children

Policy and Recommendations

10

Restoring Confidence in Pediatric Forensic Pathology

Volume 2 of my Report contains my systemic review and assessment of the practice and oversight of pediatric forensic pathology in Ontario, from 1981 to 2001. It chronicles the systemic failings that occurred as they affected the criminal justice system.

In this volume, I set out the changes necessary to ensure, so far as possible, that the public can once again trust that pediatric forensic pathology will play its vital role in helping the criminal justice system address the very difficult and troubling cases involving a child's death in suspicious circumstances.

The systemic review and assessment that I conducted identified a significant array of failures that must be addressed if public confidence is to be restored. These systemic issues emerged from my examination of Dr. Charles Smith's work and its oversight, and from what I heard about the practice and oversight of pediatric forensic pathology generally during the years on which I was mandated to report. As I describe in the chapters that follow, the responses to these systemic issues can in some instances be targeted at pediatric forensic pathology specifically. In many instances, however, effective responses require broader change, often to forensic pathology as a whole.

Very early in the Inquiry process, Commission counsel and I were conscious of the need to begin developing an inventory of systemic issues that needed to be addressed before we turned to the recommended solutions.[1] Commission counsel began this process by preparing a preliminary list of possible systemic issues based on the facts and information collected to that point. It was understood that not every issue on the list would necessarily be addressed in my Report.

The nature of my mandate made it essential that we be conscious not just of

[1] See Chapter 23, The Scope and Approach of the Inquiry, in Volume 4 of the Report.

the systemic issues but of the need to gather, at every stage of the process, the necessary policy information to address them. Our information was collected in a number of ways.

Through my director of research, Professor Kent Roach of the University of Toronto, I commissioned independent research by a group of world-renowned experts from Canada, Australia, the United Kingdom, and the United States. These studies, which related to pediatric forensic pathology and its interaction with the justice system, proved to be of great benefit to me. I know they will add significantly to the body of knowledge in this field.

In addition to the research studies, the hearings themselves proved to be a fruitful source of policy information. Many of the witnesses who had evidence about factual matters relevant to the systemic review had also thought deeply about the policy issues the Commission would address. In addition to eliciting their evidence about the years under review, we took the opportunity to invite their views on many of the broader policy issues.

To assist in the development of specific recommendations, the Commission also held a series of 18 policy roundtables, each designed around a particular theme, to provide the Inquiry with policy input.[2] We were fortunate to secure participation from world leaders in the various fields, and I found the dialogue extremely helpful.

One of the reasons the dialogue was so helpful was that, in advance of the roundtables, Commission counsel circulated to the parties a description of each roundtable, together with a series of questions to be discussed, reflecting the systemic issues that might be addressed in my Report. The parties and the community were canvassed for opinions and advice and, once again, it was made clear that the questions posed were part of an evolving process.

The final submissions stage of the Inquiry also provided great assistance. In both their written and their oral submissions, the parties were able to address the systemic issues that, in light of the body of information collected by the Inquiry, they believed should be the subject of recommendations for change. All counsel met a very high standard that has contributed much to my capacity to address the difficult questions confronting the Inquiry.

In making my recommendations, I have benefited enormously from all the information that has been gathered over the entire course of the Inquiry. I am very grateful to all involved. In the end, the issues that I ultimately chose to address in this volume are those that, in my judgment, must be dealt with if pub-

[2] See Appendix 29 in Volume 4 for the issues covered at the roundtables.

lic confidence in pediatric forensic pathology in Ontario and its use in the criminal justice system is to be restored and enhanced.

In the main, the recommendations are organized around the themes of the various roundtables. In each chapter, I attempt to reiterate briefly the findings from my systemic review that justify the need for the recommendations, as well as my reasons for making them. In my view, these recommendations, if acted upon, represent the best way to protect the justice system from flawed pathology and to leave behind the dark times of the recent past.

11

Professionalizing and Rebuilding Pediatric Forensic Pathology

Overview

Our systemic review has demonstrated the fundamental importance of forensic pathology to sound death investigation and the proper administration of criminal justice. Without a critical mass of highly trained and credentialed forensic pathologists working within a professionalized forensic pathology service, the criminal justice system will remain vulnerable to miscarriages of justice caused by flawed pathology.

For more than a decade, Dr. Charles Smith was viewed as one of Canada's leading experts in pediatric forensic pathology and the leading expert in Ontario. Yet he had little forensic expertise and his training was, as he himself described it, "woefully inadequate." He achieved the status of a leading expert in the field, in large part because there was no one who had the training, experience, and expertise to take him on. He worked all too much in isolation. This situation was prolonged because there was then, as there is now, a severe shortage of forensic pathologists in Ontario; there are even fewer forensic pathologists with the knowledge and experience to do pediatric forensic cases, or to provide the culture of peer review on which quality depends.

The most important and fundamental challenge ahead is to correct this situation by creating a truly professionalized Ontario forensic pathology service. The commentary and recommendations that follow are based on the objective of professionalizing all of forensic pathology and are not limited to pediatric forensic pathology.

I wish to stress that the focus needs to be on forensic pathology and not pediatric forensic pathology. Pediatric forensic pathology is not a recognized subspecialty. Nowhere in the world can one attend an accredited training program and receive certification in pediatric forensic pathology, and very few pathologists in the world are certified in both forensic and pediatric pathology. Although

pediatric pathologists were once considered better qualified to perform autopsies in suspicious child deaths, the consensus today is that forensic pathologists are much better trained for such cases. And, as a practical matter, the many shortcomings in the practice and organization of pediatric forensic pathology that have been demonstrated by our systemic review cannot be addressed by professionalizing pediatric forensic pathology only. Forensic pathology as a whole must be professionalized. This change is essential in order to restore public confidence and to ensure the quality of forensic pathology in pediatric cases to which the people of Ontario are entitled.

The professionalization of forensic pathology must be built on these four cornerstones:

1 legislative change that provides both proper recognition of the vital role forensic pathology plays in death investigation and the foundation for proper organization of a forensic pathology system;
2 a commitment to providing forensic pathology education, training, and certification in Canada and strengthening the relationship between service, teaching, and research;
3 a commitment to the recruitment and retention of qualified forensic pathologists; and
4 adequate, sustainable funding to grow the profession.

Legislative Recognition of a Professionalized Forensic Pathology Service

Forensic pathology in Ontario has suffered from decades of inattention. The *Coroners Act*, RSO 1990, c. C.37, provides the legal framework for death investigation in Ontario. Even though forensic pathology is the core specialized discipline in death investigation, the *Coroners Act* does not mention the role of the pathologist, let alone the forensic pathologist. The *Coroners Act* contains no concept of a forensic pathology service, makes no reference to the Chief Forensic Pathologist, and nowhere contemplates oversight of the work of forensic pathologists.

The silence of the *Coroners Act* speaks volumes. It treats this core discipline as little more than a consultancy service to the coroner. This treatment fails to accurately reflect the respective roles of coroners and forensic pathologists in the highest stakes deaths in the system: criminally suspicious deaths. The current legislative framework is inadequate.

As a result, for more than 25 years, Ontario's system of forensic pathology and pediatric forensic pathology has been little more than a patchwork of ad hoc con-

tracts, practices, and understandings inside the Office of the Chief Coroner for Ontario (OCCO); between the OCCO and the Ministry of the Solicitor General (now the Ministry of Community Safety and Correctional Services); and among these bodies and individual hospitals and pathologists performing work under coroner's warrant. Indeed, our systemic review has clearly shown that Ontario has never had a forensic pathology *system* – an organized and coherent service with a legislative and operational structure that supports and oversees an adequate pool of properly trained forensic pathologists to serve the province.

A legislated structure is essential to provide the framework within which the discipline of forensic pathology can evolve and grow to meet the requirements of modern death investigation. Legislative recognition represents an essential public expression of the importance our society must attach to this service, as we try to re-establish public confidence in it. The *Coroners Act* must be amended. The key features of the proposed amendments are set out below.

Creation of the Ontario Forensic Pathology Service

Fundamental to professionalizing forensic pathology is the creation of a formal entity, the Ontario Forensic Pathology Service (OFPS), to be responsible for all post-mortem examinations performed by pathologists under coroner's warrant. The purpose of the service is to provide forensic pathology services for coronial death investigations and oversight and quality assurance of those services. Approximately 7,000 such examinations are performed in this province each year, including approximately 400 cases initially investigated as criminally suspicious or homicide cases. Enshrining the OFPS in the *Coroners Act* as a separate and distinct service within the OCCO will reflect the fundamental importance of forensic pathology to sound death investigations and will ensure that the practice of forensic pathology is defined in a structure that fosters excellence, provides leadership, and ensures oversight.

Leadership Structure for the Ontario Forensic Pathology Service

The development of a sustained and committed leadership structure devoted to excellence is vital to the viability of the OFPS. There must be legislative recognition of the roles and responsibilities of the leaders of this service; their duties should not be defined only by a job description. The evidence I heard persuaded me that the leadership structure for forensic pathology should mirror the leadership structure for coroners. I therefore recommend legislative recognition of the following positions:

1 a Chief Forensic Pathologist who must be a certified forensic pathologist; and
2 one or more Deputy Chief Forensic Pathologists.

As discussed in greater detail in Chapter 12, Reorganizing Pediatric Forensic Pathology, the duties and responsibilities of the Chief Forensic Pathologist must include responsibility for overseeing all the work of the OFPS. This is an onerous responsibility. The quality of forensic pathology services on which the criminal justice system depends requires thoughtful and diligent oversight.

The Role of Pathologists

There was a consensus among the expert reviewers who testified at the Inquiry that only qualified pathologists – ideally, certified forensic pathologists – should conduct post-mortem examinations in criminally suspicious cases. At present, the *Coroners Act* does not recognize any role for pathologists in death investigations. This must change. The *Coroners Act* must be amended to define pathologists and to require that all post-mortem examinations performed under coroner's warrant are performed by pathologists.

Establishment of the Governing Council

As is discussed in detail in Chapter 13, Enhancing Oversight and Accountability, the package of recommended legislative amendments must also include a governing council to provide independent and objective governance for the OCCO as a whole and to ensure proper oversight and accountability for the provision of forensic pathology services in the future. In my view, restoration of public confidence requires the creation of this governing council.

As discussed in Chapter 9, Oversight of Pediatric Forensic Pathology; Chapter 13, Enhancing Oversight and Accountability; and Chapter 15, Best Practices, Chief Forensic Pathologist Dr. Michael Pollanen, former Chief Coroner for Ontario Dr. Barry McLellan, former Chief Coroner for Ontario Dr. Bonita Porter, and others have done a significant amount of work since 2004 to address the many concerns surrounding the quality of forensic pathology services that have been demonstrated by my review. This is a commendable start, but there remains much to do to create a professionalized forensic pathology service for Ontario. There is wide agreement that legislative change is a prerequisite to addressing the fundamental systemic shortcomings revealed at this Inquiry. Only legislative change can create a credible forensic pathology service with the institutional framework to deliver quality, provide oversight, and ensure accountability. Unless the Province of Ontario amends the *Coroners Act* and makes a sustained commitment to provide the resources needed to effect the recommended changes, much

of the good that has been done will wither away and much that is urgently required will never be accomplished. The Province of Ontario should amend the *Coroners Act* to recognize the importance of forensic pathology in death investigations and to create a professionalized forensic pathology service for Ontario.

Recommendation 1

The Province of Ontario should amend the *Coroners Act* in order to

- **a) establish the Ontario Forensic Pathology Service as the provider of all forensic pathology services for the province;**
- **b) recognize and define the principal duties and responsibilities of the Chief Forensic Pathologist;**
- **c) recognize one or more Deputy Chief Forensic Pathologists;**
- **d) require that all post-mortem examinations performed under coroner's warrant be performed by "pathologists," a term that should be defined in the *Coroners Act* ; and**
- **e) create a Governing Council to oversee the duties and responsibilities of the Office of the Chief Coroner for Ontario.**

An Educational Foundation for a Professionalized Forensic Pathology Service

Perhaps it was easy in the past to ignore and to undervalue the importance to society of forensic pathology. Although it is the public face of pathology, it is an extremely tiny discipline. Thus, while the shortage of properly trained and accredited forensic pathologists is acute, the absolute number that must be added to properly staff the discipline is not daunting, although that number is impossible to precisely fix today.

This shortage does not exist only in Ontario. It is a worldwide problem. However, in Ontario and indeed throughout Canada, the development of the profession of forensic pathology has been seriously hampered by the fact that there have been no domestic postgraduate training programs in the science. Canadian forensic pathologists have been forced to seek training and certification in other countries. This situation must be corrected if Ontario is to have properly trained forensic pathologists in sufficient numbers to sustain a truly professionalized service.

As of the fall of 2008, there are still no academic departments of forensic medicine, and no established institutes, centres, or research programs in forensic medicine at any Canadian university. Thus, most of the work of forensic pathology in Ontario has not been carried out by fully qualified, full-time forensic pathologists. Rather, it has been left in large part to anatomical pathologists who are self-taught in forensic matters, have little or no forensic training, and, at best, work only as part-time forensic pathologists. This situation has also inhibited adequate research and development of the science of forensic pathology, even as compared to other subspecialties in laboratory medicine.

Forensic pathology education and training in Canada has lagged behind many countries for far too long. As long as Canada does not offer undergraduate education, postgraduate training programs, and certification of its own forensic pathologists, most of those practising forensic pathology in Ontario, and in Canada, will continue to be largely self-taught. The evidence I heard has proven the obvious – there is greater potential for misdiagnoses and other serious mistakes when those working in forensic pathology lack formal training and institutional support. There is broad agreement that this situation is untenable.

We are not the only jurisdiction to confront the shortage of adequately trained forensic pathologists. Other jurisdictions have dealt with similar issues. Although the means employed are often quite different, these jurisdictions have uniformly emphasized the need for quality education and training. Their experiences have reinforced the conclusion that, without domestic education and training programs, recruiting excellent people into forensic pathology will remain little more than a hope.

Education, Training, and Credentialing in Other Jurisdictions

United Kingdom

Forensic medicine in the United Kingdom began to develop as a discipline at the end of the eighteenth century. King's College Medical School in London was the first university to establish a chair in forensic medicine in England and, by 1876, there were chairs of forensic medicine in medical schools across Great Britain. Both academic and non-academic professionals wrote textbooks dedicated to forensic medicine as the discipline became firmly entrenched in Great Britain's hospital medical schools. When the National Health Service (NHS) was established in 1948, a number of hospitals in the United Kingdom were granted teaching-hospital status and, among other things, provided forensic pathology services. Until the 1990s, forensic pathology continued to be taught in university

medical schools, and forensic pathology training was largely based in teaching hospitals that provided services for the NHS. Then the landscape in relation to the discipline changed dramatically.

In 1989, the Home Office Working Party on Forensic Pathology examined the discipline in the wake of a number of miscarriages of justice that raised professional and public concern about the evidence and work of forensic scientists. It produced a report (the Wasserman Report) that has resulted in changes to the way in which forensic pathology services are delivered in the United Kingdom.

In response to the Wasserman Report, the Home Office Policy Advisory Board for Forensic Pathology (the Board) was created in 1991 to oversee the provision of forensic pathology services in England and Wales; to establish best practices for forensic pathologists; and to encourage the development of the profession through the training of practitioners and the support of academic departments and relevant research. The Board accredits the forensic pathologists it deems to be appropriately qualified and experienced to provide forensic services to Her Majesty's Coroners and the police by listing them on the Home Office Register of Accredited Forensic Pathologists. Police forces began to enter into service contracts, generally on a fee-for-service basis, with their local registered forensic pathologists.

In 2001, the Home Office revisited the state of forensic pathology in the United Kingdom and discovered that unforeseen changes had transpired over the decade, resulting in new challenges for forensic pathology. Most notably, forensic pathology had been squeezed out of the medical school curricula, in large part because of a lack of funding for service and research, and a consequential lack of interest in teaching the discipline. As a result, forensic pathology had become "peripheral to the … core medical curriculum." This decline in academic interest coincided with the NHS hospitals' lack of interest in appointing forensic pathologists to perform what they now viewed as essentially non-NHS work – post-mortem examinations in coroner's cases.

These factors, together with the attraction of the fees available to private practitioners, have encouraged many qualified academic staff to leave universities and NHS posts to pursue careers in the private practice of forensic pathology. The results are predictable. Today, forensic pathology is rarely taught to undergraduate medical students, a situation that greatly limits exposure to the subspecialty. There are no longer any academic departments of forensic pathology in London, and training locations accredited by the Royal College of Pathologists (the medical college that oversees the education and training of specialists in all pathology disciplines in the United Kingdom) have dwindled to 10 in all of England, two in Wales, two in Scotland, and one in Northern Ireland.

The significant growth in self-employed forensic pathologists who are no longer exposed to the collegial atmosphere of academic institutions has generated a number of serious concerns. There is less consistency in practices, training, and standards in different areas of the country and among individual forensic pathologists. It has also become increasingly difficult to ensure that qualified forensic pathologists are available.

The forensic pathologists from the United Kingdom who participated in the Inquiry all expressed grave concern that the diminishing commitment to teaching forensic medicine and forensic pathology in universities and teaching hospitals has stunted the growth of the profession in a manner that risks its ability to serve the criminal justice system.

Despite the present shortage of accredited training opportunities in forensic pathology, the Royal College of Pathologists continues to promote a vigorous training program for trainees before they are eligible to write its examinations. The College offers two examination routes: one results in a career limited to forensic pathology, while the other allows for a career in histopathology as well as forensic pathology. At the end of either examination route, trainees should have acquired a broad knowledge of forensic systems and the legal aspects of clinical practice; familiarity in performing post-mortem examinations in a wide range of natural and non-natural deaths, including specialist techniques and related investigation; and an awareness of the responsibilities involved in dealing with suspicious deaths and in giving evidence in courts.

The United Kingdom provides an example of a system in some turmoil as a result, in part, of the erosion of university-based training programs and career-long affiliations between the universities and the profession. The lesson to be learned is that we must begin professionalizing the service from its roots. University-based education and fellowships are vital to the development of a high-quality forensic pathology service.

United States

In 1959, the American Board of Pathology (ABP) recognized forensic pathology as a subspecialty of pathology and began to offer a certification examination in the discipline. Qualification for the examination required two years of experience. Approximately 1,300 persons have been certified in forensic pathology in the United States through the ABP. However, the ABP does not offer subspecialty certification in pediatric forensic pathology. Even in the United States, there are only a handful of "pediatric forensic pathologists" who are trained and certified in both the pediatric and forensic pathology subspecialty areas.

In 1981, the Accreditation Council for Graduate Medical Education (ACGME)

was created to improve health care by assessing and advancing the quality of education for resident physicians. The ACGME inspects post-medical training programs within the United States and evaluates them against established standards and guidelines. It accredits the programs that meet its criteria, training goals, and objectives. In 1999, the ABP changed its qualification criteria. It now requires candidates to train through an ACGME-accredited program in forensic pathology to qualify for the subspecialty examination in forensic pathology.

As of 2007, approximately 40 forensic pathology residency programs, offering approximately 70 training positions nationwide, are accredited by the ACGME. These programs are often located within medical examiner offices that are affiliated with medical schools.

This affiliation recognizes the need to provide forensic experience to medical students and pathology residents who become candidates for recruitment into the medical examiners' offices. It is important to recognize that this system provides defined career paths for trainees in forensic pathology.

Australia

The *Coroners Act 1985* (Vic.) mandated a coordinated Coronial Service and an integrated Coronial Services Centre in Victoria, Australia, to house both the State Coroner's Office and the Victorian Institute of Forensic Pathology. Created as an independent institute of forensic medicine to address a number of difficult issues, the Victorian Institute of Forensic Medicine (VIFM), as it is now called, endorses an inclusive model based on a team approach to death investigations. Coroners in Victoria are county court judges, magistrates, or barristers and solicitors who, by their training, bring a legal component to the death investigation team. Sharing physical space with the medical professionals at the VIFM has strengthened the ties between the medical and legal aspects of forensic medicine and has reinforced the concept of teamwork in the death investigation system in Victoria.

Central to the VIFM is its commitment to teaching, research, and service, premised on the statutory obligation that the director of the VIFM, who is responsible for ensuring the provision of service, also hold a chair in forensic medicine at a university. This legislated obligation has ensured the indivisibility of the three pillars of service, teaching, and research, and has provided the necessary structure to foster the professional culture.

The VIFM's commitment to the education and training of future forensic scientists is demonstrated by its affiliation with two academic institutions and its accreditation by the Royal College of Pathologists of Australasia, a body that accredits laboratories and conducts certification examinations in forensic pathology. In 1989, the VIFM formally affiliated with the University of Melbourne to

create and promote common teaching and research interests between staff at both institutions, resulting in university access to the physical premises of the institute, and teaching and research obligations within the university for VIFM staff. In 1999, the VIFM also became affiliated with Monash University as its Department of Forensic Medicine, Australasia's only university-based postgraduate program in forensic medicine. The VIFM medical staff is widely engaged in teaching forensic medicine to undergraduate and postgraduate students at both universities. Affiliation with the two universities underscores the strong academic links supporting the VIFM.

Accreditation and Certification in Forensic Pathology in Canada

The Royal College of Physicians and Surgeons of Canada (Royal College) was established in 1929 by an Act of Parliament to oversee the medical education of specialists in Canada. It accredits specialty training programs and conducts examinations for certificates of qualification, similar to the American Board of Pathology and the Accreditation Council for Graduate Medical Education in the United States, and the Royal Colleges of Pathologists in the United Kingdom and Australasia. Holders of certificates of the Royal College are recognized by provincial authorities as specialists within their chosen specialty or subspecialty. The Royal College offers certification in several specialties of pathology, including anatomical pathology and general pathology.[1]

In the mid-1990s, the Royal College froze the development of any new specialties and fellowships. The timing was unfortunate for a group of pathologists who had begun to seek the Royal College's recognition of forensic pathology as a subspecialty of anatomical and general pathology. In 2001, Dr. Jean Michaud, professor and head of the Department of Pathology and Laboratory Medicine at the University of Ottawa, as well as the head of the Department of Pathology and Laboratory Medicine at the Ottawa Hospital and the Children's Hospital of Eastern Ontario, revisited this issue and presented an application for recognition.

By September 2003, Dr. Michaud and others had convinced the council of the Royal College to formally recognize forensic pathology as a subspecialty by "Certificate of Special Competence," following a candidate's certification in either anatomical or general pathology. By this time, the Royal College understood the need to recognize the subspecialty of forensic pathology, a fact demonstrated by its approval of the application for subspecialty status.

[1] Medical terms used in this Report are defined in the medical glossary at the front of this volume.

The Royal College's formal recognition of forensic pathology as a subspecialty was only a first step. Eventually, candidates for certification in the newly recognized subspecialty of forensic pathology will need to complete an "accredited" training program to qualify to write the Royal College's certification examination(s). However, no training programs have yet been approved by the Royal College, and certification examination(s) have yet to be created by the Royal College's Examination Board.

To this end, the Specialty Committee for Forensic Pathology at the Royal College (Specialty Committee) and the Royal College are presently fine-tuning the requirements for both accredited training programs and certification procedures. They envision a one-year training program for those who have already completed their five years of postgraduate training in either anatomical or general pathology, followed by examination(s) set by the Royal College.

In addition, the Royal College has initiated a "Practice Eligibility Route" that sets out how the many pathologists who are currently practising forensic pathology in Ontario can become eligible to write the Royal College's certifying examination(s). For those with certification from an international jurisdiction, the Royal College contemplates a "Practice Ready Assessment Route," where it will confer certification once certain conditions have been satisfied. The Inquiry was informed that the profession expects examinations for new trainees, and for those currently practising the profession, to be in place for September 2009.

The Specialty Committee anticipates the process of recruiting interested physicians to the subspecialty of forensic pathology to begin once accredited training programs are approved by the Royal College. Once this occurs, the accreditation process will be disseminated through the Royal College's website to postgraduate deans at medical schools across Canada. It will be incumbent on the deans to work with local forensic pathologists to create residency programs.

Despite the fact that the Royal College has not yet approved any programs for accreditation, we were advised that, on request, it will provide information and applications for accreditation to interested centres. Its Accreditation Committee will vet any submitted applications, with input from the Specialty Committee. In my view, it is important that this information be circulated to all medical schools immediately so that applications can be submitted as soon as possible to begin the process of becoming an accredited training program.

It is most important that approval by the Royal College in relation to accredited training programs and the creation of examinations leading to certification by the Royal College be expedited. The status of the subspecialty needs to change immediately. Recognition and approval by the Royal College in the form of accredited training programs and certification is a vital part of elevating the

status of forensic pathology to its proper place; this factor alone will help entice students to consider it seriously.

Recommendation 2

As expeditiously as possible, the Royal College of Physicians and Surgeons of Canada should

a) **approve the accreditation of one-year training programs in forensic pathology offered by Canadian medical schools to candidates with Royal College certification in either anatomical or general pathology;**

b) **certify forensic pathologists upon successful completion of an accredited training program and a Royal College examination in the subspecialty of forensic pathology; and**

c) **finalize the process by which pathologists currently practising forensic pathology in Ontario may become certified by the Royal College.**

Increasing the Interest in Forensic Pathology

The offer of credentials following successful completion of an accredited training program and certification examination will encourage people to view the subspecialty of forensic pathology with renewed respect. This feature, however, is only one step toward encouraging medical students to consider forensic pathology as a viable career option. It will also be necessary to increase exposure to the subspecialty at medical schools in order to promote an interest in the discipline early in physicians' medical careers. In fact, a number of pathologists who participated in the Inquiry acknowledged the importance of encouraging students to develop an interest in forensic pathology during medical school. Recent statistics indicate that the number of students entering residency programs in pathology has increased somewhat over the last several years. There is therefore an enhanced opportunity for those practising forensic pathology in Ontario today to reach out to students already interested in pathology and persuade them to pursue forensic pathology as a rewarding career in an increasingly valued subspecialty of medicine.

The affiliations between the regional forensic pathology units and university medical schools in the province provide an excellent opportunity for practising pathologists to foster teaching relationships with medical schools as a way of promoting careers in forensic pathology. For example, the pathology departments at the Ottawa Hospital and Hamilton General Hospital have taken active roles in promoting forensic pathology to medical students and pathology residents within

their affiliated universities.[2] As discussed later in this chapter, it is hoped that the Provincial Forensic Pathology Unit (PFPU) will soon be affiliated with the University of Toronto and, together with the proposed Centre for Forensic Medicine and Science at the University of Toronto and the Ontario Pediatric Forensic Pathology Unit (OPFPU) at the Hospital for Sick Children (SickKids), they will provide students and residents with valuable exposure to the subspecialty, along with the opportunity to be mentored by forensic pathologists.

It is important, therefore, that practising forensic pathologists take an active role in promoting the discipline within their affiliated universities. The Chief Forensic Pathologist should work with the regional directors and their hospitals to consider how best to promote forensic pathology in Ontario medical schools and among residents in anatomical and general pathology.

Recommendation 3

The Ontario Forensic Pathology Service and the Chief Forensic Pathologist should actively encourage

a) **faculties of medicine to promote interest in forensic pathology by exposing students in the early years of their programs to forensic pathology; and**

b) **forensic pathologists to work with the faculties of medicine to educate students about forensic pathology.**

The Three Pillars: Service, Teaching, and Research

Encouraging pathologists at the regional units to become actively involved with medical students will enhance and ultimately strengthen connections between pathologists, universities, and teaching hospitals. This linkage will expand the parameters of a unit's focus from provision of autopsy services only to include teaching and research, and will assist in generating an interactive and collegial atmosphere. In time, the affiliation may encourage students who train in the discipline to remain with the unit if it promises an attractive and balanced career. This model of growth is premised on cementing the relationship between the three pillars of a professionalized forensic pathology practice – service, teaching, and research. The expert forensic pathologists who participated in the Inquiry strongly encouraged the development of these three pillars as the foundation of a

[2] The Ottawa Hospital is affiliated with the University of Ottawa, and Hamilton General Hospital is affiliated with McMaster University.

credible forensic pathology service. They have had experience working within systems that have promoted integration of these three components of the discipline and view this integration as essential to the sustainability of a professionalized forensic pathology service.

The benefits of linking teaching and research obligations to service are obvious. Teaching and research enable the science of forensic pathology to progress, and ensure that practising pathologists remain current with developments in the profession. Teaching and research complement and reinforce the practice of forensic pathology that relies on evidence, research, and careful explanation, as opposed to the mere assertion of experience, authority, and conclusions about the cause of death. These linkages also strengthen ties between practitioners and students, as well as between service delivery units and teaching hospitals. Further, education and training programs affiliated with university medical schools bring together experts from a range of other related disciplines, such as law, criminology, anthropology, and clinical medicine. Encouraging and supporting forensic pathologists to engage in teaching and research may even prevent the risk of burnout that is associated with the heavy caseloads and isolated working conditions that forensic pathologists all too often encounter. These benefits will not only revitalize and enhance the profession but will assist in recruiting qualified forensic pathologists to Ontario by promoting the long-term viability and attractiveness of a career in the discipline.

However, the evidence I heard indicates that, currently, the service obligations of Ontario's forensic pathologists are such that they have little time to become involved in teaching or research. Unless caseloads are reduced, these pathologists will not have sufficient time to participate in these endeavours. Although some practising forensic pathologists will not be interested, most will welcome the opportunity to become more involved in teaching, training, and research activities, provided they are fairly compensated.

In my view, teaching and research must become part of the agenda to grow the profession of forensic pathology. To that end, the new OFPS should work with Ontario hospitals to ensure that forensic pathologists who engage in these activities as well as service have manageable caseloads. While this linkage obviously depends on increasing the number of forensic pathologists within the OFPS, adding teaching and research to service is a vital long-term goal.

Recommendation 4

The Governing Council and the Chief Forensic Pathologist should ensure that the Ontario Forensic Pathology Service is built upon the three essential and interdependent pillars of service, teaching, and research.

Funding Forensic Pathology Fellowships

Dr. Pollanen has recently developed a fellowship program in forensic pathology at the PFPU in collaboration with the University of Toronto. He began to train two Canadian residents in July 2008, anticipating that accreditation for the program from the Royal College will be forthcoming during the residents' academic year. These fellowships have been funded jointly by the OCCO and the University of Toronto. Unfortunately, the agreement to fund these fellowships is a one-time-only agreement. This arrangement is not sustainable.

More fellowships like this one are needed across the province, but with adequate, sustainable funding. Such fellowships will respond to the global shortage of forensic pathologists and will enrich the pool of candidates for full-time positions within the OFPS. A number of the regional forensic pathology units are positioned to provide such fellowships. In my view, they should move aggressively to do so. This is an important aspect of growing the service.

A Centre for Forensic Medicine and Science at the University of Toronto

The PFPU located in Toronto is the only forensic pathology unit in the province that is not integrated into an academic teaching hospital environment. This busy unit is the main centre for forensic autopsies in Ontario. It would benefit greatly from affiliation with a medical school, so that it could draw on the university's teaching and research endeavours as well as its student body. The University of Toronto is the logical choice. From the university's perspective, affiliation will provide prospective forensic pathology students with direct experience in forensic cases at the unit. In addition, exposure to pediatric forensic pathology cases will be available through the OPFPU at SickKids, which is already affiliated with the University of Toronto.

Dr. Pollanen and others have been working to create an extra-departmental centre through the University of Toronto, to be named the Centre for Forensic Medicine and Science (the Centre). The purpose of the Centre is to foster excellence in forensic medicine and science. The proposal envisions the Centre as the hub of five main branches of forensic science that together will collaborate to

develop a truly multidisciplinary approach to teaching and research in forensic medicine and science.

The creation of the Centre has the potential to develop evidence-based educational programs in forensic pathology. The Centre would focus on interprofessional education for undergraduate students of medicine and law, as well as on continuing professional development activities for the medical and legal communities. It would provide education in related forensic disciplines and would facilitate research into areas of controversy and debate in forensic medicine and science, among other educational endeavours.

The evidence at the Inquiry made it absolutely clear that a more interdisciplinary approach to forensic pathology is needed. Forensic pathologists know too little about the justice system or how best to participate in it, in those cases in which their input is vital. For its part, the justice system understands far too little about the science of forensic pathology. The Centre, with its capacity to draw on leading teachers and practitioners from both worlds and to encourage their interaction, could make an important contribution to addressing this challenge. In my view, it deserves the government's support.

Recommendation 5

The Province of Ontario, the Governing Council, and the Chief Forensic Pathologist should work with the University of Toronto to establish a Centre for Forensic Medicine and Science, which would

a) **educate both practitioners and students in a variety of medical disciplines related to the forensic sciences; and**

b) **be affiliated directly with the Provincial Forensic Pathology Unit and the Ontario Pediatric Forensic Pathology Unit.**

Educating the Medical Profession about the Criminal Justice System

Our systemic review dramatically demonstrated that forensic pathologists must learn more than pathology to practise competently. It is critical that their training include education about the justice system and, in particular, the criminal justice system. Forensic pathologists must understand the objectives of the criminal justice system, how it operates to achieve those goals, and how they can best fulfill their roles as experts. All the internationally renowned forensic pathologists who participated in the Inquiry emphasized how important it is for forensic

pathologists to understand the criminal justice system and their role within it. After all, their work is done for the justice system and is essential to it.

Universities, through both their undergraduate and graduate medical programs, perhaps jointly with faculties of law and other related disciplines, are well situated to provide education about the justice system. Forensic pathologists in training must be exposed to a course that deals with expert evidence, the justice system, and the relevant aspects of evidence law, and criminal procedure. The goal is to ensure that forensic pathologists are able to provide useful support to the justice system. Ideally, all undergraduate medical students should be introduced to forensic medicine and the law early in their medical school education, given that many of them may act as expert witnesses during their careers.

The Royal College has recently released documents detailing the specific standards of accreditation and the objectives to be met for residency programs in forensic pathology. These documents outline what is expected of a trainee on completion of an accredited training program. The Royal College's definition of forensic pathology, as set out in its "Objectives of Training in Forensic Pathology," underscores the importance of applying pathology principles and methodologies to support the forensic and judicial systems:

> Forensic Pathology is a subspecialty of Anatomical Pathology and General Pathology which applies basic pathologic principles and methodologies of these two specialties to support the medicolegal and judicial systems in determining causes and manners of death, supporting the investigation of circumstances surrounding deaths, and assisting in the interpretation of postmortem findings of medical legal significance.[3]

I applaud the Royal College's recognition that a critical component of the forensic pathologist's job relates to the criminal justice system. Education about the justice system deserves a larger profile than it has received in the past, when it focused mainly on how to perform as an expert witness in court. The Royal College's definition of the forensic pathology subspecialty and its standards for trainees will go a long way toward cementing the importance of legal education to the profession.

In enhancing their teaching of forensic pathology at all levels, medical schools and forensic units should take advantage of interdisciplinary approaches to strengthen the importance of legal education for those studying forensic pathology.

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[3] Royal College of Physicians and Surgeons of Canada, "Objectives of Training in Forensic Pathology," 2008. Referenced and reproduced with permission.

Recommendation 6

All individuals and institutions that provide or oversee the education of medical students in Ontario should focus on the critical importance of the criminal justice system in medico-legal education. In particular, the Royal College of Physicians and Surgeons of Canada should ensure that any accredited fellowship programs in forensic pathology provide education in relation to expert evidence, the justice system, and the relevant aspects of evidence law and criminal procedure.

Continuing Medical Education

In 2000, the Royal College officially established a Maintenance of Certification program requiring all physicians certified by the Royal College to maintain their skills and competencies in their particular specialty or subspecialty by completing 400 credit hours over a five-year cycle, with a *minimum* of 40 credit hours to be completed per year, of continuing medical education. Credits include time spent reviewing journals, attending conferences, and working on personal learning projects. Should the Royal College agree to certify forensic pathologists, those certified will be subject to the continuing medical education requirements set out above, as a minimum requirement.

The evidence I heard has demonstrated a specific need for continuing education about the justice system and the role of the forensic pathologist within it. Pathologists practising forensic pathology in Ontario should be required to complete a certain number of continuing education hours each year on the topic, either as part of, or in addition to, the Royal College's requirements for continuing education. The particulars of this requirement should be determined by the Chief Forensic Pathologist or designate.

In this way, all pathologists conducting autopsies under coroner's warrant will receive continuing medical education in relation to both recent developments in the science of forensic pathology (for example, shaken baby syndrome) and the criminal justice system. Continuing education must be adequately resourced so that forensic pathologists can participate in programs outside Ontario or even Canada, if they are not offered locally.

Recommendation 7

All individuals and institutions that provide or oversee the provision of forensic pathology services in Ontario should focus on the critical importance of continuing medical education and, in particular,

a) the Chief Forensic Pathologist or designate should assume primary respon-

sibility for fostering ongoing and interdisciplinary education about the role of the forensic pathologist in the justice system; and

b) the Province of Ontario should adequately fund continuing education for forensic pathologists regarding recent developments in the science of forensic pathology and the role of the forensic pathologist in the justice system.

Recruitment and Retention of Forensic Pathologists

Forensic pathology has never been a popular career choice in Canada. Heavy workloads and poor remuneration have discouraged pathologists from undertaking forensic work in favour of careers in clinical pathology, which is better paying and, until very recently, was viewed as less controversial.

This historical trend has been aggravated by a number of problems specific to the discipline in Ontario. As we learned, most pathologists doing forensic work today are in the latter stages of their careers and are not being replaced by new trainees. As well, the small group of those practising forensic pathology in Ontario has been forced to spread itself more thinly than in the past, particularly given the increased number and complexity of its cases.

It is true that forensic pathology, being a human activity, cannot always achieve absolute perfection. However, it is also true that forensic pathology, like all pathology, provides a vital service to society and therefore must achieve a level of excellence. For forensic pathology, the cost of failure is that the criminal justice system may deliver unjust outcomes, with tragic consequences. For clinical pathology, the cost of failure can be equally tragic. For both forensic and clinical pathology, society must ensure that it can attract the very best people and provide the very best oversight mechanisms so that failure can be avoided.

This goal has been made more difficult to achieve because forensic pathology – indeed, all pathology – has been under severe public scrutiny for some time. For more than a year, pathologists have repeatedly been in the national headlines and their alleged errors have spawned not just this Inquiry but inquiries in Newfoundland and Labrador and New Brunswick. The media scrutiny has been intense, most of it has been negative, and it has put a significant strain on pathologists across the country. Dr. Pollanen told us that some Ontario pathologists are no longer prepared to perform post-mortem examinations under coroner's warrant because they fear this level of scrutiny. The reality this situation presents cannot be ignored when we address the challenge of building a truly professionalized forensic pathology service in Ontario.

It is too early to know with certainty whether these events will have a lasting chilling effect on attempts to recruit and retain qualified forensic pathologists, but active steps must be taken to prevent such a result. Various measures must be taken immediately to revitalize the profession so that the province is not left with an insufficient number of qualified pathologists.

The Province of Ontario must urgently provide the resources necessary to address the acute shortage of qualified forensic pathologists. The following proposals must be implemented immediately to address the present crisis and establish a sound basis on which to professionalize forensic pathology.

As discussed earlier, a first step is to ensure adequate funding for the proper education of forensic pathologists at the undergraduate, graduate, and continuing education levels. Adequate sustainable funding for fellowships in forensic pathology at the regional forensic pathology units will allow the units to offer attractive fellowships to residents that, over time, will hopefully lead to a steady increase in forensic pathologists across the province. The forensic pathologists who participated in the Inquiry indicated that positive experiences often lead trainees to remain for their entire careers within the unit in which they were trained.

This recommendation dovetails with the importance of offering newly recruited forensic pathologists positions that embody the basic commitment to service, teaching, and research. To achieve this objective will require an infusion of additional resources to ensure that caseloads are within manageable standards.

Another important element is to provide, within the OFPS, career paths similar to those available to coroners in Ontario: fellows, junior pathologists, regional directors, deputies, and Chief Forensic Pathologist. This hierarchy allows for clearly defined roles and recognizes the importance of engaging those working within the profession in careers that can offer increasing responsibility and remuneration. It addresses the present situation, described as "relatively flat," with no straightforward career progression or advancement offered. The present model will not encourage those exploring challenging career options to seek employment within an organization that does not offer an opportunity to grow professionally.

One very important issue in Ontario is equal compensation across the province for the pathologists performing forensic work for coronial death investigations. The salaries of hospital-based pathologists are governed by the Laboratory Medicine Funding Framework Agreement (LMFFA). This agreement between the Ontario Medical Association and the Ministry of Health and Long-Term Care provides that each hospital pathologist receives the same minimum guaranteed remuneration. Ministry of Community Safety and Correctional

Services forensic pathologists (those who work at the PFPU) are excluded from the LMFFA.

The result is that government-employed forensic pathologists at the PFPU are paid far less than hospital pathologists across the province. The differential in favour of hospital pathologists is magnified by the additional benefits hospital pathologists receive over those employed directly by the ministry, such as funds for continuing medical education and other benefits offered by the hospitals themselves. The differential has an obvious adverse effect on recruitment. Those familiar with it all agreed that this salary differential is a major obstacle to hiring forensic pathologists in full-time positions at the PFPU. It is essential that the Province of Ontario take immediate steps to ensure equal compensation for all forensic pathologists, whether on staff at a hospital or at the PFPU, by making them part of the LMFFA, or by taking steps that will achieve and maintain an equivalent result.

There are two additional points that need to be addressed by appropriate funding to ensure the professionalization of the service. The first is the need to increase, over time, the full-time-equivalent positions within the OFPS located within the regional units across the province. This concept acknowledges the change in recent years where more of the work completed pursuant to coroner's warrants has been reallocated to the regional forensic pathology units across the province, increasing their volume of cases while decreasing the volume completed in smaller community hospitals. This arrangement has benefits not only for quality of service. The increasing use of full-time-equivalent positions in the regional units, and the diminishing need for fee-for-service work that this allows, also facilitates the dedicated expertise needed for a professionalized service.

It is also critical that sufficient funding be provided to ensure that the facilities where forensic pathology is practised reflect the level of excellence expected of the OFPS and are equipped with state-of-the-art equipment to assist the forensic pathologists in their work. This factor is important – particularly if the regional units are to perform an increasing percentage of the forensic work across the province, including the most difficult cases. It is also a vital part of making forensic pathology an attractive career choice at a time when it, like all pathology, has been negatively affected by adverse publicity.

Creation of a New Facility

Dr. Stephen Cordner, director of the Victorian Institute of Forensic Medicine in Australia, toured 26 Grenville Street in downtown Toronto, which houses the PFPU. Dr. Cordner emphasized the importance of working within a contemporary

facility that can support the technical complexities of conducting post-mortem examinations. He described the present premises of the PFPU as cramped and outdated. In its present state, it is a significant obstacle to the professionalization of forensic pathology in Ontario.

The Inquiry learned about the Ontario government's proposal to create a large state-of-the-art forensic sciences complex. It is anticipated that this complex will be built outside the Toronto city core and will house the Centre of Forensic Sciences; the PFPU with an expanded catchment area, including Brampton and Guelph; inquest courts; and the administrative offices of the OCCO. It will be physically much larger than the present facility, with industry-leading equipment and services along with the ability to engage in telepathology communications across the province. The creation of this facility represents a major commitment to the modernization and professionalization of death investigations in Ontario.

I urge the Province of Ontario, the Centre of Forensic Sciences, and the Office of the Chief Coroner for Ontario to move forward as quickly as possible to develop this facility.

Recommendation 8

The Province of Ontario should provide the resources necessary to address the acute shortage of forensic pathologists in Ontario. In particular, the Province of Ontario should

a) **provide adequate and sustainable funding for fellowships in forensic pathology in each of the regional forensic pathology units across the province;**

b) **fund full-time positions within the profession that will support the three pillars of service, teaching, and research, including but not limited to, Deputy Chief Forensic Pathologist(s), director positions at the regional forensic pathology units, and staff forensic pathologist positions;**

c) **provide sufficient resourcing to ensure that forensic pathologists' caseloads do not exceed recommended standards;**

d) **include Ontario Forensic Pathology Service pathologists in the Laboratory Medicine Funding Framework Agreement, to ensure that all pathologists are compensated fairly, whether they work on staff at a hospital or at the Provincial Forensic Pathology Unit, or take steps that will achieve and maintain an equivalent result;**

e) **increase the number of full-time-equivalent positions in Ontario's regional forensic pathology units;**

f) **ensure that each unit where post-mortem examinations are performed pursuant to coroner's warrant is fully equipped, up to date, and properly resourced; and**

g) **fund the construction of a new, modern facility to house the Office of the Chief Coroner for Ontario and related forensic sciences.**

Immediate Steps

There is an immediate need to enhance the expertise in forensic pathology in Ontario. In addition to the proposals I have already made, immediate measures are also required. The public needs to have faith in those performing forensic pathology services in the most difficult cases. One way to move more quickly to attain this goal as the subspecialty continues to grow is through the creation of a Registry of forensic pathologists, comprised of different categories with specific requirements of expertise. Competent and qualified pathologists will be appointed to the Registry. As a result, the Chief Forensic Pathologist will have a mechanism by which the public can be assured that the forensic pathologist best qualified for a specific case will perform that post-mortem examination. Details of the Registry are discussed in Chapter 13, Enhancing Oversight and Accountability.

The objective is the creation of a forensic pathology service in Ontario that is an internationally renowned service, with forensic pathologists trained and certified in Canada through excellent accredited training programs. Obviously, this transformation will not occur immediately. To assist in addressing the issue of maintaining a pool of qualified forensic pathologists in the immediate future, aggressive efforts need to be made to recruit appropriately credentialed forensic pathologists offshore.

Recommendation 9

The Ontario Forensic Pathology Service should immediately recruit appropriately credentialed forensic pathologists offshore to address the shortage in the province.

Recommendation 10

The Province of Ontario should provide sufficient resources to permit the recruitment of appropriately credentialed forensic pathologists from other countries.

Adequate and Sustainable Funding

Our systemic review has highlighted the many ways in which forensic pathology has been undervalued for decades. Not surprisingly, it has also been underfunded – again, for decades. Inadequate resources continue to undermine the laudable efforts of the new leadership of the OCCO to fix the many problems identified by our systemic review. This cannot continue. Unless the Province of Ontario acts quickly to implement a significantly increased and sustainable funding model for forensic pathology, these problems cannot be fixed – and the system cannot be rebuilt, as it must be. Resources are essential to professionalize and grow forensic pathology in Ontario and thereby avoid miscarriages of justice.

Many of my proposals related to the qualifications and practices of forensic pathologists, including the practice of quality assurance, depend on there being an adequate number of forensic pathologists. There is a global shortage of forensic pathologists. Ontario lags behind many jurisdictions in part because it has been impossible for pathologists to receive education, training, and ultimately certification in Ontario. It is essential that adequate resources be provided for the training, recruitment, retention, and continuing education of forensic pathologists in Ontario. Ontario's forensic pathologists should be encouraged to engage in teaching and research, in addition to the provision of services in death investigations. They should also be able to practise in appropriate facilities. These changes, which I describe in this chapter, and others that I address in the chapters that follow, can be made only if funding is adequate and sustained over the long term.

I urge the Province of Ontario to allocate the necessary resources that will permit the changes I have discussed so far, and those that I discuss subsequently, to succeed.

Recommendation 11

The Province of Ontario should commit to providing funding sufficient to sustain the changes required to restore public confidence in pediatric forensic pathology.

12

Reorganizing Pediatric Forensic Pathology

In Chapter 11, Professionalizing and Rebuilding Pediatric Forensic Pathology, I explain that restoring public confidence in pediatric forensic pathology requires the Province of Ontario to take immediate steps to professionalize and rebuild the forensic pathology service in Ontario. This is an essential precondition for the commitment to quality and quality assurance that forensic pathology in Ontario urgently requires.

In this chapter, I explain that to achieve professionalization, the service must be reorganized significantly, from the top down, the bottom up, and in the relationship between the Ontario Forensic Pathology Service and the regional forensic pathology units. I expand on the legislative amendments to the *Coroners Act*, RSO 1990, c. C.37, that are needed to reorganize the service and recommend improvements to strengthen the service agreements between the Office of the Chief Coroner for Ontario (OCCO) and the hospitals that house the regional units. These changes will situate forensic pathology more prominently within our province's death investigation system and will ensure that qualified forensic pathologists direct, supervise, administer, and manage the province's forensic pathology services. These organizational changes are a necessary basis for effectively addressing the shortcomings in the way pediatric forensic pathology was practised and in its oversight, which were identified in the systemic review.

There was widespread agreement among participants at the Inquiry that these organizational changes are necessary to ensure that high-quality, reliable forensic pathology is available to the criminal justice system.

Effective Organization of the Work of Forensic Pathology in Ontario

The Ontario Forensic Pathology Service

In Chapter 11, Professionalizing and Rebuilding Pediatric Forensic Pathology, I explain that statutory recognition of a new entity, the Ontario Forensic Pathology Service (OFPS), is critical in order to professionalize and rebuild forensic pathology in Ontario. The OFPS is the embodiment of a highly skilled service with a structure that advances quality and facilitates oversight. It is the heart of this new approach to quality. As such, it must be established and described in the *Coroners Act*. Because it provides a service to death investigations conducted by the OCCO, it should remain as a branch within that organization. However, legislative recognition reflects the importance of the OFPS as an essential service in the province.

Recommendation 12

The *Coroners Act* should be amended to establish and define the Ontario Forensic Pathology Service as follows:

> **"Ontario Forensic Pathology Service" means the branch of the Office of the Chief Coroner for Ontario which, as directed by the Chief Forensic Pathologist, provides all forensic pathology services performed under or in connection with a coroner's warrant.[1]**

The Role of the Chief Forensic Pathologist

In Chapter 11, I also recommend that the *Coroners Act* be amended to recognize the roles and responsibilities of the leadership of the OFPS – in particular, the Chief Forensic Pathologist. The Chief Forensic Pathologist will direct the OFPS and be professionally responsible for the service it provides. This fundamental responsibility, and other duties, should be included in the legislation in a way that parallels the responsibilities of the Chief Coroner. Consistent with the objective of enhancing the quality of the service, the Chief Forensic Pathologist must be a certified forensic pathologist. Inclusion of this position in the legislation requires that legislative definitions be given to both "pathologist" and "certified forensic pathologist."

[1] The language of this and other proposed amendments to the *Coroners Act* is recommended language only.

Recommendation 13

The *Coroners Act* should be amended to include the following definitions for pathologist and certified forensic pathologist:

a) **"Pathologist" means a legally qualified medical practitioner certified by the Royal College of Physicians and Surgeons of Canada or its equivalent as a specialist in anatomical or general pathology;**

b) **"Certified forensic pathologist" means a pathologist certified by the Royal College of Physicians and Surgeons of Canada or its equivalent as a specialist in forensic pathology.**

Our systemic review made it very clear that the Chief Forensic Pathologist did not have the necessary authority to ensure quality forensic pathology services in the province. It is vital that this situation not only be changed but also be seen to be changed. The fundamental responsibilities of the Chief Forensic Pathologist must therefore be set out in the *Coroners Act*. Beyond those provided for in the legislation, the duties and responsibilities of the Chief Forensic Pathologist must also be clearly described.

A healthy OFPS will be dedicated to service, teaching, and research as the way to ensure future excellence. It will have a culture in which highly trained professionals engage with each other to promote excellence. It will have the autonomy to use its resources to maximum effect. These tasks must all ultimately be the responsibility of the Chief Forensic Pathologist. So, too, is the maintenance of quality of service and sound oversight.

It is important that the Chief Forensic Pathologist have the ultimate authority to determine which individual forensic pathologist has the appropriate training and experience to perform a particular post-mortem examination and, in addition, the location where the examination will be conducted. This authority is particularly important for criminally suspicious pediatric cases or others that present unique forensic challenges. The Chief Forensic Pathologist has the requisite training and experience, and has knowledge of the resources available to the OFPS at any given time, to best fulfill this role. Although the Chief Forensic Pathologist should consult with coroners regarding assignment of autopsies, the ultimate decision-making authority must rest with the Chief Forensic Pathologist.

To make this assignment system as effective as possible, all warrants for post-mortem examination should be directed to the Chief Forensic Pathologist or designate.

Recommendation 14

The *Coroners Act* should be amended to provide that the Lieutenant Governor in Council appoint a certified forensic pathologist to be the Chief Forensic Pathologist for Ontario to

a) direct the Ontario Forensic Pathology Service and be responsible for the services it provides;

b) supervise, direct, and oversee the work of all pathologists in Ontario under, or in connection with, a coroner's warrant;

c) conduct programs for the instruction of pathologists in their duties;

d) prepare, publish, and distribute a code of ethics for the guidance of pathologists;

e) administer a Registry of pathologists approved to perform post-mortem examinations under coroner's warrant; and

f) perform such other duties as are assigned to him or her by, or under, this or any other Act, or by the regulations, or by the Lieutenant Governor in Council.

Recommendation 15

The Governing Council should create a document outlining additional duties and responsibilities of the Chief Forensic Pathologist, which would include to

a) ensure that the Ontario Forensic Pathology Service (OFPS) provides a high quality of service;

b) ensure effective oversight of the work performed throughout the OFPS;

c) take responsibility for the service, teaching, and research mission of the OFPS;

d) encourage a collaborative culture of quality within the OFPS;

e) be responsible for the preparation and administration of the annual budget for the OFPS; and

f) be responsible for determining the pathologist who will conduct each post-mortem examination under coroner's warrant in Ontario.

Recommendation 16

The Chief Coroner for Ontario should direct investigating coroners to issue all warrants for post-mortem examination to the Chief Forensic Pathologist or designate.

The Role of the Deputy Chief Forensic Pathologist

If excellence is to be achieved as expeditiously as possible, much work needs to be done in creating and administering the OFPS. The job cannot be accomplished by the Chief Forensic Pathologist alone. Thus, in Chapter 11, Professionalizing and Rebuilding Pediatric Forensic Pathology, I recommend that legislative recognition be given to a sustainable and committed leadership structure for the OFPS that mirrors the leadership structure already in place for coroners. This structure includes one or more deputies.

The Deputy Chief Forensic Pathologist will report to the Chief Forensic Pathologist and have the powers of the Chief Forensic Pathologist in the absence of the Chief or when he or she is unable to act. Although it is preferable that the Deputy Chief Forensic Pathologist be a certified forensic pathologist, the Chief Forensic Pathologist should have the discretion to recommend the appointment as deputy of a pathologist without certification in forensic pathology who nevertheless has the requisite skills and experience. This discretion recognizes the current limited number of certified forensic pathologists.

The OCCO made a strong case that two Deputy Chief Forensic Pathologists should be appointed – one to sit in Toronto as director of the Provincial Forensic Pathology Unit (PFPU), and the other to sit outside Toronto as a director of one of the regional forensic pathology units.

Recommendation 17

The *Coroners Act* should be amended to provide that the Lieutenant Governor in Council may appoint one or more forensic pathologists to be Deputy Chief Forensic Pathologist(s) in Ontario who may act as, and have all the powers and authority of, the Chief Forensic Pathologist during the absence of the Chief Forensic Pathologist, or during his or her inability to act.

The Role of Regional Directors

The geographic cornerstones of forensic pathology service in Ontario today begin with the PFPU headed by the Chief Forensic Pathologist. It is located at the OCCO in Toronto, and those who work there are employees of the OCCO.

In addition to the PFPU, there are currently five regional forensic pathology units: the Hamilton Regional Forensic Pathology Unit at Hamilton General Hospital, the Kingston Regional Forensic Pathology Unit at Kingston General Hospital, the London Regional Forensic Pathology Unit at the London Health Sciences Centre, the Ottawa Regional Forensic Pathology Unit at the Ottawa Hospital, and the Ontario Pediatric Forensic Pathology Unit (OPFPU) at the Hospital for Sick Children (SickKids) in Toronto. Those who work in the units are on staff at the various hospitals and are not employees of the OCCO. The forensic pathology is done on a fee-for-service basis.

Each regional unit has a director (regional director) to oversee the work of the pathologists who provide services to the unit, and they bring some measure of quality control. However, because the roles and responsibilities of these regional directors vary with the service agreement establishing the unit as a provider of autopsy services to the OCCO, they are not consistent. Some of these agreements detail the regional director's responsibilities, while others provide little assistance. In addition, the manner in which these responsibilities are carried out varies considerably. Over the last few years, the Chief Forensic Pathologist has started the process of standardizing the responsibilities to be undertaken by the regional directors, most notably in the areas of peer review and quality control. But there is more work to be done.

The roles and responsibilities of the regional directors need to be formalized and standardized. The position of the regional directors within Ontario's death investigation system should parallel that of the regional coroners. Each must be accountable to the Chief Forensic Pathologist for the work of his or her regional unit. In addition to the supervisory duties this responsibility entails, the regional directors will work with the Chief Forensic Pathologist and the Deputy Chief Forensic Pathologist(s) to craft quality assurance processes, including peer review and other mechanisms for the OFPS as a whole. In terms of regional responsibilities, the regional directors will be responsible for all forensic pathology services provided within their geographical region, whether performed within their units or at other hospitals within the region. The specific duties of the position should be developed by the Chief Forensic Pathologist in conjunction with each regional director. This consultation will allow for individual variation to suit particular circumstances while also providing a common base for this position that ensures quality.

Consistency is important to allow the OFPS to provide sufficient oversight and quality control. Later in this chapter, I make recommendations about the way in which the funding contracts between the province and the hospitals that house the regional forensic pathology units need to be reformulated as service agree-

ments in those cases where this arrangement is not in place. The basic roles and responsibilities of the regional directors should be set out in the new service agreements, but allow room for region-specific terms.

Each regional director should be a certified forensic pathologist, if possible, although this requirement is a longer-term goal. Of immediate importance is the capacity to help lead the OFPS forward. This objective will be enhanced if regional directors hold full-time-equivalent positions with the OFPS, so that their work for the units is not on a fee-for-service basis but is part of a dedicated and coherent service. The degree to which a position is full-time may vary from unit to unit, with the objective of raising it over time as forensic pathology services are able to be concentrated increasingly in the units.

In addition, the regional directors should participate as members of a Forensic Pathology Advisory Committee (FPAC) formed to work with the Chief Forensic Pathologist. In this way, the regional directors will be encouraged to participate in decisions that affect the OFPS. Further details about the scope of the FPAC are discussed in Chapter 13, Enhancing Oversight and Accountability.

Recommendation 18

The Governing Council, on the recommendation of the Chief Forensic Pathologist, should appoint a regional director for each regional forensic pathology unit who will

a) **provide oversight of and be accountable for the work of their regional units;**

b) **be a member of the Forensic Pathology Advisory Committee; and**

c) **assist the Chief Forensic Pathologist and the Deputy Chief Forensic Pathologist(s) to create quality assurances processes, peer review processes, and other mechanisms of review.**

Building on the Regional Units

The challenges created by Ontario's immense geography are best addressed by building on the foundation provided by the existing regional forensic pathology units. These units, originally formed to develop regional expertise and to act as centres of excellence, are already housed within established institutions and academic teaching hospitals, and are well positioned to provide service across the province. As such, each benefits from its hospital's infrastructure and academic supports, and can rely on available resources and expertise to deliver high-quality forensic pathology services.

Our systemic review revealed the problems that develop when responsibility is ill defined. It is important that there be clarity in all lines of responsibility. It must be clear that the forensic work of pathologists conducted for the unit, although done in a hospital, is the responsibility of the OFPS, not the hospital, and that accountability flows accordingly. It must also be clear that the clinical pathology done by those same pathologists is the responsibility of the relevant hospital.

The regional units provide a strong foundation for the OFPS, offering expertise, linkages to teaching hospitals, and optimal geographic coverage. However, in order to achieve these objectives, the present funding needs to be increased. The current funding of the regional units is inadequate. It appears to have been arbitrarily set and, in some cases, has remained unchanged for years. It does not reflect the real cost of operating the units, nor does it adequately compensate the directors for their management, supervision, and other duties. A proper costing of the services provided by the units must be done, and the agreements for each unit must reflect that cost. This practice is not only responsible accounting but also a precondition to excellence.

Recommendation 19

To ensure quality of service across the province, the Ontario Forensic Pathology Service should utilize and build on the regional forensic pathology units.

Recommendation 20

The Province of Ontario should fund the actual costs of the regional forensic pathology units.

The Northeastern Regional Forensic Pathology Unit

In addition to the five existing regional forensic pathology units, all of which have contractual agreements with the Ministry of Community Safety and Correctional Services (formerly the Ministry of the Solicitor General), Sudbury Regional Hospital has provided autopsy services for the OCCO since May 1999. On June 14, 2007, the unit was officially named the Northeastern regional forensic pathology unit. Dr. Martin Queen, a certified forensic pathologist at the unit, performs approximately 250 post-mortem examinations a year, close to 90 per cent of which are coroner's cases. This unit provides extensive geographical coverage for the OCCO, including the Sudbury-Manitoulin region, as well as North Bay and Thunder Bay. However, the Northeastern unit is not formally recognized as a

regional forensic pathology unit. It does not have a contract with the ministry or the OCCO, so it does not receive any funding as a unit. Nor does it have a director.

This unit has much to offer the OFPS. Situated within the Sudbury Regional Hospital, it provides an established infrastructure with access to supporting expertise and equipment. The forensic work can be performed by a certified forensic pathologist. The unit itself is connected with a university medical school, the Northern Ontario School of Medicine. The unit's morgue recently underwent significant reconstruction that enables it to handle a volume of cases similar to that of other regional forensic pathology units. This unit should be formally recognized in a service agreement and should receive appropriate funding for the services it provides, including funding for the position of a regional director. This recognition will assist in meeting the service challenge presented by the sheer size of Ontario. I address this issue in greater detail in Chapter 20, First Nations and Remote Communities.

The Service Agreements

The first service agreement establishing a regional forensic pathology unit was signed in 1991. Over the next few years, similar agreements were signed to establish other regional forensic pathology units across the province. These agreements between the hospitals and the Ministry of the Solicitor General were little more than funding agreements. They failed to create the structures and delineate the relationships necessary to ensure meaningful oversight and quality control at the units, or to define sufficiently the relationships between the units and the OCCO or the Chief Forensic Pathologist.

A number of important changes have been made to the service agreements over the years. Today, the majority of the agreements reference each unit's mission "[t]o provide a centre of excellence for service, education and research related to forensic pathology / medicine," and a commitment to the concept of multidisciplinary teamwork. Most important, the focus of the majority of the agreements has shifted away from the flow of grant money provided to the units and toward providing some clarification of the roles and responsibilities within the units and at the OCCO. These responsibilities include the creation of a governance mechanism in the form of an Executive Team or Board of Directors, identification of the person responsible for the general supervision of the unit, clarification about to whom regional directors report in matters professional and financial, and confirmation that the unit is ultimately accountable to the Chief Coroner for Ontario. These changes, found in all the agreements except that regarding the Hamilton Regional Forensic Pathology Unit, are commendable.

However, in my opinion, the agreements need to go further to enhance oversight and accountability. The agreements state that the person responsible for the general supervision of the units is the Chief Coroner, who is also the person to whom the units are ultimately accountable. Moreover, the agreements identify the Chief Coroner as the person responsible for providing direction and guidelines in relation to acceptable standards of forensic pathology practice in the units, for ensuring that appropriate quality control measures are in place, and for reviewing all homicide and suspicious death reports of postmortem examination before their release. I detail elsewhere in this Report the frailties associated with entrusting professional oversight to those not qualified to provide it.

Between 1997 and 2001, a number of the agreements gave these responsibilities to the Chief Forensic Pathologist, not to the Chief Coroner for Ontario. After 2001, when the province was without a Chief Forensic Pathologist, it appears that these responsibilities were assumed by the Deputy Chief Coroner of Forensic Services and, once that position was vacated, by the Chief Coroner. Unfortunately, this language has remained unchanged, even after the appointment of the current Chief Forensic Pathologist in 2006. These provisions must be changed to reflect the role of the Chief Forensic Pathologist in providing oversight and accountability for the work of the units, including the work of the regional directors.

Some elaboration of the responsibilities of the regional director of the units is also incorporated in most of the current agreements. However, in some agreements, important aspects of professional responsibility for the unit – such as staffing schedules, monitoring report turnaround times, and financial management of the unit – are assigned not to the regional director but to an administrator. Ultimately, it must be made clear that the regional directors are responsible for all aspects of forensic pathology undertaken within their units. The agreements remain deficient, overall, because they fail to assign uniform oversight responsibilities to someone with the requisite expertise. The responsibilities of the regional directors must be expanded, and the role and responsibilities to be undertaken by the Chief Forensic Pathologist must be included in each of the agreements.

Another issue involves the contracting parties to these agreements, the Ministry of Community Safety and Correctional Services and the hospitals. The OCCO, although ultimately accountable for the oversight of the regional units, is not a party to the contracts.

These contracts establishing the regional units are better described as service agreements and need to be rewritten. Given that the OCCO and the OFPS must oversee and be accountable for the work within the units, it would be preferable if

the parties to the agreements were the OCCO and the individual hospitals. These agreements should contain uniform provisions and provide for funding on an equivalent basis, unless regional differences require special provisions.

The OCCO should also seek to enter into a service agreement with the Winnipeg Health Sciences Centre in Manitoba to formalize the provision of forensic pathology services by Dr. Susan Phillips to the OCCO. Currently, Dr. Phillips does some pediatric cases for the OCCO, including pediatric homicides and criminally suspicious cases, and this fact ought to be reflected in an agreement to provide for proper oversight and funding. The same is true for the Children's Hospital of Eastern Ontario (CHEO), which currently conducts non-criminally suspicious pediatric cases for the OCCO. A service agreement with CHEO is needed if this work is to continue. Service agreements will enhance these relationships and ensure that the Chief Forensic Pathologist has the tools to exercise oversight of the autopsies conducted at these institutions, including, in particular, any pediatric autopsies performed at those sites.

All these service agreements should carefully describe the relationship between the OCCO and the regional units. At a minimum, they should contain provisions that enable effective oversight of the work to be performed in the regional units for the OCCO by assigning specific responsibilities to the Chief Forensic Pathologist, the regional directors, the pathologists performing the work, and the hospitals in which the regional units are located.

In addition, the hospitals and the OCCO must ensure that policies are in place to require reciprocal information sharing where either the OCCO or a hospital develops serious concerns about the work of a pathologist who conducts coroner's cases. As a condition of inclusion on the Registry, pathologists must consent to such information sharing where serious concerns arise.

Recommendation 21

The Office of the Chief Coroner for Ontario should enter into service agreements regarding each of the regional forensic pathology units. These agreements should, at a minimum, provide that

a) **the unit will assume responsibility for a designated geographic area of the Ontario Forensic Pathology Service;**

b) **each regional director will be accountable to the Chief Forensic Pathologist for the work of his or her unit and will be responsible for the oversight, timeliness, and quality control of all post-mortem examinations performed under coroner's warrant within the unit's designated area;**

c) the Chief Forensic Pathologist will be responsible for the general supervision of the units, for providing direction and guidelines as they relate to acceptable standards of forensic pathology practice in the units, and for ensuring appropriate quality control measures are in place;

d) forensic pathologists performing work for the Ontario Forensic Pathology Service must be included on the Registry of pathologists and will be primarily accountable to their regional director; and

e) each regional director will hold a salaried position with the regional unit, although that may be a full- or part-time position, depending on the local circumstances.

Recommendation 22

Ontario hospitals should create policies requiring them to report any serious concerns about the work of any hospital pathologist who performs autopsies under coroner's warrant to the Chief Forensic Pathologist, whether or not the concerns arise out of work performed under coroner's warrant. The Office of the Chief Coroner for Ontario should also create policies requiring it to report any serious concerns about the work of a forensic pathologist to the hospital where the pathologist practises.

Recommendation 23

The Ontario Forensic Pathology Service should ensure that, as a requirement for inclusion on the Registry, pathologists consent to hospitals reporting serious concerns to the Chief Forensic Pathologist and to the Chief Forensic Pathologist reporting serious concerns to the hospitals.

Recommendation 24

With the support of the Ministry of Health and Long-Term Care and the Ministry of Community Safety and Correctional Services, the Ontario Forensic Pathology Service and each hospital with which a regional unit is associated should create protocols to clearly define the areas and limits of the hospital's responsibilities, to avoid confusion about the oversight roles of the Chief Forensic Pathologist and the hospital.

Future Growth of the Units

At present, approximately 50 per cent of the 7,000 coroners' post-mortem examinations conducted annually in Ontario are performed by fee-for-service pathologists who work outside of the regional units. This wide dispersion tends to permit ad hoc practices and to undermine efforts to enhance quality control. It impedes optimal oversight.

As the OFPS moves into the future, it should take action to reduce the use of fee-for-service pathologists outside of the regional units. Dr. Michael Pollanen, Ontario's Chief Forensic Pathologist, has already taken steps to stream all criminally suspicious cases that do not fall within the direct catchments of a regional unit to Toronto – adult cases go to the PFPU, and pediatric cases to the OPFPU. Moreover, the OCCO's protocol in relation to the investigation of sudden and unexpected deaths of children under five years of age specifies that autopsies in these cases must be performed at a unit designated for pediatric cases.[2]

As forensic pathology expertise becomes more available in Ontario, the OFPS should build additional strength and capacity within the PFPU and the regional forensic pathology units. This growth will permit the increasing use of full-time-equivalent positions in those units as the volume of work rises. In the longer term, both steps will assist in professionalizing the forensic pathology service provided in Ontario.

Recommendation 25

The Ontario Forensic Pathology Service should increase the number of full-time-equivalent positions in all the units, as well as the proportion of forensic autopsies that are performed within those units.

The Use of Technology

Our systemic review showed the risks that arise when a pathologist works largely alone and seldom consults colleagues or is challenged by them. As with any branch of medicine, teamwork is vital for the best practice of forensic pathology. Given the size of Ontario, the need for separate units to provide a distribution of service throughout the province, and the relatively small number of skilled

[2] The units that are designated for pediatric cases are the OPFPU, the PFPU, the Hamilton Regional Forensic Pathology Unit, the London Regional Forensic Pathology Unit, the Children's Hospital of Eastern Ontario, and the Winnipeg Health Sciences Centre.

practitioners in this specialty, the OFPS faces a continuing challenge to provide the means for interaction among pathologists.

The teamwork necessary to run an effective OFPS can, however, be supported by harnessing information and communications technology to enable those practising in remote areas of Ontario to participate in educational sessions, rounds, and meetings on a regular basis. Equally important, the use of technology can assist greatly in reducing isolation and encouraging consultation and peer review in complex cases.

The Province of Ontario should fund the acquisition of the communications and information technology that will support the networking capabilities of the OFPS. A telemedicine portal should be established at the PFPU and, if not already part of the particular hospital system, at all the regional forensic pathology units. It will enable "real-time" review and consultation among forensic pathologists during post-mortem examinations in difficult cases. Given that this technology is now available in most hospital systems, it should also be possible to use it in all hospitals where pathologists perform post-mortem examinations under coroner's warrant, and not just in the regional units.

Recommendation 26

The Province of Ontario should fund a telemedicine portal in the Provincial Forensic Pathology Unit and at each of the regional forensic pathology units, if not already a part of the particular hospital system.

Effective Organization of Pediatric Forensic Pathology in Ontario

The OPFPU

A central issue at the Inquiry was whether the OPFPU at SickKids should continue or be disbanded. The position of director of the OPFPU assisted in positioning Dr. Charles Smith to become the leading expert in pediatric forensic pathology, when he lacked the requisite training and qualifications. The mere fact that he came from SickKids, where the OPFPU was located, added significantly to his stature. Yet, in reality, SickKids had no ownership of his forensic pathology work. Thus, it is argued, Ontario got the worst of both worlds – the reputation without the substance on which that reputation should have been based. Those on the other side of this debate point out the enormous value added by the renowned expertise that SickKids can bring to the work.

Particularly for sudden infant deaths that engage diseases that are difficult to diagnose and that do not appear criminally suspicious, SickKids can offer expertise without peer. Sudden infant death syndrome (SIDS) is a good example. Many post-mortem examinations involving sudden and unexpected deaths of infants that are ultimately diagnosed as SIDS have been done at the OPFPU over the years, and the knowledge thus accumulated has done much to assist the understanding of this phenomenon. The argument is that this benefit ought not to be obscured by the regrettable past.

The OPFPU was the first of the regional units, and it is the only unit dedicated solely to the provision of pediatric services. It conducts more than half of Ontario's pediatric coroner's cases. The OPFPU has world-class expertise in pediatric death cases that focus on disease rather than injury. The breadth and depth of its pediatric expertise and technical assistance is not available elsewhere in the province. However, until 2001, when Dr. David Chiasson, a certified forensic pathologist, joined SickKids, the unit had no pathologists with forensic certification. As Dr. Chiasson pointedly explained it, "It's time to emphasize the 'forensic'" of the Ontario Pediatric Forensic Pathology Unit.

Notwithstanding the OPFPU's unfortunate legacy as the setting in which Dr. Smith's flawed practices went unchecked, I agree with SickKids that the OPFPU has much to offer our province. Its work in non-criminally suspicious forensic cases deserves to be fostered. It also provides a unique setting within a highly respected hospital for training in the pediatric aspects of forensic pathology. The training should be made available to forensic pathologists for a concentrated period – perhaps three to six months – in the OPFPU environment. The training could form part of a forensic pathology fellowship program and could offer continuing medical education to those who wish to incorporate pediatric forensic pathology into their practice. In this way, the "pediatric" as well as the "forensic" of the OPFPU will benefit the medical profession and, in particular, pediatric forensic pathology.

In my view, the OPFPU should continue to provide pediatric forensic pathology services and act as a regional unit. The pediatric pathology expertise of SickKids' pathologists is too important to be sidelined. However, never again can the director of the OPFPU lack training in forensic pathology and qualifications. Dr. Chiasson, the OPFPU's current director, is a certified forensic pathologist, and his expertise is vital to the work of the unit. Not only is he available to take on the criminally suspicious cases but his expertise enables him to provide effective quality assurance and peer review for all pediatric forensic cases.

Recommendation 27

The Ontario Pediatric Forensic Pathology Unit should continue as a regional forensic pathology unit located at SickKids. Its director must be a certified forensic pathologist.

Relationship between the PFPU and the OPFPU

The OPFPU, like the other regional forensic pathology units, operates within the greater provincial system. Unlike the other regional units, however, the OPFPU is closely tied to the PFPU. The OPFPU handles those pediatric forensic cases for Toronto and its broader catchment area that would otherwise be done within the catchment area for the PFPU. Indeed, on an ad hoc basis, it often gets cases from elsewhere in the province. And the Chief Forensic Pathologist, whose office is at the PFPU, assists with cases and consultations at the OPFPU.

It is important to maintain this close association between the PFPU and the OPFPU because, in the future, both units should be involved in pediatric cases under coroner's warrant. Cases that appear criminally suspicious (fortunately, there are not many each year) can be done in either unit, as the Chief Forensic Pathologist directs, depending on available skills and resources at the time. For the majority of pediatric forensic cases, the OPFPU is the better site, since these cases do not appear criminally suspicious, and there are various pediatric experts on hand to assist the pathologist as needed. The OPFPU also has access to a number of technical resources to assist the pathologist. Indeed, even where the autopsy is done at the PFPU, these resources are close enough to be easily accessed.

The close association between the OPFPU and the PFPU is also important for training purposes. We heard evidence that some forensic pathologists shy away from pediatric forensic cases. To address this concern, Dr. Pollanen hopes to expose forensic pathology trainees to pediatric cases early in their careers. The expertise and facilities of the OPFPU have much to offer and can work in conjunction with a fellowship program at the PFPU. I encourage this vision – ultimately, the majority of qualified forensic pathologists at the PFPU and the regional units should be trained and able to perform pediatric forensic cases as well as adult forensic cases. The province cannot bear the risks associated with having all, or even most, of the pediatric forensic autopsies conducted by only one or two pathologists. We need to encourage those practising forensic pathology and new trainees to learn about pediatric forensic pathology.

It is also very important to encourage a culture of collegiality between the

forensic pathologists working in the OPFPU and the PFPU. Numerous attempts have been made over the years to include the pediatric pathologists from the OPFPU in the PFPU rounds, and vice versa. It was hoped that the information exchange would benefit them all. However, the evidence revealed that, in the past, this participation in rounds at the other institution proved difficult, and there was very little interaction between the staff at the two units. Attempts to enhance communication and information sharing between the units, as well as between the PFPU and fee-for-service pathologists working outside of the units, have, however, improved over the years.

Since 2001, there have been a number of positive educational changes. For example, Dr. Pollanen has instituted bimonthly seminars for forensic pathologists about difficult issues in forensic pathology, such as autopsy pitfalls and miscarriages of justice. He has also developed a multidisciplinary expert witness workshop for forensic pathologists.

At present, the close proximity of the OCCO and SickKids in the City of Toronto enables a pathologist from one location to travel to the other with ease when required. The importance of attending rounds at both institutions in order to remain current and involved in both adult and pediatric issues is increasingly emphasized, which I commend. It is vital that the pediatric pathologists doing the pediatric forensic pathology work at the OPFPU (even though it will be non-criminally suspicious for the most part) and the forensic pathologists doing the pediatric forensic work at the PFPU learn from one another.

As a particular example, it is essential that forensic pathologists practising at the OPFPU also have exposure to adult forensic cases. Dr. Chiasson continues to perform adult post-mortem examinations at the PFPU to maintain his skills, and this precedent should be emulated.

Communication will be further enhanced with the use of technology, enabling busy practitioners at these and the other units to assist one another regularly without leaving their offices. The use of technology to maintain open channels of communication between the units will become increasingly important if and when the PFPU moves to larger premises outside the city core. The evidence supports the need for continued interaction between the PFPU and the OPFPU because the accumulated expertise of colleagues in the two units will increase the quality of forensic pathology in pediatric cases, especially those engaging criminal suspicions.

Recommendation 28

For pediatric forensic cases that are to be done in Toronto, the Chief Forensic Pathologist or designate should direct that

a) **for pediatric forensic cases that do not appear to be criminally suspicious, the post-mortem examination should usually be conducted at the Ontario Pediatric Forensic Pathology Unit;**

b) **for criminally suspicious pediatric forensic cases, the post-mortem examination should be conducted by an appropriate pathologist at the Ontario Pediatric Forensic Pathology Unit or at the Provincial Forensic Pathology Unit, as determined by the Chief Forensic Pathologist or designate; and**

c) **particularly in difficult cases, the pathologists at each unit should take advantage of the expertise available at the other unit.**

Information Sharing between SickKids and the OCCO

Our systemic review revealed a disturbing wall of silence between SickKids and the OCCO in relation to Dr. Smith. This breakdown in communication must be avoided in future. SickKids must share with the Chief Forensic Pathologist any significant concerns about the clinical pathology performance of those doing forensic pathology work for the OCCO. Indeed, as I have said, such communication should occur at *all* the regional forensic pathology units. The host hospitals must agree to share with the Chief Forensic Pathologist the serious concerns they have about any aspect of a pathologist's work, if the pathologist is also to perform coroner's work. This information sharing should be required by all the service agreements, including that between SickKids and the OCCO.

Pediatric Forensic Pathology across Ontario

Apart from the OPFPU, pediatric forensic pathology is now performed in three other locations across Ontario – the regional forensic pathology units in Hamilton and London, and CHEO in Ottawa – as well as at the Health Sciences Centre in Winnipeg. I see no reason why this distribution should not continue, at least for non-criminally suspicious cases.

For criminally suspicious pediatric cases, it should be the responsibility of the Chief Forensic Pathologist or designate to determine whether the autopsy will be performed at one of these locations or transferred elsewhere, most commonly to either the OPFPU or the PFPU.

Recommendation 29

For pediatric deaths outside the area regularly serviced by the Ontario Pediatric Forensic Pathology Unit, the Chief Forensic Pathologist or designate should direct that

a) **for pediatric forensic cases within the geographical area of the designated regional units that do not appear to be criminally suspicious, the post-mortem examination should be conducted at the appropriate regional forensic pathology unit or by Dr. Susan Phillips or another approved forensic pathologist in Winnipeg; and**

b) **for criminally suspicious pediatric forensic cases, the post-mortem examination should be conducted by the pathologist and at the unit designated by the Chief Forensic Pathologist or designate.**

Protocol for Criminally Suspicious Pediatric Cases

A fundamental conclusion of our systemic review was that Dr. Smith's lack of forensic training caused great harm. The evidence is clear that forensic pathologists rather than pediatric pathologists should take the lead in criminally suspicious pediatric cases. They are better qualified to conduct these autopsies. They begin each case with the relevant training in injury identification and the proper preservation of evidence. It is difficult to rebuild the forensic framework and gain evidentiary control at a later stage if a pathologist not trained or experienced in forensic work begins the autopsy. The expertise of other pediatric pathology specialists can be engaged at almost any point thereafter. Therefore, for all criminally suspicious pediatric forensic cases, a forensic pathologist must conduct the post-mortem examination.

The October 2007 Guidelines on Autopsy Practice for Forensic Pathologists: Criminally Suspicious Cases and Homicides (the Autopsy Guidelines) move a long way in this direction. However, even more should be done to ensure that these difficult cases are performed by experienced forensic pathologists with pediatric expertise. To achieve this goal, it is essential that the number of forensic pathologists with pediatric forensic experience be expanded as quickly as possible. As I will discuss in Chapter 13, Enhancing Oversight and Accountability, once the Registry is established, the Chief Forensic Pathologist will determine which forensic pathologists are sufficiently qualified by training and experience to perform autopsies in criminally suspicious pediatric cases. I refer to that group identified in the Registry as "approved" pediatric forensic pathologists. Ultimately, once numbers permit, the goal must be to have only certified forensic pathologists with pediatric forensic experience perform these cases.

Recommendation 30

Until the Registry of pathologists is created, the provisions of the 2007 Guidelines on Autopsy Practice for Forensic Pathologists: Criminally Suspicious Cases and Homicides should be followed in all criminally suspicious pediatric forensic cases.

Recommendation 31

Once the Registry is created, the Chief Forensic Pathologist or designate should ensure that, in all criminally suspicious pediatric forensic cases, the post-mortem examination is conducted by an approved pediatric forensic pathologist.

Recommendation 32

As soon as numbers permit, the Chief Forensic Pathologist should ensure that, in all criminally suspicious pediatric forensic cases, the post-mortem examination is conducted by a certified forensic pathologist with pediatric forensic experience.

Double Doctoring

The concept of "double doctoring" generated considerable discussion at the Inquiry. In particular, a few participants favoured a double doctoring system in which both a forensic and a pediatric pathologist must be present at every suspicious child death autopsy.

Ontario has neither the human nor the financial resources to implement such a system, and I am not persuaded that this system is necessary to ensure quality. The regional forensic pathology units that conduct pediatric forensic autopsies are all located in hospitals with a variety of specialists, such as pediatric pathologists and neuropathologists, who can be called on to assist when their expertise is required. This less formal form of double doctoring achieves the goal of benefiting from different areas of expertise in the performance of pediatric forensic autopsies. It has proven successful in other jurisdictions, both from a human resources and a financial perspective. This collaboration is best achieved through a policy that encourages the Chief Forensic Pathologist and others within the OFPS to use available resources as needed in an individual case.

Moreover, as recommended above, forensic pathologists must take the lead in criminally suspicious pediatric cases, as determined by the Chief Forensic Pathologist. Therefore, the Chief Forensic Pathologist or designate must be given the tools to ensure that the particular type of case and the skill set of the forensic

pathologist are properly matched and that, in complex cases, collaboration with appropriate experts takes place as needed.

Recommendation 33

For all forensic cases, but particularly for criminally suspicious pediatric cases, the Ontario Forensic Pathology Service should reinforce a policy that encourages collaboration between the forensic pathologist and other relevant professionals.[3]

Protocol for Pediatric Cases That Become Criminally Suspicious during Autopsy

Given that a number of pediatric forensic cases do not initially present suspiciously, pediatric pathologists may be assigned autopsies that do not appear to be criminally suspicious. However, in a small number of cases, something unexpected arises during the autopsy, and they become criminally suspicious.

Before 2007, there were no formal OCCO guidelines regarding how pathologists should determine whether a case might raise criminal suspicions. The April 2007 Autopsy Guidelines introduced criteria for initially determining whether a case should be regarded as criminally suspicious. These have since been incorporated into the October 2007 Autopsy Guidelines. They include a known history of child abuse, unusual or suspicious appearance of the death scene, history of an unusual fall or accident, poor hygiene or other evidence of neglect, injuries or bruising or burns of an unclear nature, previous sudden and unexplained infant death of a sibling, and history of recurrent life-threatening episodes. If any of these criteria apply, the remainder of the guidelines for homicidal and criminally suspicious deaths in infants and children are to be followed.

These criteria should continue to be used to identify a pediatric case as criminally suspicious at the outset. Where these criteria do not apply initially to a pediatric case, only a very low threshold must be met to re-designate the case as criminally suspicious. This precaution will ensure that, at the earliest sign of any suspicion, the pathologist will turn the case over to a qualified forensic pathologist. Even at the beginning, indicators such as the history provided by the coroner or the police, or physical evidence such as suspicious healing fractures on X-rays,

[3] I have not always distinguished between policies, protocols, guidelines, and practices in my recommendations, although others sometimes do draw distinctions on the basis that some of these documents are intended to be mandatory, others discretionary. From my perspective, they all provide instructions that should be followed.

are important factors that necessitate consultation with a qualified forensic pathologist before either continuing with the autopsy or turning it over to the more specialized professional.

A detailed protocol should be developed to assist pathologists in cases where an unexpected finding arises during a pediatric autopsy. The protocol should set out that, in such cases, the pathologist should stop the autopsy, consult with a qualified forensic pathologist, and notify the Chief Forensic Pathologist or designate before proceeding. The protocol should help forensic pathologists identify circumstances that would meet this low threshold. Ongoing training and education will assist forensic pathologists in recognizing when, mid-autopsy, cases are possibly no longer within the realm of pediatric disease and, consequently, raise criminal suspicion.

Recommendation 34

The Ontario Forensic Pathology Service should establish a protocol for pediatric forensic cases that appear non-criminally suspicious at the outset, but become criminally suspicious during the post-mortem examination. The pathologist must trigger the application of the protocol as soon as a suspicion arises, and the protocol should provide for immediate access to a forensic pathologist and, ultimately, to the Chief Forensic Pathologist.

Protocol for Criminally Suspicious Adult Cases

The evidence clearly demonstrates that criminally suspicious cases, whether pediatric or adult, are best undertaken by experienced forensic pathologists. As with pediatric cases, the current Autopsy Guidelines go a long way in that direction for adult cases. The ultimate objective for adult cases is that the post-mortem examination be performed by a certified forensic pathologist.

At present, there are insufficient numbers to achieve that goal. As I have said, building this pool of expertise is of vital importance. In the meantime, and pending the creation of the Registry, the Chief Forensic Pathologist should ensure that the current Autopsy Guidelines are followed in criminally suspicious cases. Once the Registry is established, only those forensic pathologists approved to do so will perform post-mortem examinations in these cases. And ultimately, these examinations will be done only by certified forensic pathologists. That goal should be reached as soon as possible.

Recommendation 35

Until the Registry of pathologists is created, the provisions of the 2007 Guidelines on Autopsy Practice for Forensic Pathologists: Criminally Suspicious Cases and Homicides should be followed in all criminally suspicious adult forensic cases.

Recommendation 36

Once the Registry is created, the Chief Forensic Pathologist or designate should ensure that in all criminally suspicious adult forensic cases, the post-mortem examination is conducted by an approved forensic pathologist.

Recommendation 37

As soon as numbers permit, the Chief Forensic Pathologist should ensure that, in all criminally suspicious adult forensic cases, the post-mortem examination is conducted by a certified forensic pathologist.

There is a need to recognize the importance of forensic pathology in death investigations in the *Coroners Act*. Equally pressing is the need to ensure clear lines of responsibility for the forensic pathology work that is done for the OCCO. The role of the Chief Forensic Pathologist will be vital in this endeavour: he or she should be ultimately accountable for the work and, just as important, should have the necessary powers and resources to direct how the work is to be done. However, the Chief Forensic Pathologist cannot do it alone and must be assisted by Deputy Chief Forensic Pathologists as well as regional directors. The regional forensic pathology units reflect the geographic reality of Ontario and, in the case of the OPFPU, reflect the teaching, research, and other assets offered by SickKids. All of the regional forensic pathology units should be continued, and the relationship with the unit in Sudbury should be formalized. All of the units, however, need to be provided with adequate funding and with service agreements that recognize the responsibilities of the Chief Forensic Pathologist. Such a reorganization of forensic pathology should provide a solid foundation for the service, teaching, and research that is necessary to have a forensic pathology service that earns, and maintains, the confidence of the public.

13

Enhancing Oversight and Accountability

Introduction

Our systemic review has exposed deep flaws in the oversight and accountability mechanisms, quality control measures, and institutional arrangements of pediatric forensic pathology in Ontario from 1981 to 2001. The litany of problems did not result just because of the people involved. Many were problems of the system. Although there have been significant improvements in the oversight and accountability mechanisms of the Office of the Chief Coroner for Ontario (OCCO) since 2001, more needs to be done to restore and enhance public confidence in pediatric forensic pathology and its future use in the criminal justice system in Ontario.

In Chapters 11, Professionalizing and Rebuilding Pediatric Forensic Pathology; 12, Reorganizing Pediatric Forensic Pathology; and 15, Best Practices, I recommend ways to professionalize and build Ontario's forensic pathology service, and to improve both the organization and the best practices of forensic pathology. These initiatives will improve the quality of the forensic pathology used in death investigations in Ontario. Without proper oversight and corresponding accountability, however, we cannot be sure that, if serious mistakes do in the future arise in forensic pathology or in the way it is used by the criminal justice system, they will not, once again, go undetected. In this chapter, I detail much needed improvements to the important mechanisms for oversight of forensic pathology in Ontario. These mechanisms are centred at the OCCO. In subsequent chapters, I address the contributions required of other participants in the criminal justice system to help protect it from flawed pathology.

As with many aspects of what I discuss in this Report, it is not practical to design oversight and accountability mechanisms targeted only at a small subset of forensic pathology – namely, pediatric forensic pathology. Oversight of pediatric forensic pathology must take place in the broader context of the oversight of

forensic pathology. To be effective, oversight and accountability improvements must address the practice of forensic pathology in Ontario as a whole.

However, in a fundamental way, change must reach beyond forensic pathology. Our systemic review revealed very significant failures of oversight of Dr. Charles Smith by the senior leadership of the OCCO. The failure by the Chief Coroner to oversee effectively a senior colleague of such importance to the work of the OCCO has shaken public confidence in the ability of the current leadership structure to provide proper overall oversight of the work of that institution. In my view, the public's loss of confidence is justified: these serious failures can be seen only as a failure of governance. To provide effective oversight of the work of the OCCO and to restore public confidence, a major institutional change in governance is required.

Hence, the most significant component of my oversight and accountability recommendations is the development of a new governance structure for the OCCO. It requires a Governing Council to ensure more objective and independent governance of the institution, including the work of both the Chief Coroner and the Chief Forensic Pathologist and those they oversee in the coronial and forensic pathology services in Ontario.

Other institutional changes are also needed to improve oversight and accountability of forensic pathology. Principal among these changes are the creation of a registry of pathologists approved to perform coroner's autopsies; and the clarification of the reporting relationships between pathologists and the Chief Forensic Pathologist, between the Chief Forensic Pathologist and the regional units, and between the Chief Forensic Pathologist and the Chief Coroner.

The oversight and accountability mechanisms recommended in this chapter also include a variety of specific tools that can be used to ensure and enhance quality in forensic pathology. As I have said, many improvements have been made since 2001. My recommendations aim to build on these advances.

Oversight, Accountability, and Quality Control / Assurance

Before turning to my recommendations, I will explain what I mean by "accountability," "oversight," and "quality control / assurance." Although these terms appear in the Order in Council establishing the Inquiry and are frequently used by public servants and lay people, their meanings are rarely clearly articulated.

At its simplest, accountability is the obligation to answer for a responsibility conferred. When called on to account, a party on whom responsibility has been conferred must explain and justify – against criteria of some kind – his or her

decisions or actions. Oversight is the other side of this equation. Once a responsibility is conferred, oversight seeks to ensure that the responsibility is properly fulfilled. The overseer must ensure that those who hold the responsibility in fact discharge it and are held accountable for their actions and decisions.

One of the most effective ways to promote oversight and accountability is through the development of quality assurance or quality control measures. Quality assurance can take a variety of forms. An example is the peer review of reports of post-mortem examination.

At the institutional level, oversight is the responsibility of those charged with governing the institution. In that sense, effective oversight is an important component of effective governance. As the OCCO is structured at present, the Chief Coroner holds ultimate responsibility to oversee those who do work for the OCCO. The Chief Coroner must ensure that this work is done properly, whether it is the work of coroners or that of forensic pathologists.

A related institutional issue is accountability. To whom is the OCCO accountable and what is the nature of that accountability? In a democratic system of government, every public institution is, in a broad sense, answerable to the public for its activities. From this perspective, the OCCO is accountable for its work and its oversight of death investigations to the public through its governing ministry, the Ministry of Community Safety and Correctional Services. The public ultimately oversees the OCCO's work through the government of the day. If the OCCO fails to properly oversee the work of coroners or forensic pathologists and is not rigorously held to account, public confidence may well be shaken.

But the public rarely has sufficient information or expertise to exercise this role in an effective way. Nor, in many cases, does the ministry. Moreover, there is another consideration that constrains the ministry. In seeking to hold the OCCO accountable for the delivery of first-class death investigations, the ministry must avoid all political interference. Because the public interest requires that the OCCO be objective and independent from government, the ministry's ability to closely monitor the OCCO and hold it accountable is constrained. Although the OCCO is accountable to the government for the public funds it spends, and for adherence to a range of other governmental policies (for example, policies relating to procurement, budgeting, and financial administration), the Chief Coroner must exercise the duties set out in the *Coroners Act*, RSO 1990, c. C.37, in an independent fashion.

Since the ministry can have no more than this general responsibility, it is vital that effective overall oversight of the work of the institution be central to the day-to-day mandate of the OCCO. Individual actors within the institution must be accountable for the performance of their duties. Those who monitor and supervise

their work must be held accountable for that oversight. Various tools such as policies, protocols, guidelines, audits, and reviews must be available to ensure that all the tasks that comprise a quality death investigation are performed as well as possible. But the crucial level of responsibility is that for the OCCO itself. It must be overseen by a governing body that is objective, has the information and expertise needed to set broad directions, can require that they be pursued and ensure that mistakes are prevented or corrected, and can see that problems are identified and addressed and thus guarantee that the public interest is protected.

Governance of the OCCO: Creation of a Governing Council

Our systemic review revealed significant failures in the OCCO's oversight of pediatric forensic pathology from 1981 to 2001. It had no effective systems in place to ensure meaningful and objective oversight of forensic pathologists working pursuant to coroner's warrant. Rather, senior leaders of the institution, Chief Coroner Dr. James Young and Deputy Chief Coroner Dr. James Cairns, had ad hoc responsibility for the oversight of Dr. Charles Smith. This was part of their overall responsibility for the forensic pathologists doing work for the OCCO. As I describe in Volume 2, they failed in this task.

There were a number of reasons, all of which have systemic implications, for their failure to oversee effectively the forensic pathology being done for the OCCO in Dr. Smith's cases. There were few, if any, tools for effective oversight of Dr. Smith's work. More important, although ultimately responsible as its senior leadership for the oversight of the work of the OCCO, Dr. Young and Dr. Cairns lacked any training or expertise to permit them to oversee forensic pathology. Their objectivity, an essential prerequisite of effective oversight, was compromised by a kind of symbiotic relationship with Dr. Smith – as the leaders of the OCCO, they needed him to continue to do his work for the institution, and he needed them to allow him to do so. Their objectivity was further eroded by their long professional friendships with Dr. Smith. They had worked with him in the close confines of the OCCO and the Ontario Pediatric Forensic Pathology Unit (OPFPU) for years. They liked and admired him. They trusted his work as a senior colleague with a faith that the facts could not shake. Over time, this professional closeness left them increasingly incapable of objectively evaluating his work.

Is it a sufficient remedy that their leadership has been replaced by a new cohort of talented individuals? Quite simply, no. It would be wrong to imagine that the conditions in place during the 1990s were a unique confluence of events and that their recurrence could be avoided simply by installing different individ-

uals in the OCCO's leadership positions. A sound system of oversight and accountability cannot rely on who happens to occupy the OCCO's leadership positions at any given time. Systemic change is necessary. First, there must be a governance structure that ensures that those responsible for governing the OCCO have sufficient expertise to provide institutional oversight of the forensic pathology work done for the OCCO. Second, it is essential that those governing the OCCO not suffer the loss of independent judgment and objectivity that came with the professional closeness of the past. The Chief Coroner, then, should no longer be the ultimate level of responsibility for the OCCO. In my opinion, the creation of a Governing Council is required if the OCCO is to provide effective institutional oversight of forensic pathology in the public interest.

Responsibilities of the Governing Council

What should the responsibility of the Governing Council be? Should it be limited to the forensic pathology service provided by the OCCO? My mandate is directed at the oversight of pediatric forensic pathology, but, of necessity, this recommendation must address oversight and accountability for the OCCO as a whole, including the services provided by coroners as well as forensic pathologists. It would be harmful to have a system that properly oversees forensic pathology but did so by creating a silo for that service separate from the coronial service. Forensic pathology is the core specialized discipline in death investigations, but it must work in partnership with the coronial service. As well, as a practical matter, many of the institutional supports required by the forensic pathology service are also required by, and must be shared with, the coronial service. A single governance structure is cost effective, avoids duplication of resources, and encourages coordinated approaches to death investigation. A Governing Council is essential to provide ultimate oversight of the forensic pathology service provided by the OCCO, and there is no reason to think it will do any less for the coronial service.

A Governing Council with responsibility for all of the OCCO has another advantage. A death investigation system in which the public can have confidence must ensure that deaths are subject to objective, independent, and accountable investigations. At present, the Chief Coroner for Ontario is accountable to, and receives limited oversight from, the deputy minister of emergency planning and management of the Ministry of Community Safety and Correctional Services through the commissioner of community safety. However, in accordance with the institutional independence of the OCCO from government, the oversight provided by the commissioner and the deputy minister is limited to administrative and budgetary matters. As a result, the ministry provides little oversight of the

OCCO's management of the substantive aspects of death investigation in Ontario. Under the current regime, given the limits on oversight by government, the Chief Coroner is, in effect, required to serve in functions akin to both chief executive officer (with ultimate responsibility for managing the OCCO) and chair of the board (with ultimate responsibility for oversight of the management of the OCCO). As Professor Lorne Sossin of the University of Toronto told the Inquiry, these dual responsibilities are incompatible with effective accountability, independent oversight, and good governance. They give the appearance that the OCCO's leadership is not subject to independent scrutiny. Nor is it only an issue of appearance. As I describe above, our systemic review has shown that the closeness of the relationships between Dr. Smith and the Chief Coroner and Deputy Chief Coroner undermined the ability of the latter two to scrutinize Dr. Smith's work objectively.

Thus, in my view, the oversight of the OCCO as a whole, both the coronial service and the forensic pathology service, should be shifted to the Governing Council. The Governing Council would oversee both of the major services provided by the OCCO – the coronial service and the new Ontario Forensic Pathology Service (OFPS). The Governing Council would be independent from government, but would report in much the same limited way to the responsible commissioner and deputy minister as the Chief Coroner does now. Unlike the present situation, however, this structure would serve to create a buffer between government and the operational side of death investigations. It would ensure that the OCCO is operationally independent from government. The Governing Council would also assist in ensuring a collaborative relationship between the Chief Coroner and the Chief Forensic Pathologist and would be available to resolve any issues that might arise between them.

In making this recommendation, it is important to underline that the OCCO, which has given this matter careful thought in light of the traumatic events it has had to grapple with, has come to a very similar conclusion. The OCCO sees the creation of a council to provide oversight for death investigations in Ontario, and to have oversight responsibilities for the Chief Coroner and the Chief Forensic Pathologist, as vital in restoring public confidence in Ontario's death investigation system and in ensuring sound oversight. That is an assessment that I share entirely.

Structure of the Governing Council

In considering a proposed structure for the Governing Council, I was influenced by the governance model in place at the Victorian Institute of Forensic Medicine

(VIFM) in Australia. The VIFM is considered, with justification, to be a world-renowned service provider of forensic medicine. It is created by statute, and is managed by a board that is defined in the legislation and that holds the director of the VIFM accountable for the institute's operations. Likewise, the existence and responsibilities of the Governing Council that will oversee death investigations in Ontario should be set out in the *Coroners Act*. It should be defined as the governing body charged with oversight of the OCCO.

I was also guided by the submissions of the OCCO. The OCCO submitted that the principal functions of the Governing Council should be to provide the Chief Coroner and Chief Forensic Pathologist with strategic planning direction, guidance on performance expectations within the OCCO and on ethical issues, and directions concerning operational priorities and achieving high-quality death investigations. This envisages the Governing Council operating much like a board of directors. In my view, these are sound recommendations. The Governing Council should indeed oversee the strategic direction of the OCCO, including both the coronial service and the OFPS. The Governing Council's responsibilities should include budgetary approval, making senior personnel decisions, running the public complaints process, and ultimate oversight of the work of the OCCO.

The Chief Coroner for Ontario should report to and be accountable to the Governing Council for the professional aspects of the coronial service. The Chief Forensic Pathologist should report to and be accountable to the Governing Council for the professional services of the OFPS. In addition, as I discuss below, an executive director should report to and be accountable to the Governing Council for the administration of both the coronial service and the OFPS.

The Governing Council should report on an annual basis to the Ministry of Community Safety and Correctional Services, and the Governing Council's annual report should be made available to the public. The ministry should also retain the ability, as it does now, to fulfill certain functions in relation to the OCCO, including directing an inquest, in accordance with s. 22 of the *Coroners Act*. The Governing Council would also be required to approve the budget and business plans of the OCCO. The executive director would then present the budget and business plans to the ministry for review and final approval.

The membership of the Governing Council should be set by regulation. Appointments to the Council should be made by the Lieutenant Governor in Council, with a fixed term of office. The Chief Coroner and Chief Forensic Pathologist should sit on the Governing Council as ex officio members. The executive director would serve as secretary to the Governing Council and provide it with appropriate administrative support.

The creation of the Governing Council is fundamentally about good governance.

Its membership should therefore be based on competency, not constituency. The membership should form the basis for an independent, multidisciplinary governance body with the skills to ensure meaningful oversight of the death investigation system, including both the coronial service and the forensic pathology service. Members should therefore be senior decision makers from related public institutions with experience acting in the public interest, or their nominees. In order to ensure an independent perspective on forensic pathology services, its membership should also include a certified forensic pathologist from outside of Ontario.

At the Victorian Institute of Forensic Medicine, membership of the board includes the VIFM director, the state coroner, a nominee of the Chief Justice, two nominees from the Attorney General, nominees from the medical schools, a nominee from the Chief Commissioner of Police, and nominees from the ministries of police and emergency services, health, community services, and women's affairs.

In my view, the membership of the Governing Council of the OCCO should, in significant measure, parallel this structure. One exception is the nominee from the police service. In my view, the inclusion of a police nominee would undermine the appearance of independence of death investigations. Equally, given that members of the Governing Council must act in the public interest and must not be seen to serve a particular constituency, it would not be appropriate, for example, to appoint defence counsel to the Governing Council. In my view, constituency-based appointments would simply be inconsistent with the requirement of independent decision making in the public interest. Constituency interests are better accommodated through advisory committees.

As I describe in Chapter 14, Improving the Complaints Process, the Governing Council should have a public complaints committee to address complaints about coroners or pathologists. The complaints committee should be comprised of members of the council, not including any of the OCCO employees. The complaints committee must develop transparent procedures that are fair to both the coroner or pathologist in question and the complainant. The complaints committee would consider complaints not resolved at the first instance to the satisfaction of both the complainant and the coroner or pathologist.

Recommendation 38

The Province of Ontario, having created the Governing Council by statute, should amend the *Coroners Act* to set out the powers and responsibilities of the Governing Council, including

a) oversight of the strategic direction and planning of the Office of the Chief Coroner for Ontario, including the coronial service and the Ontario Forensic Pathology Service;

b) budgetary approval;

c) senior personnel decisions; and

d) administration of the public complaints process.

Recommendation 39

The Chief Coroner should be accountable to the Governing Council for the operation and management of the coronial service. The Chief Forensic Pathologist should be accountable to the Governing Council for the operation and management of the Ontario Forensic Pathology Service.

Recommendation 40

The Governing Council should report annually to the Ministry of Community Safety and Correctional Services. Its annual report should be available to the public.

Recommendation 41

The Province of Ontario should establish the membership of the Governing Council through a regulation to the *Coroners Act*. The Lieutenant Governor in Council should appoint the following members to a fixed term:

- a nominee of the Chief Justice of Ontario. He or she may act as chair of the council, or the chair may be otherwise designated by the Ministry of Community Safety and Correctional Services;
- the Chief Coroner for Ontario;
- the Chief Forensic Pathologist for Ontario;
- the dean of medicine of an Ontario medical school or his or her delegate;
- a nominee of the Minister of Health and Long-Term Care;
- a nominee of the Attorney General of Ontario;
- a nominee of the Minister of Community Safety and Correctional Services;
- the Director of the Centre of Forensic Sciences or his or her delegate; and

- **three others named by the Ministry of Community Safety and Correctional Services, one of whom should be a certified forensic pathologist from outside Ontario.**

Principles for the Oversight of Forensic Pathology

Through its Governing Council, the OCCO needs to ground its oversight of forensic pathology in Ontario in a set of core building blocks or principles. These building blocks will influence how specific oversight and accountability mechanisms are implemented. In my view, the significant deficits demonstrated by our systemic review provide useful guidance in identifying the most important ones. The crucial building blocks include:

- a professionalized and expanded Ontario Forensic Pathology Service;
- clear lines of responsibility for oversight and accountability;
- an institutional commitment to quality; and
- the proper tools for oversight.

A professionalized OFPS, in addition to creating the foundation for high-quality forensic pathology services, will ensure that those who are in positions of oversight will have the expertise necessary to perform their responsibilities. In addition, the creation of the OFPS will encourage the hiring and retention of the forensic pathologists needed to establish effective systems of peer review of the reports, opinions, and testimony of forensic pathologists in individual cases.

Our systemic review also demonstrated the pitfalls of poorly defined responsibilities for oversight and accountability. The Governing Council must ensure that these responsibilities are clearly articulated within the OCCO as a whole, within the OFPS, and between the coronial service and the forensic pathology service.

The Governing Council must charge the OCCO's leadership with the creation of an institutional commitment to quality with core values that emphasize the pursuit of excellence, the importance of teamwork, and the need for collegiality and knowledge sharing. The OCCO has suggested that it create a strategic plan including "[a] culture of quality and performance excellence," "[a] dedication to peer review," and "[a] re-dedication to seeking the truth, using the scientific method, and developing evidence-based practice." These are the kinds of core values and principles that the coronial system and the OFPS should adopt in order to provide meaningful oversight.

Finally, the Governing Council must ensure that those charged with responsi-

bility for oversight have the necessary tools to allow them to discharge that responsibility. The kinds of tools that can be used are outlined below.

Recommendation 42

The Governing Council should guide the development of quality assurance, oversight, and accountability mechanisms for the work of the Office of the Chief Coroner for Ontario, including both the Ontario Forensic Pathology Service and the coronial service.

Institutional Improvements

The institutional arrangements for the oversight of forensic pathology in the 1980s and 1990s were inadequate. Future arrangements need to include systems such as a registry of pathologists who are permitted to conduct coroner's autopsies. In addition, clarity is needed to define the reporting relationships among the Chief Coroner, Chief Forensic Pathologist, and the Governing Council. Finally, an executive director should assume the burden of administrative responsibilities.

Need for a Registry of Forensic Pathologists

Our systemic review revealed that, in the 1990s, pathologists in Ontario were enlisted to perform coroner's warrant work, including cases that were criminally suspicious, without regard for their training and experience in forensic pathology. The main example, of course, is that criminally suspicious pediatric cases were deliberately triaged to Dr. Smith without any appreciation of his woefully inadequate training in forensic pathology.

During the 2000s, the new leadership of the OCCO has introduced policies to attempt to ensure that pathologists performing criminally suspicious cases have the skills and expertise required. In 2005, the OCCO's Guidelines on Autopsy Practice for Forensic Pathologists: Criminally Suspicious Cases and Homicides introduced a requirement that only a forensic pathologist – defined as a certified anatomical or general pathologist with specific training or certification in forensic pathology and/or recognized experience as a forensic pathologist – may perform autopsies in criminally suspicious cases. The revised October 2007 Guidelines on Autopsy Practice for Forensic Pathologists: Criminally Suspicious Cases and Homicides (the Autopsy Guidelines) added that only forensic pathologists "with pediatric forensic experience" or pediatric pathologists "with significant forensic experience" may perform autopsies in

criminally suspicious deaths of infants or children.

These provisions in the Autopsy Guidelines are good first steps. However, as policy instruments without any meaningful enforcement mechanisms, they are limited in their ability to ensure that forensic pathologists doing coroner's cases meet and maintain specified standards of competence. To build on the improvements already made by the OCCO, some additional mechanisms are needed. As referred to in Chapter 11, Professionalizing and Rebuilding Pediatric Forensic Pathology, a central feature of the proposed OFPS is the creation of a publicly accessible registry of forensic pathologists. The Registry is a vital tool for maintenance of quality control in the forensic pathology used in death investigations. It would help ensure that pathologists involved in death investigations maintain high standards within their profession in relation to their education, skills, and performance. The Chief Forensic Pathologist would be able to use the Registry to institute remedial measures if serious issues arose concerning either the competence of, or any excessive delays in criminal proceedings caused by, forensic pathologists on the Registry. Continued inclusion in the Registry would depend on a willingness to engage in remediation. And, ultimately, if necessary, a competent service could be ensured by the removal of the offending pathologist. Of course, such action would require a corollary process of appeal – for example, to a committee of the Governing Council, in cases of alleged unfair sanctions.

Structure and Establishment of the Registry

The broad concept for the Registry I propose is similar to the model provided by the Home Office Register of Accredited Forensic Pathologists in place in the United Kingdom. It was described by a number of witnesses at the Inquiry. Needless to say, the specifics of the Registry need to reflect the unique characteristics of the practice of forensic pathology in Ontario.

The design of the Registry should be developed and its workings administered by the Chief Forensic Pathologist. As outlined in Chapter 12, Reorganizing Pediatric Forensic Pathology, the new provisions of the *Coroners Act* outlining the responsibilities of the Chief Forensic Pathologist should include his or her responsibility for administering a list of forensic pathologists approved to perform coroner's autopsies. The Governing Council must oversee the Chief Forensic Pathologist's work in establishing the structure and the criteria for the Registry and give final approval to its design.

As its most central function, the Registry would designate the forensic pathologists who, because of their experience and expertise, are approved to conduct autopsies under coroner's warrant. Since different skill sets are required for differ-

ent types of cases, the Registry should be divided into specific tiers with, at a minimum, three categories: forensic pathologists approved to perform criminally suspicious adult cases, those approved to perform criminally suspicious pediatric cases, and those approved to perform routine coroner's cases only.

In the immediate future, during the transition to a professionalized OFPS, some grandparenting will be necessary to allow pathologists with significant experience or training in forensic pathology, but without formal certification in the discipline, to continue to perform criminally suspicious cases. The development of specific grandparenting provisions should be left to the discretion of the Chief Forensic Pathologist. As the profession of forensic pathology in Ontario evolves, the criteria for admission to the Registry, and in particular for inclusion in the tiers for performance of criminally suspicious cases, will undoubtedly become more rigorous. As soon as it is practicable, only certified forensic pathologists should be placed on the Registry to perform criminally suspicious cases. The criteria for performing routine forensic autopsies will undoubtedly be more flexible and may vary based on the skill and experience of the pathologist.

The Registry should include procedures for admission to, renewal on, and removal from the Registry. In guiding the development of these procedures, the Governing Council should emphasize the principles of quality, transparency, and fairness to individual forensic pathologists. The Chief Forensic Pathologist will be charged with establishing the specific criteria for forensic pathologists who seek admission or reappointment to the Registry. Central consideration should be given to their academic training and professional experience. Once the initial criteria for appointment are met, reappointments may consider additional criteria such as continuing medical education, involvement in teaching and/or research activities, peer review of courtroom testimony, and participation in the peer review of others. As a condition of inclusion, members of the Registry will have to comply with the relevant polices, protocols, practice guidelines, and codes of conduct issued by the Chief Forensic Pathologist or the OCCO.

Oversight and assessment of forensic pathologists on the Registry will be aided by the peer review processes outlined below. If the Chief Forensic Pathologist becomes concerned about the work of a forensic pathologist, he or she may take appropriate remedial or corrective measures, up to and including the removal of the pathologist from the Registry. The Governing Council should develop a mechanism for review of the exercise of the Chief Forensic Pathologist's authority in relation to the Registry. This review would allow a form of appeal where a forensic pathologist is dissatisfied with the actions of the Chief Forensic Pathologist.

Recommendation 43

The Ontario Forensic Pathology Service should create a publicly accessible Registry of pathologists who have been approved to perform post-mortem examinations under coroner's warrant.

Recommendation 44

The Chief Forensic Pathologist should have responsibility for administering the Registry.

Recommendation 45

With the approval of the Governing Council, the Chief Forensic Pathologist should design the details of the Registry, including fair and transparent procedures for admission, renewal, and removal. The Registry should have separate categories for those forensic pathologists approved to perform criminally suspicious adult cases, those approved to perform criminally suspicious pediatric cases, and those approved only to perform routine coroner's cases.

Recommendation 46

As the Ontario Forensic Pathology Service grows in size and skill, the criteria for inclusion in the Registry should become more rigorous. As soon as possible, only certified forensic pathologists should be approved to perform criminally suspicious adult cases and only certified forensic pathologists with significant pediatric forensic experience should be approved to perform criminally suspicious pediatric cases.

Clarifying Relationships

Accountability of the Chief Coroner and the Chief Forensic Pathologist

Many difficulties can arise if the Chief Coroner is charged with oversight of forensic pathology. In a number of the cases we examined, the Chief Coroner or Deputy Chief Coroner assumed the major role in overseeing Dr. Smith's pathology work. Their oversight failed in part because of their lack of expertise in the highly specialized science of forensic pathology.

The positions of Chief Coroner and Chief Forensic Pathologist should become parallel positions with separate responsibilities for, respectively, the coronial service and the OFPS. The Chief Forensic Pathologist would therefore be responsible and accountable for the professional work and budget of the OFPS, and would report to the Governing Council and be accountable to it for the operation of the OFPS. As I describe in Chapter 12, Reorganizing Pediatric Forensic Pathology, the fundamental duties and responsibilities of the Chief Forensic Pathologist would be set out in the legislation. The Chief Coroner would be responsible for the professional work of the coronial service, as outlined in the *Coroners Act*, and would report to the Governing Council and be accountable to it for the operation of the coronial service.

As further detailed in Chapter 12, the hierarchy for the new OFPS will clarify oversight and accountability relationships within the forensic pathology service. The Chief Forensic Pathologist will provide overall oversight of the OFPS, including the work of all pathologists performing coroner's cases. The Chief Forensic Pathologist will also supervise the work of the Deputy Chief Forensic Pathologist(s). The directors of the regional units will oversee, and be responsible for, the forensic pathology conducted in their regions, whether at their unit or at another hospital.

In its closing submissions to the Inquiry, the OCCO proposed that the Chief Forensic Pathologist should remain accountable to the Chief Coroner for the provision of forensic pathology services. I recognize the attraction of this argument. The OFPS is essentially a service provider for the coronial service in the death investigation process. Therefore, at first blush, it seems that the Chief Coroner should be able to exercise oversight where, for example, delays in a pathologist's reports are interfering with the work of the coronial service.

In my view, however, a clear definition of this proposed accountability would remain so elusive as to be a constant impediment to sound governance. It is far better to have the clarity that comes with giving the Chief Coroner and the Chief Forensic Pathologist professional responsibility for the oversight of their respective services. The accountability of each is then clear; each would be accountable to the Governing Council. Each is then able to focus on achieving professional excellence for his or her service. Not only does this minimize the risk of disputes between them due to ambiguity of reporting relationships, but it also permits the Governing Council to resolve any disputes that do arise.

Administrative Responsibilities for the Coronial Service and the OFPS

Administrative responsibilities for management of the OCCO are significant. Currently, the Chief Coroner retains a major administrative burden, including indirect oversight of a staff of 84 people. It is important that administrative responsibilities not impede the professional oversight needed from both the Chief Coroner and the Chief Forensic Pathologist.

To allow the Chief Coroner and the Chief Forensic Pathologist to devote their time and attention to the enhancement and development of the professional capacities of the coronial service and the OFPS, an executive director should be appointed with responsibility for the administration required by both the coronial system and the OFPS. The executive director's administrative responsibilities would include, for example, human resources, support services, and physical plant services. The executive director would report directly to the Governing Council. This structure is preferable to that where the Chief Coroner has administrative responsibility for the entire OCCO.

Recommendation 47

The Governing Council should appoint an executive director with responsibility for the administration of both the coronial service and the Ontario Forensic Pathology Service.

Chief Coroner and Chief Forensic Pathologist as Full-Time Positions

Our systemic review has also demonstrated that oversight suffered under the leadership of a Chief Coroner who was not engaged full-time in that office and who was burdened by other significant and time-consuming positions that he held simultaneously. The problem was compounded by the fact that the Chief Coroner's other positions were senior positions in government, diminishing the appearance of accountability of the OCCO.

In order for the holders of the positions of Chief Coroner and Chief Forensic Pathologist to fulfill their obligations properly, both positions must be full-time. At the same time, the full-time position should allow the Chief Forensic Pathologist to engage in teaching and research because of the importance of both to the development of a professionalized service. I suspect the same is true for the Chief Coroner and the coronial service.

Recommendation 48

The positions of Chief Coroner and Chief Forensic Pathologist should be full-time.

Contractual Relationships with Regional Forensic Pathology Units

As discussed in detail in Chapter 12, Reorganizing Pediatric Forensic Pathology, the service agreements between the OCCO and hospitals regarding the regional forensic pathology units need to be revised to clarify the oversight and accountability relationships.

The agreements should also be amended to create greater accountability through the use of specific quality assurance measures. They should stipulate that every forensic pathologist at a unit that provides services to the OFPS must be included on the Registry. They should explicitly outline each regional director's responsibilities for oversight of, and quality assurance for, forensic pathologists performing coroner's autopsies within the geographical area of the unit. The agreements should also introduce requirements regarding reporting relationships – for example, that the regional director must report to the Chief Forensic Pathologist regarding the unit's practices for peer review and consultation. The service agreements should also incorporate timeliness requirements for the production of reports of post-mortem examination.

Forensic Pathology Advisory Committee

It is vital that the OFPS create a culture of teamwork and collegiality. As we have seen, working in isolation is a route to error. To advance that teamwork goal, the Chief Forensic Pathologist should seek the counsel of other leaders in forensic pathology in the province. The OCCO recommended the creation of a Forensic Pathology Advisory Committee (FPAC). I agree with this recommendation. The FPAC would be created within the OFPS. Its members would include the directors of the regional forensic pathology units. Rather than provide case-specific advice, the FPAC would provide the Chief Forensic Pathologist with assistance in setting objectives, policies, protocols, and guidelines for the provision of forensic pathology services across the province. The FPAC would assist in improving quality processes, and would also enhance the relationship between the Chief Forensic Pathologist and the regional units. It would assist the Chief Forensic Pathologist in addressing issues specific to Ontario's various regions.

In addition, our systemic review demonstrated the danger of concentrating

power and expertise in a single individual. This institutional structure will help guard against that risk.

Recommendation 49

A Forensic Pathology Advisory Committee should be formed to advise the Chief Forensic Pathologist in setting objectives, policies, protocols, and guidelines for the provision of forensic pathology services. Its membership should include the regional directors.

Tools for Oversight and Accountability of Forensic Pathologists' Work

Forensic pathologists act as individual experts when providing forensic pathology opinions and services to the justice system. They do not represent an institution or provide an institutional opinion. The role of the OFPS as overseer of forensic pathology services is to ensure that the appropriate safeguards are in place to ensure the reliability of these individual expert opinions. The OFPS must make certain that appropriately qualified persons are appointed and adequate quality control mechanisms are in place. This is especially true for the most difficult cases, including criminally suspicious pediatric deaths.

Since 2001, the OCCO has greatly improved the tools available for proper oversight of forensic pathology. During the 1980s and 1990s, these tools were limited and, at times, non-existent. The OCCO has, to the best of its abilities in the context of limited financial and professional resources, supported the development of an evidence-based, professionalized forensic pathology service. In this section, I discuss how the OFPS can build on those improvements.

I am aware that additional accountability and oversight mechanisms may place further workload demands on the limited number of forensic pathologists in Ontario. This increased workload is a serious factor to consider. I expect that the Chief Forensic Pathologist will need to weigh carefully workload demands involved in implementing new oversight mechanisms. However, quality of service must remain paramount. That is the lesson to be learned from allowing Dr. Smith to continue in part because there was no one else to do the work.

Quality Assurance Staff

Until recently, the OCCO did not emphasize the quality management of forensic pathology. It still lacks the resources to create a quality assurance unit. In moving

forward, the OCCO must develop a comprehensive quality management philosophy with adequate structures in place to implement that philosophy.

In considering what might be necessary to raise the profile of quality assurance at the OCCO, I am guided by the experiences of other institutions that provide forensic services. Both the Centre of Forensic Sciences (CFS) and the Victorian Institute of Forensic Medicine have formal quality assurance units with dedicated staff. The VIFM has a quality review committee, which accumulates data from the quality management system and provides it to the internal leadership and the VIFM council.

The OFPS must have qualified staff dedicated to quality assurance. There should be a full-time quality assurance manager with a mandate to oversee the quality assurance mechanisms in place at the OFPS. He or she should be responsible for tracking the success of quality management measures so that, through the Chief Forensic Pathologist, this information can be relayed to the Governing Council. Indeed, it may be appropriate for the Governing Council to establish a committee to oversee the work of the quality assurance staff. It would also seem reasonable that the quality assurance manager have responsibility for quality assurance throughout the OCCO. But at a minimum, a dedicated quality assurance manager is necessary for the OFPS.

Recommendation 50

The Ontario Forensic Pathology Service should appoint dedicated quality assurance staff, including a full-time quality assurance manager, to track quality assurance mechanisms.

Policy Guidelines

Policies and standards are a useful means of assuring quality. They clarify expectations for pathologists doing forensic work and encourage consistency of practice and methodology. Our systemic review demonstrated that, before 2001, there were few policy guidelines and standards designed to assist pathologists in performing coroner's autopsies or in their testimony and interaction with the criminal justice system.

The new leadership of the OCCO has developed policies and guidelines reflecting its recognition of the need for an evidence-based, professionalized forensic pathology service. The primary focus of recent policies, such as the province-wide Autopsy Guidelines for criminally suspicious cases, has been on the proper analytical approach or mindset for the forensic pathologist – open-minded, objective, and evidence based.

I endorse the general direction of the OCCO in its recent policies. The Autopsy Guidelines are in line with the best practices for oversight of criminally suspicious cases adopted in other jurisdictions. My main recommendations to improve and build on the current guidelines and policies are set out in my discussion of the best practices in forensic pathology in Chapter 15, Best Practices, and effective communication in Chapter 16, Effective Communication with the Criminal Justice System.

Peer Review – Consultation with Chief Forensic Pathologist

In the 1990s, then Chief Forensic Pathologist Dr. David Chiasson encouraged forensic pathologists to consult him for advice about their difficult cases. He received a mixed response. Some pathologists contacted him frequently about difficult cases, but others, often the more senior pathologists, did not. He had no power to do anything about this unwillingness to seek his advice.

In recent years, policies and guidelines issued by the OCCO have highlighted the Chief Forensic Pathologist's role in quality control. The Autopsy Guidelines mandate notification of the Chief Forensic Pathologist in all criminally suspicious cases, and encourage consultation with the Chief Forensic Pathologist in difficult or contentious cases. This system is preferable to relying on forensic pathologists' individual judgments about when to consult with the Chief Forensic Pathologist.

Peer Review of Reports of Post-Mortem Examination

Peer review of autopsy reports is central to an effective quality assurance system in criminally suspicious cases. It is, quite simply, the best way to assess a pathologist's work in a difficult case before the work enters the criminal justice system. Reports of post-mortem examination in criminally suspicious deaths, particularly pediatric deaths, must receive the highest level of scrutiny.

In the 1980s and early 1990s, there was no real quality control of the work of pathologists in these cases. In the mid-1990s, Dr. Chiasson began to review, personally, all reports of post-mortem examination in criminally suspicious cases. However, Dr. Chiasson's paper review was only that. It was inadequate to catch many of the most serious problems.

The OCCO's new leadership has greatly improved the procedures for peer review of reports of post-mortem examination in criminally suspicious cases. As of August 2004, the directors of the regional units assumed responsibility for

review of autopsy reports in their units. As set out in the Autopsy Guidelines, all autopsy reports in criminally suspicious cases are now peer reviewed by the Chief Forensic Pathologist, a regional director, or a staff forensic pathologist at the Provincial Forensic Pathology Unit (PFPU) before they are released to the coroner and the criminal justice system. The regional directors review the reports of other pathologists within their units, while the Chief Forensic Pathologist reviews the reports of the regional directors. The Chief Forensic Pathologist's reports are reviewed by his colleagues at the PFPU or by a regional director; and, within the PFPU, staff forensic pathologists provide peer review of their colleagues' reports. In the unusual instance of criminally suspicious cases performed outside of a forensic pathology unit, such as at the Winnipeg Health Sciences Centre, the Chief Forensic Pathologist generally reviews the reports.

The extent of the current peer review of reports of post-mortem examination in criminally suspicious cases is more comprehensive than Dr. Chiasson's paper review in the 1990s. The originating forensic pathologist is asked to submit all necessary materials to the reviewing forensic pathologist, including the report, background information, images from the gross examination, ancillary reports, and, in some cases, histology slides. If necessary, as in most pediatric homicides, the histology is examined. The peer review form provided in the Autopsy Guidelines requires the reviewing forensic pathologist to indicate whether he or she agrees with the cause of death and the other forensic opinions. Agreement is an appropriately high standard. This requirement is more rigorous than peer review processes at the CFS and VIFM, which require only that the reviewing scientist find the conclusions reasonable.

The Autopsy Guidelines also incorporate a process for further examination where there is a difference of opinion between the originating and the reviewing forensic pathologists. If there is a significant difference of opinion about the cause of death or other major forensic issues between the originating and reviewing forensic pathologists, the Chief Forensic Pathologist is notified. The Chief Forensic Pathologist undertakes a comprehensive review and prepares a written report.

The OCCO's model for peer review of criminally suspicious cases has provided a template for other jurisdictions in developing their peer review structures. The VIFM developed its peer review process in or around 2006 based on the OCCO's advances. I commend the OCCO on its current peer review system for criminally suspicious cases and recommend that this system continue.

In Ontario, the process for review of reports of post-mortem examination applies only to reports in cases giving rise to criminal suspicions. Within the forensic pathology units, peer review in non-criminally suspicious cases is undertaken

at the discretion of the directors and, as a result, reviews vary in their frequency, scope, and procedures. Some of the regional directors review all coroner's cases, while others conduct only random or sporadic reviews. To ensure that forensic pathologists at the forensic pathology units receive continuing feedback about their work, I recommend that the OFPS require some peer review of all reports of post-mortem examination in coroner's cases where the autopsy is conducted at one of the regional forensic pathology units or the PFPU. This review can be undertaken by a colleague (rather than the regional director or Chief Forensic Pathologist) and does not need to mirror the complete review undertaken in criminally suspicious cases.

Given limited human resources, I do not think it is feasible at present to expect the formal peer review process to extend to non-criminally suspicious autopsies conducted outside of the forensic pathology units.

Peer Review of Supplementary and Consultation Reports

A very significant failure in the peer review system in the 1990s was the lack of review of supplementary and consultation reports. Dr. Chiasson had no mechanism in place to review consultation reports or second opinions unless they were attached to the report of post-mortem examination. In addition, there were no mechanisms in place to examine supplementary reports. As a result, he did not review Dr. Smith's consultation work or supplementary opinions. These failures allowed significant errors to go undetected.

The current procedures for peer review as set out in the Autopsy Guidelines do not provide for peer review of supplementary or consultation opinions in criminally suspicious deaths. Unless the supplementary opinion is the result of the peer review process itself, there is no process in place allowing the Chief Forensic Pathologist or directors of the regional forensic pathology units to review supplementary reports provided by pathologists after the initial report of post-mortem examination. Dr. Michael Pollanen, the Chief Forensic Pathologist, indicated that such a process would be desirable. I agree.

I recommend that a peer review process be developed for supplementary and consultation opinions in criminally suspicious cases in order to ensure their quality. The peer review process should be set out in the Autopsy Guidelines.

Quality Control during Rounds

Peer review through consultation during rounds is an important aspect of sound medical practice – it may ensure that significant findings are not missed. In the

1990s, there were some opportunities for review of forensic pathology work through rounds at hospitals housing regional forensic pathology units. However, in part because of concerns about the effect on ongoing criminal investigations, the rounds often did not include discussion of criminally suspicious cases. That has changed for the better, and, currently, rounds at the regional forensic pathology units include discussion of criminally suspicious cases.

Although the current system of rounds provides some quality assurance, more can be done to ensure the comprehensiveness of consultations at the regional forensic pathology units. As opposed to the VIFM, which is able to ensure frequent consultations between pathologists who work within one centralized unit, the forensic pathology services in Ontario face the burden of having forensic pathologists – of necessity – located in regional centres that are far apart. In order to enable peer review among colleagues at the various regional forensic pathology units, telemedicine technology should be utilized.

The Chief Forensic Pathologist should endeavour to enhance the telecommunication facilities between the PFPU and the regional forensic pathology units. By linking the regional units using telemedicine technology, consultation between forensic pathologists, as well as with other experts, can occur in real time or at daily conferences. Telemedicine portals should be situated in the PFPU and the regional forensic pathology units. Adequate funding is required for these facilities.

In addition, best practices should be developed at the regional forensic pathology units – as are currently in place at the PFPU – for daily morning rounds for review of cases. Directors of the regional forensic pathology units should be required to report to the Chief Forensic Pathologist regarding the consultation opportunities within their units.

Recommendation 51

In order to enhance quality assurance of the work of pathologists, the Ontario Forensic Pathology Service should

a) **in accordance with the October 2007 Autopsy Guidelines, continue to require direct notification of the Chief Forensic Pathologist of preliminary autopsy results in all criminally suspicious deaths;**

b) **in accordance with the October 2007 Autopsy Guidelines, continue to require full peer review of all reports of post-mortem examination in criminally suspicious cases by either a regional director, a staff pathologist at the Provincial Forensic Pathology Unit, or the Chief Forensic Pathologist or designate;**

c) develop a system for peer review of reports of post-mortem examination in non-criminally suspicious cases where the autopsy was conducted at a regional forensic pathology unit or the Provincial Forensic Pathology Unit. The review system may be less comprehensive than the peer review system for criminally suspicious cases;

d) develop a system for peer review of opinions made supplementary to the report of post-mortem examination in criminally suspicious cases;

e) develop a system for peer review of consultation opinions in criminally suspicious cases; and

f) develop best practices for daily morning rounds at the regional forensic pathology units. The regional directors should report to the Chief Forensic Pathologist regarding implementation of these best practices.

Annual Performance Reviews

The evidence revealed that there are currently no formal systems in place – other than some review of individual autopsy reports – to review the overall performance of pathologists conducting criminally suspicious autopsies within the regional units or to review the performance of the regional directors. Even though the OCCO does not have a direct employment relationship with forensic pathologists performing coroner's work on a fee-for-service basis, it must exercise some oversight of performance.

I recommend that the Chief Forensic Pathologist immediately institute a program of annual performance reviews. He or she should review the work of the directors of each of the forensic pathology units. The directors should, in turn, conduct annual performance reviews of the forensic pathologists doing work for the OCCO within their units. I recognize that this does not provide for performance assessments of pathologists performing coroner's autopsies outside of the forensic pathology units. However, since these pathologists will not be conducting either criminally suspicious adult cases or pediatric cases, particularly criminally suspicious pediatric cases, review of their performance is less urgent. The Chief Forensic Pathologist, at his or her discretion, may in future decide to implement a more complete system of performance reviews.

Recommendation 52

The Chief Forensic Pathologist should institute a program of annual performance reviews. He or she should conduct annual performance reviews of the work of the regional directors. The regional directors should conduct annual performance reviews of the work of forensic pathologists within their units.

Oversight of the Chief Forensic Pathologist

In the 1990s, as the director of the OPFPU at the Hospital for Sick Children, Dr. Smith was widely perceived as the "go-to" pathologist for child abuse and homicide cases in Ontario, and as the leading expert in pediatric forensic pathology. Dr. Smith's reputation in the field clearly left some Ontario pathologists unwilling to challenge and review his opinions. This situation demonstrates a problem for effective oversight of the casework of those perceived to be at the top of the profession.

Two steps must be taken to address this issue. First, as the many internationally renowned experts from whom we heard emphasized, it is very important that the OFPS create a culture in which colleagues feel comfortable critiquing the work of senior members of their institutions. It is crucial that the Chief Forensic Pathologist and the senior leadership of the OFPS lead the way in creating this institutional culture, by encouraging challenges to their own work and being open to accepting constructive criticism from juniors.

Second, the Autopsy Guidelines provide that the Chief Forensic Pathologist's reports are reviewed either by a colleague at the PFPU or by a director of a regional forensic pathology unit. This system for peer review of the Chief Forensic Pathologist's work is in line with practices at other institutions. However, some additional measures are required to ensure that the experience with Dr. Smith is not repeated. Forensic pathologists external to the province are more likely to be immune to hidden pressures that may accompany the review of the work of a senior colleague with an excellent reputation. Therefore, I recommend that out-of-province expertise be employed from time to time to review the casework of the Chief Forensic Pathologist on a random basis. The Forensic Pathology Advisory Committee should consider whether this technique should be extended to other senior leaders of the OFPS.

Recommendation 53

The Chief Forensic Pathologist and the senior leadership of the Ontario Forensic Pathology Service should lead the creation of a culture in which constructive criticism of a forensic pathologist's work is encouraged regardless of position and reputation.

Recommendation 54

In order to ensure adequate oversight of the casework of the Chief Forensic Pathologist, beyond that provided for in the October 2007 Autopsy Guidelines, out-of-province expertise should be used on a random basis to assess the casework of the Chief Forensic Pathologist.

Committee Development

When Dr. Barry McLellan became Chief Coroner in 2004, the OCCO had a well-developed system of committees for review of pediatric cases – namely the Paediatric Death Review Committee (PDRC) and the Deaths under Two Committee. The main change under the new leadership has been the expansion of the mandate of the Deaths under Two Committee (renamed the Deaths under Five Committee as of October 2006) to include review of all death investigations relating to children under the age of five years. The Deaths under Five Committee, whose membership includes a number of forensic pathologists, reviews all deaths of children under five years to assess the accuracy of the cause and manner of death determinations.

In addition, in 2004, under Dr. McLellan's leadership, the Forensic Services Advisory Committee (FSAC) was created. It is a multidisciplinary committee designed to provide independent and external advice to the Chief Coroner in order to ensure the quality and independence of post-mortem examinations in coroner's cases. The FSAC was created in part to respond to the concerns raised by criminal defence lawyers about the OCCO's perceived lack of objectivity. The FSAC generated a list of forensic pathologists willing to provide opinions to the defence. It addressed the education of forensic pathologists. It also played a central role in determining the scope and process of the Chief Coroner's Review.

I recommend that the work of the PDRC, the Deaths under Five Committee, and the FSAC continue. They provide valuable mechanisms for enhancing quality and bringing a multidisciplinary perspective and insight to the OCCO's death investigations.

Recommendation 55

The Paediatric Death Review Committee, the Forensic Services Advisory Committee, and the Deaths under Five Committee should continue.

A Central Tracking System for Forensic Cases

The OCCO's inability to track criminally suspicious pediatric cases through the criminal justice system was one factor in its failure to properly oversee the delivery of forensic pathology services. For example, in 2001, defence counsel asked the OCCO to review Dr. Smith's work in Valin's case. Since the OCCO had no good system for tracking events in the case, it was completely unaware that Dr. Smith had provided an expert opinion and had testified at the trial. That made oversight difficult, to say the least.

The OCCO's inability to track cases makes it more difficult to monitor the timely production of autopsy reports. As discussed in more detail in Chapter 15, Best Practices, the OCCO had, and currently has, no mechanism to track delays by forensic pathologists in producing reports.

The OCCO and the OFPS should develop a system to track cases in the criminal justice system in which their professionals continue to be involved. The system can be loosely modelled on the current dispatch system for Toronto, which tracks coroner's cases through a centralized computer system. When someone in Toronto requires a coroner, he or she calls a central number for the dispatching of a coroner. Information about the case, including the post-mortem examination, is entered into the centralized computer system.

From the perspective of my mandate, such a tracking system need only include the approximately 7,000 annual coroner's cases involving forensic pathology work. However, it may be practical and cost-effective to track all 20,000 of the OCCO's annual cases.

As outlined in the OCCO's final submissions to the Inquiry, a province-wide coroner's dispatch and tracking system would allow for immediate entry and tracking of all coroner's death investigations. It would assist the Chief Forensic Pathologist in directing post-mortem examinations to appropriate forensic pathologists and facilities. It would also allow the Chief Forensic Pathologist to track which forensic pathologist is involved in a case, as well as the progress of the case after completion of the report of post-mortem examination and, subsequently, through the judicial process. In addition, and importantly, it would allow the Chief Forensic Pathologist – who will be responsible for the timely production of reports – to monitor the timeliness of reports of post-mortem examina-

tion. Finally, the tracking system could be used by the regional directors, regional coroners, and the Chief Coroner in fulfilling their responsibilities for individual death investigations.

The tracking system must include as well mechanisms for tracking consultation opinions, supplementary opinions after the initial report of post-mortem examination, and the giving of evidence in criminal proceedings.

The OCCO and OFPS will require adequate resources in order to implement a central tracking system.

Recommendation 56

The Office of the Chief Coroner for Ontario should implement a central tracking system for, at a minimum, coroner's cases in which post-mortem examinations are conducted. The Province of Ontario should provide the resources necessary to create, implement, and administer the central tracking system.

Evaluation of Pathologists' Testimony

Some of the most serious concerns about the work of forensic pathologists in criminal proceedings from 1981 to 2001 concerned communications with other participants in the criminal justice system and testimony in court. One basic failing was that the OCCO was, in some cases, unaware of the problems. At present, the OCCO has no mechanisms in place to review the courtroom testimony of forensic pathologists or the opinions a forensic pathologist provides to Crown counsel or police, or to discover and review adverse judicial comment.

What is the best way to review a pathologist's work after the final report of post-mortem examination is produced? There are a number of possible models used by other institutions and jurisdictions. The Centre of Forensic Science's accreditation system requires a review of the testimony of each scientist once a year. CFS managers attend court to observe CFS scientists giving evidence. If it is not possible to conduct an in-person review while a scientist is testifying, a CFS manager reviews the transcript. The CFS also has a system in place whereby, after a CFS scientist testifies, the CFS requests that Crown and defence counsel complete a questionnaire reporting on the scientist's work.

The VIFM requires that, at least once a year, each forensic pathologist be accompanied to court by another forensic pathologist. The reviewing forensic pathologist completes an evaluation form addressing issues such as appearance and conduct, as well as technical issues regarding use of appropriate language and ability to present scientific evidence. Dr. Jack Crane, the state pathologist for

Northern Ireland, also often attends court to observe his junior staff.

In my view, the OFPS should implement a system of annual peer review of testimony by OFPS pathologists in criminal cases. The review should be documented and encompass a process of discussion and feedback.

At the PFPU, a process for peer review of testimony can be put in place directly through the Chief Forensic Pathologist. In order to entrench the practice at the regional forensic pathology units, the directors of the units should be required to document and report on such peer review of testimony on a regular basis. It is not necessary or practical to also review the transcripts of forensic pathologists' evidence on a regular basis, although that may be necessary if significant concerns arise.

There should also be some form of oversight of forensic pathologists' more informal consultations with Crown and defence counsel. The OFPS should develop a program to obtain feedback from defence and Crown counsel regarding the work of forensic pathologists in criminal proceedings. This could mirror the CFS's court-monitoring program, and could be administered by the OFPS's quality management staff.

In Chapter 17, The Roles of Coroners, Police, Crown, and Defence, I outline the need for Crown counsel to bring adverse judicial comments to the attention of his or her supervisor and to the division lead for child homicide cases, who should report such comments or concerns to the Chief Forensic Pathologist. The Chief Forensic Pathologist should review any adverse comments by judges brought to his or her attention and take whatever steps are appropriate as a result.

Recommendation 57

In order to enhance quality assurance of the work of forensic pathologists during criminal proceedings, the Ontario Forensic Pathology Service should develop

a) a system of peer review of testimony given by forensic pathologists in criminal proceedings; and

b) a program to obtain feedback from defence and Crown counsel regarding the work of forensic pathologists in criminal proceedings.

Recommendation 58

Where brought to his or her attention, the Chief Forensic Pathologist should review any adverse comments made by judges about the work of forensic pathologists in criminal proceedings, and take whatever steps are appropriate as a result.

Accountability to External Standards and Review Mechanisms

Our systemic review demonstrated that objective oversight may be hindered by close professional relationships. When people work together in small groups, they may have difficulty challenging the work of their colleagues. In order to maintain quality, external and impartial review mechanisms are required.

Experts who appeared at the Inquiry emphasized the importance of external quality assurance programs in addition to internal peer review. I heard evidence about the various external review processes in place at other institutions. In Australia, the VIFM engages in external proficiency testing programs that assess the performance of the pathologists as a group. In Northern Ireland, external audits are conducted of the work done at the State Pathologist Office. In the United Kingdom, all Home Office pathologists must submit a number of their cases for review by the Scientific Standards Committee.

In Ontario, there is no external review mechanism in place to review the collective work of the PFPU or the regional forensic pathology units. Neither the PFPU nor any of the regional forensic pathology units are accredited by an external agency. In addition, no external reviews are conducted of autopsy reports produced in the units.

I recommend that random external audits be implemented on a regular – perhaps annual – basis of sample reports of post-mortem examination generated within each regional forensic pathology unit and the PFPU. The reviewer must be a forensic pathologist external to the forensic pathology unit, and should be external to the OFPS if possible. This will ensure an independent perspective of the work of Ontario forensic pathologists conducting criminally suspicious cases.

In addition, the OFPS should make itself accountable to the best external organization(s) that benchmark such services, such as the National Association of Medical Examiners (NAME), a U.S. organization dedicated to the improvement of death investigations. NAME conducts an inspection and accreditation program for forensic death investigation offices, including an inspection checklist and a set of policies and procedures. Although accreditation by an organization such as NAME is likely not yet feasible, given the OFPS's current facilities, accreditation by such an external assessor should be a long-term goal of the OFPS. The OFPS should invite review of its quality assurance work by external organizations.

Recommendation 59

In order to ensure quality through impartial review mechanisms, the Ontario Forensic Pathology Service should

a) **develop a system of random external audits of a sample of autopsy reports from the regional units and the Provincial Forensic Pathology Unit; and**

b) **strive to make itself accountable to external organizations that benchmark services.**

Continuing Medical Education

In the 1990s, Dr. Smith's lack of knowledge about advances in forensic pathology and about the proper role of an expert witness was detrimental to the quality of pediatric forensic pathology in the province. In a number of cases examined during the Chief Coroner's Review, Dr. Smith was not conversant with the most recent and important medical literature. Because of this lack of knowledge, he was unable to communicate accurate information to actors in the criminal justice system. And, at least early on, Dr. Smith failed to understand that his role as an expert witness was not that of advocate for the Crown's case.

The new leadership team at the OCCO has developed expert witness workshops for forensic pathologists and bimonthly seminars on difficult forensic pathology issues. These are useful additions to the continuing medical education of forensic pathologists. However, more can be done. The Registry provides a powerful tool for the OFPS to ensure that its forensic pathologists receive continuing education, provided that programs are available.

In order to ensure that pathologists performing coroner's autopsies have an adequate knowledge base, the Chief Forensic Pathologist should enhance the continuing education of forensic pathologists listed on the Registry. As discussed in Chapter 11, Professionalizing and Rebuilding Pediatric Forensic Pathology, this education should address the role of an expert witness within the justice system as well as recent developments in the practice and science of forensic pathology.

Recommendation 60

The Ontario Forensic Pathology Service should strive to enhance the continuing education of forensic pathologists listed on the Registry.

In this chapter, I have set out important ways in which oversight and accountability of forensic pathology must be enhanced. Most important is the creation of a Governing Council to be responsible for both the OFPS and the coronial service provided by the OCCO. The creation of a Registry is also very important, and so

is the clarifying of relationships within the OCCO and the OFPS. Finally, there is a need for enhanced tools of oversight of the work of forensic pathologists. None of these steps alone can guarantee that the past will not be repeated. However, together they provide, in my view, our best hope of achieving that objective.

14

Improving the Complaints Process

Our systemic review demonstrated that the complaints mechanisms in place to address public concerns about the work of pathologists providing forensic pathology services for use in investigations and criminal proceedings were quite inadequate. In part because of these failures, significant warning signals about the work of Dr. Charles Smith were missed. To address this failing, the Office of the Chief Coroner for Ontario (OCCO) should implement an effective complaints process separate from, and in addition to, the present process administered by the College of Physicians and Surgeons of Ontario (CPSO).

The CPSO is the self-regulating body for the Ontario medical profession. It regulates the practice of medicine to protect and serve the public. All doctors, including pathologists, must be members of the CPSO in order to practise medicine in Ontario. The role and authority of the CPSO is set out in various pieces of legislation including the *Regulated Health Professions Act (RHPA),* SO 1991, c. 18, as amended; the Health Professions Procedural Code, which is Schedule 2 of that Act; and the *Medicine Act, 1991*, SO 1991, c. 30. The CPSO's legislated mandate requires it to investigate complaints against doctors and to discipline doctors who have committed an act of professional misconduct or displayed incompetence. This disciplinary jurisdiction covers physicians and surgeons in traditional and non-traditional roles.

Although the present CPSO process is valuable, an efficient new complaints process at the OCCO will perform several key functions. It will impose a degree of accountability on the medical professionals engaged in the death investigation system and help to ensure that the standards of the profession are upheld. It will also help to uncover flawed pathology practices at an early stage so they can be corrected. Finally, it will help to restore public confidence in the practice and oversight of pediatric forensic pathology in Ontario.

In this chapter, I discuss the broad principles that should guide this new complaints process. It must be transparent, responsive, and timely. It must include a mechanism for appeal through a committee of the Governing Council, giving both the complainant and the forensic pathologist the ability to seek redress if they are not satisfied with the initial outcome. In addition, the complaints process established by the OCCO must benefit from relevant information sharing with other institutions, such as the CPSO. These changes will all enhance the efficiency and breadth of the complaints process.

As with my other systemic recommendations, I focus, by necessity, on forensic pathology as a whole rather than the small subdiscipline of pediatric forensic pathology. The issues that can arise, and which an effective complaints process must address, are not limited to pediatric cases. To be effective, improvements to complaints mechanisms must apply to the entire practice of forensic pathology in Ontario. In addition, it makes sense for the complaints process to handle complaints about both coroners and forensic pathologists.

Although I recommend that the OCCO adopt certain principles as it establishes the new structure, the details of the complaints process are best left to the leaders of the Ontario Forensic Pathology Service (OFPS) and the coronial service to decide.

The Need for a Complaints System at the OCCO

From 1981 to 2001, members of the public who attempted to raise concerns about Dr. Smith faced significant obstacles to the timely, comprehensive, and independent adjudication of their concerns. The OCCO never had a formal independent mechanism in place to address complaints about pathologists, and, after the 1998 disbanding of the Coroners' Council, had no formal mechanism to address complaints about coroners.

When complaints were made to the Chief Coroner or its governing ministry about Dr. Smith's work, the OCCO's reaction was to defend and shield him rather than conduct full, impartial, and timely investigations. Further, the OCCO tried to prevent the CPSO, an independent and objective body, from investigating complaints against Dr. Smith by arguing that it alone had jurisdiction to deal with them. The CPSO agreed to cede jurisdiction to the OCCO. When little action was taken by the OCCO, it then took several years and an appeal to the Health Professions Appeal and Review Board before the CPSO assumed jurisdiction to investigate the complaints about Dr. Smith. In part because these complaints were not investigated and adjudicated in a timely fashion, serious problems with Dr. Smith's work remained undetected.

An effective complaints process can help to prevent the future repetition of serious mistakes by forensic pathologists. It can help to ensure that any problems missed during quality control processes are caught and addressed. Further, it will mean that the OCCO remains responsive and accountable to the public for the performance of its oversight responsibilities.

Jurisdiction of the Complaints Process

All forensic pathologists who are included on the Registry should be subject to the OCCO complaints process where complaints arise about their forensic pathology work – including the performance of autopsies under coroner's warrant as well as forensic pathology consultation opinions provided to Crown or defence counsel – or their conduct when carrying out such work. In this chapter, when I refer to forensic pathologists, I am referring to those forensic pathologists included on the OCCO's Registry of pathologists approved to perform autopsies under coroner's warrant. Where, for example, an individual pathologist not included on the Registry provides a consultation opinion to the defence, complaints arising from his or her work would likely not fall within the OCCO's complaints process.

Coroners should also be subject to the OCCO complaints process. Although my central focus in this chapter is complaints about forensic pathologists, in my view a combined process covering both forensic pathologists and coroners is more cost effective than two separate systems. It also avoids duplication of resources and encourages coordinated approaches to death investigation. The death investigation process can be quite complex, and the roles of the coroner and the forensic pathologist can sometimes overlap – for instance, in the determination of the cause of death. Individual members of the public cannot be expected to distinguish which aspects of the death investigation are the responsibility of the coroner, and which belong to the forensic pathologist. A complaint about a coroner's finding of cause or manner of death could also involve some aspects of a pathologist's responsibility, or vice versa. Allowing the public to access a single complaints process regardless of the medical actor in the death investigation helps to ensure that individuals do not have the onus of determining who does what in a death investigation. Indeed, in some instances, the complaint might relate to both coroner and forensic pathologist. A single, centralized complaints process is therefore preferable.

Although I will refer mainly to complaints made against forensic pathologists, I intend the principles of the complaints process to apply equally to complaints brought about coroners.

Recommendation 61

The Office of the Chief Coroner for Ontario should establish a public complaints process that

a) **is transparent, responsive, and timely; and**

b) **encompasses all the medical practitioners and specialists involved in the death investigation process, including coroners and forensic pathologists.**

The OCCO and the CPSO Must Both Have Jurisdiction Regarding Complaints

The complaints process that I recommend in this chapter is to be adopted in addition to the process currently in place at the CPSO. Although there was once some dispute about which institution – the OCCO or the CPSO – had jurisdiction to investigate and adjudicate complaints brought against pathologists acting under coroner's warrant, that dispute has since been resolved. In recent years, the CPSO has properly asserted its jurisdiction over physicians doing work for the OCCO, whether as coroners or as forensic pathologists, and it should continue to do so.

The evidence at the Inquiry suggested that certain aspects of the CPSO's investigations into the complaints regarding Dr. Smith were unsatisfactory – for example, lengthy delays and the difficulty the CPSO had in obtaining records relevant to the investigation. However, I am satisfied that these failings were either unusual or have since been addressed by changes in practice and policy. I am satisfied that the CPSO continues to have an important role to play in the investigation and adjudication of complaints brought against medical professionals engaged in work for the OCCO.

Nevertheless, the OCCO must also have its own complaints process. In my view, there are four primary reasons why a separate OCCO complaints process is necessary. First and most important, the OCCO can measure the work of forensic pathologists against specific policies, protocols, guidelines, or practices issued by the Chief Forensic Pathologist and the OCCO. The OCCO is best situated to assess if a forensic pathologist has contravened one of its own guidelines or recommended practices, and, if so, to take measures to ensure that it does not happen again. This is the case whether or not the contravention would amount to professional misconduct that would concern the CPSO.

Second, the OCCO is equipped with a unique and comprehensive understanding of the death investigation process, including its various players – coro-

ners, forensic pathologists, police, and Crown counsel, to name but four. Because of its involvement with the entire death investigation, the OCCO can consider not only whether a complaint has merit but also whether it implicates other aspects of the death investigation – and can then decide whether other members of the team ought to be notified or referred for possible discipline.

Third, a separate complaints process will allow members of the public to voice concerns directly to – and be heard by – the institution responsible for a pathologist's forensic work. This access will help restore public confidence in the oversight of forensic pathology in the province.

Finally, the OCCO complaints process can have a flexibility and informality tailored to the institutional needs of the OFPS.

For these reasons, I do not see jurisdiction over complaints as belonging solely to either the CPSO or the OCCO. Both institutions have legitimate and complementary interests in receiving and investigating complaints about medical professionals engaged in death investigations. Both have strengths they can bring to the adjudication of such complaints. I therefore recommend that the CPSO and the OCCO each maintain a jurisdiction over complaints about forensic pathologists . And, as I discuss in more detail below, I anticipate that the CPSO and the OCCO will work together to ensure that future complaints against forensic pathologists will be properly and efficiently adjudicated. This collaboration will ensure that the public benefits from the strengths of both institutional overseers.

Recommendation 62

The complaints process to be established by the Office of the Chief Coroner for Ontario should be separate and apart from the complaints process offered by the College of Physicians and Surgeons of Ontario, and should focus on forensic pathologists' performance of their roles and their compliance with Ontario Forensic Pathology Service requirements.

Recommendation 63

The College of Physicians and Surgeons of Ontario should continue its practice of investigating complaints about forensic pathologists acting under coroner's warrant.

Principles and Design of the Complaints Process

The specific design of the complaints process for coroners and forensic pathologists at the OCCO should be left to the discretion of the Chief Coroner and the

Chief Forensic Pathologist, subject to approval by the Governing Council. In this section, I outline some broad principles that, in my view, should inform the process, as well as several specific features that I think the system must include.

- First, an effective complaints process must be sensitive to the needs of complainants. It must be easy to use, keep the complainant informed, and dispose of complaints in a timely way.
- Second, the complaints process must treat fairly the forensic pathologist who is the subject of a complaint. Forensic pathologists must be afforded an opportunity to be actively involved in the complaints process.
- Third, the OCCO must balance the public's right to know with the legitimate privacy and confidentiality interests of both complainants and forensic pathologists.
- Fourth, where consistent with quality forensic pathology services, the complaints process at the OCCO should emphasize remediation and rehabilitation through continuing medical education rather than punitive sanctions. The complaints process should adopt a remedial/rehabilitative focus allowing for mentorship, supervision, and education of practitioners whose skills and practice are in need of improvement. In cases where the public interest is clearly at risk, sanctions should be imposed that appropriately reflect the gravity of the situation. Since all pathologists performing work for the OFPS will be members of the Registry, other more onerous sanctions, such as suspension or even removal from the Registry, should be available where necessary.
- Fifth, the mechanism for the initial resolution of a complaint should be left to the discretion of the Chief Coroner and the Chief Forensic Pathologist. However, the complaints process must include, at a minimum, the ability for both complainants and forensic pathologists to have recourse to an independent review mechanism when they are dissatisfied with the disposition reached. To achieve this potential for review, the Governing Council should create a complaints committee to which a complainant or a forensic pathologist can appeal. The committee should have the power to review independently the decisions that have been made by the Chief Forensic Pathologist, the Chief Coroner, or their designates.

Recommendation 64

With the approval of the Governing Council, the Chief Coroner for Ontario and the Chief Forensic Pathologist should design the specific procedures for the complaints process to

a) **reflect the principles of transparency, responsiveness, timeliness, and fairness;**

b) **focus on remedial and rehabilitative responses, rather than punitive ones, except where the public interest is jeopardized; and**

c) **provide for appeals by the complainant or the physician to the complaints committee of the Governing Council where they are not satisfied with the initial resolution of the complaint by the Chief Coroner or the Chief Forensic Pathologist or their designates.**

Mechanisms to Address Complaints about the OCCO/OFPS Leadership

From 1981 to 2001, neither the OCCO nor its governing ministry had an adequate process in place to address complaints made about its senior leadership. For example, Nicholas' grandfather filed a complaint with the Solicitor General about Deputy Chief Coroner Dr. James Cairns' conduct in the investigation into Nicholas' death. Chief Coroner Dr. James Young, who was not in a position to assess the complaint independently, nevertheless personally prepared the Solicitor General's reply to that complaint.

In 2002, subsequent to the Ombudsman's recommendation arising from Nicholas' case that the Solicitor General consider establishing an independent complaints-handling body, a formal mechanism was instituted for complaints regarding the Chief Coroner or the Deputy Chief Coroner: any such complaints would be sent directly to the deputy minister's office and be investigated independently of the OCCO.

Although this process for handling complaints about the senior leadership was definitely a step forward, it should now be superseded by the creation of the complaints committee of the Governing Council to deal in the final instance with complaints concerning the work of the Chief Coroner, the Chief Forensic Pathologist, and their respective deputies. In cases where there is need for a further review of the initial disposition, it should be conducted by the deputy minister in the Ministry of Community Safety and Correctional Services.

Recommendation 65

The complaints committee of the Governing Council should deal with complaints concerning the work of the senior leadership of the Office of the Chief Coroner for Ontario, with a further review by the deputy minister if necessary.

Information Sharing during Complaints Process

Our systemic review showed that a lack of coordination and exchange of information among various institutions frustrated complainants' attempts to have their concerns heard in a full and timely manner.

The complaints processes of the OCCO and the CPSO will serve the public interest best if there is cooperation between the two institutions. Both institutions have a responsibility for the work of forensic pathologists. Each should know when the other has cause for serious concern about a forensic pathologist. This dual process will allow the two institutions to respond to complaints in a manner that uses their unique strengths. In addition, cooperation and exchange of information should reduce any duplication of effort and resources.

The OCCO should inform the CPSO when it has any serious concerns about the work or conduct of a forensic pathologist. It should be prepared to disclose the relevant information it has gathered during its investigation processes as well as the outcome of such processes. Likewise, the CPSO should inform the OCCO when it has any serious concerns about the work or conduct of a forensic pathologist and be prepared to disclose any relevant information it has gathered throughout its investigation, whether or not the case proceeds to a formal discipline process.

In sharing information, the OCCO and the CPSO should consider the privacy and confidentiality interests of the various parties involved, including the complainants, the families, and any other third parties. The two institutions must then balance these interests with the need for sufficient information sharing between them to ensure the quality of forensic pathology in the province.

I am mindful that the CPSO, like all colleges regulating health professions in Ontario, is subject to statutory duties to maintain the confidentiality of information obtained during the course of its work. Disclosure of information is permissible in a number of situations, including, first, where written consent has been given by the person to whom the information relates and, second, as may be required for the administration of the *Coroners Act,* RSO 1990, c. C.37. In most cases, the CPSO will likely be able to obtain consent from the forensic pathologist and the complainant to enable disclosure to the OCCO. Indeed, all forensic pathologists will be required to consent to such information sharing as a condition of their inclusion on the Registry.

Recommendation 66

The Office of the Chief Coroner for Ontario and the College of Physicians and Surgeons of Ontario should each be prepared to inform the other of

a) **the fact that it has a serious concern about the work or conduct of a forensic pathologist or coroner;**

b) **relevant information it has gathered during the investigation process; and**

c) **the outcome of its investigation.**

Recommendation 67

The Chief Forensic Pathologist should ensure that all forensic pathologists are required, as a condition of their inclusion on the Registry, to consent to the Office of the Chief Coroner for Ontario and the College of Physicians and Surgeons of Ontario sharing information relating to serious concerns about their work or conduct.

15
Best Practices

When a child dies suddenly and unexpectedly, the coroner issues a warrant for a post-mortem examination. The pathologist who receives the warrant may attend the death scene and, very soon after the death, will perform the autopsy that has been ordered. What forensic pathologists do at the autopsy is of critical importance to the death investigation and the criminal justice system. They must collect the pathology evidence that will inform their opinions as to cause of death and any other pathology issues, and do so in a thorough, objective, accurate, and transparent way. The outcome of the autopsy often triggers significant consequences. Should the cause of death be found to be non-accidental, there will almost certainly be legal implications for the person suspected of being responsible, whether in child protection or criminal proceedings or both. If something goes wrong in the autopsy room, the consequences can be disastrous. A number of the cases examined at this Inquiry make this point all too clearly.

Despite those grave risks, the evidence at the Inquiry demonstrates that, up to 2001, relatively little guidance was given to forensic pathologists on best practices in conducting the autopsy or to the police about how best to assist them. There existed few, if any, guidelines on such important things as what information should be provided to the pathologist and how, if at all, the communications between the police and forensic pathologist should be recorded. There was little, if any, instruction as to the required content or timeliness of the report of post-mortem examination. Most significant, the direction given on the forensic pathologist's overall approach, however well intentioned, was deeply flawed. It was not premised on a search for truth. Insofar as it adopted the "think dirty" premise, it was at a cost to the appearance of objectivity.

Since 2001, however, significant work has been done by the Office of the Chief Coroner for Ontario (OCCO) to develop written best practices in forensic pathology that address a number of the best practices that should guide the con-

duct of the autopsy. This is largely the work of current Chief Forensic Pathologist, Dr. Michael Pollanen, building on the foundation laid by the former Chief Forensic Pathologist, Dr. David Chiasson. The most prominent of these documents are as follows:

- Guidelines on Autopsy Practice for Forensic Pathologists: Criminally Suspicious Cases and Homicides, issued in July 2005 (July 2005 Autopsy Guidelines);
- the update issued in October 2007, known as the October 2007 Autopsy Guidelines; and
- Autopsy Guidelines for Homicidal and Criminally Suspicious Deaths in Infants and Children, issued in April 2007 (April 2007 Autopsy Guidelines).

Each of these documents represents substantial progress in promoting best practices at autopsy. Indeed, throughout this chapter, a number of the specific practices that I view as particularly important will be referred to or specifically endorsed. However, as acknowledged at the Inquiry by those who continue to be involved in this work, there is more to be done.

Basic Principles

Before I turn to my specific recommendations, it is important to set out the basic principles that, in my view, must guide all autopsy practices in forensic pathology, including pediatric forensic pathology. Each of the guidelines I refer to above reflect these principles, if not expressly, at least implicitly.

1 At autopsy, the forensic pathologist should "think truth" rather than "think dirty." To do so requires an independent and evidence-based approach that emphasizes the importance of thinking objectively. The pathology evidence must be observed accurately and must be followed wherever it leads, even if that is to an undetermined outcome. This approach guards against confirmation bias, where evidence is sought or interpreted in order to support a preconceived theory.
2 In performing autopsies, forensic pathologists must remain independent of the coroner, the police, the prosecutor, and the defence to discharge their responsibilities objectively and in an impartial manner. The role required of them in the criminal justice system necessitates this independence.
3 The forensic pathologist's work at autopsy must be independently reviewable and transparent. This objective requires care in recording and preserving the

information received pre-autopsy, the steps taken at autopsy, and the materials preserved after autopsy. This transparency is necessary to ensure that the pathologist's opinions can be properly reviewed and confirmed or challenged.

4 The forensic pathologist's work at autopsy must be understandable to the criminal justice system. The autopsy must be performed so that it can be described in clear and unambiguous language to lay people.

5 The teamwork principle is fundamental for sound autopsy practice. This includes teamwork between forensic pathologist and coroner, and between forensic pathologist and colleagues in the same and associated specialties. Particularly in difficult cases, the forensic pathologist must seek assistance and consult with colleagues. In forensic pathology, as in all branches of medicine, teamwork promotes excellence.

6 Fundamentally, the forensic pathologist's practices at autopsy must be founded on a commitment to quality.

Our systemic review of autopsy practices in the Dr. Charles Smith years revealed the absence of any articulated principles of this kind on which a set of best practices could be built. The review also revealed that these principles were all too often ignored in the conduct of post-mortem examinations. It is important that we never return to this era.

Recommendation 68

The Ontario Forensic Pathology Service should explicitly adopt a set of basic principles that include those set out in this chapter; guidelines for best practices at autopsy should be founded on these principles.

The Pathologist's Basic Orientation: Thinking Dirty vs. Thinking Truth

The Inquiry heard a great deal of evidence about the genesis and execution of a policy that encouraged forensic pathologists to "think dirty" in approaching the post-mortem examination. This was captured in the April 1995 OCCO Protocol for the Investigation of Sudden and Unexpected Deaths of Children under Two Years of Age, which was attached to Memorandum 631 and distributed on April 10, 1995, to all coroners, pathologists, and chiefs of police. The protocol included this paragraph:

> Unfortunately, in this day and age CHILD ABUSE IS A REAL ISSUE and it is extremely important that all members of the investigative team "THINK DIRTY". They must actively investigate each case as potential child abuse and not come to a premature conclusion regarding the cause and manner of death until the complete investigation is finished and all members of the team are satisfied with the conclusion. [Emphasis in original.]

Fairly or unfairly, this has been seen subsequently by some to reflect the approach Dr. Smith brought to his work. Thus, it is important to explain how the policy came about. And because the basic approach that the forensic pathologist brings to the post-mortem examination is so vital, it is important to understand how the "think dirty" approach has been discredited and replaced.

Although the evidence at the Inquiry indicates that "think dirty" may never have been intended to represent what some assume – namely, that forensic pathologists should presume homicide or child abuse – the consensus was that such a phrase is nonetheless inappropriate and problematic. Dr. John Butt, one of the expert reviewers, testified that, although it might be reasonable to have a high index of suspicion throughout the autopsy, "think dirty" was a poor way of putting it. In essence, it represents an intrusion into the pathologist's objectivity.

Another expert reviewer, Dr. Christopher Milroy, viewed the phrase as suggesting that the forensic pathologist should believe the case to be a homicide until proven otherwise. In his opinion, although the pathologist should properly question whether all appropriate dissections and procedures have been performed and whether there are grounds to say that a death is due to homicide, directing the forensic pathologist to "think dirty" is simply wrong.

Starting in the late 1990s, the OCCO began to move away from the "think dirty" philosophy. Instead the focus was redirected to the importance of keeping an open mind. On June 29, 2000, the Chief Coroner for Ontario, Dr. James Young, issued Memorandum 00-04, regarding the protocol to follow for investigations of sudden and unexpected death. The memorandum recommended: "Investigations of sudden deaths must be approached with a fair and open mind." The July 2005 Autopsy Guidelines emphasized the need to ensure that forensic pathologists' opinions are "objective and have scientific validity." In December 2006, the OCCO drafted a new Protocol for the Investigation of Sudden and Unexpected Deaths in Children under Five Years, which replaced the 1995 protocol. It stated:

> Every sudden and unexpected death of a child under five years of age must be actively investigated as potentially suspicious and premature conclusions should not be made regarding the cause and manner of death until the complete investigation

> is finished and all members of the team, listed below, are satisfied with the conclusion. [Emphasis in original.]

The April 2007 Autopsy Guidelines again emphasized the need for pathologists to maintain an "open mind":

> In general, the pathologist must keep an open mind to the possibilities of occult violent death, child abuse, sexual assault, maltreatment and neglect. On this basis, it is recommended that the forensic pathologist have a low-threshold for performing special dissections and collecting biological samples.

In the October 2007 Autopsy Guidelines, the OCCO expressly revokes the "think dirty" phrase from its lexicon. The Guidelines state, "Keep an open mind. Don't 'think *dirty*' – think *objectively*," and elaborate as follows:

> The emphasis on the independent, objective and evidence-based approach in forensic medicine can be viewed as revision of an old forensic aphorism *from* 'Think Dirty' *to* 'Don't think Dirty; Think Objectively, Think Truth.' [Emphasis in original.]

In keeping with this evolution in approach, the OCCO has now removed the "think dirty" phrase from its presentations and courses on death investigation. Other jurisdictions around the world have also abandoned the phrase.

The pathologists who testified at the Inquiry emphasized the importance of objectivity. The proper approach is always to start from a position of objectivity, to have an open mind, and to consider all the possibilities before arriving at a conclusion. If a catchy replacement phrase is needed, the consensus was that "think truth" was fitting.

Dr. Pollanen put it succinctly when he discussed the need for a "search for truth" framework. He called for the adoption of an evidence-based approach that keeps one's mind open to a broad menu of possibilities, and that collects objective evidence whether it supports or negates any possible theories. According to Dr. Pollanen, once forensic pathologists adopt this approach, there is no need for an a priori mindset. If pathologists engage with the forensic issues using an evidence-based approach, they start from a neutral position, approach every autopsy systematically, and, from there, are guided to a conclusion by the objective evidence.

I agree with the decision to discard the "think dirty" approach. It invites the perception, whether or not well founded, that the forensic pathologist presumes, and therefore is looking to confirm, the existence of criminal activity. And since

pathologists' work is interpretive in nature, it is vital to exclude the slightest perception that a "think dirty" approach has seeped into their analysis. An evidence-based, "think truth" culture that promotes objectivity should be cultivated.

Recommendation 69

a) Evidence-based forensic pathology is incompatible with an approach of "thinking dirty." It, instead, involves keeping an open mind to the full range of possibilities that the evidence might yield, without preconceptions or presumptions about abuse, and collecting evidence both to support and to negate any possibilities.

b) "Thinking truth," the orientation now adopted by the Office of the Chief Coroner for Ontario, accurately captures the appropriate approach to forensic pathology and helps promote an evidence-based culture.

Specific Best Practices

Scene Attendance

The evidence at this Inquiry demonstrated that, in the 1980s and 1990s, forensic pathologists did not typically attend the crime scene. The sole exception was the Hamilton Regional Forensic Pathology Unit, whose pathologists regularly attended the scene and continue to do so.

For certain complex cases, the forensic pathologist's attendance at the scene may be beneficial. For example, Dr. Pollanen and Dr. Milroy believed that the pathologist's attendance at the scene of Sharon's death (either before or after the autopsy) would likely have been valuable. It would have provided the pathologist with an additional opportunity to consider the evidence and the competing hypotheses in the case. It could have assisted in bringing together in Dr. Smith's mind the evidence relating to a possible dog attack. Unfortunately, that opportunity was lost.

There are concrete benefits to scene attendance. First and foremost, it allows forensic pathologists to make their own observations of the scene and to connect those observations to the autopsy findings in arriving at the ultimate diagnosis. Relevant observations might include the position of the body, the pattern and distribution of blood, and possible weapons present at the scene. Second, forensic pathologists can provide expert involvement early in the investigation process by making observations and providing advice and guidance to the police at the scene. And finally, they can ensure that evidence is appropriately collected. While

at the scene, they can assist in collecting evidence from the body, in removing clothing, and in taking swabs or fingerprints, all of which is designed to avoid losing important trace evidence once the body is moved.

Dr. Pollanen and Dr. Milroy testified that effective engagement of the forensic pathologist in criminally suspicious cases should start at the very beginning, which is at the scene. This entails a change in culture. The forensic pathologist's role should not be viewed as limited to the autopsy suite but as extending from the scene to the courtroom. According to Dr. Milroy, forensic pathologists therefore should at least have input into whether they attend the scene, even if the ultimate decision is not theirs. After all, as Dr. Stephen Cordner, director of the Victorian Institute of Forensic Medicine (VIFM), pointed out, the whole point of the autopsy is to attempt to recreate what happened back at the scene.

On June 1, 2005, Chief Coroner Dr. Barry McLellan and Dr. Pollanen sent a memorandum regarding scene attendance by forensic pathologists in Toronto to investigating coroners in Toronto, forensic pathologists at the Provincial Forensic Pathology Unit (PFPU), and the Toronto Police Service – Homicide Unit. The memorandum states, "[I]n certain complex cases, forensic pathologists should, wherever possible, attend the death scene and make observations before the movement of the body." According to the memorandum, the investigating coroner and homicide investigators should consider having the forensic pathologist attend the scene for

- all suspicious or homicidal deaths with no readily apparent cause of death (e.g., suspected asphyxial deaths);
- all suspicious or homicidal deaths where the body is in a concealed location, including apparently "dumped" bodies;
- all suspicious deaths of young women and children where the body is in an uncontrolled environment (e.g., public place, outdoor environment, naturally occurring body of water, bathtub, unlocked residence);
- all deaths suspected to be related to sexual violence;
- dismembered or buried bodies;
- scenes with apparent "overkill" or other extensively disturbed and bloody scenes;
- thermally-damaged or charred bodies with suspicion of homicide (i.e., arson); and
- any other cases that the investigating coroner or police deem appropriate.

The memorandum instructs that, generally, in the absence of those circumstances, the forensic pathologist may not be required to attend scenes involving

penetrating trauma, like gunshot wounds and stabbing or cutting injuries. When attendance by the pathologist is considered, the memorandum instructs the police to contact the OCCO dispatch unit to have the pathologist paged.

Since the June 1, 2005, memorandum was issued, pathologists at the PFPU in Toronto have frequently visited the scene. Typically, the police or investigating coroner (or both) contacts the forensic pathologist when the body is discovered. They discuss the nature of the case before the pathologist proceeds to the scene. Dr. Pollanen told the Inquiry that the Toronto Police Service and Ontario Provincial Police have been very receptive to the policy, recognizing the value in early expert involvement and effective evidence collection. However, the memorandum was confined to Toronto. Accordingly, outside Toronto and the Hamilton Regional Forensic Pathology Unit's catchment area, attendances at the scene by forensic pathologists remain infrequent, and in the north, tend not to take place at all.

Recommendation 70

a) The Ontario Forensic Pathology Service should encourage forensic pathologists throughout the province to attend the scene of death more frequently.

b) The Office of the Chief Coroner for Ontario should develop guidelines with respect to scene attendance by forensic pathologists throughout the province. The guidelines should draw upon the Toronto memorandum and the experience with scene attendance by forensic pathologists at the Provincial Forensic Pathology Unit and the Hamilton Regional Forensic Pathology Unit. Such guidelines should

- **i) recognize the strengths and limitations of scene attendance;**
- **ii) identify the circumstances in which scene attendance by the forensic pathologist would be valuable;**
- **iii) emphasize the need for communication between the investigating coroners, police, and forensic pathologists in determining when scene attendance will take place; and**
- **iv) outline a protocol to be followed at the scene when forensic pathologists are in attendance.**

Providing On-Scene Information to the Pathologist

Although scene attendance by forensic pathologists represents a best practice in a number of circumstances, concerns were raised at the Inquiry about its feasibility

in three respects. First, Ontario's vast size means that timely scene attendance will often not be possible. Second, there is a shortage of pathologists doing forensic pathology and they are already overworked. Requiring scene attendance, which often occurs at night, may further tax this already overburdened group of specialists. Third, forensic pathologists will need to be compensated financially for scene attendance.

Although the recommendations in this Report address shortages of pathologists who are able to do forensic pathology, the reality remains that forensic pathologists will not be able to attend all scenes where that would be optimal.

Dr. Pollanen described how in many cases technology can be used effectively in place of scene attendance. Critical information can now be transmitted to forensic pathologists through, for example, the use of photographs and videotapes provided by the investigating coroner and the police. Digital photography now helps to provide what the director of the Kingston Regional Forensic Pathology Unit, Dr. David Dexter, described as a "virtual visit." This technology means that the pathologist can receive high-resolution images of the scene, which can also be magnified if necessary.

Recommendation 71

Where it is not feasible for the forensic pathologist to attend the scene, the Ontario Forensic Pathology Service (OFPS) should develop and encourage enhanced "real time" communication, including the transmission of digital photographs, and even the use of video and telemedicine technology, so that the forensic pathologist can view the scene, where helpful, prior to the body being removed. The OFPS should be provided with the resources necessary to do so.

Recommendation 72

Compensation for forensic pathologists should reflect the added work represented by their attendances at the scene.

Information Provided to the Pathologist

In Chapter 16, I discuss how forensic pathologists should effectively communicate their opinions to the criminal justice system. The effective communication of forensic pathology is of importance not only in reports or testimony but also in the often informal dialogue that takes place among the forensic pathologist, coroner, and police at or surrounding the autopsy or thereafter. It is no less critical

that these informal communications avoid misunderstanding or misinterpretation. Forensic pathologists must always communicate their opinions accurately and in a transparent way.

It is of equal importance to address not only what forensic pathologists communicate to others, but also what is communicated to them. The latter is the prime focus of this section of the Report.

It is vital that forensic pathologists receive the underlying facts that should help inform their opinions. These can come from the investigating coroner, the police, or both. This communication of information to the forensic pathologist must be as accurate and transparent as the communication from the pathologist. Otherwise, the ability of fellow pathologists or the justice system to evaluate and test the forensic pathology opinion – that may be based, in part, on the information received by the pathologist – is limited.

The evidence at the Inquiry demonstrated that the interplay between Dr. Smith, police officers, and coroners was often problematic. The information provided to Dr. Smith was sporadic and at times incomplete. He, in turn, showed insufficient or uneven attention to deficiencies in the information provided. It was often unclear what information had been shared with him, and, almost invariably, it was unknown to the outside observer what information he had relied on to form his opinion. Moreover, the exchanges between Dr. Smith and others were often not recorded – certainly not by him – and therefore lacked transparency and were easily misinterpreted. It is not surprising that in a number of cases, disputes later arose over what it was that Dr. Smith actually said at various points, what if any limitations had been articulated, and what level of confidence he purportedly had in the opinions informally expressed. This was a recipe for disaster.

Although there has been improvement since Dr. Smith's tenure, a number of issues still need to be addressed.

Information Relayed by Coroner or Police about the Circumstances Surrounding the Death

Obtaining and carefully considering the history is essential to a proper autopsy. In Jenna's case, that did not happen, with adverse consequences. While Jenna was at the hospital, an emergency physician noticed a hair in her vaginal area and signs of possible sexual abuse. Although both the coroner and a police officer were present at the hospital, neither passed that information on to Dr. Smith before the post-mortem examination. Dr. Smith was, however, given the hospital emergency record, which contained the physician's observations. Despite this, he failed to perform a complete sexual assault examination and concluded incorrectly that

there were no signs of sexual abuse. This error could have been avoided. Had the coroner and the police highlighted the history of a possible sexual assault, or had Dr. Smith carefully reviewed the emergency record that was provided to him, he might have done more investigative work (such as utilizing a sexual assault kit or taking swabs) to determine if Jenna had in fact been sexually abused.

Sergeant Larry Charmley of the Peterborough Lakefield Community Police Service said that any medical records relating to the deceased should be provided to the pathologist – "the more information you have up front the better." Typically, it would be the coroner who would be in a position to obtain these records before the autopsy. Acting Deputy Chief Coroner and regional coroner Dr. Albert Lauwers and Detective Sergeant Chris Buck of the Toronto Police Service agreed. Ideally, in pediatric death cases, the pathologist would be provided with hospital emergency and medical records, the deceased's medical file from his or her pediatrician, and any relevant records from the children's aid society (CAS). Dr. David Ranson, deputy director of the VIFM, indicated that he would be reluctant to begin an autopsy without such records, unless a delay might result in the loss of evidence.

Dr. Lauwers told the Inquiry about the "Deaths under Five" form, an investigative questionnaire issued by the OCCO that provides details about the deceased, the death scene, the environmental conditions where the child was found, the position of the body, the medical history, and the prenatal/birth history. It should be filled out by the coroner for all sudden and unexpected deaths of children under the age of five years and provided to the forensic pathologist before autopsy.

The OCCO Guidelines for Death Investigation issued to coroners on April 12, 2007, state that discussion between the investigating coroner and the pathologist before the post-mortem examination is desirable, though not mandatory, if the warrant for post-mortem examination is comprehensive. Dr. McLellan told the Inquiry that coroners are expected to give pathologists all available information, including medical records, family history, and even CAS records, where possible.

The Guidelines also direct that the background details provided to the forensic pathologist in the warrant for post-mortem examination include "past history, reasons for the post-mortem examination, and the circumstances of the death, particularly if circumstances are suspicious." However, the information provided should be factual and "should not contain speculation, rumour, or conclusions that will be made at the time of the post-mortem examination (i.e. describing gunshot wounds as exit or entrance wounds)."

On April 30, 2007, the OCCO amended its earlier guideline with respect to verbal discussions between the coroner and the forensic pathologist. It announced a

policy requiring direct telephone or in-person communication between the coroner and forensic pathologist before the autopsy for every criminally suspicious case and for every death of a child under the age of five. This mandatory communication between coroner and forensic pathologist provides a formal opportunity for the coroner to provide the pathologist with any information or details not in the warrant, and for the pathologist to ask questions that might assist in his or her performance of the autopsy.

I support recent OCCO initiatives to improve the level of communication from investigating coroners to forensic pathologists. However, more can be done. The Guidelines for Death Investigation should also require the coroner to provide the deceased's hospital records, medical records, and even CAS records, where possible.

I recommend below that, as a best practice, coroners should not filter out the factual information provided to the forensic pathologist, although rumours, irrelevancies, and speculation should be avoided. As well, coroners should be cautious in providing information that appears factual but may be potentially unreliable or contentious. These represent best practices for coroners, as well as for police.

It is important that coroners refrain from expressing medical conclusions in their early communications with the forensic pathologist. Although the coroners make the final determination about cause and manner of death, they are also well advised to await the considered opinions of pathologists before expressing those conclusions. Finally, transparency requires verbal exchanges of information of any significance between coroners and forensic pathologists (as with exchanges between police and pathologists) to be recorded in writing by both parties.

Acting Inspector Robert Keetch of the Greater Sudbury Police Service testified that, typically, when the police attend an autopsy, they provide to the forensic pathologist a brief overview of the scene as they found it. In addition, the police now have the ability to produce digital images of the scene for the forensic pathologist to view via a laptop computer. Sometimes, the police bring physical evidence, such as a suspected murder weapon, to the pathologist. If the police have some idea of who the perpetrator of a suspected homicide might be, they may share that with the forensic pathologist.

According to Acting Inspector Keetch, the amount of information provided by the police to the forensic pathologist differs from case to case, depending on whether or not it is criminally suspicious. For example, Inspector Brian Begbie of the Kingston Police Service testified that in some circumstances he might tell the pathologist before the autopsy that there had been a confession, since it might help direct the pathologist to look for signs that might otherwise be missed. There might be other information (such as the mother's background

or prior CAS involvement) that would not necessarily be conveyed to the pathologist. The fact that another child had been abused might be something that would be disclosed.

There needs to be greater clarity as to what the police should provide on a consistent basis. There must also be greater coordination between coroners and police so that, together, they ensure that all needed information has been passed on.

Recommendation 73

a) The contents of warrants for post-mortem examination should conform to the current guidelines of the Office of the Chief Coroner for Ontario.

b) In accordance with current guidelines of the Office of the Chief Coroner for Ontario, the investigating coroner should strive to provide full and accurate information to the forensic pathologist. In particular, all relevant hospital and medical records should, if at all possible, be provided to the forensic pathologist prior to the commencement of the post-mortem examination.

c) The coroner should refrain from expressing medical conclusions in any early communications with the forensic pathologist. Although the coroner makes the final determination about cause and manner of death, the coroner is well advised to await the considered opinions of the forensic pathologist before expressing those conclusions.

d) In accordance with existing policy of the Office of the Chief Coroner for Ontario, direct telephone or in-person communication between the coroner and the forensic pathologist should take place prior to the autopsy for every criminally suspicious case and for autopsies of children under the age of five.

e) Province-wide protocols for police officers should be developed that articulate the types of information that should and should not be provided to the forensic pathologist. Such protocols should also address how police and coroners can coordinate what information is provided to the forensic pathologist and by whom.

Recording the Pre-autopsy Communications

The evidence at the Inquiry showed that, in the 1990s, there were no standard procedures as to whether or how pre-autopsy communications between the forensic pathologist and the coroner should be recorded. Typically, these communications were verbal and largely unrecorded. Coroner's warrants were often uninformative;

Dr. Lauwers described them as "cryptic." As for communications between the pathologist and the police, with the exception of the Hamilton Regional Forensic Pathology Unit, which used a standard form filled out by the police, there were again no standard procedures as to whether or how these communications should be recorded. The extent to which notes were made of pre-autopsy communications depended largely on the individuals involved. Typically, forensic pathologists did not take extensive notes of their discussions with police. Nor did the police generally keep a record of the information conveyed verbally to the pathologist.

Dr. Smith was inconsistent in documenting information received from the police or the coroner. Sometimes he took notes; other times he did not. For example, in Sharon's case, Dr. Smith testified at the preliminary hearing that he did not keep notes of conversations with police officers or others involved in a case. In Jenna's case, Constable Scott Kirkland of the Peterborough Lakefield Community Police Service, who accompanied Jenna's body to SickKids for autopsy by Dr. Smith, testified that he communicated important information to Dr. Smith, including the account provided by Jenna's babysitter of what happened before her death. As far as he could recall, Dr. Smith took no notes of their conversation. However, Dr. Smith did take some handwritten notes in Jenna's case, likely during a conversation with the investigating coroner.

As described above, the current Guidelines for Death Investigation for coroners provide that background details in the warrant for post-mortem examination should include past history and the reasons for the post-mortem examination. The circumstances of death – particularly if suspicious – should also be provided to the forensic pathologist.

Dr. Pollanen made the important point that it is insufficient to recommend that the police or the coroners simply provide accumulated information to the forensic pathologist in a standardized form. There are two dimensions, both vital, to the forensic pathologist's role in acquiring complete pre-autopsy information. The first is passive, involving the receipt of information brought to the forensic pathologist by the police or the coroner. The second is active, involving the forensic pathologist in taking a relevant history from the police or the coroners and asking germane questions about the case. A protocol that simply has police or coroners providing information to the pathologist in writing does not capture the active dimension. The forensic pathologist's information base must include not just the information volunteered by the police or coroners but also the answers to questions posed by the forensic pathologist.

Information provided to the pathologist should therefore be recorded in two main ways. First, the police and coroners should be encouraged to provide initial information to the forensic pathologist in writing. Second, both the conveyor and

the recipient of additional information should record what has been communicated verbally to the pathologist.

The recording of the initial information provided by police or coroners to the forensic pathologist can be done in a variety of ways. As reflected in the current guidelines for coroners, coroners can provide much of the information they have learned in a detailed coroner's warrant. Moreover, coroners are now expected to complete an investigation questionnaire in every case involving the death of a child under the age of five. Similarly, police can provide information to pathologists before the autopsy has commenced through a written summary of the police investigation, a police occurrence or supplementary report, or through an investigation questionnaire specifically designed for this purpose. Further information acquired later can also be provided in writing. Investigation questionnaires are particularly well suited to pediatric forensic cases. Police officers are often less familiar with these cases, and with what may be significant to the pathologist. The questionnaires promote the collection of information that is complete and relevant to the pathologist's duties.

In my view, the precise format by which this information is recorded is less important than systemic recognition that as much information as possible should be provided to the pathologist before the autopsy and that, where possible, it be done in writing. Similarly, during the course of the death investigation up to and including trial, additional information should be provided to the pathologist in writing as it is accumulated.

With respect to the verbal communications that inevitably take place, an important question is who should bear the responsibility of recording the information conveyed. Dr. Milroy suggested that it is the forensic pathologist's responsibility to ensure that the intake information is recorded. Dr. Pollanen regards it to be a best practice for forensic pathologists to record contemporaneously all relevant information received from others. In fact, in his view, such communications should be documented at both ends. I agree with this approach. To the extent possible, transparency favours the recording of communicated information by both parties.

Recommendation 74

a) The police and coroners should be encouraged to provide initial information to the forensic pathologist in writing.

b) Additional information communicated to the forensic pathologist at any time should be provided in writing or, if verbal, should be recorded by both the person communicating the information and the person receiving it.

c) Investigation questionnaires should be utilized by police and coroners to provide information to forensic pathologists in all cases of sudden infant death. The completed questionnaire should be provided to the forensic pathologist before the post-mortem examination begins.

Filtering the Information Provided to the Pathologist

The forensic pathologists who participated at the Inquiry agreed that, presumptively, forensic pathologists should be provided, before the autopsy, with as much information as possible. The more difficult issue is whether the police or coroners should ever "filter out" some of that information so as not to taint or prejudice the pathologist's opinions.

There appear to be two schools of thought. The first approach places confidence in the ability of forensic pathologists to remain objective and discard potentially inflammatory or irrelevant information. That approach favours little or no filtering by those who provide the information. It then becomes the role of the forensic pathologist to filter out irrelevant or useless information. One advantage of this approach is that it does not place police or coroners in the difficult position of having to decide, without pathology expertise, what might be relevant to the forensic pathologist's task. Ultimately, the most effective safeguard against the misuse of such information is complete transparency as to what information has been communicated and what parts of it are relied on by the pathologist in forming his or her opinions.

Dr. Pollanen was an articulate spokesperson for the first school of thought. He explained that forensic pathologists, as part of their function, should automatically filter the information they receive about the history and circumstances of death. In his view, the best way to guard against misuse by forensic pathologists of extraneous information is by emphasizing the importance of the evidence-based framework.

The second school of thought recognizes that pathologists are human and are susceptible to subtle influences or biases, which may be fuelled by potentially inflammatory or highly incriminating information such as purported confessions. Given the interpretive nature of the discipline, it is vital to avoid the appearance of tainting the pathologist or, worse, subtly playing into confirmation biases or tunnel vision. Transparency may assist in exposing the misuse of such information, but it is imperfect since forensic pathologists will not always recognize how such information has affected their ultimate opinions.

The evidence at this Inquiry illustrates the dangers associated with the misuse of such information. Dr. Smith at times noted extraneous information about the

social backgrounds of suspected caregivers or parents in a way that suggested he may not have filtered the information out of his final assessments. In both Delaney's and Katharina's cases, Dr. Smith acknowledged that he relied on confessions to form his opinions as to cause of death. The reviewers concluded that there was limited pathology evidence to support those opinions. In Joshua's case, in diagnosing the cause of death as asphyxia, Dr. Smith admitted to placing undue weight on the remote history provided to him that Joshua's mother had stated, one month before Joshua's death, that she could not take it anymore and was going to smother the baby. In none of these instances was Dr. Smith transparent about using or disregarding this information.[1]

Although the witnesses at the Inquiry generally supported a model in which filtering out extraneous information was largely left to the forensic pathologist, some allowed for a small amount of filtering by the police and coroners of clearly irrelevant information.

The OCCO has addressed the use of such information in its October 2007 Autopsy Guidelines, which state, "The pathologist must not base any expert opinion on untested/untestable evidence such as reported confessions, or assumptions that cannot be independently validated or corroborated by other evidence."

In my view, police and coroners, as a general rule, should err on the side of transmitting the information in their possession to the forensic pathologist, rather than withholding it. They are often not well situated to know what may be relevant to the pathologist's work. By omitting certain information, they run the risk of adversely affecting the completeness of the pathologist's work or its responsiveness to the issues raised in the case.

That being said, the danger of confirmation bias remains if the forensic pathologist becomes too easily wedded to a theory advanced early on by the police. For example, Dr. Katherine Gruspier, adjunct professor of the University of Toronto forensic science program, described at the Inquiry a study in which world-class fingerprint experts were given prints they had previously examined and either ruled in or out as a match. When the experts (unaware of their own prior examinations) were provided the prints a second time together with biasing and irrelevant information, it led to scientific error.

This concern is best addressed in several ways. First, as suggested by Dr. David Ranson, the deputy director of the Victorian Institute of Forensic Medicine, increased professionalism and education of pathologists will bring an enhanced awareness of the risks of confirmation bias. Second, the promotion of an evidence-

[1] See Appendix 28 at the end of Volume 4 for summaries of the cases.

based culture surrounding forensic pathology will also help. Complete transparency concerning both what is communicated and what parts of it are relied on by the forensic pathologist, while not perfect, enhances independent reviewability and serves as a further safeguard against confirmation bias. However, this approach is not a licence for police or coroners to transmit information that is clearly irrelevant, innuendo, or purely speculative. Indeed, the OCCO's guidelines for coroners specifically direct coroners to exclude speculation and rumour from their warrants for post-mortem examination. Nor does this approach prevent experienced officers and coroners from exercising discretion as to how relevant information is communicated to the forensic pathologist. A purported confession illustrates both the problem and the possible solution. The police may have obtained a confession from the caregiver or parent of a young child. Providing the confession to the forensic pathologist before the autopsy invites the obvious concern that he or she may be tainted or unduly influenced by its existence and fail to examine the existing pathology critically and objectively to determine what opinions can properly be given about the case. Dr. Smith fell prey to this very danger. He expressed expert opinions about causes of death in some cases, with little or no pathology support, because the non-pathology information seemed to support those causes of death.

Although a confession may arguably risk biasing the forensic pathologist, it may also contain valuable information that should rightly be evaluated by the forensic pathologist. If, for example, it provides a detailed account of what happened, it may be important for the forensic pathologist to determine whether the account is excluded by the pathology or, conversely, the extent to which the pathology supports that account.

The solution to the problem associated with the confession is therefore case specific. There are no bright lines to be drawn that determine when a confession should be provided to the forensic pathologist. Some experienced officers might ensure that the issues raised by a confession or other inflammatory information are discussed with the pathologist while not informing the pathologist that a confession has been secured. Others might defer providing the confession to the pathologist until some time later in the process. The point here is that, while police should presumptively provide more, rather than less, information to the forensic pathologist, they should have some discretion to communicate the relevant information in ways that reduce the likelihood or the perception of bias.

Related to this point is the recommendation I make in Chapter 16, Effective Communication with the Criminal Justice System, that forensic pathologists should take a cautious approach to the use of circumstantial evidence or non-pathology information. Such evidence or information should never be asked to

support the entire burden of the forensic pathologist's opinions. The forensic pathologist should be especially cautious in using such information where it is potentially unreliable or contentious or comes close to the ultimate issue that the court must decide. As I recommend in that chapter, these principles ought to be incorporated into an Ontario Code of Practice and Performance Standards for forensic pathologists.

All of these measures collectively ensure that the forensic pathologist has the required information to do the job, while guarding against its misuse.

Recommendation 75

a) As a general rule, police and coroners should not "filter out" relevant information that is to be provided to the forensic pathologist. The forensic pathologist is best situated to determine what is relevant to his or her work.

b) That being said, police and coroners should generally not transmit information that is clearly irrelevant, innuendo, or purely speculative. Coroners and police officers also have discretion as to how relevant information is communicated to the forensic pathologist. This might mean, for example, that information is communicated in ways that reduce its potential misuse or its inflammatory character.

c) The forensic pathologist should remain vigilant against confirmation bias or being affected by extraneous considerations. This is best done through increased professionalism and education, an enhanced awareness of the risks of confirmation bias, the promotion of an evidence-based culture, complete transparency concerning both what is communicated and what parts of it are relied upon by the pathologist, and a cautious approach by the pathologist to the use of circumstantial or non-pathology information.

A related question is whether forensic pathologists, when engaged in their own filtering process, should record everything they are told or only those portions that they regard as relevant. Practices in this regard vary:

- Dr. Pollanen's practice is to "filter" out the irrelevant information prior to recording it through dictation. Thus he dictates only the information that he anticipates relying on to arrive at an opinion. This means that, as a general rule, what he dictates also appears in his final report.
- Dr. Cordner writes down a summary of what he is told, without making any judgment as to the relevance of that information.

- Dr. Michael Shkrum, director of the London Regional Forensic Pathology Unit, writes down as much as he can and includes a lot of information that might be extraneous.

These differences reflect two separate rationales for recording the information. If the focus is only on how the pathologist arrives at his or her opinion, that can be achieved by noting only what the pathologist regards to be relevant. If the focus is on transparency, then more inclusive documentation is warranted.

Both positions are defensible. On balance, however, I think it is preferable to recognize the dual purpose of recording information provided to the pathologist. This means, as I earlier indicated, that all of the information provided to the pathologist should be recorded. Doing this requires the pathologist to be very clear about the extent to which that information has been relied on in subsequently forming an opinion. It allows the pathologist to revisit information that was regarded as irrelevant when received but which later acquired relevance. And, finally, it also enables others to consider whether the pathologist may have been influenced by extraneous considerations not reflected in his or her opinion.

Recommendation 76

Any information provided by the coroner or the police to the forensic pathologist should be carefully recorded both by the conveyor of the information and by its recipient.

Recording and Preserving the Autopsy's Work Product

The pathologists who appeared at the Inquiry were all of the view that the autopsy itself should not, as a general rule, be videotaped or audiotaped. They were concerned that videotaping would inhibit the free exchange of ideas that must take place during the autopsy, and that undue reliance could later be placed on thoughts, impressions, or beliefs tentatively expressed during the autopsy.

In my view, no compelling reason has been presented to justify the routine audiotaping or videotaping of autopsies. Best practices require that anything of any significance done at the autopsy – including dissections, removal or retention of body parts, and samples taken for further testing – be carefully recorded. All of the findings made at the autopsy, abnormal or otherwise, are also to be reflected in the post-mortem report. Photographs should be taken, either by OCCO staff or police, or both. All of these steps promote transparency and independent reviewability.

A related aspect of autopsy practice that was shown by our systemic review to

be inadequate was the recording, preserving, and storing of materials derived from the autopsy, such as slides and tissue blocks. In Valin's case, for example, subsequent reviewability was frustrated for far too long by Dr. Smith's failure in this regard.

The October 2007 Autopsy Guidelines already offer specific guidance on the collection and retention of external samples in criminally suspicious cases, as well as on the requirement for photographs. They also require disclosure of the samples and photographs taken in the final report of post-mortem examination. In addition, hospitals have policies in place to address the storage of these materials. I endorse the treatment of these issues in the guidelines and in hospital policies.

Recommendation 77

a) **Autopsies should not normally be audiotaped or videotaped. However, what is done at the autopsy should be fully transparent and independently reviewable. Therefore, what is done and by whom at the autopsy should be carefully documented. This documentation includes careful recording through photographs and contemporaneous note-taking by support staff and the forensic pathologist.**

b) **Best practice also requires the appropriate retention, storage, and transmittal of organs, tissues, samples, and exhibits in accordance with the current autopsy guidelines of the Office of the Chief Coroner for Ontario and policies in place at hospitals where forensic autopsies are performed.**

c) **In accordance with the current guidelines of the Office of the Chief Coroner for Ontario, materials kept for testing and independent reviewability should be carefully documented.**

Providing Preliminary Opinions

Not surprisingly, forensic pathologists are sometimes requested, particularly by the police, to provide an opinion before finalizing the post-mortem report. Dr. Smith testified at the Inquiry that he typically gave the police a preliminary opinion on the cause of death at the conclusion of the gross examination in the autopsy, because the police were usually anxious either to investigate criminally suspicious deaths while the evidence was fresh, or to avoid unnecessary investigations in cases that were not regarded by the pathologist as suspicious. In some instances, where the death was clearly explained by disease or other medical causes, Dr. Smith might even provide the police with his preliminary diagnosis

mid-autopsy and advise them that it was unnecessary for them to remain. Dr. Smith believed he always qualified his opinion by telling the police that the findings might change on receipt of toxicology or other ancillary test results, or on a review of the histology.

The dangers in delivering a preliminary opinion are obvious. First, if the forensic pathologist delivers a preliminary opinion that might change or which is not appropriately qualified, it can lead the police in the wrong direction. Second, verbal opinions, particularly preliminary or tentative ones, are prone to misinterpretation or misunderstanding. Both dangers can result in unwarranted criminal or child protection proceedings.

Once again, the evidence at the Inquiry is instructive. In Kenneth's case, at the conclusion of the autopsy, Dr. Smith told police that there was nothing that would indicate an obvious cause of death, but he nonetheless characterized the cause of death as suffocation by obstruction of the airways. Kenneth's mother was arrested several weeks thereafter, almost five months before Dr. Smith issued his post-mortem report, which included no such characterization. Dr. Pekka Saukko, who reviewed the case, testified that suffocation was not a reasonable conclusion (tentative or otherwise), as there was no pathology to substantiate it.

Dr. Pollanen testified that many forensic pathologists now recognize that they should say the cause of death is "pending" when no cause of death is apparent at the conclusion of the gross examination. However, this was not universally understood in the 1990s.

On April 12, 1999, Dr. Young and Dr. Chiasson sent Memorandum 99-02, entitled "Forensic Pathology Pitfalls," to all coroners and pathologists in Ontario. Among other things, the memorandum addressed the expression of preliminary causes of death by forensic pathologists. It emphasized the need to communicate to the coroner and the police that the cause of death is "pending" where "there is no clear-cut anatomic cause of death or there are multiple potential causes of death and/or contributing factors." It also advised that the forensic pathologist must clearly convey her or his level of certainty and comfort about the cause of death.

The memorandum noted that a "pending further tests" opinion is always preferable to a speculative one, particularly in cases where additional tests and/or investigative information are required. It stated:

> The 'pending' of a case is not a sign of weakness, but rather one of professional strength, indicating that the pathologist is careful and is giving a considered formal opinion. Any potential disadvantage to pending a case vis-a-vis "investigational efficiency" is far outweighed by the dangers inherent in the pathologist jumping to conclusions and/or fencing him/herself in.

> In reaching a conclusion, pathologists are reminded to remain cautious and conservative in their opinions and not to extend themselves beyond where the evidence or experience comfortably takes them. The dictum "*better safe than sorry*" should prevail. [Emphasis in original.]

Dr. Chiasson told the Inquiry that it is acceptable for the pathologist to render a preliminary opinion as to cause of death if one is obvious at the conclusion of the gross examinations (for example, a gunshot wound to the head). This situation occurs in most police cases, although pediatric cases raise different considerations.

Dr. Pollanen explained that "pending" can be used by forensic pathologists in several related situations:

- where the cause of death seems apparent at the conclusion of the external and internal examinations, but additional studies might detract from that conclusion or the pathologist would like to consider other evidence to strengthen the conclusion;
- where the pathologist lacks data to arrive at a conclusion; or
- where the pathologist needs more time to arrive at a conclusion because she or he wants to think more about the case, examine the literature, or discuss the case with colleagues.

The importance of reserving judgment when these situations present themselves cannot be overstated. This does not mean that the forensic pathologist is precluded from discussing the case with the police. It does mean that forensic pathologists must take care to ensure that their views, and the limitations on them, are understood and appropriately recorded. This is especially important because, as Acting Inspector Keetch told us, in the absence of express qualifications, the police will generally interpret a preliminary opinion as being firmly held.

In the study prepared for the Inquiry, "A Model Forensic Pathology Service," Dr. Cordner and his colleagues provided this helpful rule that should guide the decision whether to issue a preliminary opinion: the pathologist should offer an opinion only on which he or she would be happy to be cross-examined later in court.[2]

When the cause of death is pending, pathologists are well advised also to discuss the matter with the coroner. After all, the coroner needs to understand the

[2] Stephen Cordner et al.,"A Model Forensic Pathology Service," in *Controversies and Models in Pediatric Forensic Pathology*, vol. 1 of Inquiry into Pediatric Forensic Pathology in Ontario, Independent Research Studies (Toronto: Ministry of the Attorney General, 2008).

status of the case and how long it might take for outstanding work or tests to be completed. The Guidelines for Death Investigation for coroners require "direct verbal discussion" within four hours of completion of the gross examination between the investigating coroner and the forensic pathologist.

In addition, the October 2007 Autopsy Guidelines now offer specific guidance on the issues raised here:

- Where the cause of death is apparent at the end of the gross examination, the forensic pathologist should report the diagnosis to the police and coroner, who will understand that the pathologist has established the cause of death without needing to consider the results from ancillary tests that might be pending. The cause of death provided to the police and coroner must be recorded in written form at that time.
- Where the cause of death is not readily apparent, the forensic pathologist should report the cause of death as "pending," "under investigation," or something to that effect. This ensures that the police and coroner understand that the cause of death has yet to be determined.

The October 2007 Autopsy Guidelines also direct that the forensic pathologist refrain from providing a preliminary opinion where one should not be provided:

> A preliminary opinion on the cause of death (or other critical matters such as the timing or mechanism of injury) must not be given to the police if toxicology, histology, examination of fixed whole organs, or other ancillary testing have any reasonable chance of significantly alter [sic] the preliminary opinion. The importance of this cannot be over-emphasized. If definitive actions such as arrest and detention of a person are taken by police based on a preliminary opinion on the cause of death opinion that cannot be substantiated later, then significant difficulties will arise and justice will not have been served.

Recommendation 78

a) In accordance with the October 2007 Autopsy Guidelines, the Office of the Chief Coroner for Ontario should continue to encourage forensic pathologists to exercise caution in providing preliminary opinions. In particular, a preliminary opinion on the cause of death or other forensic issues, such as timing or mechanism of injury, should not be provided if ancillary investigations have any reasonable chance of altering the preliminary opinion. In such circumstances, the cause of death should be given as "pending further tests."

b) Whether forensic pathologists express a preliminary opinion or indicate that the cause of death is "pending," they should ensure that this is fully understood, including in particular any qualifications or limitations that exist for the preliminary opinion.

Recording the Preliminary Opinion

Dr. Smith's practice was to provide the preliminary cause of death verbally. There was no evidence that he ever recorded these opinions in any way. This caused difficulties. In Sharon's case, for example, Dr. Smith testified at the preliminary hearing that he did not keep a record of his conversations with the police. In Kenneth's case, he could not recall what he told the police immediately after the gross examination. Indeed, in cross-examination at the preliminary hearing, he told defence counsel that he would have to look at the police officer's notes to determine what his own preliminary opinion had been. This is unacceptable practice.

In my view, any opinions communicated – preliminary, pending, or final – must be reduced to writing. The same approach should govern any later informal communications between the forensic pathologist and the police or coroner. There is nothing radical in this suggestion. For example, Dr. Milroy testified that he keeps notes of any post-autopsy conversations with police, and records contemporaneously any additional information received from them.

The practice in Ontario in this area has been variable. Some pathologists, like Dr. Smith, provided their preliminary opinions only verbally. Sergeant Charmley confirmed that, in such circumstances, the attending police officer would usually try to record exactly what the forensic pathologist said about the cause of death. The potential for error in those situations, despite the best efforts of the police, is obvious. They lack the pathology training to be tasked with the sole responsibility of recording preliminary opinions.

By contrast, forensic pathologists at the Hamilton Regional Forensic Pathology Unit have traditionally recorded their preliminary opinions in writing on the rough autopsy sheet, which they then show to the police. Another equally valid approach is for a forensic pathologist to read, and sign off on, the officer's record of what was said. A copy can then be provided to the forensic pathologist for his or her file. This ensures that the police have accurately captured the forensic pathologist's views.

What is clear is that, regardless of the format to be employed, it is an important best practice that preliminary opinions – indeed anything substantive said by the forensic pathologist – should be captured in writing in a way that the forensic pathologist can take responsibility for. Doing so not only ensures that

the police understand what the pathologist says, together with its limitations, but also forces the forensic pathologist to think, with desirable rigour, about precisely what can be said.

This is the message of the OCCO's October 2007 Autopsy Guidelines, which require that, in cases where the cause of death is apparent and where the forensic pathologist provides a preliminary diagnosis to the police and the coroner, the pathologist must record that opinion in written form at that time.

The same guidelines also provide that, within 24 hours of completion of the gross examination, the forensic pathologist is also to fax a notification form (created by the applicable regional forensic pathology units) to the Provincial Forensic Pathology Unit in Toronto and the regional coroner. The notification form is to include the relevant history and the preliminary cause of death provided to the police. The Chief Forensic Pathologist or designate is to review the document and provide feedback to the pathologist.

At the Ontario Pediatric Forensic Pathology Unit (OPFPU), the notification form, which has been in use since 2007, is completed at the end of all forensic autopsies. It is forwarded to the director of the OPFPU, and, in criminally suspicious cases, to the Chief Forensic Pathologist. The notification form contains the preliminary cause of death conveyed verbally to the investigating coroner and the police at the time of the post-mortem examination. In addition to the preliminary cause of death, the form also includes some information on the samples retained – for example, whether whole organs have been retained.

There are currently variations in practice as to whether the notification form is provided to the police. At the Hamilton and London Regional Forensic Pathology Units, the pathologist provides a copy of the notification form to the police. In Hamilton, the pathologist also asks the investigating officer to sign the form. By contrast, pathologists at the Kingston Regional Forensic Pathology unit and the PFPU do not provide the form to the police. The practice there has been and continues to be to provide the preliminary opinion to police verbally. However, Dr. Pollanen testified that, at the PFPU, the pathologist watches the attending police officer write the opinion in her or his notebook, to ensure that it is recorded accurately. These variations, although not critical, should be standardized in the interest of best practices.

Recommendation 79

a) When a forensic pathologist provides a preliminary opinion at the conclusion of the autopsy, it should be reduced to writing. Either the pathologist should provide the opinion in writing to the police, retaining a copy for his or her

records, or the attending police should carefully record the opinion in their notebooks. If this second procedure is followed, the forensic pathologist should review what the police have recorded for accuracy, and indicate in writing that it conforms with her or his opinion, including its limitations. The forensic pathologist should also retain a copy of the relevant entries.

b) If the notification form of the Office of the Chief Coroner for Ontario is used to record the forensic pathologist's preliminary opinion, it should be provided to the police and coroner with a copy retained by the pathologist.

Timeliness of Reports

The important product of an autopsy performed in a coroner's case is, of course, the post-mortem report. A discussion of best practices is incomplete without detailed consideration of the content of these reports. That discussion has equal application to supplementary or consultation reports that may be prepared by the forensic pathologist up to the date of trial. These reports must effectively communicate what the pathologist has to say to the criminal justice system. That is what forensic pathology is all about. The content of these reports is also inextricably interwoven with what the pathologist says verbally, both in testimony and informally to Crown counsel, police, defence counsel, affected families, child protection workers, and others. It is for that reason that I identify best practices surrounding the content of these forensic reports and make recommendations about them in Chapter 16, Effective Communication with the Criminal Justice System. Both in that chapter and this one, the recommendations I make apply equally to any post-mortem, supplementary, or consultation reports provided by the pathologist.

Here, I wish to address the need for timely reports. No matter how accurate, transparent, clear, and unambiguous a report may be, it is not useful to the criminal justice system if it cannot be delivered in a timely way. Indeed, harm can be done by its absence at critical times in the investigation or subsequent legal proceedings.

A recurring theme in the cases examined at the Inquiry was the chronic lateness of Dr. Smith's reports. In fairness to him, this problem was far from his alone. It was endemic to the system. That said, the evidence also demonstrated that Dr. Smith was particularly tardy. In fact, his tardiness was so problematic that, in several cases, it required threatened or actual judicial intervention to obtain his report. And, in Athena's case, the lateness of Dr. Smith's supplementary report was one of the reasons why serious criminal charges against the parents were stayed.

The OCCO has made efforts to remedy the problem. After Dr. Chiasson became Chief Forensic Pathologist in 1994, he began to develop proposed timelines for pathologists across the province. He believed a reasonable timeline to be three to four months, unless additional testing beyond the pathologist's control, such as toxicology, was necessary. In those circumstances, the proposed timeline was one month from the receipt of the additional test results. In 1998, the OCCO set a target turnaround time for reports generated at the OPFPU: 90 per cent were to be completed within 90 days. Those targets were not met, and Dr. Chiasson candidly admitted that they may not have been realistic.

More recently, on July 23, 2004, the OCCO sent a memorandum regarding the completion of autopsy reports to all coroners, pathologists, Crown counsel, and chiefs of police, outlining the following guidelines for the production of post-mortem reports:

- 12 weeks from the time of the autopsy, in cases where there are no other reports required to complete the post-mortem report; and
- four weeks from receipt of other reports or relevant investigation materials, in cases where report completion depends on other reports and/or investigation materials.

Despite those guidelines, the timeliness of these reports continues to be a problem. Of course, merely setting a timeline does not mean it will be met. One must examine and fix the underlying reasons why they continue to be late.

At the Inquiry, a number of witnesses testified about the challenges faced by forensic pathologists in completing post-mortem reports in a timely fashion. These include

- unpredictable and, at times, onerous workloads;
- lack of prioritization, as completing paperwork is usually relatively low on a forensic pathologist's list of priorities;
- lack of administrative support, since hospitals might regard coroner's autopsies as separate and distinct from what their administrative staff are paid to do, leaving the forensic pathologist to deal with the administrative side of post-mortem reporting;
- the prioritization of surgical pathology over autopsy pathology by pathologists in hospital settings;
- delays associated with consulting other experts, because the pathologist must rely on the schedules and work loads of those experts;

- the degree of complexity of the case, because complicated forensic cases take longer;
- delays in receiving histology slides from the hospital laboratory; and
- delays in receiving toxicology test results.

For their part, senior officials at the OCCO testified about the challenges in ensuring or enforcing timely reporting by pathologists. One fundamental challenge is the shortage of pathologists available to do the work.

Dr. Pollanen testified that there is really no effective way at present, other than encouragement, for the OCCO (or in future, the OFPS) to compel fee-for-service pathologists to produce their post-mortem reports. If the OCCO were to impose a punitive mechanism, such as not sending any more cases to delinquent pathologists until they produce their overdue reports, it would simply exacerbate the current shortage of pathologists available to do the work. In other words, the attempt to solve the timeliness problem would compound another serious problem.

Dr. Albert Lauwers, the Acting Deputy Chief Coroner for Ontario and regional coroner, testified that having a limited number of people willing and able to provide the service limits the ability of senior people at the OCCO, such as regional coroners, to exert their influence to ensure that reports are produced in a timely fashion. Dr. William Lucas, Acting Deputy Chief Coroner and regional coroner, pointed out that they have to walk a fine line between pushing pathologists to complete their reports in a timely fashion, and pushing them so hard that they may decide they no longer want to perform the service at all. To strike that balance, in recent years the OCCO has increased the compensation paid to fee-for-service pathologists in the province. This increase has, to some extent, provided pathologists with additional motivation to improve their turnaround times.

The challenge for the OCCO now (and for the OFPS in the future) is compounded by the absence of any centralized system for keeping track of unfinished post-mortem reports. The magnitude of the systemic problem of timeliness therefore remains unquantifiable at any point in time. The tracking system I discuss in Chapter 13, Enhancing Oversight and Accountability, would help address this issue.

Despite these challenges, everyone agrees that doing nothing is not an acceptable response to the problem of timeliness. There are a number of steps, identified in my recommendation below, that may assist in solving the problem of untimely reports.

Recommendation 80

a) Using the suggestions contained in this Report, the Office of the Chief Coroner for Ontario (OCCO), and in future the Ontario Forensic Pathology Service (OFPS), should address the important challenge of timely production of forensic pathology reports needed by the criminal justice system.

b) The components of a solution to this difficult problem should include the following:

   i) There should be realistic and well-understood timelines for the completion of post-mortem reports. Those set out in the OCCO's July 2004 memorandum would seem to be appropriate.

   ii) The OCCO should develop a central tracking system which will permit better knowledge, and therefore better management, of the problem of untimely production of reports.

   iii) Growing the profession of forensic pathology will be of great assistance.

   iv) The OCCO should be provided with sufficient resources to ensure that there are no administrative impediments to the timely production of reports.

   v) The development of better lines of communication between the OCCO and the regional forensic pathology units through their service agreements will assist in minimizing the pressure of clinical pathology work as an impediment to timely forensic pathology reports.

   vi) Particularly for difficult, criminally suspicious cases, the OCCO should develop a guideline for prioritizing reports that are urgently needed by the criminal justice system.

   vii) Sanctions must be available. Those in positions of responsibility, starting with the regional director, should use their management skills to address the problem. Ultimately, the Chief Forensic Pathologist can utilize the tool of possible removal from the Registry. With increased remuneration for reports provided to the fee-for-service forensic pathologists, this may be enough. At the extreme, actual removal from the Registry may in fact be necessary to preserve the integrity of the OFPS.

Toxicology Testing

In several of the cases before the Inquiry, delays in completing or signing off on the post-mortem report were attributable, at least in part, to the need for ancillary testing. In those cases, Dr. Smith told the members of the death investigation team that he was waiting for an outstanding report or a test result before completing his report. Often, the ancillary testing was toxicological.

Currently, all toxicology testing, except in Northern Ontario, is done at the Centre of Forensic Sciences (CFS) in Toronto. In circumstances where the testing must be expedited, it may be done instead at a hospital laboratory.

In the past, the OCCO and the CFS have attempted to address the chronic problem of turnaround times of CFS toxicology reports, which necessarily delay the production of post-mortem reports. On September 29, 2003, to ensure that the OCCO played its part, Dr. McLellan sent a memorandum to all coroners, pathologists, and chiefs of police which was designed to eliminate delay in the submission of samples to the CFS. It noted that the OCCO had become aware of instances in which a significant period of time had elapsed between the taking of samples at autopsy and their submission to the CFS for analysis. Dr. McLellan instructed pathologists to complete a submission form at the conclusion of the autopsy to ensure that the samples were submitted (whether by the pathologist or the police) as soon as possible after the post-mortem examination.

Nonetheless, several pathologists and coroners indicated during the Inquiry that the delay in obtaining toxicology results from the CFS remains the most common reason for delays in the completion of post-mortem reports. According to Dr. Lauwers, although the turnaround time at the CFS for some testing, such as alcohol levels, is now quite short, turnaround times where full toxicology reports are required, such as for criminally suspicious pediatric cases, continue to be substantial.

In December 2007, the senior management committee of the OCCO began discussions with the CFS to find ways to improve turnaround times. This is commendable, and these ongoing discussions must be given priority by both institutions.

Recommendation 81

a) To shorten delays in producing post-mortem reports, the Office of the Chief Coroner for Ontario should continue to instruct forensic pathologists to submit samples for toxicology testing as soon as possible.

b) The Office of the Chief Coroner for Ontario and the Centre of Forensic Sciences should together quickly create a guideline that prioritizes and expedites toxicology testing in clearly articulated types of cases, such as those that are criminally suspicious.

c) The Office of the Chief Coroner for Ontario and the Centre of Forensic Sciences should continue their discussions on a priority basis to improve the turnaround times for toxicology reports needed by forensic pathologists to complete their reports.

Teamwork

Although I have described the principle of teamwork as one that must inform a best practices approach to the forensic pathologist's conduct of the autopsy, this concept also translates into specific best practices to be followed if autopsies are to be done well. Our systemic review showed the dangers of an individual pathologist practising too much in isolation.

It is not just the teamwork between the investigating coroner and the forensic pathologist that matters, although that is vital from the moment the coroner issues the warrant for the post-mortem examination. Pathology assistants are also vital members of the post-mortem team, as are colleagues in related specialties that may be called on in particular cases – for example neuropathologists, pediatric pathologists, or forensic odontologists. Only if the pathologist shares information and ideas with these professionals, and draws on their expertise, will the autopsy produce the best outcome. With the advent of more telemedicine technology linking the regional forensic pathology units, this cooperation should be even more possible over time. It must be remembered, however, that, as discussed in Chapter 16, Effective Communication with the Criminal Justice System, when the pathologist engages in any significant consultations with colleagues in related specialties, these should be recorded by both the consulting and consulted doctors.

In a number of the cases examined at the Inquiry, Dr. Smith's opinion was simply wrong. Given that so much can, and did, turn on the forensic pathologist's opinion, it is important to manage this risk. Working as a team goes some distance in that direction.

In Sharon's case, for example, had Dr. Smith consulted initially with a qualified forensic pathologist with more experience with animal bites and stab wounds, his basic forensic pathology errors might have been caught at an early point. Similarly, in Jenna's case, had Dr. Smith reached out to the appropriate experts, he

might have correctly addressed both the timing of Jenna's fatal injuries and the probable bite mark on her body.

As part of practising teamwork at autopsy, it is therefore vital for the forensic pathologist to seek out colleagues not just in related specialties, but also in the same specialty for advice and assistance with any challenging issues. This is particularly true for difficult cases, such as criminally suspicious pediatric deaths. The responsibility for doing so must rest with the forensic pathologist. But it is the responsibility of the OFPS, and ultimately the Chief Forensic Pathologist, to create a culture in which this is expected as a best practice. It is commendable that steps have already been taken to do this.

Recommendation 82

Forensic pathologists should practise teamwork in conducting autopsies. The Ontario Forensic Pathology Service should be charged with creating a culture in which this is expected.

Implementation of Best Practices for the Conduct of Autopsies

The development of best practices for conducting autopsies is critical to ensuring that pathologists, and the criminal justice system, get it right. OCCO guidelines have done much to address the best practices at or surrounding the autopsy. But there is more to do, as I have suggested. Once best practices are settled on, the challenge of implementing them must also be addressed.

A primary method of implementation is through OCCO guidelines. They should expressly address all the principles articulated in this chapter, while at the same time respecting a proper zone of professional independence.

As recommended in other chapters, I also encourage ongoing and continuing education about the basic principles that must guide pathologists in their tasks. Pathologists practising forensic pathology should participate regularly in continuing medical education that addresses not only the best practices at or surrounding an autopsy but also the systemic lessons learned from past errors, including those identified at this Inquiry.

In addition, as in any professional organization, when guidelines are established, there must also be checks and balances to ensure that those guidelines are being respected, and, in the worst case scenario, mechanisms in place to discipline those who do not conform. Tools such as peer review, spot audits, or loss of Registry accreditation must be in place for this purpose.

In Chapter 16, Effective Communication with the Criminal Justice System, I recommend the creation of a Code of Practice and Performance Standards for forensic pathologists. It should incorporate the recommendations set out in that chapter which are designed to promote the communication of evidence-based, understandable opinions, orally and in writing, by forensic pathologists to the criminal justice system. It should also incorporate the recommendations identified in this chapter.

Recommendation 83

The Office of the Chief Coroner for Ontario should continue to develop guidelines to assist forensic pathologists in adhering to best practices at or surrounding the autopsy. Those guidelines should incorporate, where appropriate, the specific recommendations about best practices made in this Report. Such guidelines should complement the proposed Code of Practice and Performance Standards for forensic pathologists.

The objective of forensic pathology is to serve the justice system. The centrepiece of forensic pathology is, of course, the autopsy. If forensic pathologists conduct an autopsy poorly or fail to ensure that exhibits are preserved and appropriate ancillary testing is done, or if the information provided to forensic pathologists on which they rely in forming their opinions is unrecorded or not made known to others, the justice system is not well served. Hence, the importance of developing and maintaining best practices at and surrounding the autopsy.

I recognize that significant progress has already been made in developing such best practices. My recommendations are intended to build on that existing foundation and thereby promote accurate, understandable, and transparent forensic autopsies. If that intention is realized, pediatric forensic pathology and the justice system will both be the better for it.

16

Effective Communication with the Criminal Justice System

The evidence at this Inquiry demonstrated that opinions expressed by Dr. Charles Smith and others were not only substantively flawed but communicated in ways that promoted misinterpretation or misunderstanding on the part of police, prosecutors, defence counsel, and the courts. It is important to remember that the main purpose of forensic pathology is to serve the justice system. When the opinions of forensic pathologists, including their limitations, are not properly understood, the justice system operates on misinformation. This breakdown in communication may have serious and sometimes disastrous consequences for the administration of justice and those most affected by it, including accused persons and families of the deceased. The innocent should not be charged or convicted, or the guilty go free, on the basis of expert opinions that are misunderstood. In this chapter, I make recommendations designed to ensure, to the extent possible, that the information provided by forensic pathologists is communicated to the justice system in a way that is accurate and fully understood. Here, as in other chapters, I do not focus exclusively on pediatric forensic pathology. Although the principles have general application to forensic pathology, the effective communication of pediatric forensic pathology is of particular importance. As the cases examined at this Inquiry illustrate, pathology often plays a pivotal, if not decisive, role in pediatric death cases. That key role makes it imperative for forensic pathologists to communicate clearly and well.

I first examine the principles that should inform the communication of forensic pathology opinions, whether written or verbal, and whether in or out of court. Next, I address some of the systemic communication issues identified at this Inquiry. Finally, I consider how best to implement these proposals, with particular emphasis on writing reports and giving testimony. Not surprisingly, the themes in this chapter resonate with many of those discussed in other chapters, particularly in the sections concerned with best practices and the roles of all the

participants in the justice system, including the judiciary. Simply put, it is not just the forensic pathology community that is responsible for ensuring that opinions are well communicated and understood by others.

General Principles

Various aspects of a pathologist's opinion may cause misunderstanding:

1 the substance of the opinion itself and the language in which it is expressed;
2 the level of confidence or certainty that the expert actually has in the opinion expressed;
3 whether the opinion addresses other explanations for the pathology findings;
4 whether the opinion is in an area of controversy within the forensic pathology community;
5 whether all or part of the opinion falls outside the pathologist's area of expertise;
6 whether the opinion is based, in whole or in part, on non-pathology information provided to the pathologist;
7 whether the opinion relies, in whole or in part, on other expert opinions provided to the pathologist; and
8 the omission of the facts and the reasoning process that the pathologist has relied on to form the opinion.

I briefly discuss each one of these aspects of a pathologist's opinion and make recommendations about them as a means of avoiding misunderstanding in future. First, however, I want to consider a number of principles that apply generally to the effective communication of pathology opinions to the criminal justice system.

Clearly, these principles must provide the foundation for the written reports prepared by forensic pathologists for the criminal justice system, whether they be post-mortem, consultation, or supplementary reports. These principles are equally relevant when forensic pathologists give evidence or communicate less formally with others in the system, such as police, prosecutors, coroners, or defence counsel.

Obviously, all these principles must be adapted to fit the needs of individual cases. For example, some causes of death may be so non-contentious and uncomplicated that there is no need to provide an elaborate explanation for the opinions reached. However, particularly in criminally suspicious pediatric cases, forensic pathology can be vital. In those cases, the need for proper communication is essential. It is with these cases most in mind that I make the recommendation that follows.

Recommendation 84

Several general principles should inform the way that pathology opinions are communicated:

a) **Pathology opinions often depend on technical knowledge and expertise that are not easily understood by lay persons. Particularly in pediatric forensic pathology, opinions may be highly nuanced. However, the criminal justice system in which these opinions are used craves certainty and simplicity. This divergence in the cultures of the two professional areas poses a serious risk of misunderstanding between them, one that is further increased by an adversarial process designed to push and pull these opinions in different directions. To reduce the risk of their being misunderstood, the most important parts of a forensic pathologist's opinion should be expressed in writing at the earliest opportunity.**

b) **The ability of the various consumers of a forensic pathologist's opinion – including peer reviewers, coroners, and stakeholders in the criminal justice system or child protection proceedings – to understand, evaluate, and potentially challenge the opinion requires that it be fully transparent. It should clearly state not just the opinion but the facts on which the opinion is based, the reasoning used to reach it, the limitations of the opinion, and the strength or degree of confidence the pathologist has in the opinion expressed.**

c) **Although some of the consumers of a forensic pathologist's opinion are experts, such as peer reviewers, many are lay persons who have little or no understanding of technical language. It is essential that the pathologist's opinion be understood by all the users. It must therefore be communicated in language that is not only accurate but also clear, plain, and unambiguous.**

d) **In expressing their opinions, forensic pathologists should adopt an evidence-based approach. Such an approach requires that the emphasis be placed on empirical evidence, and its scope and limits, as established in large measure by the peer-reviewed medical literature and other reliable sources. This approach places less emphasis on authoritative claims based on personal experience, which can seldom be quantified or independently validated.**

Sources of Misinterpretation or Misunderstanding

The Substance and Language of the Opinion

It is clear that a pathologist's opinion about the cause of death, if it is not carefully

expressed, can be a major source of misunderstanding. The best example that emerged from the Inquiry was the use of the term "asphyxia." Dr. Smith opined that asphyxia was the cause of death for a number of the cases under review. Asphyxia, based on its Greek root, literally translates as "stopping of the pulse." However, the evidence at this Inquiry demonstrated that the term has commonly been used to mean simply that the deceased stopped breathing or was deprived of oxygen. It has also been used frequently to denote mechanical asphyxia through the intervention of a third party. The latter meaning is radically different from the former, in that it generally implies non-accidental injury. One of the problems identified at the Inquiry was that Dr. Smith used the term "asphyxia" in inconsistent ways. At times he used it in its more inculpatory sense as indicating mechanical asphyxia through the intervention of a third party. At other times he used it in its more benign sense, although this distinction would not always be apparent to the police and others who received the opinions. The situation was compounded by Dr. Smith's testimony. He sometimes explained what asphyxia meant in ways that were, at best, confusing and nearly incomprehensible. The varied meanings that can be given to the term asphyxia not only invite caution in its use but present a compelling argument to avoid its use altogether, if confusion and misunderstanding are to be avoided.

The Inquiry revealed an equally significant systemic problem associated with the use of the term. Even if asphyxia were to be used precisely, to refer only to the stoppage of breath, it is unhelpful and unlikely to enlighten anyone on the issues of importance for the criminal justice system. Indeed, all the forensic pathologists who testified or participated in the Inquiry's roundtables held the view that asphyxia is not properly characterized as a cause of death. This conclusion was also supported by a helpful study prepared by Dr. Stephen Cordner, the director at the Victorian Institute of Forensic Medicine (VIFM), and his associates, who stated:

> "[A]sphyxia" of itself is a relatively non-specific term as regards a particular mechanism interfering with breathing and, with the exception of throttling, non-specific as to the manner of its cause (whether natural, accidental, or homicidal). Already we can sense that, for the word to be useful in a technical sense, it has to be explained and specified.[1]

[1] Stephen Cordner et al., "Pediatric Forensic Pathology: Limits and Controversies," in *Controversies and Models in Pediatric Forensic Pathology*, vol. 1 of Inquiry into Pediatric Forensic Pathology in Ontario, Independent Research Studies (Toronto: Ministry of the Attorney General, 2008), 57.

In fairness, it was not Dr. Smith alone who used the term asphyxia as a cause of death. However, he was prepared to diagnose a death as asphyxial (in its more inculpatory sense) when the pathology findings did not support it, and he was dangerously imprecise in his use of the term, even when he was not prepared to draw inculpatory conclusions.

The potential for misunderstanding the substance of an opinion is not confined to asphyxial cases. It arises whenever the articulated cause or mechanism of death invites confusion, either because the language used is susceptible to varied meanings or because it truly says nothing at all that elucidates the cause of death.

The Office of the Chief Coroner for Ontario (OCCO) has since addressed this issue to some extent in its October 2007 Guidelines on Autopsy Practice for Forensic Pathologists: Criminally Suspicious Cases and Homicides (Autopsy Guidelines), which state, "The cause of death must not be speculative. In the cause of death statement, avoid terms such as: *asphyxia* [and] *consistent with asphyxia* ..." I endorse this approach.

Recommendation 85

a) The use of the term "asphyxia" should be avoided as an articulated cause of death. If it must be used to describe the mechanism of death, it should be elaborated on to avoid confusion.

b) Forensic pathologists in Ontario should be educated as to the dangers associated with the term "asphyxia" and, under the auspices of the Chief Forensic Pathologist, reach a common understanding as to when it should and should not be used.

c) More generally, forensic pathologists should be careful to express their opinions in terms that are not susceptible to varied meanings, but that do elucidate the issues addressed by the opinions.

The Level of Confidence or Certainty in the Opinion

During the Inquiry, I had the benefit of hearing from a number of eminent forensic pathologists from around the world. Through their participation, it became apparent that there is no common understanding of how forensic pathologists think about their level of confidence or certainty in their opinions; how they articulate this level, if at all, when communicating their opinions; and how they might strive to sharpen their perception and articulation of the level of certainty

in their views. Misunderstanding can arise in a number of ways. Of greatest concern is the possibility that the criminal justice system, in its search for certainty, will interpret a pathology opinion as reflecting a higher level of confidence than the expert intended.

There was some suggestion in the evidence that Dr. Smith based his opinions on a balance of probabilities, although, if accurate, that would not have been readily apparent from much of his testimony in court or communications with the police. Even more troubling, he often used language that overstated the level of confidence he now says he had. Dr. David Chiasson, the director of the Ontario Pediatric Forensic Pathology Unit (OPFPU) at SickKids in Toronto, said that he employs a balance of probabilities test. One difficulty in using such a standard is that, unless it is clearly articulated, the pathologist's level of confidence or certainty in the opinion may remain unknown or be misinterpreted. Indeed, it could well be assumed that the pathologist's level of confidence as a Crown witness parallels the criminal standard of "beyond a reasonable doubt." Thus, the trier of fact in the case would mistakenly conclude that the opinion was held more firmly than it actually was.

Various options have been discussed at this Inquiry. Some pathologists eschew reliance on standards such as "balance of probabilities" or "to a medical degree of certainty." Rather, they feel either that they are able to express an opinion or they are not, based on the available evidence. Simply put, they express opinions when the evidence reaches a threshold that they feel enables them to do so.

Other pathologists, such as Dr. Christopher Milroy, the Chief Forensic Pathologist in the United Kingdom's Forensic Science Service, recognize that some opinions may be more strongly held than others, and they have used expressions such as "highly probable" or "highly unlikely" to articulate those differences, but without uniformity in their own approach. Dr. Milroy, who also holds a law degree, rejected the idea that pathologists should provide an opinion only after they are satisfied "beyond a reasonable doubt." He stated that proof "beyond a reasonable doubt" was a legal, not a scientific, standard and that it properly applied only to the totality of the evidence (pathology and non-pathology) in determining whether an accused is guilty or not. Dr. Milroy's view accords with Canadian jurisprudence. He invited me to consider a uniform scale of confidence that should be applied by pathologists generally in their forensic work. Dr. Jack Crane, the state pathologist for Northern Ireland, agreed that it would be a worthwhile exercise to try to develop a common language to articulate levels of certainty.

In some jurisdictions, efforts have been made to codify a scale of confidence for forensic pathologists. Dr. Pekka Saukko, a highly respected Finnish forensic pathologist, indicated that, "if possible, a ranking order of probability of the

various alternatives can be offered." Although it is not possible to rank in all cases, he uses a five-grade ranking system, as do pathologists in Germany. The five categories are very probable, somewhat probable, possible, somewhat improbable, and very improbable.

In other disciplines, work has been done to create such scales. For example, the American Board of Forensic Odontology has adopted standard language to set out the degree of confidence on whether an injury is a bite mark. The options are: not a bite mark, possible bite mark, probable bite mark, and definite bite mark. Those categories are defined as follows:

- *Not a bite mark.* The phrase is self-explanatory.
- *Possible bite mark.* The marking under examination may or may not have been caused by the teeth, though other factors cannot be ruled out. The general shape and size are present, but distinctive features such as tooth marks are missing, incomplete, or distorted.
- *Probable bite mark.* The marking in question has a pattern strongly suggestive or supportive of originating from the teeth. The pattern shows some basic characteristics of teeth arranged around arches.
- *Definite bite mark.* There is no reasonable doubt that teeth created the pattern. Other possibilities were considered and excluded. The pattern conclusively illustrates classic features and all the characteristics of dental arches and human teeth in their proper arrangement, so it is recognizable as an impression of a human dentition.

The use of any one of these categories for bite marks is, of course, no guarantee that the underlying opinion is correct.

A uniform scale of confidence has some obvious attractions, but Dr. Michael Pollanen, Ontario's Chief Forensic Pathologist, described some of the difficulties in its use. First, it may mask very real differences between pathologists as to what evidence is sufficient to form the opinion that a particular cause or mechanism of death is "highly likely" or "highly unlikely." Professor Gary Edmond, an Australian expert on law and science, sounded another cautionary note at the Inquiry. Scales of confidence, or even statistical percentages (as have been adopted in some American jurisdictions), he said, may be attractive because they appear to be precise. However, they may not be evidence based. The true limitations on the opinions expressed may again be masked, this time not by failing to articulate a level of confidence or certainty but by articulating a level that cannot survive scientific scrutiny.

There is no easy solution to how degrees of confidence or certainty in forensic

opinions should be articulated. Professor Erica Beecher-Monas, a U.S. expert on evaluating scientific evidence, made the important observation during our roundtables that the justice system should be less fixed on the pathologist's level of confidence in the opinion expressed than on the reasons the pathologist gives for that opinion. Reasons are what can be evaluated, debated, and challenged, particularly when it is acknowledged – as it must be – that forensic pathology is an interpretive discipline in which degrees of certainty are not easily quantified or may not even be scientifically supportable.

Although I recognize the challenges inherent in the process, it is, in my view, a worthwhile and important exercise to try to develop some common or uniform language for pathologists to use in describing what they have to say to the criminal justice system about their levels of confidence in the opinions they express. That exercise is best done jointly by forensic pathologists (who know what needs to be said) and the legal profession (which knows the needs of the criminal justice system). The objective is to develop language that can be generally used by forensic pathologists and properly understood by the participants in the justice system. This exercise addresses levels of confidence, but can profitably extend to all aspects of the pathologist's opinion.

This discussion also raises the related question of whether the pathologist's level of confidence should be affected by the type of judicial proceeding (e.g., civil, criminal, child protection) in which the opinion is expressed. In my view, the pathologist's level of confidence should remain the same, regardless of the judicial proceeding in which it is given. This view accords with the perspective offered by the forensic pathologists who testified at this Inquiry. It must be recognized that, while the essential opinion will not change, its implications may vary depending on the nature of the proceedings. That, however, is a matter for the particular tribunal, not the expert witness.

Recommendation 86

a) Forensic pathologists should analyze the level of confidence they have in their opinions and articulate that understanding as clearly as they can. Pending the development of a common language for this purpose, pathologists should use their own formulations to capture, as accurately as possible, their own level of confidence.

b) Under the auspices of the Chief Forensic Pathologist, work should be done, in a multidisciplinary setting, to develop, to the extent possible, some common language to describe what forensic pathologists have to say. That multidisciplinary setting should include leading practitioners and academics from both forensic pathology and the legal profession.

c) One objective should be to build consensus on how levels of confidence should be articulated.

d) The results of this work should be reflected in a proposed Code of Practice and Performance Standards for forensic pathologists.

Recommendation 87

a) Proof beyond a reasonable doubt is a legal standard applicable to the totality of evidence, and it has no correlation with science or medicine. Forensic pathologists should be educated and trained not to think in terms of "proof beyond a reasonable doubt," and they should not formulate or articulate their opinions in terms of this legal standard.

b) Participants in the justice system should similarly be educated to avoid efforts to compel forensic pathologists to express their opinions in terms of this legal standard.

Recommendation 88

Forensic pathologists should be educated and trained so that their level of confidence or certainty in their opinions remains essentially the same and not dependent on the forum in which those opinions are expressed.

Failure to Address Other Explanations for the Pathology Findings

Evidence presented at this Inquiry showed that Dr. Smith sometimes formulated his opinions in terms such as the following template: "In the absence of a credible explanation, in my opinion the post-mortem findings are regarded as resulting from non-accidental injury."

It is clear that this wording can create very different understandings about what it means for the criminal justice system. In Nicholas' case, for example, when Dr. Smith used this expression, the police and the prosecutor both believed that, if charges were laid, an acquittal would be inevitable.[2] They felt that his particular wording suggested that a credible explanation (and hence a reasonable doubt) might well be available on the evidence.

[2] See Appendix 28 at the end of Volume 4 for summaries of the 20 cases.

Representatives of the defence bar at this Inquiry, however, argued that this formulation, contrary to the presumption of innocence, improperly places the burden of disproving non-accidental injury on the suspected parent or caregiver. The fact that such diametrically opposed understandings could be taken from the same words eloquently underscores how an imprecise use of language can breed misunderstanding.

For yet another fundamental reason, this particular formulation should not be used. Whether intended or not, it too easily leads to an unscientific diagnosis by default rather than an evidence-based determination of a cause of death. As Dr. Pollanen stated at the Inquiry:

> The difficulty here is that the pathologist needs to situate the evidence as best they can into a level of certainty or … illustrate the degree of the limitations of the medical evidence in coming to a positive conclusion about non-accidental injury, as opposed to simply saying, "Unless you can find some reason to think otherwise, you should think of non-accidental injury." [This] is not really sufficient to communicate what the medical evidence is telling you …
>
> For example, in pathology, in general, when somebody goes to a … surgeon with a lump … a tumour, and the pathologist is given a biopsy of the tumour … and when we look at the section under the microscope and we're uncertain if it's cancer or not, we don't say, "In the absence of evidence to the contrary, this is cancer." What we say is, "The findings of the histology are not sufficient to come to a diagnosis; re-biopsy. Do more investigations to find out."

Pathologists should be entitled to express their opinions, if the science permits them to do so, as to whether explanations given for the deceased's injuries or condition can be excluded or, conversely, are supported by the pathology evidence. Subject, again, to the limits of the science, they can properly express their levels of confidence or certainty in their opinions about these explanations. If none is supportable, that must be said. But that is very different from allowing the absence of a credible explanation to serve as a substitute for pathology findings sufficient to support a cause of death. If the evidence is insufficient to support a cause of death, the death should be characterized as "undetermined."[3] The same reasoning applies to opinions about issues other than the cause of death which may be within the forensic pathologist's expertise.

To be clear, the characterization of the cause of death as unascertained or

[3] The OCCO uses the term "undetermined," although "unascertained" has also been used in Ontario and elsewhere.

undetermined does not mean that there is no scope for the forensic pathologist to give expert testimony. It may be important for the judge or the jury to understand the limits of the forensic pathology and why the cause of death is unascertained or undetermined. It may also be important to discuss which causes of death are excluded or not excluded by the available evidence, provided they are properly based opinions and not simply speculation.

Dr. Saukko told us that when the findings are less clear-cut, the pathologist should discuss the alternative conclusions that the empirical evidence could support and provide an opinion on the respective strengths of each of them. Dr. Milroy and Dr. Crane agreed. Similar reasoning applies to alternative causes of death that the pathologist believes can be ruled out. Dr. David Dexter and Dr. Chitra Rao, directors of forensic pathology units, stated that any complete report should explain why the pathologist ruled out certain causes of death where certain facts existed that might point in those directions.

I agree with these views. In addition to providing the primary conclusions, the forensic pathologist should outline and evaluate, where applicable, the alternative explanations that are raised by the pathology or by the reported history associated with the individual's death. The pathologist should explain why alternative explanations can or cannot be ruled out. This approach applies not only to the cause of death but also to other issues within the forensic pathologist's expertise that clearly arise in the case.

Joshua's case shows that this approach would best serve the justice system. In that case, the investigating officer conscientiously collected information relating to the possibility that mould caused the child's death. This possibility had been raised by Joshua's mother and by other information obtained by the officer. The investigating officer requested that Dr. Smith address this issue in his report. Dr. Smith initially refused. Forensic pathology is designed to serve the justice system and respond to the issues raised by it. In this instance, that included open-minded consideration of the mould issue as an alternative explanation.

Jenna's case illustrates the general point in another way. It was readily apparent from the early stages of the investigation that the real issue was the timing of the fatal injuries. Dr. Smith's report was silent on that issue. That is not a criticism of Dr. Smith per se but of a systemic approach to report writing that failed to meet the needs of the justice system. Forensic pathologists cannot be expected to foresee every issue that might develop in a case and, moreover, must be allowed to exercise some discretion as to whether or not to address issues other than the cause of death in their reports. But the overriding theme here is that forensic pathologists' opinions must be responsive to the needs of the justice system. This requirement means that their reports should address the live issues in

each particular case and articulate in a transparent way what the pathologists have to say about those issues and why.

Recommendation 89

a) Forensic pathologists should not engage in "default diagnoses." The absence of a credible explanation is not a substitute for sufficient pathology findings to support the existence of abuse or non-accidental injury. In particular, a formulation such as "in the absence of a credible explanation, the post-mortem findings are regarded as resulting from non-accidental injury" should not be used.

b) If the evidence is not sufficient to support a cause of death, it should be characterized as "undetermined."

Recommendation 90

a) Forensic pathologists should outline in their post-mortem or consultation reports the alternative or potential diagnoses that may arise in a case. They should also evaluate alternative explanations that are raised by the pathology or by the reported history associated with the deceased's death. They should describe precisely what alternative explanations have been considered and why they can or cannot be ruled out. The same principles should inform all forensic pathologists' communications, including their testimony.

b) More generally, forensic pathologists' opinions, written or verbal, should be responsive to the needs of the justice system. They should address the live or pertinent issues in the case, for instance, and articulate in a transparent way what they have to say about those issues and why.

Opinions in Areas of Controversy within Forensic Pathology

Earlier in this Report, I describe some of the controversies that exist in pediatric forensic pathology. The most pronounced is that surrounding shaken baby syndrome and related issues. In those cases where there is potential controversy, pathologists should identify the particular area in dispute early on and place their own opinions within that context. This approach enables the police to make fully informed decisions about the direction of their investigation, the need for additional expertise, and the existence of reasonable and probable grounds. It permits prosecutors to make informed evaluations about the reasonable prospects of conviction. When charges are laid, this context educates the defence and makes an informed and independent assessment of the strength of the Crown's case more

likely. Ultimately, this information is clearly relevant for the judge or the jury as they try to understand and evaluate the quality of the positions of the Crown and the defence. In those cases where the pathologist expresses an opinion as well as the context of the relevant controversy, the judge or the jury is better able to appreciate where the opinion falls within a spectrum of views in the forensic pathology community and, therefore, to evaluate it properly. Without this context, misunderstandings can easily arise.

Dr. Pollanen indicated that, in addition to identifying the controversy in a report, an evidence-based approach might, in some cases, require a mini-review of the literature to provide a balanced view of the knowledge in the area and to apply that knowledge to the various diagnoses that could be drawn from the evidence. Although epidemiological data might also assist in determining the likelihood of one potential mechanism over others (for example, shaking compared with short falls), it must be remembered that epidemiological studies are done on populations, while pathologists work on individual cases.

Of course, the obligation for forensic pathologists to acknowledge the relevant controversies in their area has equal importance when they are giving expert testimony. They should describe the particular controversy to the judge or the jury and explain how and why they came to the conclusion they did. The English Court of Appeal in *R. v. Harris and others* adopted the comments of Lord Justice Nicholas Wall concerning an expert's duty when advancing a controversial hypothesis:

> In my view, the expert who advances such a hypothesis owes a very heavy duty to explain to the court that what he is advancing is a hypothesis, that it is controversial (if it is) and place before the court all material which contradicts the hypothesis.[4]

Earlier in this Report, I describe the limits on both pediatric forensic pathology and forensic pathology generally. These limits may not be controversial, but they are equally important for forensic pathologists as they form their opinions and define the level of confidence or certainty they have in them. Accordingly, pathologists have a corresponding obligation to ensure that the limitations that exist for the science generally and for each opinion specifically are clearly communicated and understood.

[4] *R. v. Harris and others*, [2005] EWCA Crim 1980 at para. 272.

Recommendation 91

a) Forensic pathologists should clearly communicate, where applicable, areas of controversy that may be relevant to their opinions and place their opinions in that context.

b) They should also clearly communicate, where applicable, the limits of the science relevant to the particular opinions they express.

c) They should remain mindful of both the limits and the controversies surrounding forensic pathology as they form their opinions and as they analyze the level of confidence they have in those opinions.

d) These obligations extend to the content of post-mortem or consultation reports, to verbal communications, and to testimony.

The Limits of the Pathologist's Expertise

Experts have a positive obligation to identify and observe the limits of their particular area of expertise. This restriction is true for forensic pathologists from the time of their first involvement at the autopsy. They should not offer any opinions outside their specialty and, when testifying, should clearly state when particular questions or issues fall outside their expertise.

The evidence given at this Inquiry illustrates the importance of these obligations. In Sharon's case, Dr. Smith mistook dog bites for stab wounds. As he acknowledged at the Inquiry, that opinion was beyond his area of expertise. A number of his other diagnostic errors resulted from the same cause. In Jenna's case, he wrongly described the window of opportunity for inflicting the fatal injuries so broadly that he included the mother as a suspected killer. Dr. Milroy testified that a properly trained forensic pathologist would not have erred in this way.

Dr. Smith not only exceeded his expertise but presented himself in a way that masked his lack of expertise. In Sharon's case, he dismissed suggestions in cross-examination that his lack of training as a forensic pathologist made his opinion problematic. He claimed an expertise in animal bites that he simply did not have. Indeed, he stated that he was better situated than a forensic pathologist to diagnose stab wounds in children, a claim the expert reviewers clearly dismissed in their evidence.

In his testimony in other cases, Dr. Smith went well beyond his expertise as a pathologist when he repeatedly described the sociological or psychological profile of a baby shaker or relied on circumstantial evidence alone. Because he failed to

disclose that his opinions were based on circumstantial evidence, not pathology findings, the fact that he was outside his expertise remained unknown. If experts do not have an accurate understanding of the limits of their own specialty, others are likely to be misled, whether intentionally or not, into believing that the opinions expressed fall within the pathologist's area of expertise.

If pathologists identify the limits of their expertise accurately, they will know when to seek further assistance. Two situations illustrate this point.

First, in a number of the cases examined at this Inquiry, a child had died from a head injury, although the specific cause of that injury was contentious. In these circumstances, it was important that the forensic pathologist recognize the specialized expertise a neuropathologist could contribute to determining the cause and the mechanism of death. As a second example, forensic pathologists have less familiarity than pediatric pathologists with pediatric diseases. A study by Dr. Jean Michaud, the head of the Department of Pathology and Laboratory Medicine at the Ottawa Hospital and the Children's Hospital of Eastern Ontario, indicates that forensic pathologists, compared with pediatric pathologists, are more likely to over-diagnose sudden infant death syndrome (SIDS). It is best, then, for forensic pathologists to consult with pediatric pathologists in cases that present as SIDS.

At times, Dr. Smith exceeded the scope of his expertise at his own initiative, but on other occasions he was invited to do so by Crown or defence counsel. Forensic pathologists have the obligation to resist pressure from police, counsel, and even the court to go beyond the legitimate scope of their expertise, either when they are asked questions about subjects in which they are not expert or, more typically, when they are pushed to be more certain than the science permits. There is therefore a shared responsibility of all participants in the justice system to ensure that forensic pathologists remain firmly within their expertise.

Recommendation 92

Forensic pathologists have a positive obligation to recognize and identify for others the limits of their expertise. They should avoid expressing opinions that fall outside that expertise. When invited to provide such opinions, they should make the limits of their expertise clear and decline to do so.

Misplaced Reliance on Non-pathology Information

In some cases, Dr. Smith relied heavily on non-pathology information in forming his opinions. However, this dependence was often not apparent, either in his writ-

ten reports or in his testimony in court. It should have been, to meet the standard of transparency. But reliance upon non-pathology evidence does not merely raise the issue of transparency. The extent to which pathologists' opinions should be based, in whole or in part, on non-pathology information or "circumstantial evidence" is another difficult issue.

There is some debate within the pathology community over the amount of circumstantial information the pathologist should use in determining the cause of death. Dr. Pollanen referred to this issue as a "sliding scale." At one end of the scale is reliance on circumstantial information in the absence of any pathology evidence to suggest a cause of death. At the other end is reliance only on pathology evidence, with no need even to consider the circumstantial evidence. Although the experts generally agreed that pathologists should take circumstantial evidence into account, because it is helpful in steering them in the right direction, the question remains, to what extent?

In Dr. Crane's view, it is appropriate for a pathologist to state a cause of death where the pathology is not definitive, but where the history and circumstances might help to provide an answer, as long as the pathologist makes it explicit in the report the extent to which the conclusion is based on circumstantial – and not pathology – evidence.

Dr. Saukko took a different approach. A pathologist should consider the circumstantial evidence in arriving at a diagnosis, he testified, but not base a diagnosis on such evidence. So, even in cases where the circumstantial evidence as to how the death occurred is overwhelming (for example, Delaney's case and Katharina's case), Dr. Saukko would list the cause of death as unascertained if there was no pathology evidence to support a conclusion. He would raise the possibility that the circumstantial evidence could point to a cause of death. In his view, while there might be a sliding scale in terms of pathologists' comfort level with using circumstantial evidence, there is a definite limit – they should not base a diagnosis solely on circumstantial evidence.

Dr. Saukko also testified that pathologists should exercise caution before they ever use circumstantial evidence because it can contribute to the misinterpretation of pathology findings. Similarly, Dr. Crane testified that he is more careful in his commentary when relying on information that he has not observed himself at the autopsy but has come from another source.

In my view, there is no bright line that dictates when non-pathology information can be used in forming pathologists' opinions. However, some guidance can be provided. First, circumstantial evidence should never be asked to bear the entire burden of supporting the pathologist's opinion. Delaney's case and Katharina's case are instructive. The causes of death were properly characterized

as unascertained because the pathology did not support any cause of death. It was only the overwhelming circumstantial evidence that explained what had happened. Simply put, Dr. Smith's expression of opinions in those cases ran afoul of the basic principle that the opinion must fall within the expertise of the pathologist. Otherwise, the pathologist, under the guise of scientific opinion, is simply presenting a conclusion drawn from the circumstantial evidence.

Second, there is some scope for pathologists to use non-pathology or circumstantial evidence in forming their opinions. They need not operate in complete isolation. So, for example, they might consider evidence of resuscitation in evaluating the existing pathology and formulating a cause of death. The extent to which the use of non-pathology evidence can be considered in forming an opinion may well be affected by the potential unreliability or contentious nature of the circumstantial evidence and by how close it comes to the ultimate issue that the court must decide.

I endorse the October 2007 Autopsy Guidelines, which caution that "the pathologist must not base any expert opinion on untested / untestable evidence such as reported confessions, or assumptions that cannot be independently validated or corroborated by other evidence." I elaborate on the limited use that forensic pathologists should make of confessions, consistent with the October 2007 Autopsy Guidelines, in Chapter 15, Best Practices.

Recommendation 93

a) Forensic pathologists should never use circumstantial evidence or non-pathology information to bear the entire burden of support for an opinion.

b) Caution in using such evidence or information at all should be particularly pronounced where the circumstantial evidence is potentially unreliable or contentious or comes close to the ultimate issue that the court must decide.

c) Forensic pathologists' opinions must ultimately fall within their particular area of expertise. They should not rely on circumstantial evidence to a point where the opinion no longer meets that requirement.

d) There is some limited scope for forensic pathologists quite properly to use non-pathology or circumstantial evidence in forming their opinions. They need not operate in complete isolation. However, their use or consideration of circumstantial evidence should always be transparent: they should always disclose both the extent to which they have used or relied on such evidence and the impact such evidence has had on their reasoning and opinions.

e) Forensic pathologists can consider hypothetical questions that involve circumstantial evidence in determining whether, or to what extent, a reported history can be excluded or supported by the pathology findings.

Failure to Indicate Reliance on Other Expert Views

The evidence at this Inquiry established that, on a number of occasions, Dr. Smith consulted with other experts such as neuropathologists or radiologists and, without identification or acknowledgment, incorporated their findings or opinions into his autopsy report. Sometimes it was obvious that a consultation had taken place; sometimes not. In Jenna's case, Dr. Smith testified that he had consulted Dr. Dirk Huyer, then a member of the Suspected Child Abuse and Neglect (SCAN) Program, who assisted him in examining the child's genitalia for possible sexual abuse. That collaboration was not obvious from Dr. Smith's autopsy report, which said nothing about the consultation. The absence of any documentation of such an examination in the report – or even of Dr. Huyer's involvement – invited questions about whether or to what extent Dr. Huyer had actually been involved.

I strongly encourage forensic pathologists, particularly in difficult cases, to consult with fellow forensic pathologists and other experts in forming their opinions. These specialists might include neuropathologists, pediatric pathologists, radiologists, neurosurgeons, and forensic ondontologists. Such collaboration will assist forensic pathologists to come to the best possible opinion. It is imperative, however, that all consultations be documented.

Recommendation 94

a) When forensic pathologists base their opinions, in whole or in part, on consultation with other experts, they should identify those experts as well as the content of the opinions those experts expressed.

b) When informal "corridor" consultations influence formal opinions, the same identification and acknowledgment procedures should be followed. In addition, the consulted experts should express in writing, where feasible, any significant findings or opinions they contributed.

The Omission of the Facts and Reasoning Process Underlying the Opinion

The development of an evidence-based culture in forensic pathology fosters practices that produce sound opinions. This approach requires a clear and accurate recitation in the opinion of the relevant empirical evidence, particularly the findings at autopsy, followed by an explanation of the reasoning process that took the pathologist from that evidence to the final opinion.

Like most pathologists at the time, Dr. Smith generally failed in his post-mortem reports to explain how he arrived at his opinion on the cause of death. For this reason, among other things, his written opinions were difficult, if not impossible, to review independently. They were also more likely to mask poor reasoning, flawed pathology knowledge, speculation, and overreliance on circumstantial or non-pathology information. The problem extended beyond that of transparency and possible misunderstanding to one of clarity in thinking. In the way that judges, in formulating their reasons for judgment, are compelled to think about how they moved from evidence to their ultimate conclusions, so forensic pathologists, in writing their reports, should be obliged to think about the logic of their reasoning process and explain how they moved from the pathology findings to their ultimate opinions.

The act of expressing the opinion in writing also adds significant value in another way. Dr. Chiasson testified that obliging pathologists to outline their reasoning in writing helps to get them thinking about just how comfortable they are with the opinion they have expressed. This process assists them in clarifying their level of confidence in the opinion.

According to Dr. David Dexter, there is a direct relationship between the clarity with which pathologists outline their reasoning process in their reports, from the abnormal findings to the diagnosis, and the transparency of the level of certainty with which they hold their opinions. Gaps in reasoning or incorrect assumptions made during the analysis will become apparent if the reasons behind the opinions are clear. As an additional benefit, Dr. Pollanen testified that, when pathologists explain their reasoning clearly in their reports, their colleagues can properly peer review the case.

Forensic opinions that make the pathologist's reasoning process explicit also assist in avoiding "confirmation bias" – the situation that occurs when anyone, including pathologists and the police, tends to seek out evidence to support or confirm an investigative theory or an expert opinion and excludes other theories or possible opinions. Confirmation bias is closely related to "tunnel vision," which has been defined as "the single-minded and overly narrow focus on a particular

investigative or prosecutorial theory, so as to unreasonably colour the evaluation of information received and one's conduct in relation to that information."[5] In pediatric cases, forensic pathologists, like others, may be caught up in the emotions surrounding the death and possible abuse of a child. The interaction between the police and the forensic pathologist on the case may subtly encourage the pathologist to form tentative views even before the autopsy has begun. In Amber's case, for example, Justice Patrick Dunn found that Dr. Smith refused to consider evidence that contradicted his preconceived beliefs. Interestingly, the review produced by SickKids after the release of Justice Dunn's judgment began with the preconceived notion that the judge must be wrong.

The evidence-based approach to preparing an opinion serves as a bulwark against confirmation bias. It recognizes the significance of critical evidence, including contradictory evidence that might challenge a prevailing investigative theory or a dogmatic preconceived opinion.

It is commendable that a number of points made in this chapter already find expression in the recent guidelines formulated by the Ontario Chief Coroner's Office (OCCO). For example, under the October 2007 Autopsy Guidelines, pathologists in Ontario are directed to:

- adopt an evidence-based approach;
- give any opinions in writing;
- ensure that the facts and reasoning that inform the opinion be explained;
- ensure that the opinion is based on documented and reviewable autopsy findings;
- not provide an opinion based on circumstantial evidence or assumptions that cannot be independently validated or corroborated by other evidence;
- not provide speculative opinions, such as "asphyxia" or "consistent with asphyxia." If the cause of death cannot be objectively determined by combining information from the history, autopsy, and ancillary testing, it should be documented as unascertained or undetermined;
- ensure that the opinion is clearly communicated to the coroner and police, in writing, so that it is understood, including the scope and limits of the opinion; and
- consult with other pathologists in difficult or challenging cases.

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[5] This definition comes from Ontario, *The Commission on Proceedings Involving Guy Paul Morin: Report* (Toronto: Ministry of the Attorney General, 1998), recommendation 74 (Commissioner Fred Kaufman) (hereafter *Guy Paul Morin Report*). See also discussion in Bruce MacFarlane, "The Effect of Tunnel Vision and Predisposing Circumstances in the Criminal Justice System," in *Pediatric Forensic Pathology and the Justice System,* vol. 2 of Inquiry into Pediatric Forensic Pathology in Ontario, Independent Research Studies (Toronto: Ministry of the Attorney General, 2008).

The same principles I have discussed apply equally to testimony. Dr. David Ranson, the deputy director at the Victorian Institute of Forensic Medicine in Australia, teaches his students that, when testifying in court, they should express their opinions logically and clearly, following a formula of "You can believe me because ..." In other words, the experts should explain why it is that their opinions have been formed.

As I noted at the outset of this chapter, the primary consumers of forensic pathology opinions are the participants in the justice system, many of whom have little or no understanding of technical language. It follows that the explanation for the pathologist's opinion must be communicated in language that is not only accurate but clear, plain, and unambiguous.

The importance of this accessibility is illustrated by the evidence of Sergeant Larry Charmley, the investigating officer in the re-investigation of Jenna's case. He candidly acknowledged that the language used in the Jenna post-mortem report was so "above his head" that he obtained a medical dictionary to assist him in understanding the report. The OCCO also provided some assistance by explaining the medical terminology to him. Sergeant Charmley testified that the police would be greatly assisted by having a glossary of medical terms appended to the post-mortem report. I agree that a list of definitions is warranted in many cases.

It might be tempting to read my comments as imposing an onerous burden on already overburdened pathologists. I do not believe that to be the case. Drs. Cordner, Ranson, Milroy, Crane, Whitwell, Saukko, and others reflected that the recommended approach already represents the practice in a number of jurisdictions. I was also told that it has already been adopted by an increasing number of Ontario forensic pathologists. In essence, it requires no more of the pathologist than to articulate clearly the mental process the pathologist has already undertaken in reaching the opinion.

An evidence-based approach to forensic pathology requires that experts think about how they moved from the evidence to the conclusions. The forensic pathologists' obligation is to put on paper the mental process they followed through their investigation and analysis. In most cases, recording that process should not compel a lengthy report. To analogize to what has been said about a judge's reasons for judgment, adequacy is not measured by the pound or the inch. Sometimes the reasoning behind a forensic pathology opinion can be developed in a paragraph or two. Some uncomplicated or patently uncontentious cases require little elaboration or explanation, although controversial or difficult cases undoubtedly require more extensive discussion. A complete report ultimately makes the pathologist's task in court an easier one, and, more important, best serves the ends of justice.

Recommendation 95

a) The articulation of the basis for the forensic pathologist's opinion in a completely transparent way is at the cornerstone of evidence-based pathology.

b) Forensic pathology opinions, whether given in writing or in oral communication, should articulate both the pathology facts found and the reasoning process followed, leading to the opinions expressed.

Recommendation 96

Forensic pathologists, in order to communicate their opinions in plain language to their lay readers, should consider including a glossary of medical terms, and, in some cases, relevant secondary literature, in their post-mortem or consultation reports.

Implementing More Effective Communication

Report Writing

I have already acknowledged the good work that has been done by the OCCO, through Dr. Pollanen and others, to provide guidelines for the writing of forensic pathology reports, but it would also be helpful in my view if my recommendations on effective communications were captured as part of a comprehensive Code of Practice and Performance Standards for forensic pathologists. A number of sources already exist that are helpful in describing best practices in report writing and that could serve as a model for such a code.

In England and Wales, the *Code of Practice and Performance Standards for Forensic Pathologists*, developed jointly by the Home Office and the Royal College of Pathologists in 2004,[6] recommends that pathologists include the following sections in their autopsy reports:

(a) report preamble, setting out information relating to the deceased and the autopsy (for example, who was present);
(b) history, summarizing the information provided to the pathologist prior to the post-mortem examination and identifying the sources of such information;
(c) scene examination, when applicable, including location, when the pathologist attended the scene, general descriptions, and any recordings made;

[6] The code is directed primarily to practitioners working within England and Wales, although it expresses the hope that it will be of value to pathologists who work outside these borders.

(d) external examination, describing the state of the body, and including both positive and negative findings;
(e) injuries, setting out the positions and measurements;
(f) internal examination, setting out observations with particular attention paid to organs that are diseased and injured;
(g) supplementary examination, including results and the source of the results;
(h) commentary and conclusions, including reasons for conclusions and a discussion of other relevant issues (for example, the amount of force used), and potential diagnoses;
(i) cause of death; and
(j) retention of samples, indicating what has been retained, submitted and/or stored.[7]

As well, Dr. Milroy advised the Inquiry that the Home Office and the Royal College of Pathologists endorse the practice of setting out the alternative explanations and the reasons why one is favoured by the pathologist over the other(s).

I am of the view that developing a Code of Practice and Performance Standards in Ontario would not only assist in promoting an evidence-based approach to post-mortem and consultation reports but enhance transparency and comprehension. The code introduced in England and Wales would be very helpful in developing a similar code here.

The English Court of Appeal has also provided detailed guidance to all expert witnesses,[8] as has my former colleague, the Honourable Coulter Osborne, in the recommendations to his report on civil justice reform.[9] I prefer to address the guidance offered by the English Court of Appeal and Mr. Osborne in more detail later in the context of my recommendation that a code of conduct be created for all experts whose reports or testimony might be introduced into court. Suffice it to say here that some of the features of a code of conduct for experts generally are equally relevant for forensic pathologists when their reports or testimony might be provided to the criminal justice system. For example, the English Court of Appeal recommended that an expert's report provide "details of the expert's academic and professional qualifications, experience and accreditation relevant to the opinions expressed in the report[,] and the range and extent of the expertise and any limitations upon the expertise." An initial statement of the range and

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[7] Home Office and Royal College of Pathologists, *Code of Practice and Performance Standards for Forensic Pathologists* (London: November 2004), 20–22.

[8] *R. v. Harris and others*, [2005] EWCA Crim 1980.

[9] Coulter A. Osborne, *Civil Justice Reform Project: Summary of Findings & Recommendations* (Toronto: Ministry of the Attorney General, November 2007).

extent of a forensic pathologist's expertise and any limitations on it would facilitate the gatekeeper role of the trial judge (described in Chapter 18, The Role of the Court) in clearly defining the subject area about which the forensic pathologist proposed as a witness has the required expertise to offer opinion evidence to the court.

Recommendation 97

The Office of the Chief Coroner for Ontario should develop a Code of Practice and Performance Standards for forensic pathologists in Ontario which describes, among other things, the principles that should guide them as they write their reports and the information that should be contained in them. It should draw on existing sources, including the *Code of Practice and Performance Standards for Forensic Pathologists* in England and Wales. It should include at least the following:

a) **the principles set out in Recommendation 84;**

b) **guidance on the content of their autopsy and consultation reports (particularly where they may be used by the justice system), including**

   i) **the subjects mandated by the *Code of Practice and Performance Standards for Forensic Pathologists* in England and Wales;**

   ii) **details of each expert's academic and professional qualifications, experience, and accreditation relevant to the opinions expressed in the report, as well as the range and extent of this expertise and any limitations on it;**

   iii) **the levels of confidence or certainty with which the opinions are expressed;**

   iv) **any alternative explanations that are raised by the pathology or by the reported history associated with the deceased's death, with an analysis of why these alternative explanations can or cannot be ruled out;**

   v) **what the pathologist has to say that is relevant to the live or pertinent issues in the case and why;**

   vi) **any area of controversy that may be relevant to their opinions, placing their opinions in that context;**

   vii) **any limits of the science relevant to the particular opinions;**

   viii) **the extent to which circumstantial or non-pathology information has been used or relied on, and its impact on the reasoning and opinions;**

   ix) **any other expert opinions relied upon;**

x) **the pathology facts found and the reasoning process that was followed, leading to the opinions expressed; and**

xi) **a glossary of medical terms, if helpful, to assist in communicating opinions in plain language to lay readers.**

c) **guidance on**

i) **language to be used or avoided, and the dangers associated with the use of particular terms;**

ii) **how best to think about and articulate levels of confidence or certainty;**

iii) **the need to avoid the formulation or articulation of opinions in terms of proof beyond a reasonable doubt;**

iv) **the need to avoid default diagnoses;**

v) **the importance of recognizing and identifying for others the limits of their own expertise and of avoiding the expression of opinions that fall outside that expertise; and**

vi) **the cautions that should surround the use of circumstantial evidence or non-pathology evidence.**

Testimony

One of the forensic pathologist's most significant roles is giving testimony. It is a formidable responsibility. Triers of fact are easily impressed with the credentials of experts generally, and of forensic pathologists in particular. Their testimony may be accorded an aura of infallibility that is not easily displaced. For that reason, it is imperative that the testimony given by forensic pathologists be informed by all the principles and approaches outlined earlier in this chapter.

As well, there are other components to the testimonial responsibilities of forensic pathologists that have not been previously addressed. First, the evidence at this Inquiry showed that Dr. Smith was, at times, unprepared for the task at hand. He was unable to answer fairly basic questions as to what he had done and what tests had been conducted. An expert must always be prepared for court. That involves, among other things, reviewing the case before testifying, particularly the pathologist's notes and the post-mortem or consultation report. Of course, a written report that meets the criteria discussed in this chapter should make the task of preparing for testimony much easier.

Second, forensic pathologists should meet with examining counsel in advance

of the proceeding to review the case and prepare for testimony. Meeting counsel for the first time minutes before testifying does a disservice to the administration of justice. This obligation rests, in the main, with the examining counsel, but should also be insisted upon by the forensic pathologist.

The forensic pathologist should also be open to meeting with counsel for other parties in a timely and non-adversarial way in advance of testimony. In several of our roundtables, experts discussed their willingness to meet with counsel for the accused to discuss their opinions and prospective evidence. Professor Katherine Gruspier, a forensic anthropologist, spoke of her willingness to do so, but of the limited number of counsel who avail themselves of the opportunity. She indicated that, before testifying, she is quite prepared to identify for counsel the limitations on what she can say. Similarly, Dr. Ranson indicated that less-experienced counsel generally will not speak with him in advance about his testimony. As discussed in Chapter 17, The Roles of Coroners, Police, Crown, and Defence, counsel have a responsibility to seek out the forensic pathologist in this regard.

I earlier recommend that a Code of Practice and Performance Standards be developed in Ontario to address the writing of reports. It should also address the giving of evidence.

The *Code of Practice and Performance Standards for Forensic Pathologists*, designed for those working in England and Wales, addresses the pathologist's obligations as a witness:

> ATTENDANCE AT COURT
>
> 10.1 Standard
>
> The pathologist must:
>
> a) ensure that he is well prepared prior to attendance at court to give evidence
> b) ensure that all documentation relevant to the case is brought to court
> c) ensure that appearance and behaviour conform to acceptable professional standards
> d) deliver evidence in an audible and understandable manner
> e) give evidence consistent with the contents of the written report
> f) deal with questions truthfully, impartially and flexibly
> g) identify questions that are unclear and clarify these before offering a response
> h) give answers to technical questions in a manner understandable by those who have no technical or scientific training

i) differentiate between facts and conclusions drawn from those facts, and ensure that any such conclusions lie within his or her field of expertise
j) consider additional information or alternative hypotheses that are presented and, where warranted, modify conclusions already drawn
k) where it appears that a lawyer has misunderstood or is misstating evidence, ensure that the court is made aware of that misunderstanding or misstatement.

10.2 Code of practice

Pathologists must ensure that they are appropriately prepared prior to attending court to give evidence. A copy of the pathologist's autopsy report, together with all contemporaneous notes, should be taken to the court. The evidence must be objective and fairly presented and attention must be drawn to any areas of speculation. Proper and objective consideration must be given to any interpretations or conclusions fairly raised by the defence, particularly if they are supported by their own expert opinion.

The role of the expert witnesses is not to provide evidence that supports the case for the Crown or for the defence. Opinions must be objectively reached and have scientific validity. Witnesses must make it clear which part of their evidence is fact and which is opinion. The evidence on which that opinion is based must also be available.

Facts may emerge during the course of an investigation, sometimes even during the course of the trial, which may make the pathologist modify a previously held opinion. The pathologist has a duty to give any new facts due consideration and ensure that his or her evidence remains objective and unbiased. If previously held conclusions can no longer be substantiated, any change of opinion must be promptly and clearly stated, irrespective of any possible embarrassment. Delay will not only potentially harm the administration of justice but will reflect adversely upon the reputation of the pathologist.

I endorse the contents of the *Code of Practice and Performance Standards* adopted in England and Wales. The points included there have equal application in Ontario. I would add only two things, based on the evidence I heard:

a) if the expert witness can answer a hypothetical question posed in court only after time for reflection, that extra time allowance should be insisted upon;

and

b) if expert colleagues hold different opinions from those of the forensic pathologist responsible for giving evidence, the differing views must be addressed professionally and not ad hominem.

Recommendation 98

The Code of Practice and Performance Standards for forensic pathologists in Ontario should also address giving evidence, again drawing on existing sources for its content, particularly the *Code of Practice and Performance Standards for Forensic Pathologists* developed in England and Wales. It should also include specific guidance on how forensic pathologists should deal with hypothetical questions and the differing views of colleagues.

Building Consensus on Language

What must be obvious at this point is the prominence that must be given to the communication of pathologists' opinions in clear, plain, and unambiguous language. I identified that earlier as one of the foundational principles that inform this chapter. Its corollary is that pathologists must avoid misleading language. For example, I have already made reference to the dangers associated with the term "asphyxia." Not only is it unsupportable as a cause of death but it bears a variety of meanings and, as such, is easily susceptible to serious misunderstanding. For that reason, I recommended that pathologists be educated about the dangers associated with the term and, under the auspices of the Chief Forensic Pathologist, reach a common understanding on when it should and should not be used.

However, "asphyxia" is only one of a number of words or phrases that may be seriously misinterpreted or misunderstood. The phrase "consistent with" is particularly problematic. Where forensic pathologists are unable to narrow their opinions to a single cause or mechanism of death, they may indicate that the pathology is "consistent with" a particular cause or mechanism of death or a scenario presented by the questioner. Indeed, I saw instances in which Dr. Smith was asked whether his findings were "consistent with" suffocation or smothering or asphyxia.

This phrase is fraught with danger. That observation, supported by the testimony of a number of forensic pathologists at this Inquiry, is hardly a new one. The danger was identified by Commissioner Fred Kaufman at the Morin Inquiry, specifically in connection with hair and fibre comparisons and generally for the

forensic sciences.[10] The following quotation he offered also resonates with the work of this Inquiry:

> Bernard Robertson and G.A. Vignaux, in their book *Interpreting Evidence: Evaluating Forensic Science in the Courtroom*,[11] offer the following explanation of the difficulty with the term "consistent with":
>
> > Worst of all is the word "consistent," a word in (unfortunately) common use by forensic scientists, pathologists and lawyers. To a scientist, and to a dictionary, "consistent with" is simply the opposite of "inconsistent with." The definition of "inconsistent" is precise and narrow. Two events are inconsistent with one another if they cannot possibly occur together. Thus, a person cannot be in two different places at the same instant and so evidence that he was in New York at a particular instant is inconsistent with the proposition that he was in London at the same instant. Anything which is not inconsistent is consistent. Thus, the proposition "several murders were committed in New York today" is quite consistent with the proposition "it rained in London today," although it may be irrelevant.
> >
> > Unfortunately for clear communication, Craddock, Lamb and Moffat found that lawyers usually interpret "consistent with" as meaning "reasonably strongly supporting," while scientists use it in its strict logical and neutral meaning. When a pathologist says that certain injuries are "consistent" with a road accident there is no implication about whether or not there has been a road accident. It is possible that the injuries could occur given the circumstances that have been described. It is therefore perfectly sensible to say that something is "consistent but unlikely." If there is some genuine dispute about the cause of the injuries what would the pathologist be able to say? He might say that the injuries were consistent with either an assault or a road accident but are more likely to have occurred if there had been an assault than if there had been a road accident. If they are equally consistent with both then they do not help us decide which of them occurred.

This example reinforces the desirability of using plain, common language that is not potentially misleading and that enhances understanding. It also supports

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[10] *Guy Paul Morin Report*, 341.

[11] Bernard Robertson and G.A. Vignaux, *Interpreting Evidence: Evaluating Forensic Science in the Courtroom* (Chichester and New York: John Wiley, 1995), 56.

the need to avoid specific language, such as "consistent with," that is demonstrably misleading. If "consistent with" a particular cause of death means no more than "may or may not be the case," it is surely of little help. If reference must be made to this point, then the pathologist should use neutral language rather than mask the opinion in language that may leave the impression that the pathology provides some support, or even strong support, for that cause of death.

In the context of misunderstandings around how pathologists think and communicate about levels of confidence or certainty, I recommend that, under the auspices of the Chief Forensic Pathologist, work should be done, in a multidisciplinary setting that includes leading practitioners and academics from both forensic pathology and the legal profession, to develop, to the extent possible, some common language to describe what forensic pathologists have to say. In my view, that kind of consensus building must also extend to the kind of language that forensic pathologists should avoid and to the expressions that can be used in its place.

Recommendation 99

a) Forensic pathologists should avoid potentially misleading language, such as the phrase "consistent with," and adopt neutral language that clearly reflects the limitations of the opinion expressed.

b) Work should be done in a multidisciplinary setting to build consensus on words and phrases that forensic pathologists should utilize or avoid as potentially misleading. The results of this work should be reflected in the Code of Practice and Performance Standards for forensic pathologists.

Additional Steps

I have outlined some steps that should be taken to implement my recommendations on effective communication, including a Code of Practice and Performance Standards for forensic pathologists and multidisciplinary work to build consensus on plain language to enhance common understanding. As well, in other chapters, I recommend annual peer review of expert testimony by pathologists, post-trial counsel evaluations of that testimony, and the transmittal to the appropriate authorities of any adverse judicial comments about a particular pathologist's testimony. Ultimately, the best way to ensure that pathologists have a widespread understanding of these changes and the culture they represent – and to achieve a greater uniformity of practice than exists today – is to provide ongoing education and training for forensic pathologists. The need for such education

and training has been addressed in earlier chapters, but I want to emphasize it again in this context.

Recommendation 100

Forensic pathologists should be regularly reminded of the dangers of being misinterpreted or misunderstood by the criminal justice system. To that end, those engaged in forensic pathology should be provided with regular continuing education and training to enhance their effective communication with the criminal justice system.

As recommended elsewhere in this Report, I encourage the creation of joint educational programs between forensic pathologists and those involved in the criminal justice system. The more interaction there is between these groups, the more they will develop a common understanding of forensic pathology. That understanding will surely serve to improve the administration of justice.

Serving the criminal justice system is a central function of forensic pathology. In criminally suspicious deaths, the role of forensic pathology can be critically important in ensuring that justice is done. That is particularly true in pediatric forensic pathology.

One of the principal lessons learned at the Inquiry is that, although it is vital that forensic pathologists be highly skilled scientists, it is equally vital that they be able to communicate their opinions effectively to the criminal justice system. Improvements in the quality of forensic pathology must be paralleled by improvements in the effectiveness with which forensic pathologists are able to communicate to the criminal justice system. It is with this objective in mind that I make the recommendations in this chapter.

17

The Roles of Coroners, Police, Crown, and Defence

My recommendations are designed to restore and enhance public confidence in pediatric forensic pathology and its future use in the criminal justice system. It is therefore not surprising that much of the focus must be on forensic pathologists and the issues surrounding their training, education, accreditation, oversight, and accountability. But it must also be recognized that other participants in the criminal justice system have important roles to play in protecting the public against the introduction of flawed or misunderstood pediatric forensic pathology into the system. The unique role of the court is discussed in Chapter 18, The Role of the Court. Here, I address the roles that coroners, police, Crown counsel, and defence counsel can play in helping to achieve the objective.

Coroners

The coroner has statutory responsibility for the death investigation. However, coroners are not just passive overseers. They perform an active role in the death investigation in cases where a post-mortem examination is done, and their actions may significantly affect the opinion ultimately provided by the pathologist and, therefore, the outcome of the investigation itself.

One need only examine the responsibilities set out in the April 2007 Guidelines for Death Investigation to understand the critical role of the coroner. These include:

1 attending at the death scene;
2 communicating with the police and others;
3 examining the body, if attending the scene;
4 recording information about the body, such as its temperature, the presence or absence of rigor mortis, and the presence, type, and pattern of lividity;

5 pronouncing death;
6 issuing a warrant for post-mortem examination, where appropriate;
7 obtaining medical records of the deceased;
8 communicating with the pathologist; and
9 completing the coroner's investigation statement and the medical certificate of death.

As evidenced by these responsibilities, the coroner can be an important source of information for the forensic pathologist who conducts the autopsy. It follows that deficiencies in the information collected by the coroner may have an adverse impact on the forensic pathologist's work. For example, in Jenna's case, the coroner failed to relay to Dr. Charles Smith, verbally or in the warrant for post-mortem examination, that a hair had been observed in Jenna's vaginal area during resuscitation efforts. Although Dr. Smith had a copy of Jenna's hospital records, which should have alerted him to this information, the coroner and the police should have highlighted it for Dr. Smith.

In Chapter 15, Best Practices, I discuss the importance of accurate and thorough communication of information by the coroner to the forensic pathologist in the warrant of post-mortem examination, verbally and through the provision of all relevant medical records, where feasible. I also discuss how their verbal communications should be documented.

While the coroner and the forensic pathologist must work in close cooperation, it is also vital that the coroner respect the forensic pathologist's expertise and independent professional judgment. In particular, coroners should refrain from expressing medical conclusions in their early communications with the forensic pathologist. Although coroners make final determinations about cause and manner of death, they are well advised to await the considered opinions of forensic pathologists before expressing such conclusions.

Recommendation 101

The coroner and forensic pathologist should work in close cooperation where there is a post-mortem examination. In doing so, the coroner should respect the forensic pathologist's expertise and independent professional judgment.

In addition to the recommendations contained in other chapters, there are two additional features of the coroner's role that require elaboration here: the coroner's role in promoting early and ongoing case conferencing in pediatric forensic cases, and the need for coroners to avoid providing opinions outside their expertise.

Case Conferences

Case conferences are multidisciplinary meetings involving members of the death investigation team. They are intended to promote the participants' awareness of the issues in the case, and they allow for informed decision-making. In complex cases, such as criminally suspicious pediatric death cases, early case conferencing is critical. Case conferences inform police investigators about the scope and limitations of the available science, including forensic pathology. They enable discussion of further testing and ensure prioritization of sample submission to the Centre of Forensic Sciences (CFS). If used correctly, multidisciplinary case conferencing can reduce the danger of confirmation bias – the tendency to test one's theory of the case by looking for instances that confirm it – and be used as a vehicle to critically assess the available information and any deficiencies or weaknesses in that information. This potential benefit of case conferencing depends on the participation of those who understand, through education and training, the importance of an evidence-based approach to death investigations and the need to maintain objectivity. If the participants do not approach case conferences in an objective and non-adversarial manner that seeks the truth and recognizes the limits of the available information, there is a danger that case conferences may reinforce rather than counteract the dangers of confirmation bias or tunnel vision.

The regional coroner generally convenes and chairs case conferences. Police and the investigating coroner always attend. The forensic pathologist need not attend if the cause of death is straightforward and there are no controversial issues related to medical evidence. Representatives from the children's aid society (CAS) and the CFS may also be present. Crown counsel do not usually attend early case conferences, but may do so on rare occasions to gain a better understanding of the medical and forensic issues. Some Crown counsel have raised the legitimate concern that their involvement at this early stage may be incompatible with the important separation between investigation and prosecution. I agree that, generally, Crown counsel will not be involved in early case conferences, but recognize that there may be circumstances where their participation in such conferences will enable them to understand the underlying facts in order to provide early legal advice to the police. When attending case conferences, Crown counsel should of course remain mindful of their independent and quasi-judicial role.

The regional coroner generally keeps notes identifying the participants and the decisions made at the case conference. In the past, there were varying practices respecting disclosure of these notes to the defence. Currently, the Office of the Chief Coroner for Ontario (OCCO) has determined, on the advice of legal counsel, that the notes should form part of the disclosure package provided for

criminal cases. In my view, their inclusion is appropriate. They enhance the transparency of the death investigation and offend no public interest principles, and the notes are likely to contain relevant information.

The evidence at the Inquiry illustrated the important role that case conferencing can play. On November 28, 1997, a case conference (although not formally designated as such) was held regarding Nicholas' case. Attending were Chief Alex McCauley, Deputy Chief Jim Cunningham, Superintendent Fern Kingsley, Inspector Brian Grisdale, Sergeant Robert Keetch, and Sergeant Dave West, all of the Sudbury Regional Police; Dr. Smith; and Crown counsel Greg Rodgers. There was an extensive discussion of the available forensic evidence, most particularly Dr. Smith's opinion that Nicholas had died from cerebral edema caused by blunt force trauma *in the absence of a credible explanation*. Ultimately, it was concluded that the opinion was incompatible with proof beyond a reasonable doubt, resulting in the decision not to proceed criminally against Nicholas' mother.

In Jenna's case, during the second investigation that followed the withdrawal of charges against Jenna's mother, Brenda Waudby, Dr. Michael Pollanen, the Chief Forensic Pathologist, convened a case conference. It included officers from the Ontario Provincial Police (OPP) and the Peterborough Lakefield Community Police Service; the Chief Coroner and the Deputy Chief Coroner; Dr. Robert Wood, the forensic odontologist; and a member of the Suspected Child Abuse and Neglect (SCAN) Program. They discussed the existing medical evidence, most particularly the pathology. The conference generated suggestions as to further opinions to be sought and testing to be done. The renewed investigation, which drew on those suggestions, ultimately led to the arrest and conviction of J.D., Jenna's babysitter.

These examples, although resulting in very different outcomes, demonstrate the value of early and ongoing case conferencing. In addition to the benefits described earlier, case conferences ensure that forensic pathologists correctly appreciate the underlying facts and the real issues in the case. They also represent a further opportunity for forensic pathologists to communicate with the police and ensure that there are no misunderstandings surrounding the scope and limitations of their opinions.

Case conferencing is certainly not a novel idea. In June 1996, Justice Archie Campbell, in his report on the Paul Bernardo police investigation, the *Bernardo Investigation Review: Report of Mr. Justice Archie Campbell*,[1] endorsed the collab-

[1] *Bernardo Investigation Review: Report of Mr. Justice Archie Campbell* (Toronto: Ministry of the Solicitor General and Correctional Services, 1996).

oration of members of various disciplines – including coroners, police, forensic scientists, and forensic pathologists – in homicides and criminally suspicious death investigations. The goal was to pool the work of the different disciplines and provide an opportunity to focus collectively on the key issues.

In 1998, the Commission on Proceedings Involving Guy Paul Morin (the Morin Commission) endorsed the Campbell model, which contemplated "ongoing case conferences between the various players throughout the investigation. … All this is done in order to ensure that information is exchanged, the right forensic tests are being done in the right order, and things are being delivered when they are meant to be delivered."[2]

Currently, the OCCO recommends that a case conference be held within two weeks of the autopsy for every homicide and criminally suspicious death, and that case conferences occur before the laying of criminal charges where such charges rely significantly on pathology or toxicology evidence. Where the latter is not possible, case conferences should occur as soon as possible after charges are laid. I endorse this approach. It has particular appeal for pediatric forensic cases, which are generally complex and rely heavily on the pathology.

In addition to early case conferences, subsequent case conferences may be necessary after all the information and test results have been received. Again, I endorse ongoing case conferencing because it encourages, on a continuing basis, dialogue among the members of the death investigation team. New information about cases should not be "sprung on" the forensic pathologist by the police or Crown counsel in court or on the eve of the preliminary hearing or trial. Case conferencing represents one way that forensic pathologists can stay informed of developments that may affect their opinions. It is also an early opportunity to have others scrutinize the forensic pathologist's opinion.

Of course, regardless of whether further case conferences take place, new information or developments in the case that may affect or invite reconsideration of the forensic pathologist's opinion should be promptly communicated to the forensic pathologist and recorded by those involved. Such information should also generally be subject to disclosure in the criminal proceedings.

I wish to add a cautionary note with respect to case conferencing. In the earlier chapters on Best Practices (Chapter 15) and Effective Communication with the Criminal Justice System (Chapter 16), I discuss the limited use that forensic pathologists should make of non-pathology information or circumstantial evidence. For example, forensic pathologists should not base an opinion as to cause

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[2] Ontario, *The Commission on Proceedings Involving Guy Paul Morin: Report*, vol. 2 (Toronto: Ontario Ministry of the Attorney General, 1998), 1118 (Commissioner Fred Kaufman).

of death on a confession when the pathology findings do not otherwise support that opinion. The cause of death in such a case should be classified as undetermined. However, coroners determine cause and manner of death in fulfillment of their own statutory responsibilities and, in doing so, may base their decisions on the totality of the evidence collected in the death investigation. They may rely more heavily on a confession or other circumstantial evidence that they regard to be compelling.

Thus, a scenario can arise in which the forensic pathologist properly concludes, based on the existing pathology evidence, that the cause of death is undetermined, but the coroner concludes, based in whole or in large part on a confession, that the deceased was the victim of a homicide. This disparity, if misunderstood, can lead to confusion on the part of the investigators and even tension when the matter is the subject of a case conference.

In my view, there are two important considerations that must guide the police and, later, the Crown in these cases. First, all participants in the justice system must understand that the different conclusions reached by the coroner and the forensic pathologist in the scenario described are not incompatible. On the contrary, they are explained by the different roles played by each. Case conferencing is designed to facilitate an open-minded multidisciplinary discussion of the issues. But pressure should not be exerted on the forensic pathologist at a case conference, or elsewhere, to change his or her opinion to conform to the coroner's determination, particularly when their different roles are properly understood. Second, it must be understood that the coroner's determination is not an expert pathology opinion, and it should not be treated as such. This is important when police determine whether the evidence supports the laying of charges; and when the Crown decides whether there is a reasonable prospect of conviction and, ultimately, what expert evidence is available to the prosecution.

Recommendation 102

The Office of the Chief Coroner for Ontario should continue to facilitate early and ongoing case conferencing, particularly for criminally suspicious pediatric death investigations. Such case conferencing promotes the exchange of relevant information among the participants, an objective and informed investigation, and forensic pathology opinions that are accurate and address the real issues in the case.

Recommendation 103

Case conferences should be recorded in notes that ultimately form part of disclosure in criminal cases.

Recommendation 104

Case conferences are excellent opportunities for members of the death investigation team to communicate among themselves. However, they do not provide the only opportunity for communication. The members of the death investigation team should engage in regular and ongoing communication, particularly when the death investigation uncovers new evidence. That evidence should be presented to the forensic pathologists to allow them to reconsider their opinion in light of the new information. Any such communications should be documented by the parties involved in those communications.

Recommendation 105

Participants at case conferences should understand the respective roles of coroners and forensic pathologists, and how those roles affect the scope and nature of the opinions that they are able to render. A proper understanding of those roles may assist in preventing pressure from being exerted on forensic pathologists to change their opinions in order to conform to a coroner's determination of cause or manner of death. It may also assist in preventing police and Crown counsel from placing unwarranted reliance on non-expert opinions rendered by coroners for purposes other than the criminal justice system.

The Coroner's Expertise

The evidence at this Inquiry provided examples of opinions expressed by coroners that fell outside their expertise. In Nicholas' case, for example, Dr. James Cairns, the Deputy Chief Coroner, swore an affidavit on behalf of the CAS in its proceedings against Nicholas' mother. In the affidavit, Dr. Cairns expressed the opinion that Dr. Smith's characterization of Nicholas' cerebral edema as severe (rather than mild, as described by the local pathologist who performed the original autopsy) was correct. He also confirmed Dr. Smith's finding that Nicholas did not die of sudden infant death syndrome, but of severe cerebral edema caused by the intentional use of force.

As he acknowledged at the Inquiry, Dr. Cairns was unqualified to provide expert opinion evidence on those issues. His stature as Deputy Chief Coroner gave his opinion evidence an added credibility it did not deserve. Dr. Cairns now recognizes that the affidavit was inappropriate and indeed misleading (albeit unintentionally) since it appeared to be based on his own independent expertise when it was, in fact, based entirely on Dr. Smith's views.

In Paolo's case, Dr. Cairns drafted a letter in which he stated he had no concerns regarding Dr. Smith's opinion. The issues in Paolo's case were outside of his expertise, and his support of Dr. Smith ultimately proved to be unwarranted and incorrect.

The Inquiry testimony of former Chief Coroner Dr. James Young concerning the timing of Jenna's fatal injuries reinforced the fact that even highly experienced coroners who are not pathologists have limited qualifications for expressing opinions on forensic pathology issues. As I have described earlier, he misconceived the flaw in Dr. Smith's opinion as to the timing of Jenna's fatal injuries. Dr. Young did not regard it as problematic for an expert to provide too broad a window within which the fatal injuries could be inflicted; he was concerned only if the window was too narrow. He failed to appreciate – in contrast to every forensic pathologist who testified – that providing too broad a window was no less flawed if the pathology could clearly narrow the time frame within which the injuries were inflicted to exclude a part of that window.

The point here is not that only pathologists can give opinions that are relevant to issues surrounding death. Clinicians may have a significant role to play – as Dr. Pollanen and others acknowledged – in advancing the death investigation on issues that are truly within their expertise. Indeed, in Jenna's case and Tyrell's case, the expert opinions of other medical practitioners were instrumental (as they should have been) in the prosecutorial decisions not to proceed to trial. But that being said, as a number of senior coroners themselves acknowledged at this Inquiry, coroners who are not pathologists do not generally possess sufficient expertise to provide forensic pathology opinion evidence to the criminal justice system, and they should avoid doing so. It is for this reason that they also acknowledged that coroners are unable to provide substantive oversight of the work of forensic pathologists, although their experience will often permit them to raise important questions for the forensic pathologists' consideration.

Recommendation 106

Coroners should avoid offering opinions in court proceedings that do not fall within their expertise. The danger is not only that the opinions may be wrong but also that they may be accorded undue weight because they emanate from the coroner's office.

Police

The police play a significant role in the investigation of a criminally suspicious pediatric death. They will often respond to the initial 911 call (with other emergency service providers) or attend the hospital if the child has been transported there. They will assume primary responsibility for the preservation and recording of the scene, the collection of much of the evidence, interviews with potential witnesses and suspects, and the determination of whether reasonable grounds exist to lay criminal charges.

As I emphasize throughout this Report, pediatric death investigations tend to be complex. Cause and manner of death, and the timing of fatal injuries or of the death itself, may not be readily apparent. A natural death may mimic abuse, and vice versa. Simply put, both pediatric forensic pathology and the overall death investigation are severely tested by cases of this kind.

All of this reinforces the desirability that, when these cases present themselves, police investigators have specialized training and expertise. Such expertise, however, will often not be available to the investigating police service. Indeed, for a number of the cases examined at the Inquiry, the police officers who performed the initial investigation and/or attended the autopsy had no specialized training in pediatric death investigations. That is no reflection on the individual officers, but simply the reality. Moreover, some police services may find it difficult to justify the allocation of resources to confer specialized training in pediatric forensic investigations (even if those resources were otherwise available), given the thankfully rare instances of criminally suspicious pediatric deaths in their jurisdictions.

Terri Regimbal, who was the prosecuting Crown counsel in Amber's case, testified that Northern Ontario has many small municipal police forces whose officers do not have the levels of experience or training that members of the Ontario Provincial Police possess. She attributed the differences in training to a lack of resources, including training budgets for smaller police services.

In Joshua's case, Staff Sergeant Greg MacLellan was the investigating officer. He was then the head of the criminal investigations branch for the Trenton Police Force, but he had never previously led a homicide investigation, investigated a suspicious pediatric death, or attended an autopsy. He testified that, had he been experienced in these investigations, he would have resisted Dr. Smith's suggestion that he leave the deceased's body unattended by an officer. He believed then (and believes now) that he should have remained with the deceased's body to preserve continuity. He described his encounters with Dr. Smith over having taken notes at the autopsy and over his insistence that Dr. Smith properly investigate and report on alternative explanations for Joshua's death raised by the evidence. While Staff

Sergeant MacLellan is clearly an excellent officer who was able to overcome any lack of specialized training, it was obvious that he would have preferred to possess sufficient expertise to evaluate the merits of what Dr. Smith told him about report-writing and leaving the deceased's body unattended.

Detective Sergeants Chris Buck and Gary Giroux, both members of the Toronto Police Service (TPS) homicide squad and the Paediatric Death Review and Deaths under Five committees, participated in our policy roundtables. Detective Sergeant Buck explained that TPS policy sets out that the homicide squad is notified whenever a child under the age of five dies in Toronto. The squad's on-call team advises attending officers on investigative procedures to follow at the scene. The on-call team will also contact Detective Sergeant Buck or Giroux for their input because of their expertise (even within the homicide squad) in pediatric deaths. Members of the homicide squad do not attend every death scene because the vast majority of these children's deaths are not homicides.

The expertise that Detective Sergeants Buck and Giroux bring to pediatric cases in Toronto is not available in most Ontario jurisdictions, particularly in smaller communities. Officers from various police services (Peterborough Lakefield Community Police Service, Greater Sudbury Police Service, and Trenton Police Service) all emphasized the desirability that police expertise be made available where needed.

Detective Sergeant Giroux proposed that a team of specially trained investigators be on call at all times to provide advice to any police service that requires assistance with pediatric death investigations. John Ayre, the Crown Attorney for Norfolk County, also supported this approach, as did the police officers referred to earlier.

It is recognized that this expertise is likely to be drawn from the TPS, the OPP, and perhaps a few other large police services. For example, the OPP already has procedures and training in place for death investigations involving children under the age of five years. Investigators must acquire certain knowledge and skills through ongoing training to conduct these investigations.

I endorse the development of specialized training and expertise for police in pediatric death cases. Where it cannot be provided to a police service's investigators, the investigators should have quick and ready access to officers from other police services who have this expertise.

Recommendation 107

The Ministry of Community Safety and Correctional Services, police colleges, and the Ontario Forensic Pathology Service should work together to provide special-

ized training on pediatric forensic death investigations for select officers, and more basic training for other officers on forensic pathology and the issues identified at this Inquiry.

Recommendation 108

Criminally suspicious pediatric death investigations should be conducted, where possible, by officers having specialized training and expertise in such cases.

Recommendation 109

a) The Ministry of Community Safety and Correctional Services should create and maintain a roster of officers with specialized training and expertise in pediatric death investigations.

b) Those officers should be available, when needed, to provide advice to any police service in Ontario respecting the investigation of these cases.

c) This roster, together with 24-hour contact information for the on-call officer(s), should be disseminated to all police services in Ontario.

In Chapter 15, Best Practices, I recommend that forensic pathologists remain vigilant against confirmation bias. In particular, I discuss the danger of confirmation bias as a result of the pre-autopsy communications between the police and the forensic pathologist. Police officers must be equally vigilant against confirmation bias in their own investigative work and in how they communicate with forensic pathologists. This means that even in casual, unguarded conversations, they must objectively present the evidence, with an understanding of how their comments may have an impact on the forensic pathologist. As I note in Chapter 15, the best safeguards against confirmation bias are increased professionalism, an enhanced awareness of the risks of confirmation bias, the promotion of an evidence-based culture, and transparency of the communications between the forensic pathologist and the police. Those principles apply not only to the forensic pathologist but also to the police.

Recommendation 110

The police should be trained to be vigilant against confirmation bias in their investigative work generally, and for pediatric forensic cases in particular. This training is best accomplished through increased professionalism, an enhanced awareness

of the risks of confirmation bias, the promotion of an evidence-based culture, and complete transparency regarding what is communicated between the police and the forensic pathologist.

Crown

The Ministry of the Attorney General (Criminal Law Division) has recently developed a number of initiatives respecting the prosecution of child homicide cases.[3] These initiatives followed the revelation of some of the concerns that brought about this Inquiry. The initiatives were introduced during the Inquiry, and I was invited to comment on them. The key components are summarized below:

- The Criminal Law Division (CLD) will create an eight-person child homicide resource team (Child Homicide Team), chaired by the CLD lead for child homicide cases in the province. The first division lead will be John Ayre. The rest of the team will be made up of senior Crown counsel: six from the regions, one from the Crown Law Office – Criminal, and one from the policy branch. The Child Homicide Team will have an advisory role, assisting prosecuting Crowns at all stages of prosecutions in child homicide cases. It will be mandatory for the prosecuting Crown to consult with the Child Homicide Team at the earliest possible stage and at every stage of the prosecution thereafter. When a prosecuting Crown assigned to a child homicide case contacts the Child Homicide Team, a specific member of the team will be assigned to assist the prosecuting Crown by providing expertise and advice and, possibly, even sitting as second chair at the trial.
- Subject to compliance with freedom of information and individual privacy legislation, the CLD will develop and implement an internal searchable database from which to identify and record all child homicide cases. It will be a performance measure for Crown supervisors and their managers to report on compliance with this initiative. The database will be a "web-based application, which will have all the current case law, articles, [and] references available for the Crowns who are doing those cases." As well, the internal CLD-Net database will contain information that would allow prosecuting Crowns across the

[3] The Ministry of the Attorney General defines "child homicide" for the purpose of these initiatives as "any suspicious death involving a child under the age of 12, where the cause of death or the time of death is not immediately apparent, and where the Crown is consulted by the police or where pediatric forensic pathology evidence services are engaged, whether charges are laid or not."

province to communicate with one another about their contact with particular experts in child homicide cases.

- The CLD will develop and implement a mandatory reporting process for prosecuting Crowns where there is an adverse judicial comment regarding a pediatric forensic pathology expert witness, or where a prosecuting Crown has procedural or evidentiary issues with a pediatric forensic pathology expert witness. In such cases, the prosecuting Crowns will be required to report both to their supervisor and to the division lead for the Child Homicide Team.
- The CLD will direct local prosecuting Crowns to encourage local police agencies to engage in pre-charge screening with the Crown and relevant experts in all child homicide cases, except in cases where public safety concerns are engaged.
- The CLD will commit to educating prosecuting Crowns at the earliest opportunity on the recommendations of this Inquiry and the division's response to them. The CLD will commit to enhanced education on pediatric forensic pathology issues for the Child Homicide Team. The members of the team can then act as a resource for Crown counsel throughout the province who prosecute pediatric homicide cases.

Paul Lindsay, assistant deputy attorney general for Ontario, elaborated on the educational component of these initiatives. He contemplated that the education for prosecuting Crowns generally can be done at the Crown spring and fall conferences; at Crown "summer school," where a course on prosecuting homicides is offered; and through the internal CLD-Net database – a searchable location for papers, discussions, and updates. As well, members of the Child Homicide Team will seek out educational opportunities relating to pediatric forensic pathology and impart what they learn to the rest of the CLD. It may be helpful, as was done in the aftermath of the Morin Commission in relation to the gathering, preparation, and presentation of physical scientific evidence, for the Ministry of the Attorney General, in conjunction with the OCCO, to draft a memorandum on forensic pathology, and its limits, to be distributed to Crown counsel throughout the province.[4]

I endorse these important initiatives. The Child Homicide Team would not only provide valued experience and expertise to individual prosecutors, but,

[4] The memorandum was updated most recently on March 31, 2006, and provides guidance to Crown counsel on the following topics: Relationship between Crown Counsel and Forensic Science Witnesses – the Necessity of Impartiality; Retention of Evidence for Replicate Testing; Retaining Other Expert Witnesses; Duty to Obtain Written Record of Information Provided by Scientists; Disclosure; and Presenting Forensic Scientific Evidence at Trial.

armed with the lessons of this Inquiry, could collectively safeguard against the misunderstanding or misinterpretation of pathology evidence – and even overzealousness or tunnel vision, should that occur.

The Crown Attorneys' Association, while generally supportive of the initiative, queried whether the Child Homicide Team should, instead, actually prosecute the pediatric homicide cases, at least on an interim basis. Given the geographic expanse of the province, and the desirability of expanding the pool of expert prosecutors, I favour the current initiative. It recognizes, as I do, that there will be especially difficult cases that may compel a greater involvement on the part of the Child Homicide Team, including assuming the "second chair" or even leading the prosecution.

Marlys Edwardh, a senior defence counsel, also welcomed these initiatives, although she stressed the need for defence counsel to be able to approach the Child Homicide Team directly, should a disagreement arise with the prosecuting Crown. Without some institutional recognition of that right, defence counsel may be hesitant to do so (for fear of alienating the prosecutor), and the team may be hesitant to appear to be inappropriately "second-guessing" the prosecutor. Mr. Lindsay accepted this enhancement to the ministry's initiative, as do I. Defence counsel's right to access the team should be formalized in the Crown policy manual, or elsewhere, and made known to prosecuting Crowns and the defence bar. To state what is perhaps obvious, defence counsel's discussions should commence with the prosecuting Crown. Resort to the Child Homicide Team should be reserved for fundamental issues of concern.

Recommendation 111

The Ministry of the Attorney General (Criminal Law Division) should implement its initiatives on the prosecution of child homicide cases and the use of a Child Homicide Team as soon as possible.

Recommendation 112

Members of the Child Homicide Team should be experienced in homicide prosecutions and knowledgeable about the scientific method generally and pediatric forensic pathology in particular. Their education should be ongoing.

Recommendation 113

Defence counsel should be entitled to approach the Child Homicide Team when significant disagreements between the defence counsel and the prosecutor arise in

individual child homicide cases. That right should be formalized in ministry policies and made known to Crown counsel and the defence bar.

Involvement by the Child Homicide Team, either as part of its mandated consultation at each stage of the prosecution or at the instance of the defence bar, may be particularly important where the prosecution has offered the defence a plea resolution.

A number of the cases examined at this Inquiry involved guilty pleas to lesser charges for likely reduced sentences. One case involved the functional equivalent of a *nolo contendere* (or "no contest") plea in which, although guilt was not admitted, the defence did not contest the evidence tendered, on consent, to support a finding of guilt. I have been advised that, in a number of these cases, the defendants assert their innocence and explain that they felt compelled to plead guilty to avoid the severe consequences that would follow a conviction on the original charges.

My mandate expressly prevents me from making findings in this regard. However, the concern remains that individuals may plead guilty to crimes they did not commit when, for example, a murder charge with mandatory life imprisonment and lengthy parole ineligibility is reduced to a charge of criminal negligence together with a joint submission of 90 days' imprisonment. The concern is particularly relevant to the scope of this Inquiry where the case against the defendant is dependent on a flawed pathology opinion.

The Association in Defence of the Wrongly Convicted and the Mullins-Johnson Group urge me to recommend that plea offers by prosecuting Crowns in child homicide cases should require approval of the Child Homicide Team. In my view, the ministry initiative, as expanded on in Recommendation 114, addresses this concern. First, I interpret the ministry's initiative, which mandates consultation by the prosecuting Crown with the Child Homicide Team at every stage of the prosecution, to include, by necessary implication, plea resolution offers by the Crown. This is a fundamental stage in the prosecution and in the exercise of prosecutorial discretion. In any event, the right of the defence to approach the Child Homicide Team would include those situations in which defence counsel are troubled by the offered plea, and the defendant's possible innocence, and wish the matter to be reviewed by a member of the team. Mr. Lindsay and Paul McDermott, a senior Crown counsel, agreed that the Child Homicide Team should be accessible to the defence seeking to review a plea resolution offered by the prosecuting Crown.

Counsel for the Province of Ontario accurately noted that the Crown policy manual already prohibits prosecutors from accepting guilty pleas if they believe the

accused is innocent, or when they know that a material element of the offence cannot be proven, unless that fact is fully disclosed to the defence prior to the guilty plea. To be clear, my recommendations should not be read to imply that any prosecuting Crown acted unethically in offering or accepting a guilty plea in the cases examined at the Inquiry. I have made no such finding. Even with the utmost good faith of the prosecuting Crown, a serious injustice may result. My recommendations here and elsewhere in this Report are designed to reduce that possibility.

Similarly, much has been said about the ethical duties of defence counsel. It is clear that defence counsel are ethically prohibited from participating in a client's guilty plea without that client's acknowledgement that he or she committed the offence to be pleaded to, in all its constituent elements. This is particularly so when a guilty plea is coupled with inquiries from the court over whether the accused comprehends the plea and admits the offence pleaded to. Again, it is unnecessary here to discuss more fully those ethical duties and whether they were breached in individual cases. I make no such findings. But the pressures on the accused and their counsel in these cases are enormous, making it even more important that, in doubtful cases, the defence have access to the Child Homicide Team. And for that reason too, as I develop below, it is all the more important that defence counsel have the necessary skills and resources to defend these extraordinarily difficult cases.

Recommendation 114

The Child Homicide Team should, as an important component of its role, review cases in which plea offers have been made to the defence. This role will arise either as part of the mandated consultation by the prosecuting Crown with the team at every stage of the prosecution, or at the initiative of the defence.

Disclosure Issues Arising from the Ministry Initiatives

The ministry initiatives require prosecuting Crowns to report adverse judicial comments regarding pediatric forensic pathology expert witnesses – or procedural or evidentiary issues that the prosecuting Crowns have with these witnesses – to their supervisor and to the division lead of the Child Homicide Team. Had such a mechanism been in place during Dr. Smith's years, perhaps such reports would have alerted Crown officials at an early stage to judicial concerns about his work.

In Chapter 13, Enhancing Oversight and Accountability, I recommend that the Chief Forensic Pathologist review any adverse judicial comments brought to his

or her attention by the Crown. To enable the Chief Forensic Pathologist to do so, the division lead of the Child Homicide Team must report to him or her those adverse judicial comments as well as any other significant issues brought to his or her attention.

Apart from the creation of a reporting obligation for the division lead of the Child Homicide Team, there are likely to be criminal disclosure implications associated with the ministry's collection of this kind of information. The ministry initiatives do not currently address these disclosure implications, although several senior Crown counsel who participated in the Inquiry's roundtables thought it likely that disclosure obligations would indeed flow from the collection of this information.

In the United Kingdom, chapter 36 of the Crown Prosecution Service, *Disclosure Manual*, "Expert Witnesses – Prosecution disclosure obligations," provides detailed guidance for both experts and Crown counsel in that jurisdiction. The chapter sets out the disclosure steps that must be taken concerning information that may adversely affect the expert's credibility, competence as a witness, or both. Whenever witnesses are asked to provide expert evidence, they must submit to the investigating or disclosure officer what is known as the expert's self-certificate, revealing whether there is information capable of adversely affecting their competence or credibility as experts. Examples of such information are the discovery that

- the expert has not used established procedure in a scientific process;
- scientific theories that have been applied have been discredited in the mainstream field of expertise; or
- the expert has been partial in the information and material that has been taken into account in arriving at an opinion.

If the expert fails to do so, the manual lists several possible consequences:

- the prosecution may be halted or delayed;
- there may be an adverse judicial comment;
- any conviction may be found unsafe on appeal;
- professional embarrassment;
- disciplinary proceedings; or
- civil action by an accused.

However, revealing such information to the disclosure officer and the prosecution does not automatically mean that the information is disclosed to the defence. The

prosecutor must determine whether it meets the test for disclosure. Any doubt is resolved in favour of disclosure. As well, the decision to disclose or withhold information must be made by designated individuals. Bad character evidence, unresolved complaints, and disciplinary proceedings in relation to the expert will be examined by the prosecutor to determine if they are disclosable.

Any adverse judicial findings by a civil or criminal court, express or by inevitable inference, that an expert witness has knowingly misled the court, whether under oath or otherwise, must be recorded by the prosecutor and a transcript requested, where available. The prosecutor must consider whether this information should be disclosed in current or even in past cases involving the expert.

I do not intend to craft detailed guidelines or protocols in relation to adverse judicial comments or other identified issues with expert witnesses that set out when, and how, they should be disclosed. To underscore the need for the ministry, in consultation with others, to address this issue, I have highlighted the United Kingdom provisions. I am pleased that, in its written submissions, the ministry undertook to work with the OCCO to establish protocols to ensure that proper follow-up occurs when problems with the accuracy or reliability of a forensic pathologist's opinions are identified. The Province of Ontario noted that the protocols between the Crown and the Centre of Forensic Sciences, following the Morin Commission, could be instructive here. Those protocols set out a process for Crown counsel to communicate with the CFS regarding concerns about the credibility or reliability of its experts. I endorse the ministry's commitment to developing the appropriate protocols modelled on those implemented in the aftermath of that Commission.

Recommendation 115

a) In accordance with Ministry of the Attorney General initiatives, a prosecuting Crown should report to his or her supervisor and to the division lead for child homicide cases adverse judicial comments or his or her own concerns about the participation of a pediatric forensic pathology expert witness in the criminal justice system.

b) To enhance the oversight and accountability of such witnesses, the division lead for child homicide cases should report such comments or concerns to the Chief Forensic Pathologist.

Recommendation 116

In furtherance of the ministry initiatives, the ministry should develop, in consultation with others, guidelines or protocols modelled on the protocols for the Crown and the Centre of Forensic Sciences that followed the Commission on Proceedings Involving Guy Paul Morin. These would address:

a) what adverse judicial comments or other identified concerns about pediatric forensic pathology expert witnesses should be reported;

b) how these comments or concerns should be reported;

c) what transcripts, if any, should be obtained, and by whom; and

d) under what circumstances this information is disclosable, and in relation to what categories of cases.

The Crown's Obligations in Preparing for and Tendering Forensic Pathology Evidence

As I discuss earlier, one of the testimonial responsibilities of the forensic pathologist (which was sometimes unfulfilled by Dr. Smith) is always to be prepared for court. Forensic pathologists should meet with examining counsel in advance of the proceeding to review the case and prepare for testimony. This obligation rests, in the main, with the examining counsel. To enable the expert to give due consideration to issues raised in this meeting for the first time, it should, ideally, be held well in advance of the court proceedings. Several experts who appeared at the Inquiry noted the difficulties, not infrequently encountered, when hypothetical questions, scenarios, or potential weapons are presented to the forensic pathologist for the first time on the eve or morning of trial. Preparation of the witness should also focus on ensuring that the evidence is presented in a way that is clear, understandable, and grounded in the witness's expertise. Of course, whenever prosecutors meet with their experts, police officers should generally be present to take notes and facilitate disclosure of new or modified opinions or information provided by the forensic pathologist.

Part of the prosecutors' obligation to meet with expert witnesses, including forensic pathologists, in advance of the court proceeding is to ensure that the prosecutors understand the limitations on their expertise and opinions. Those limitations should be respected during the Crown's examination-in-chief. The transcripts of Dr. Smith's examinations in the cases reviewed at the Inquiry reveal instances in which the Crown's questioning invited responses that

exceeded the scope of even Dr. Smith's generous interpretation of his own expertise.

It was not only Crown counsel who fell into that trap. We saw examples at the Inquiry of both Crown and defence counsel not respecting the limitations of the expert witness. Dr. Smith and other experts were often pushed outside of their expertise and invited to speculate by both Crown and defence counsel. In fairness, on a number of occasions Dr. Smith needed no invitation to speculate. Moreover, we saw examples of both parties not being sufficiently careful in the language they used to question the expert, and even suggesting that the witness adopt troublesome language (for example, "consistent with"). And we were told by a number of forensic pathologists who appeared at the Inquiry of implicit pressure being placed on the expert to respond immediately to new facts, hypothetical scenarios, or both.

Although experienced counsel for both the Crown and the defence may, with the court's approval or acquiescence, permit some latitude to expert witnesses at a preliminary hearing – indeed there may be tactical advantages to doing so – everyone should be vigilant, particularly at trial, to ensure that the experts' opinions are properly confined within their expertise. Counsel must exercise care in not pushing experts to a place that cannot be supported by the science. It is sometimes all too easy to press such experts to abandon limitations or qualifications on their opinions that, in fact, ensure that those opinions are evidence based and reasonable. Counsel should also not introduce, through their questioning, terminology that breeds misunderstanding or misinterpretation; for example, inviting the expert (as was done in one of Dr. Smith's cases reviewed at the Inquiry) to opine that the death was "consistent with" various enumerated criminal events. The experts must also be given time to consider any new facts or hypothetical questions presented to them.

Recommendation 117

Crown counsel should properly prepare forensic pathologists for giving evidence. This preparation involves, among other things, meeting with the pathologist in advance of the court proceedings. Such meetings will assist the Crown in understanding the limitations on the expert's expertise and opinions. The preparation of the expert should also focus on presenting the evidence in a way that is clear, unambiguous, understandable, and grounded in the witness's expertise.

Recommendation 118

The following principles should inform the approach of both parties to the evidence of forensic pathologists:

a) **Both parties should ensure that they understand the scope and limitations of the forensic pathologists' expertise and opinions. They should exercise care not to ask questions that invite forensic pathologists to speculate, or to stray outside of their expertise or the outer boundaries of the science.**

b) **Both parties should be vigilant not to introduce, through their questions, terminology that breeds misunderstanding or misinterpretation.**

c) **Subject to the court's discretion, both Crown and defence counsel should also allow forensic pathology experts reasonable time to consider their responses to new information that may be relevant to their opinions or any limitation on them.**

Defence

I observed earlier that criminal pediatric death cases should be defended by counsel who have the necessary skills and resources for these extraordinarily difficult and serious cases. However, the evidence at the Inquiry suggests that a number of highly skilled counsel are reluctant to take on these cases if they are funded by legal aid.

As of August 2008, the top legal aid tariff, reserved for counsel with 10 or more years of experience in criminal law, is $96.95 per hour. For counsel with five to 10 years of experience, the hourly rate is $87.26. Counsel with less than five years' experience are paid $77.56 per hour. When junior counsel are authorized by Legal Aid Ontario (LAO), they are paid an hourly rate of $58.17.

Professor Michael Code, now a member at the Faculty of Law, University of Toronto, has served as a senior defence counsel and as assistant deputy attorney general. He told the Inquiry that there is a trend away from senior lawyers accepting long and complicated legally funded cases because the funding is inadequate. As a result, junior lawyers who are not ready to defend complex cases have to take those cases on. His comments were echoed by John Struthers, another senior member of the defence bar.

Professor Code was sharply critical of the relatively low increases in the LAO tariff for defence counsel. He noted that three out of the four major players in the criminal justice system, namely the police, the Crown, and the judiciary, have had

dramatic salary increases in the last 20 or 30 years. Meanwhile, the LAO rates for defence counsel have increased only 15 per cent since 1976.

Mr. Struthers also indicated that there are many serious criminal cases in which LAO does not authorize co-counsel or junior counsel. By way of contrast, most murder cases, he said, are prosecuted by two Crown counsel who are also assisted by police investigators.

Both Professor Code and Mr. Struthers expressed the view that it is necessary to address the underfunding of defence counsel on legal aid certificates in order to attract the best lawyers to these complex cases.

Nye Thomas, director of strategic research at LAO, and Rob Buchanan, LAO vice-president for the Greater Toronto Area, participated in a policy roundtable that considered this issue. Mr. Buchanan indicated that senior defence counsel continue to take serious criminal cases on legal aid. However, both men agreed that the current tariff is insufficient and below market rates. Mr. Thomas made the point that although the tariff should be increased, it is currently governed by the province through regulation; without more money overall, it is not possible to fund a higher tariff over the long term. LAO has proposed deregulation of the tariff so that it can establish the rules governing compensation. This would give LAO greater flexibility for making innovations, including the possible creation of a fourth tier of payment that would provide a higher tariff for the most serious matters defended by the most qualified lawyers.

I was also informed that LAO has taken steps toward ensuring that only experienced and competent counsel take on serious criminal matters. In October 2007, it established the "Extremely Serious Criminal Cases Panel." Eligibility for this panel is limited to lawyers who have five years of continuous criminal practice or the equivalent; have 100 days of contested trial or preliminary hearing work; have acted as counsel, co-counsel, or junior counsel on at least one jury trial; have conducted a minimum of five *voir dires* relating to the admissibility of evidence; and a minimum of five contested *Charter* applications. These criteria allow the lawyers who qualify to defend serious criminal charges, defined as those that have a mandatory minimum sentence of at least four years' imprisonment. I note that these would include pediatric death cases where the charge is murder, but not manslaughter or criminal negligence causing death where a firearm was not used.

Professor Code was of the view that the LAO Extremely Serious Criminal Cases Panel is an inadequate measure for ensuring that only competent counsel defend child homicide cases. The current eligibility criteria do not ensure competence in these cases. Moreover, he emphasized that in pediatric forensic pathology cases, counsel must be "strongly qualified to cope" with pediatric forensic pathol-

ogy evidence in order to competently defend such cases. He also stressed the ethical rule that defence counsel cannot take on cases that they are not competent to conduct and suggested that LAO and the Law Society of Upper Canada insist that defence lawyers not take on these cases unless they are trained in pediatric forensic pathology. In an independent research study for the Inquiry, Professor Christopher Sherrin also documented the difficulties that defence counsel have in obtaining training in pediatric forensic pathology.

In my view, the need for highly skilled counsel in pediatric death cases, particularly those cases that involve contested forensic pathology, cannot be overstated. In a similar context, Commissioner Fred Kaufman made the following comment in the *Report of the Commission on Proceedings Involving Guy Paul Morin*:

> The success of the adversarial system in preventing miscarriages of justice largely rests upon the existence of well-trained, competent prosecutors and defence counsel. This necessarily involves defence counsel who are adequately compensated for their work and who have adequate resources to ensure that appropriate investigative work is done and appropriate witnesses (particularly expert witnesses) are accessible.[5]

I agree. I also note that Professor Michael Trebilcock's recent *Report of the Legal Aid Review 2008* highlights the need for the legal aid tariff to be increased, particularly for criminal and family lawyers, to help ensure that qualified counsel take on legal aid cases.[6] He recommends that the tariff be significantly raised in the immediate future.

Although I later make recommendations to promote the education of both Crown and defence counsel on pediatric forensic pathology issues, I do not think that such education need be a precondition for defence counsel to be eligible to take on these cases on legal aid. There are senior counsel whose skills in cross-examination and in dealing with expert witnesses generally equip them well to acquire the needed knowledge in an individual case to defend it successfully. Regardless, steps must be taken to increase the funding available for these cases to assist in ensuring that, so far as possible, they are defended by the best and brightest members of the bar.

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[5] Ontario, *The Commission on Proceedings Involving Guy Paul Morin: Report*, vol. 2 (Toronto: Ontario Ministry of the Attorney General, 1998), 1233–35 (Commissioner Fred Kaufman).

[6] Michael Trebilcock, *Report of the Legal Aid Review 2008*, http://www.attorneygeneral.jus.gov.on.ca/english/about/pubs/trebilcock/legal_aid_report_2008_EN.pdf (accessed August 14, 2008).

Mr. Buchanan advised me that LAO recognizes that its authorization of junior counsel for these kinds of cases promotes their mentoring by senior counsel and ultimately the development of a larger pool of lawyers who can defend serious cases. He said that LAO has demonstrated greater willingness to authorize junior counsel in serious matters than was previously the case.

Recommendation 119

In accordance with a lawyer's ethical duty of competence, no lawyer should defend a criminal pediatric homicide or similar case that is beyond his or her competence or skills.

Recommendation 120

The Province of Ontario, together with Legal Aid Ontario, should ensure that serious criminal cases involving pediatric forensic pathology are defended by lawyers who possess the necessary skill and experience to do so. This means, among other things, that the compensation for defending these cases should be significantly increased, and that the eligibility criteria for defending these cases should be appropriately defined.

The following represent ways in which these objectives may be achieved:

a) **The Extremely Serious Criminal Cases Panel should be extended to cover all criminal pediatric homicide cases, including charges of manslaughter and criminal negligence causing death, as well as similar cases which involve forensic pathology or other complex medical evidence that must be critically evaluated and potentially challenged.**

b) **At least for pediatric homicides or similar cases, the eligibility criteria for Extremely Serious Criminal Cases should be tightened to ensure that these cases are defended by highly skilled lawyers. Although the experience and skills of some lawyers will be sufficient to meet heightened eligibility criteria without specific education and training in pediatric forensic pathology, such education and training should also inform the eligibility criteria.**

c) **Legal Aid Ontario should consider the criminal specialty designation by the Law Society of Upper Canada as a factor in determining whether counsel fulfill heightened eligibility criteria.**

d) **Legal Aid Ontario should regularly authorize junior or associate counsel for these cases, also to be paid at correspondingly increased rates. These counsel**

should not have to meet all of the eligibility criteria applicable to the lead or senior counsel.

Legal aid funding to enable the defence to retain a forensic pathologist or other medical expert must also be addressed. I was advised by Mr. Buchanan that, when the defence requests LAO approval to fund a forensic pathologist, funding is automatically authorized for four hours of the forensic pathologist's time to discuss the case. After the initial consultation, defence counsel can then make a detailed request for additional funding. In most cases, the request for additional funding for the forensic pathologist is approved. Mr. Buchanan indicated that the number of hours to be authorized is sometimes debated, but the ultimate figure is typically agreed on.

On occasion, counsel request authorization for funding more than one defence forensic pathologist. In some cases, this request is granted.

If the appropriate expert cannot be found within the jurisdiction, defence counsel may ask LAO to provide funding for an expert outside of Ontario. Mr. Thomas told the Inquiry that, quite understandably, LAO would prefer to fund local forensic pathologists. However, he said, LAO will fund other experts where there is no qualified local expert available to the defence or where there is a good reason for seeking a forensic pathologist from outside Ontario or even Canada; for example, if local forensic pathologists are reluctant to testify for the defence where the forensic pathologist testifying at the instance of the Crown was retained through the OCCO.

Legal Aid Ontario sets the tariff for experts, including forensic pathologists. This tariff is not the subject of government regulation. Currently, LAO forensic pathologists are paid $100 per hour. In terms of court time, a forensic pathologist testifying for the Crown is paid $125 per hour ($650 per day, and $325 per half day).

There are multiple disincentives for forensic pathologists in Ontario to work for the defence. Some are reluctant to testify against a colleague. Indeed, the Inquiry was told that testifying for the defence can create tension with, or even generate overt hostility from, Crown counsel and the police. Some forensic pathologists will agree to be retained by the defence only on the basis that they will not be called as a witness. I hope that some of these issues will be addressed through the creation of a Registry with eligibility criteria that include a commitment to accept criminal defence work. I also believe that a better understanding by all participants within the criminal justice system of the role of the forensic pathologist as a non-partisan expert, whether tendered by the Crown or the defence, will assist in the long term.

All that being said, the low legal aid tariff for forensic pathologists retained by the defence operates as a further disincentive. It also sends the message that defence experts are less valuable than experts retained by the prosecution. This disparity should be remedied.

An important role for a forensic pathologist retained by the defence is to attend in court (particularly at trial) to observe the testimony of other experts, primarily the forensic pathologist retained by the Crown. This role serves several functions. First, it allows the defence to consult with its expert in "real time," enabling an effective cross-examination of the expert tendered by the prosecution. This opportunity may otherwise be lost. Second, as Dr. Christopher Milroy noted at the Inquiry, the presence of an opposing expert can have a dramatic effect in ensuring that an expert's evidence is given in a responsible manner. It would appear that the Crown not infrequently has its forensic pathologist attend court when a forensic pathologist retained by the defence is testifying.

Legal Aid Ontario has only rarely funded forensic pathologists to attend at court to observe the evidence of the pathologist retained by the Crown. Mr. Buchanan indicated, however, that LAO would be willing to reconsider funding for this purpose.

Recommendation 121

For criminal pediatric homicides and similar cases, Legal Aid Ontario normally should, if requested, fund the attendance of forensic pathologists in court when pathologists retained by the Crown or other significant experts relevant to the pathology issues present testimony in the case.

Recommendation 122

Legal Aid Ontario's hourly tariff rates for forensic pathologists and similar experts should be increased to ensure defence access to their expertise and provide relative equivalence to the fees paid by the Crown. As well, in determining the number of hours to be authorized, whether an out-of-province forensic pathologist should be authorized, or whether more than one forensic pathologist or expert should be authorized, Legal Aid Ontario's discretion should be informed by the lessons learned at this Inquiry – including the complexity of criminal pediatric homicide cases and the potential for miscarriages of justice where forensic pathology evidence cannot be skilfully evaluated and, if necessary, challenged.

Recommendation 123

The total funding available to Legal Aid Ontario should be sufficient to enable the recommendations in this chapter to be implemented.

Defence Counsel Meeting with Experts

A number of the forensic experts described their willingness, as witnesses to be called by the Crown, to meet with defence counsel in advance of the court proceedings to discuss their opinions and their anticipated evidence. Their experience, however, was that defence counsel generally do not approach them before their testimony. Professor Katherine Gruspier, a leading forensic anthropologist, said that defence counsel rarely make this request. When they do, she is more than pleased to answer directly the most significant question they should pose: "What are the limitations on your opinion?" Dr. David Ranson, deputy director of the Victorian Institute for Forensic Medicine, indicated that the more experienced defence counsel do contact him in advance about his opinion; the less experienced do not.

In my view, expert witnesses to be called by the Crown should make themselves available to meet with defence counsel in advance of the court proceedings to explain their opinions and any limitations on them. I believe that many forensic pathologists and other expert witnesses are prepared to do so. But the responsibility to initiate such meetings rests, in the main, with the defence bar. This initiative can be an important step in preparing for trial and in ensuring, for forensic pathology cases, that the scope and limits of forensic pathology generally, and the pathologist's opinion in particular, are well understood.

Defence counsel are sometimes reluctant to meet with these experts for fear of "tipping their hand" and inducing the experts to "firm up" their evidence to successfully resist cross-examination. I am hopeful that, with the increased professionalism of forensic pathologists, the new Ontario Forensic Pathology Service (OFPS), and the renewed emphasis on the forensic pathologists' duties to the court, as opposed to their duties to the prosecution, these concerns will be significantly minimized and defence counsel will be more willing to meet with these experts in advance of trial.

Recommendation 124

Expert witnesses to be called by the prosecution should make themselves available to meet with defence counsel in advance of the court proceedings to explain their

opinions and any limitations on them. As part of their trial preparation, defence counsel should seriously consider meeting with such experts. This is particularly appropriate in forensic pathology cases.

Disclosure of Expert Reports and Meetings between Experts

Subsection 657.3(3) of the *Criminal Code*, RSC 1985, c. C-46, provides that, "for the purpose of promoting the fair, orderly and efficient presentation of the testimony of witnesses," each party who intends to call expert testimony shall give notice of this intention to the other parties at least 30 days before the commencement of the trial or within any other period fixed by the court. This notice should include the name of the proposed witness, a description of the witness's area of expertise sufficient to permit the other parties to inform themselves about that area of expertise, and a statement of the qualifications of the witness as an expert.

In addition, the prosecutor shall, within a reasonable time before the trial, provide the other party or parties with a copy of the witness's report or, if no report has been prepared, a summary of the anticipated opinion and the grounds on which it is based. The defence shall provide such material no later than the close of the case for the prosecution. Without the consent of the accused, the prosecutor may not produce this defence material in evidence if the proposed defence witness does not testify.

One of the contentious issues at the Inquiry was whether additional provisions should be introduced to compel the defence to provide early disclosure of its anticipated expert testimony before the trial begins. Such provisions exist in the United Kingdom and in a number of other jurisdictions outside Canada. All the forensic pathologists who participated in the work of the Inquiry supported early disclosure as a means of promoting the best scientific dialogue between Crown and defence experts.

For several reasons, I do not propose to recommend mandatory early disclosure of anticipated defence expert testimony. It is arguable that such mandated early disclosure, before the defence has available to it the full "case to meet," may infringe the *Charter*. In *R. v. Rose*, Justices Cory, Iacobucci, and Bastarache stated:

> In our view, it is useful to distinguish here between two discrete aspects of the right to make full answer and defence. One aspect is the right of the accused to have before him or her the full "case to meet" before answering the Crown's case by adducing defence evidence. The right to know the case to meet is long settled, and it is satisfied once the Crown has called all of its evidence, because at that point all of the facts that are relied upon as probative of guilt are available to the

> accused in order that he or she may make a case in reply: see *R. v. Krause*, [1986] 2 S.C.R. 466, at p. 473, *per* McIntyre J.; John Sopinka, Sidney Lederman and Alan Bryant, *The Law of Evidence in Canada* (1992), at p. 880. This aspect of the right to make full answer and defence has links with the right to full disclosure and the right to engage in a full cross-examination of Crown witnesses, and is concerned with the right to respond, in a very direct and particularized form, to the Crown's evidence. Inherent in this aspect of the right to make full answer and defence is the requirement that the Crown act prior to the defence's response.
>
> A second and broader aspect of the right to make full answer and defence, which might be understood as encompassing the first aspect, is the right of an accused person to defend himself or herself against all of the state's efforts to achieve a conviction. The Crown is not entitled to engage in activities aimed at convicting an accused unless that accused is permitted to defend against those state acts. [Emphasis in original.][7]

The Ontario Crown Attorneys' Association agreed that early mandatory disclosure by the defence may raise *Charter* issues. But both the association and the Ministry of the Attorney General suggested that early defence disclosure of expert reports be encouraged.

I think the effective functioning of the adversarial system, which is essential for fair criminal trials, requires that the decision whether to disclose an expert's report earlier than when currently required by the *Criminal Code* should remain within the control of counsel. Many of the recommendations I make will, I hope, be sufficient to ensure that the court receives scientific evidence that has benefited from some exchange of ideas between conflicting experts. It is clear that the defence is often well served (as is the forensic testimony presented to the criminal justice system) by early, voluntary disclosure of its anticipated forensic evidence. Indeed, in several of the cases examined at this Inquiry, such disclosure contributed to or resulted in decisions by prosecutors to terminate the criminal proceedings. The cases involving Jenna, Joshua, and Sharon are illustrative.

Such early defence disclosure not only may have an impact on the prosecution's reasonable prospect of conviction (as it did in the above examples). It may also narrow or clarify the issues in dispute; promote the efficient use of judicial resources; and cause forensic pathologists retained by the Crown to re-evaluate their opinions or the justifiable level of confidence in those opinions, or to con-

[7] *R. v. Rose*, [1998] 3 SCR 262 at paras. 102–103. Justice Charles Gonthier concurred with these reasons. Justice Claire L'Heureux-Dubé was in substantial agreement with these concerns. (See para. 61.)

sider appropriate qualifications or limitations on those opinions and the existence of alternative explanations.

Concern was raised at the Inquiry that early defence disclosure might allow the Crown to recast or strengthen its case by inducing the forensic pathologists to be called by the Crown to "firm up" their evidence. This concern is similar to that expressed in connection with defence counsel meeting with Crown experts in advance of trial, and it prompts a similar response: namely, that in the future, the professionalism of forensic pathologists will significantly minimize this concern.

I recognize that there will be cases in which the defence will choose, for tactical reasons, not to provide early disclosure of its anticipated expert evidence. Sometimes, these tactical reasons are influenced by the personalities involved and whether the defence has confidence in the open-mindedness of the prosecutor or the forensic pathologist involved. But I am again hopeful that, with the growing professionalism of forensic pathologists and the new OFPS, the renewed emphasis on forensic pathologists' duties to the court (as opposed to the prosecution), and the enhanced expertise and education of prosecutors dealing with these difficult cases, early reciprocal disclosure will become the norm.

As well, the need for forensic pathologists to document additions or modifications to their opinions (discussed in Chapter 15 (Best Practices) and Chapter 16 (Effective Communication with the Criminal Justice System)), both as a best practice and as a means to enhance effective communications between forensic pathologists and the criminal justice system, will ensure that the defence is well situated to challenge an opinion based on when and how it was formed, and in response to what information.

Recommendation 125

The defence is often well served (as is the forensic testimony presented to the criminal justice system) by early, voluntary disclosure of its anticipated forensic evidence. The defence should be encouraged, in its own interest, to provide such early disclosure. It should not be compelled to do so.

Counsel Evaluations of Expert Witnesses

One proposal advanced at the Inquiry is that trial counsel assist the new OFPS in evaluating the performance of its pathologists by completing questionnaires after their cases have concluded. Defence and Crown counsel are obviously well placed to provide an assessment to the OFPS regarding the forensic pathologist's performance in connection with testimony. They can address, for example, the time-

liness of report preparation and whether forensic pathologists were easily accessible for pretrial meetings, as well as their objectivity and their communication skills in and out of court.

This proposed evaluation of forensic pathologists would be similar to the court-monitoring letters sent to counsel respecting CFS expert witnesses in the aftermath of the Morin Commission. Dr. Ray Prime, director of the CFS, reported that there is substantial response by counsel to the court-monitoring letters and that the information received through this process has proven beneficial to the work done by CFS scientists. Justice John McMahon, formerly the director of Crown operations for the Toronto region and director of the implementations committee of the recommendations of the *Report of the Commission on Proceedings Involving Guy Paul Morin*, confirmed that the court-monitoring program has proven very effective.

In my view, it would be of considerable assistance to the OFPS, and ultimately to the criminal justice system, if both Crown and defence counsel provide feedback to the OFPS on the quality of the forensic pathologist's work. To allow for meaningful assessments of the work of forensic pathologists in the criminal justice system, the information should be considered by the Chief Forensic Pathologist, and, if appropriate, the Child Homicide Team as well.

Recommendation 126

A court-monitoring program for forensic pathologists should be established by the Office of the Chief Coroner for Ontario, in consultation with the Ministry of the Attorney General and the Criminal Lawyers' Association.

Education in Forensic Pathology

As I recommend throughout this Report, it is imperative that both Crown and defence counsel participate in continuing legal education programs on forensic pathology and pediatric forensic pathology to better equip them to understand and litigate these difficult cases. However, the reality is that defence counsel are at a disadvantage in accessing continuing legal education programs. Educational programs organized and funded by the Ministry of the Attorney General are often available for Crown counsel, but there is no single institution that assists defence counsel in accessing similar programming. Consequently, a number of the parties suggested a pooling of resources for joint education programs for Crown and defence counsel. I agree wholeheartedly with that suggestion.

To their credit, the Ministry of the Attorney General and the Ministry of

Community Safety and Correctional Services told us they would work together to develop joint education programs, dealing with pediatric forensic pathology issues, for Crown and defence counsel, police, the judiciary, and scientists. The Ministry of the Attorney General suggested that these programs would be similar to those held in relation to forensic science that grew out of the recommendations of the Morin Commission

I am of the view that there should be regular – annual or biannual – joint courses on forensic pathology funded by the Ministry of the Attorney General and the Ministry of Community Safety and Correctional Services. This education should address the specialized knowledge necessary for pediatric forensic pathology cases. These courses could also address other critical or emerging issues involving the interaction between forensic pathology and the law. It was suggested that these programs be web based so that counsel could access the materials whenever needed. I agree with both suggestions.

However, as a general principle, the training and education of lawyers should begin at a much earlier stage – namely, at law school. Professor Sherrin indicated that, in 2007, only one Ontario law school offered a course on forensic science. Ms. Edwardh expressed the view that law schools "fail everyone in the Province of Ontario because they do not have curricula that are designed to deliver scientific literacy, and I think … that is a big issue." She noted that most lawyers come out of undergraduate education in the social sciences, and so they do not have adequate training in the pure sciences. Ms. Edwardh recommended the creation of a law school course that would provide law students with basic scientific literacy. She acknowledged that such a course could not cover all areas of science that may potentially be of relevance to lawyers in their future legal careers, but she thought that it would still be beneficial to provide basic scientific literacy. I agree with Ms. Edwardh.

Recommendation 127

a) The Ministry of the Attorney General and the Ministry of Community Safety and Correctional Services should fund regular joint courses for defence counsel and the Crown dealing with forensic pathology generally and pediatric forensic pathology in particular.

b) This education should assist lawyers in developing the specialized knowledge necessary to act as counsel in pediatric forensic pathology cases. Educational programs could be live or online, but there should also be web-based materials so that lawyers in pediatric forensic pathology cases may access them as a resource when the course is not being offered.

Recommendation 128

Law schools should be encouraged to offer courses in basic scientific literacy and the interaction of science and the law.

The focus in this chapter has not been on forensic pathologists and the needed measures to promote their training, education, accreditation, and oversight by fellow scientists. The introduction of the most robust of these measures, while critically important, provides no guarantee against the introduction of flawed pediatric forensic pathology into the criminal justice system. These measures must be complemented by the important roles that others – coroners, police, and Crown and defence counsel – can play in protecting the public from flawed or misunderstood pediatric forensic pathology. The recommendations here are intended to assist them to perform these roles well. But, they are not the only participants in the justice system who must be expected to be objective, independent, vigilant, and skilful in resisting the introduction of bad science, including flawed pediatric forensic pathology, into the court system. The courts should be expected to perform an equally vital role. It is, accordingly, to the courts that I now turn in Chapter 18.

18

The Role of the Court

Judges play an important role in protecting the legal system from the effects of flawed scientific evidence. Although this objective will be greatly assisted by the use of rigorous quality assurance processes in preparing expert opinions, by the integrity and candour of expert witnesses, and by vigorous testing of expert evidence by skilled and informed counsel, the judge must bear the heavy burden of being the ultimate gatekeeper in protecting the system from unreliable expert evidence. Such evidence can, as we have seen, contribute to miscarriages of justice.

In the cases that led to the creation of this Inquiry, Dr. Charles Smith was allowed to give expert evidence in pediatric forensic pathology, often without challenge or with only limited review of his credentials. He was an apparently well-accredited expert from a world-renowned institution. He was a commanding presence who often testified in a dogmatic style. The evidence at this Inquiry demonstrated that the legal system is vulnerable to unreliable expert evidence, especially when it is presented by someone with Dr. Smith's demeanour and reputation. An expert like this can too easily overwhelm what should be the gatekeeper's vigilance and healthy skepticism, as we have seen. In fact, as we now know, Dr. Smith had none of the requisite training in forensic pathology and no reliable scientific basis for many of his opinions.

Because of concerns about the vulnerability of the legal system to flawed expert testimony, the Inquiry commissioned research studies and convened policy roundtables on issues relating to the admissibility of expert evidence in judicial proceedings. The authors and participants involved were asked to advise on the optimal manner in which expert evidence should be communicated to triers of fact – judges or juries – not only so that it will be properly understood, but also so that no false reliance will be placed on it. Our focus was primarily on expert evidence concerning pediatric forensic pathology, but we also considered issues of expert evidence more generally. The broader perspective is justified here

because the courts have devised tests for the admissibility of expert evidence in a generic manner. It is my hope that this chapter will assist in making the courts less vulnerable to unreliable expert evidence in cases involving both pediatric forensic pathology and other scientific evidence that may be controversial.

I first review the tests for the admissibility of expert evidence, with special attention to the problems created by qualified experts who stray from their expertise and to the gatekeeper role of judges in ensuring that expert evidence is sufficiently reliable to be admitted as evidence. This discussion includes an examination of the tools that judges can use to determine threshold reliability, the manner in which hearings can be conducted to determine the admissibility of expert evidence, the range of outcomes from the admissibility hearing, and the role of judicial education in meeting the demands placed upon trial judges in making threshold reliability decisions. I next examine the way that judges and the legal system should interact with expert witnesses, including the provision of codes of conduct for expert witnesses, the role of court-appointed or joint experts, and the role of the court in case managing forensic pathology matters, including the facilitation of the exchange of expert reports and meetings among experts. Finally, I examine charges to the jury on expert evidence. I have already examined report writing and the giving of evidence in Chapter 16, Effective Communication with the Criminal Justice System. The focus in this chapter is on how the legal system can regulate the behaviour of expert witnesses and, in particular, the vital gatekeeping role of trial judges.

The Admissibility of Expert Evidence

Defining the Limits of the Expertise

A starting point when considering the admissibility of expert evidence is to understand that the legal system, as a general rule, prohibits witnesses from testifying about their opinions, as opposed to facts they have observed. It is the trier of fact who must draw conclusions based on the evidence presented at trial. Expert witnesses are allowed to give opinion evidence as an exception to the general rule, but only to the extent that they have been properly qualified as experts. It is crucial that judges precisely define the nature and the limits of that expertise at the beginning of each trial. This description gives clarity to what the experts can properly opine on and allows the court to curtail the "roaming expert."

The problem of expert witnesses offering opinion evidence outside their area of expertise was shown by the evidence at the Inquiry to be significant. These excesses most often occurred not in written reports but in testimony, and often at

the invitation of counsel. The challenge of roaming expert witnesses for the criminal justice system is substantial. All the admissibility safeguards (to which I turn in the next section) to ensure the relevance, necessity, and reliability of expert scientific evidence are for naught if experts are allowed to stray beyond their field of expertise and offer, under the guise of expertise, what are, in essence, only lay opinions that have no scientific value.

In Dr. Charles Smith's case, he strayed well beyond his expertise in a variety of ways. Four are illustrative. First, he testified about matters well outside the expertise of a pathologist. For example, he provided a sociological profile of the typical baby shaker, including an analysis based on gender, family status, motivation, and time of likely occurrence (as he put it, "the poison hours"). Second, he testified about matters that might normally fall within the expertise of a forensic pathologist, but which, by reason of his own deficit of knowledge, he was (as he acknowledged) unqualified to address. Dog bites in Sharon's case are one example. Third, he provided expert opinions about the cause or mechanism of death based not on pathology, but on non-pathology information he acquired. Properly understood, these opinions were not within a pathologist's expertise at all. Fourth, he speculated about matters that were not supported by any existing evidence.

The trial judge's first task as gatekeeper is to define clearly the subject area about which the proposed witness has the required expertise to offer opinion evidence to the court. As the Honourable Patrick LeSage, former Chief Justice of the Superior Court of Ontario and an experienced trial judge, emphasized at our policy roundtable, the trial judge must do so with clarity and precision, after coming to understand the expert's training and experience. The trial judge should insist at the outset that counsel confine with precision the proposed area of expertise and the issues to which the opinion will be directed. The trial judge, in the words of Mr. LeSage, should then make rulings

> as to exactly what it is that they're going to be permitted to testify on, and the opinion upon which they are going to be able to comment, and nothing else. And you glare at them a bit as well. And if they stray, I think you, as the judge, even a non-interventionist judge, have an absolute obligation to step in and stop the person immediately in their tracks … if it is in front of the jury, all the better. It's a more telling admonition when the judge gives it to the witness in front of the jury. But you have an obligation to do that and to ensure that they stay within those bounds.

Justice Marc Rosenberg of the Court of Appeal for Ontario agreed with Mr. LeSage that trial judges, in their rulings on the admissibility of expert evidence,

must be as clear as possible about both the area of expertise and the proper scope of the opinion. Justice Rosenberg also emphasized that, in criminal cases, trial judges should be even more vigilant, given that the liberty of the accused person is at stake.

Part of the task of defining the nature of a witness's expertise is to define its outer limits. As the expert testifies, the trial judge is then in a position to keep the witness from roaming beyond this area of expertise. As reflected above, participants at our roundtable fully supported the idea that trial judges should stop experts who strayed beyond their recognized expertise, even if there was little or no challenge from opposing counsel.

In her research study prepared for the Commission, "Pediatric Forensic Pathology as Forensic Science: The Role of Science and the Justice System," Professor Katherine Gruspier, a professor of forensic science at the University of Toronto, warns that, in pediatric cases, there is a particular danger that experts may testify outside of their area of expertise. She discusses a 1993 Supreme Court decision in *R. v. Marquard* in which a witness who was qualified as an expert in child abuse and pediatrics was allowed to testify that the burns she observed on a child were contact burns, as opposed to flame burns, even though she was not a medical specialist in burns.[1] In the same case, another medical doctor who was qualified as an expert in burns was nevertheless allowed to testify that passivity during examination was characteristic of abused children. The defence did not object at trial to the questions that elicited this testimony. This case exemplifies the difficulties that arise where the area of expertise is not properly defined at the beginning.

The trial judge in *Marquard* did not instruct the jury to disregard the experts' testimony but, rather, to weigh it "along with all the other evidence."[2] The Supreme Court found that this was not an error of law, noting that, as "important as the initial qualification of an expert witness may be, it would be overly technical to reject expert evidence simply because the witness ventures an opinion beyond the area of expertise in which he or she has been qualified." It reversed the conviction and ordered a new trial on other grounds relating to the prejudicial value of the expert evidence about alleged prior abuse of the child and with respect to the expert improperly testifying about the child's credibility.

I note that *Marquard* was decided in 1993. As will be seen, there have been significant developments in the test for the admissibility of expert evidence since that time. The Court now takes a more rigorous approach to the requirements

[1] [1993] 4 SCR 223.

[2] *Ibid.* at para. 34.

that the expert evidence be relevant and necessary, that its prejudicial effect not outweigh its probative value, and that it possess sufficient threshold reliability to justify its admission. The stringent test for the admissibility of expert evidence applies to all potential experts, no matter how distinguished, educated, and experienced they may be. No one should receive carte blanche.

Marlys Edwardh, a highly respected criminal lawyer, expressed the challenge pointedly at our roundtables. She said that the legal system has "tended to defer to medicine without subjecting it to as much scrutiny as other areas. So," she continued, "I think we need now to stop doing that and to firmly put the trial judge as gatekeeper into the role of making sure that what is heard meets whatever we want to call reliable, in that it can be shown to be reliable."

Considerable skepticism was articulated at the roundtables about one possible remedy – instructing the jury to give less weight to evidence that experts provide outside their area of expertise. Professor Erica Beecher-Monas of Wayne State University School of Law pointed out the problem with "unringing the bell" once the jury has heard the supposedly expert testimony. Both she and Professor Gary Edmond of the Faculty of Law at the University of New South Wales stressed the difficulty for the jury of disregarding such information. Professor Edmond also emphasized the need for gatekeeping "at the front end" and the systemic problems with allowing the evidence and then trying to correct it through rebuttal experts, cross-examination, and warnings. Justice Rosenberg and Mr. LeSage agreed that it is best to prevent witnesses from giving evidence beyond their expertise.

The importance of clearly defining the limits of the witness's expertise is therefore vital. To put it in the context of forensic pathology, a number of clinicians who testified before this Inquiry, such as Dr. James Cairns, Deputy Chief Coroner for Ontario, readily conceded that it would be a mistake for clinicians to opine on the cause of death. They are simply not trained in pathology. I agree. Although clinicians may be able to give evidence in child death cases which satisfies the stringent admissibility requirements for expert evidence, the nature and limits of their expertise should, as with all expert witnesses, be defined with precision at the start of the trial and then vigilantly enforced by the judge.

In my view, many of the problems presented by the factual situation in *Marquard* could be avoided by requiring precise definitions of the nature of each expert witness's expertise, and its limits, at the start of the trial and by effectively policing that person's testimony thereafter. The very act of defining the precise limits of the witness's expertise will have the salutary effect of ensuring that the evidence given is truly expert. Defining the limits of expertise is a key part of the trial judge's role as gatekeeper.

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When a witness is put forward to give expert scientific evidence, the court should clearly define the subject area of the witness's expertise and vigorously confine the witness's testimony to it.

The Test for Admissibility of Expert Evidence

Expert evidence is admitted as an exception to the general rule against allowing witnesses to provide opinion evidence. This exception arises when it is necessary for the trier of fact to be assisted by experts. The test for the admissibility of expert evidence has evolved to some extent during the period examined at this Inquiry and, no doubt, will continue to do so in the future.

One of the earliest cases involving expert testimony occurred in England in the late 18th century, where, to enable the trier of fact to evaluate the other evidence in the case, an engineer was asked to give his opinion on what had caused a harbour to fill in.[3] For many years, the main basis for the qualification of an expert witness in court was that the subject matter was so specialized that an ordinary person would likely be unable to form an opinion without the assistance of an expert. The expert witness was seen to have special knowledge in the area through education or experience, or both.[4] In recent years, however, the approach to expert witnesses has undergone considerable refinement, as we shall see by reviewing the *Mohan* case.

Mohan

In 1994, the Supreme Court in *R. v. Mohan*[5] established a four-part test which requires that proposed expert evidence be (1) relevant, (2) necessary in assisting the trier of fact, (3) not otherwise subject to an exclusionary rule, and (4) given by a properly qualified expert. In the decision, Justice John Sopinka offered this warning:

> There is a danger that expert evidence will be misused and will distort the fact-finding process. Dressed up in scientific language which the jury does not easily understand and submitted through a witness of impressive antecedents, this evi-

[3] *Folkes v. Chadd* (1782), 99 ER 589.

[4] *Kelliher (Village) v. Smith*, [1931] SCR 672; *R. v. Beland*, [1987] 2 SCR 398 at para. 16; *R. v. Marquard,* [1993] 4 SCR 223.

[5] [1994] 2 SCR 9.

> dence is apt to be accepted by the jury as being virtually infallible and as having more weight than it deserves. As La Forest J. stated in *R. v. Béland*, [1987] 2 S.C.R. 398, at p. 434, with respect to the evidence of the results of a polygraph tendered by the accused, such evidence should not be admitted by reason of "human fallibility in assessing the proper weight to be given to evidence cloaked under the mystique of science". The application of this principle can be seen in cases such as *R. v. Melaragni* (1992), 73 C.C.C. (3d) 348, in which Moldaver J. applied a threshold test of reliability to what he described, at p. 353, as "a new scientific technique or body of scientific knowledge". Moldaver J. also mentioned two other factors, *inter alia*, which should be considered in such circumstances (at p. 353):
>
> > (1) Is the evidence likely to assist the jury in its fact-finding mission, or is it likely to confuse and confound the jury?
> >
> > (2) Is the jury likely to be overwhelmed by the "mystic infallibility" of the evidence, or will the jury be able to keep an open mind and objectively assess the worth of the evidence?[6]

The first *Mohan* criterion requires not simply relevance in the case (that is, "logical relevance") but a more searching comparison of the probative value of the evidence in relation to its possible prejudicial impact on the trial process (that is, "legal relevance"):

> Evidence that is otherwise logically relevant may be excluded on this basis, if its probative value is overborne by its prejudicial effect, if it involves an inordinate amount of time which is not commensurate with its value or if it is misleading in the sense that its effect on the trier of fact, particularly a jury, is out of proportion to its reliability. … The reliability versus effect factor has special significance in assessing the admissibility of expert evidence.[7]

The second requirement is that the expert evidence must be necessary to assist the trier of fact in understanding the subject matter. In a case subsequent to *Mohan*, the Court explained this requirement as being met "only when lay persons are apt to come to a wrong conclusion without expert assistance, or where access to important information will be lost unless we borrow from the learning of experts."[8] In *Mohan* itself, the Court concluded that the necessity requirement

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[6] *Ibid.* at para. 19.
[7] *Ibid*. at para. 18.
[8] *R. v. D.D.*, [2000] 2 SCR 275 at para. 57.

helped to ensure that the role of the trier of fact on matters such as the credibility of witnesses or the ultimate issue in the case was not usurped.

The third requirement is the absence of any exclusionary rule. An important exclusionary rule with respect to the admissibility of expert evidence is that the prejudicial effect of the evidence not exceed its probative value. As I will suggest, another important exclusionary rule is that evidence that lacks sufficient threshold reliability should not be admitted. It is important to note, however, that concerns about threshold reliability can affect all four parts of the *Mohan* test. In other words, reliability's entrée to admissibility should be seen as broader than through the probative value versus prejudicial effect analysis.

The fourth requirement is that the proposed expert have special knowledge of the subject matter about which the expert proposes to testify. The best way to check this requirement is to examine the initial training of the proposed witness, the ongoing education and accreditation practices applicable to that witness, and how these two factors relate to the proposed subject matter of the expert's testimony.

Addressing Threshold Reliability

The trier of fact must determine the ultimate reliability of any admitted evidence, including expert evidence. The question is whether the law of evidence requires the court, as gatekeeper, to ensure that evidence proffered as scientific opinion meets a minimum threshold of reliability sufficient to warrant consideration by the trier of fact. In my view, the answer to that question is clearly in the affirmative.

Any attempt to reduce the admissibility of expert evidence to a narrow application of this four-part approach does not do full justice to *Mohan* and the risks of disregarding the important role of ensuring the threshold reliability of the proposed expert testimony. One constant factor in the law of evidence has been a concern about the reliability of expert evidence. That said, the case-by-case application of the law has not always given reliability the prominence it deserves in a system dedicated to accurate fact-finding.[9]

In *Mohan*, Justice Sopinka discussed threshold reliability in the context of novel science:

> In summary, therefore, it appears from the foregoing that expert evidence which advances a novel scientific theory or technique is subjected to special scrutiny to determine whether it meets a basic threshold of reliability and whether it is essential

[9] Gary Edmond, "Pathological Science? Demonstrable Reliability and Expert Forensic Pathology Evidence," in *Pediatric Forensic Pathology and the Justice System*, vol. 2 of Inquiry into Pediatric Forensic Pathology in Ontario, Independent Research Studies (Toronto: Ministry of the Attorney General, 2008), 91.

> in the sense that the trier of fact will be unable to come to a satisfactory conclusion without the assistance of the expert. The closer the evidence approaches an opinion on an ultimate issue, the stricter the application of this principle.[10]

In my view, this statement should not be interpreted to suggest that the judge's gatekeeper role in ensuring the threshold reliability of expert evidence is limited to "novel scientific theory or technique." The reference to novel science is best seen as a particular example where the reliability of the purported science from which the expert opinion is drawn will need to be evaluated. This example is not, however, the only circumstance where judges should be concerned about the reliability of proposed scientific evidence. In recent years, the jurisprudence has been moving in the direction of recognizing the importance of reliability standards for all expert evidence and, indeed, for all evidence.[11]

Reliability as a fundamental organizing principle in the law of evidence is embedded in all parts of the *Mohan* test. In 1999, my former colleague the late Justice George Finlayson observed: "[I]t is important the trial judge serve as a gatekeeper and allow into evidence opinion evidence that is reliable and furthers the goal of accurate fact-finding while at the same time refusing to admit evidence that is irrelevant or prejudicial or not based on an adequate scientific foundation."[12]

Reliability is a factor that can play an important and indeed decisive role in each of the four steps in *Mohan*. As stated in *McWilliams' Canadian Criminal Evidence*:

> Reliability may receive consideration as an aspect of relevance itself or as part of the application of the general exclusionary rule balancing probative value and prejudicial effect. It has also been treated as an integral part of the need for a properly qualified expert. On the question of necessity, evidence of questionable reliability will of course be of little assistance in assisting the trier of fact.[13]

Justice Louise Charron, formerly of the Court of Appeal for Ontario, indicated in *R. v. K.(A.)* how reliability plays a central role in at least two of the *Mohan* factors:

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[10] *R. v. Mohan*, [1994] 2 SCR 9 at para. 28.

[11] See *R. v. Khelawan*, [2006] 2 SCR 787.

[12] As quoted in Todd L. Archibald and Heather Davies, "Law, Science and Advocacy: Moving towards a Better Understanding of Expert Scientific Evidence in the Courtroom" (2007) *Annual Review of Civil Litigation* 2006, 2.

[13] S. Casey Hill *et al.*, *McWilliams' Canadian Criminal Evidence*, looseleaf (Aurora: Canada Law Book, 2003), 12–27.

> The evidence must meet a certain threshold of reliability in order to have sufficient probative value to meet the criterion of relevance. The reliability of the evidence must also be considered with respect to the second criterion of necessity. After all, it could hardly be said that the admission of unreliable evidence is necessary for a proper adjudication to be made by the trier of fact.[14]

Reliability must therefore be a constant concern of judges in their gatekeeping role, whether the science is classified as novel or not and even though reliability does not have its own separate label when *Mohan* is reduced to a four-part test for the admissibility of expert evidence.

In *Mohan*, the Court affirmed the trial judge's decision not to admit the expert evidence of a psychiatrist who was prepared to testify that the accused did not fit the psychiatric profiles of a doctor who would sexually abuse teenaged female patients. The trial judge noted that the proposed expert had interviewed and treated three doctors who had engaged in sexual misconduct with their patients, but that the psychiatrist "admitted that he was not aware of any scientific study or literature relating to the psychiatric make-up of doctors who sexually abuse their patients and that his experience with three admitted offenders who were doctors was not a sufficient basis to allow him to make any generalizations on the subject."[15]

The Supreme Court unanimously upheld the trial judge's decision to exclude the expert evidence, noting that "there is no acceptable body of evidence that doctors who commit sexual assaults" have characteristics "that are sufficiently distinctive to be of assistance in identifying the perpetrator of the offences alleged …The expert's group profiles were not *seen as sufficiently reliable to be considered helpful*. In the absence of these indicia of reliability, it cannot be said that the evidence would be necessary in the sense of usefully clarifying a matter otherwise unaccessible, or that any value it may have would not be outweighed by its potential for misleading or diverting the jury."[16] This statement provides a fine example of both the rejection of purported expert evidence that was based only on personal experience and a call for evidence-based expert evidence, if the requisite reliability is to be achieved.

This jurisprudence should make it clear that a concern about threshold reliability is an important part of the *Mohan* test for admissibility of expert evidence.

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[14] (1999), 137 CCC (3d) 225 (Ont. CA) at para. 84.

[15] *R. v. Mohan*, [1994] 2 SCR 9 at para. 10.

[16] *Ibid.* at para. 46 (emphasis added).

Although, as I have stated, it is not expressly articulated as one of the four points in the text, it is clearly embedded in them.[17]

Beyond the jurisprudence, the constantly evolving nature of science, even in established fields such as forensic pathology, suggests that judges should be concerned about the threshold reliability of all expert scientific evidence. As Justice Todd Archibald and Heather Davies have recently observed:

> By its very nature, science is iterative and recursive and consequently, the pursuit of knowledge never comes to an end; any conclusions reached are provisional…. When evidence is labelled as "scientific", there may be a tendency to assume that the result is absolute and authoritative. But science and technological knowledge is fluid in nature. It is constantly changing and evolving. Many theories once believed to be true and scientifically "definitive" have since proven false. Indeed the history of science is littered with flawed theories once believed to be accurate and reliable, including the belief that the world is flat.[18]

The authors also recognize that, "if a theory, hypothesis or propositions have passed many experimental tests without being disproved, it is usually considered to be accurate and valid."[19] These themes are picked up again in *R. v. Trochym*, described later in this chapter.

Daubert

Although it was not cited, the Supreme Court's decision in *Mohan* was broadly consistent with that given by the United States Supreme Court in 1993 in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*[20] In that decision, the Court departed from the previous test in *Frye v. United States*,[21] which rested on whether the expert evidence was generally accepted in the relevant scientific community. The majority of the Court stressed that the expert's engagement with the scientific process of "proposing and refining theoretical explanations about the world that are subject to further testing and refinement … establishes a standard of evidentiary reliability."[22]

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[17] David Paciocco, "Coping with Expert Evidence about Human Behaviour" (1999) 25 *Queen's Law Journal* 315, 335; Hill *et al.*, *McWilliams' Canadian Criminal Evidence*, 12–27ff.; Alan W. Mewett and Peter J. Sankoff, *Witnesses*, looseleaf (Toronto: Thomson Carswell, 1999), 10–5ff.; Alan D. Gold, *Expert Evidence in Criminal Law: The Scientific Approach* (Toronto: Irwin Law, 2003); Glenn R. Anderson, *Expert Evidence* (Markham: LexisNexis Canada, 2005), 81ff.; Edmond, "Pathological Science?" 106.

[18] Archibald and Davies, "Law, Science, and Advocacy," 21.

[19] *Ibid.*, 21.

[20] 509 U.S. 579 (1993).

[21] 293 F. 1013 (DC Cir. 1923).

[22] *Ibid.*

In order to determine whether a theory or a technique constitutes scientific knowledge and has sufficient reliability, the Court in *Daubert* considered a number of factors, including (1) whether the theory or technique had been tested and found subject to falsification, (2) whether it had been subject to peer review and publication, (3) its known or potential error rate and the existence and maintenance of standards controlling its operation, and (4) whether the theory or technique has general acceptance.

Daubert has its detractors,[23] and the dissenting judges in the case raised concerns about whether judges were up to the task of applying its standards. However, I agree with those who argue that *Daubert* can have a beneficial effect in challenging judges, lawyers, and expert witnesses to relate proposed expert evidence to a scientific method that emphasizes testing and peer review as a means of attempting to ensure the reliability of expert evidence and that is conscious of known or potential error rates. As Professor Beecher-Monas has written: "No longer is it enough to obtain the approval of a cohort of the expert's cronies willing to vouch for the technique … *Daubert* has focused attention on the importance of examining the underlying theory and technique rather than just the proffered conclusions."[24]

Just how the kind of criteria discussed in *Daubert* can be applied to determine threshold reliability will depend on the type of evidence. Many types of expert evidence, including forensic pathology, are not easily amenable to empirical testing and the determination of precise error rates. The challenge for judges in exercising the gatekeeper function is to employ the necessary tools to rigorously determine threshold reliability.

As Professor Edmond said, testing and known or potential error rates will generally be better indicators of threshold reliability than general acceptance or peer review and publication, which may depend more on the expert's reputation in a small field than the reliability of his or her opinions in a specific case.[25] Professor Mike Redmayne put it this way: "The claims of handwriting experts, forensic odontologists, and experts on hair and voice identification simply do not interest most scientists, and have been subjected to little empirical validation. Yet within their own domains, these techniques are generally accepted. … A

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[23] See Scott Brewer, "Scientific Expert Testimony and Intellectual Due Process" (1998) 107 *Yale Law Journal* 1535; Adina Schwartz, "A 'Dogma of Empiricism' Revisited: *Daubert v. Merrell Dow Pharmaceuticals, Inc.* and the Need to Resurrect the Philosophical Insight of *Frye v. The United States*" (1997) 10 *Harvard Journal of Law & Technology* 149.

[24] Erica Beecher-Monas, *Evaluating Scientific Evidence: An Interdisciplinary Framework for Intellectual Due Process* (Cambridge: Cambridge University Press, 2007), 11.

[25] Edmond, "Pathological Science?"121ff.

testedness requirement would, in theory, do a far better job of screening out unreliable evidence."[26]

J.-L.J.

Any doubts about the relevance of *Daubert* or concerns about using reliability to determine the admissibility of expert evidence were dispelled by the Supreme Court of Canada's decision in *R. v. J.-L.J.*[27] In that case, the Court upheld the decision of a trial judge to exclude the proffered expert evidence of a clinical psychiatrist that the accused did not satisfy the profiles of those who would sexually assault young males, based in part on the use of penile plethysmography[28] to measure whether the accused was sexually attracted to young boys. The Court stated:

> In the course of *Mohan* and other judgments, the Court has emphasized that the trial judge should take seriously the role of "gatekeeper". The admissibility of the expert evidence should be scrutinized at the time it is proffered, and not allowed too easy an entry on the basis that all of the frailties could go at the end of the day to weight rather than admissibility. … *Mohan* kept the door open to novel science, rejecting the "general acceptance" test formulated in the United States in *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923), and moving in parallel with its replacement, the "reliable foundation" test more recently laid down by the U.S. Supreme Court in *Daubert* …[29]

Although penile plethysmography was generally accepted as a therapeutic technique, it was not "sufficiently reliable to be used in a court of law to identify or exclude the accused as a potential perpetrator of an offence."[30] The distinction between clinical judgments, which are made to treat and serve the best interests of living patients, and forensic judgments, which are made to assist the courts in determining what happened to dead patients, is critical in the field of forensic pathology. Although information derived from clinical studies may be useful, courts should always be cautious in determining whether they have sufficient reliability to be used in a forensic pathology context in a court of law. As suggested

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[26] Mike Redmayne, *Expert Evidence and Criminal Justice* (Oxford, Oxford University Press, 2001), 116. Professor Redmayne is a professor of law at the London School of Economics and Political Science and has published several texts in the area of criminal evidence.

[27] [2000] 2 SCR 600.

[28] A penile plethysmograph is an instrument for measuring changes in volume within the penis.

[29] *J.-L.J.*, [2000] 2 SCR 600 at paras. 28, 33.

[30] *Ibid.* at para. 35.

above, clinicians should not generally be allowed to testify with respect to the cause of death, as that is usually a matter within the expertise of forensic pathologists but not clinicians.

Following the *Daubert* criteria, the Court in *J.-L.J.* emphasized the high error rate of the technique and concluded that its acceptance for forensic as opposed to clinical purposes had not been demonstrated. The manner in which the opinion was expressed was also problematic. The expert "offered a packaged opinion" and was unable or unwilling to share the data with the Court, thus frustrating the Court's ability to form an independent opinion as to the value and reliability of the expert's opinion. *J.-L.J.* thus makes the point that the opinion must not only be reliable, but capable of being presented in a way that permits the judge to exercise the gatekeeper function. In the end, the Court expressed the concern that "the trial judge was simply being offered a conclusory opinion that on cross-examination turned out to be short on demonstrated scientific support."[31] As this case exemplifies, Canadian courts have found the *Daubert* questions to be useful in deciding whether expert evidence has sufficient reliability to be admitted.[32]

Trochym

In *R. v. Trochym*, the Supreme Court of Canada excluded the post-hypnosis testimony of a witness offered by the Crown who purported to identify the accused as having been in his former girlfriend's apartment at the time she was likely killed.[33] Justice Marie Deschamps, speaking for the Court's majority, stressed the responsibility of the trial judge to determine the threshold reliability of expert evidence. She warned that "reliability is an essential component of admissibility. Whereas the degree of reliability required by courts may vary depending on the circumstances, evidence that is not sufficiently reliable is likely to undermine the fundamental fairness of the criminal process."[34] It is also noteworthy that Justice Deschamps connected concerns about unreliable evidence to the risk of miscarriages of justice.[35] Finally, in *Trochym*, the Court reiterated that a technique that is perfectly acceptable in a clinical setting may not be reliable enough to accept in a forensic setting.[36]

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[31] *Ibid.* at para. 59.

[32] See *R. v. Klymchuk* (2005), 203 CCC (3d) 341 (Ont. CA). See also Gold, *Expert Evidence*, chaps. 1–3; Erica Beecher-Monas, *Evaluating Scientific Evidence: An Interdisciplinary Framework for Intellectual Due Process* (Cambridge: Cambridge University Press, 2007), 11.

[33] [2007] 1 SCR 239.

[34] *Ibid.* at para. 27.

[35] *Ibid.* at para. 1.

[36] *Ibid.* at para. 37.

The majority judgment in *Trochym* is of particular relevance to expert evidence respecting evolving controversies in pediatric forensic pathology because of its recognition that "the admissibility of scientific evidence is not frozen in time."[37] The Court observed that, "[w]hile some forms of scientific evidence become more reliable over time, others become less so as further studies reveal concerns. Thus, a technique that was once admissible may subsequently be found to be inadmissible."[38] This variability suggests that there may be some aspects of controversial science, even within the most established disciplines, that need to be scrutinized for threshold reliability. As Justice Deschamps observed, "even if it has received judicial recognition in the past, a technique or science whose underlying assumptions are challenged should not be admitted in evidence without first confirming the validity of those assumptions."[39] In general, "the scientific community continues to challenge and improve upon its existing base of knowledge. As a result, the admissibility of scientific evidence is not frozen in time."[40] Indeed, the Court of Appeal for Ontario before *Trochym* had recognized the fluidity of scientific evidence and the effect this potential for change might have on admissibility.[41] In my view, this approach is consistent with both the evolving nature of science and the responsibility of the trial judge as gatekeeper to exclude expert evidence that is insufficiently reliable. The justice system should place a premium on the reliability of expert evidence if it is to maximize the contribution of that evidence to the truth-seeking function and be faithful to the fundamental fairness required of the criminal process.

Trochym also affirms the continued utility of the *Daubert* criteria first endorsed by the Court in *J.-L.J.* The Court examined whether the technique has been tested, whether it has been subject to peer review and publication, its known or potential rate of error, and its general acceptance. It stressed that the testing of post-hypnotic memories had revealed that, "while hypnosis can result in the subject's remembering a large number of details, these will include both accurate and inaccurate information."[42] Justice Deschamps concluded that, "[p]erhaps most troubling is the potential rate of error in the additional information obtained through hypnosis when it is used for forensic purposes. At the present time, there is no way of knowing whether such information will be

[37] *Ibid.* at para. 31.
[38] *Ibid.* at para. 32.
[39] *Ibid.* at para. 32.
[40] *Ibid.* at para. 31.
[41] *R. v. A.K.* (1999), 137 CCC (3d) 225 (Ont. CA) at para. 86. See also *R. v. Chisholm* (1997), 8 CR (5th) 21 (Ont. Ct (Gen. Div.)) at 35.
[42] *R. v. Trochym*, [2007] 1 SCR 239 at para. 37.

accurate or inaccurate. Such uncertainty is unacceptable in a court of law."[43]

Re Truscott

The recent decision of the Court of Appeal for Ontario in the *Stephen Truscott* reference relates concerns about the admissibility of expert opinions (including those of forensic pathology) to the importance of those opinions being grounded on evidence and the evolving scientific literature.[44] In that reference, the Court of Appeal heard the testimony of the Crown's expert forensic pathologist, Dr. Werner Spitz, who had been a forensic pathologist for more than 50 years and had published a textbook on the subject. Dr. Spitz testified that the original expert's determination that the deceased died by 7:45 p.m. was "admirably accurate" and rested "on solid scientific foundation." The Court of Appeal then noted that "[i]t became abundantly clear during cross-examination, however, that the only basis for Dr. Spitz's opinion was his own experience in conducting autopsies and his belief arising from this experience that if stomach contents are readily identifiable at autopsy, then death must have occurred within two hours of the last meal."[45] The Court of Appeal went on to observe that "Dr. Spitz was unable to cite any recent scientific literature that would support his view" and that he "refused to concede that his opinion rested on faulty assumptions and misperceptions of the available primary evidence in this case."[46] In the result, the Court of Appeal did not place any reliance on Dr. Spitz's evidence.

The Court of Appeal accepted Dr. Michael Pollanen's evidence that forensic pathology had evolved from a traditional approach in which "expert opinions were largely based on authoritative experience and anecdotal case reports" to an "evidence-based approach" that requires "a critical analysis of peer-reviewed literature and attention to primary reviewable evidence from the post-mortem examination."[47] The literature that had been published since the 1959 trial and the 1966 reference to the Supreme Court of Canada indicated that there was less certainty and more variability than previously believed with respect to the time it takes for the contents of the stomach to empty. The Court of Appeal applied a similar approach to evidence given by an entomology expert, Dr. Neal Haskell, tendered by the Crown. It observed that he "was dogmatic and reluctant to admit obvious errors. He assumed an adversarial position as revealed by correspon-

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[43] *Ibid.* at para. 55.
[44] (2007) 225 CCC (3d) 321 (Ont. CA).
[45] *Ibid.* at para. 165.
[46] *Ibid.* at para. 166.
[47] *Ibid.* at para. 169.

dence with the Crown that Crown counsel disclosed to the appellant's counsel. Several critical elements of his opinion were based on nothing more than his purported experience, which could not be verified and was not supported by any empirical work. He was unable to demonstrate that his experience had been replicated by other scientists."[48]

These criticisms demonstrate the utility of subjecting expert evidence to the critical methodological analysis set out in *Daubert* and used in *J.-L.J.* and *Trochym*. Although admissibility at a reference based on purported fresh evidence is subject to different considerations, the Court stated that, "at a hypothetical new trial, the absence of evidentiary support for the factual assumptions on which Dr. Haskell's opinion are based could potentially lead to the exclusion of his opinion by the trial judge."[49] Finally, I note that the Court of Appeal applied its evidence-based reliability test to forensic pathology and to entomology, two disciplines that cannot be said to be novel science. In this respect, it is significant that U.S. courts as well do not restrict their *Daubert* analysis to matters involving novel science.[50]

Bald assertion of conclusory opinions, dogmatism, and a failure to engage with the relevant literature on the topic or with the primary evidence were all identified in *Truscott* as indicators that expert scientific evidence might lack sufficient threshold reliability to be admissible in any hypothetical new trial. In my view, the jurisprudence is clear that exclusion of such expert opinions on this basis may be required to avoid the danger of a jury simply accepting expert evidence of "a witness of impressive antecedents" as "virtually infallible and as having more weight than it deserves."[51]

At the policy roundtable on expert evidence, I was struck by the statement of Mr. LeSage that the standards for experts to be qualified should be tightened. He recalled his own experience with typical candour and wisdom:

> Did I … question the expertise sufficiently? Did defence counsel, or Crown counsel as the case might be, question the expertise, the basis, the underpinnings of it as much as we ought to have? In many cases, no, we didn't.

Mr. LeSage indicated that, during his long career on the bench, he had rejected perhaps only half-a-dozen proffered experts on the grounds that they had no basis on which to come to their conclusion. He was clear about the danger of trial

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[48] *Ibid.* at para. 313.
[49] *Ibid.* at para. 314.
[50] David Paciocco, "Context, Culture and the Law of Expert Evidence" (2001) 24 *Advocates Quarterly* 44–47.
[51] *R. v. Mohan*, [1994] 2 SCR 9 at para. 19.

judges simply admitting the expert evidence, then leaving any misgivings about its reliability to counsel for cross-examination or to the trier of fact in assigning the appropriate weight to the evidence.

Recommendation 130

A concern about the reliability of evidence is a fundamental component of the law of evidence. Threshold reliability plays an important role in determining whether proposed expert evidence is admissible under the *Mohan* test. Reliability can be an important consideration in determining whether the proposed expert evidence is relevant and necessary; whether it is excluded under any exclusionary rule, including the rule that requires evidence to be excluded if its prejudicial effect exceeds its probative value; and whether the expert is properly qualified. Trial judges should be vigilant in exercising their gatekeeping role with respect to the admissibility of such evidence. In particular, they should ensure that expert scientific evidence that does not satisfy standards of threshold reliability be excluded, whether or not the science is classified as novel.

Tools for Judges to Use in Determining Threshold Reliability

It is one thing for jurisprudence to arm trial judges as gatekeepers, with threshold reliability as an admissibility screen for expert scientific evidence, and quite another to describe how the standard can be applied in particular cases. A variety of tools have been developed to assist judges in discharging this challenging task. Some of these tools will undoubtedly be more useful than others, depending on the nature of the case and the particular evidence being scrutinized. Although those considerations will be of great assistance to trial judges, they still need to exercise an element of judgment. The tools should, however, provide a reasonable basis for that judgment. It may therefore be helpful to outline a few of these tools and to provide some evaluation of their potential assistance to a trial judge in fulfilling the gatekeeper role.

In a 1992 decision on a *voir dire*[52] to determine the admissibility of DNA evidence, Justice Kenneth Langdon addressed many of the factors that were relevant to the admissibility of what was then a novel science. He drew on American developments that were moving away from the *Frye*[53] test of general acceptability

[52] *R. v. Johnston* (1992), 69 CCC (3d) 395 (Ont. Ct (Gen. Div.)) at 415.
[53] *Frye v. United States*, 293 F. 1013 (DC Cir. 1923).

to requiring expert evidence to be relevant and reliable.[54] While not dealing only with reliability, he provided a list of helpful criteria to assist in determining whether the evidence would be admissible, including

1. The potential rate of error.
2. The existence and maintenance of standards.
3. The care with which the scientific technique has been employed and whether it is susceptible to abuse.
4. Whether there are analogous relationships with other types of scientific techniques that are routinely admitted into evidence.
5. The presence of failsafe characteristics.
6. The expert's qualifications.
7. The existence of specialized literature.
8. The novelty of the technique in its relationship to more established areas of scientific analysis.
9. Whether the technique has been generally accepted by experts in the field.
10. The nature and breadth of the inference adduced.
11. The clarity with which the technique may be explained.
12. The extent to which basic data may be verified by the court and jury.
13. The availability of other experts to evaluate the technique.
14. The probative significance of the evidence.[55]

Justice Langdon added that "[a] consideration of all of those factors should enable the court to decide if it is satisfied that the scientific technique in question exhibits a level of reliability sufficient to warrant its use in the court room."[56] In other words, these factors are helpful in determining the threshold reliability of expert evidence. Many of them, including the existence and maintenance of scientific standards, the potential rate of error, the ability to verify the underlying data, and the availability of other experts to evaluate the technique, speak directly to the threshold reliability of the scientific evidence.

In another case decided in 1992, Justice Michael Moldaver, when he was a trial judge, admitted opinion evidence concerning the approximate point of entry of a bullet through a car window, based on an examination of fracture lines in the remaining pieces of glass. His decision confirms not only the trial judge's responsibility to determine the threshold reliability of expert evidence but also the jury's

[54] *R. v. Johnston* (1992), 69 CCC (3d) 395 (Ont. Ct (Gen. Div.)).
[55] *Ibid.* at 415.
[56] *Ibid.*

responsibility to determine ultimate reliability and to resolve disagreements among competing experts. Justice Moldaver concluded that the Crown's expert evidence could be given, in part because the defence "has already retained a leading expert" who could conduct his "own testing to confirm or cast doubt upon the scientific proposition in issue," including tests on the remaining portion of the fractured window. Hence, he was "convinced that the jury will not be overwhelmed by the 'mystic infallibility' of the evidence. If anything, just the opposite will occur."[57]

In other words, in determining whether there is sufficient threshold reliability to justify the admission of expert evidence, one consideration is whether sufficient material exists, either from the proffered expert or from competing experts, to allow the jury to understand the relevant controversies and frailties that may surround the scientific evidence. I would add only that the presence of competing experts does not obviate the need for the trial judge to determine that all the expert evidence has sufficient threshold reliability to justify its admission as evidence.

In 1994, Justice Casey Hill articulated the following factors as relevant in determining the admissibility of psychological evidence regarding repressed memory:

1. whether there exists an acceptable body of evidence or acceptance of the theory to objectively validate the opinion;
2. whether the technique can be demonstrably tested;
3. the existence of peer review of the theory or technique;
4. the existence of publication;
5. the testing or validation employing control and error measurement; and
6. recognition or acceptance in the relevant scientific field.[58]

In my view, it may be helpful to distinguish factors such as general acceptance, publication, and peer review, which may speak more generally to the discipline in which the expert operates, from factors such as controls, error measure, and the testing of the technique, which may relate more directly to the actual opinion that the expert proposes to provide to the court. This distinction underlines the important point that trial judges should be satisfied not only that the discipline used by the proposed expert witness has sufficient threshold reliability but also

[57] *R. v. Melaragni* (1992), 73 CCC (3d) 348 (Ont. Ct (Gen. Div.)) at 354. See also *R. v. B.M.* (1998), 130 CCC (3d) 353 (Ont. CA) at para. 94, noting that conflicting expert opinion does not in itself justify its exclusion.
[58] *R. v. J.E.T.,* [1994] OJ No. 3067 (Gen. Div.) at paras. 73 and 75.

that the actual application of the discipline in the particular case has sufficient threshold reliability to permit the witness to give the opinion.

Commentators have also contributed to the discussion of how threshold reliability of expert scientific evidence can be determined. In 1994, Professor David Paciocco provided a helpful list of factors. They include consideration of the reliability of the witness, including credentials or the prospect of bias; the reliability of the process used to generate the evidence, including the existence of a specialized literature; the novelty of the technique; the potential error rate, including whether the errors were false inclusions or exclusions; the maintenance of standards and fail-safe techniques; and the care with which the scientific technique was employed. Procedural safeguards, including the ability of cross-examination and disclosure to expose weaknesses in the process, are another factor.[59] Additional considerations include the probative value and prejudicial effect of the proposed evidence, and whether it would result in undue consumption of time.

In his research study prepared for the Commission, "Pathological Science? Demonstrable Reliability and Expert Forensic Pathology Evidence," Professor Edmond provided the Inquiry with his indicia of reliability, which can be used to supplement and flesh out the *Daubert* criteria:

- What is the error rate – for the technique, as well as the equipment and practitioner?
- Has the technique or theory been applied in circumstances that reflect its intended purpose or known accuracy? Departures from established applications require justification.
- Does the technique or opinion use ideas, theories, and equipment from other fields? Would the appropriations be acceptable to those in the primary field?
- Has the technique or theory been described and endorsed in the literature? This should include some consideration of where it has appeared and the qualifications of the person who described and endorsed it.
- Is the reference in the literature substantial or incidental? Is it merely the author's opinion or is it something more?
- Has the publication, technique, or opinion undergone peer review? Logically, peer acceptance of techniques and theories should take priority over peer review of individual results or applications. Where the reliability of a technique is unknown, positive peer review may be (epistemologically but not sociologically) meaningless.

[59] David Paciocco, "Evaluating Expert Opinion Evidence for the Purpose of Determining Admissibility: Lessons from the Law of Evidence" (1994) 27 CR (4th) 302 at 313–18.

- Is there a substantial body of academic writing approving the technique or approach?
- To what extent is the technique or theory accepted? Is the technique or theory discussed only in forensic scientific and forensic medical circles? In assessing the extent of *acceptance*, the judge should consider what evidence supports acceptance – opinions based on personal impression or hearsay and incidental references in the relevant literature may not be enough to support claims about wide acceptance. The fact that support comes from earlier judgments rather than scientists or scientific, technical, and biomedical publications will usually be significant.
- Is the expert merely expressing a personal opinion (*ipse dixit*)? To what extent is the expert evidence extrapolation or speculation? Is the expert evidence more than an educated guess? Is this point made clear?
- Does the expert evidence actually form part of a field or specialization? Judges should not be too eager to accept the existence of narrow specializations or new fields based on limited research and publication.
- Does the evidence go beyond the expert's recognized area of expertise?
- In determining the existence of a field or specialization, it may be useful to ascertain whether there are practitioners and experts outside the state's investigative agencies. If so, what do they think?
- Is the technique or theory novel? Does it rely on established principles? Is it controversial?
- Is the evidence processed or interpreted by humans or machines? How often are the machines tested or calibrated?
- Does the evidence have a verification process? Was it applied? Were protocols followed?
- Is there a system of quality assurance or formal peer review? Was it followed?
- To what extent is the expert evidence founded on proven facts (and admissible evidence)?
- Has the expert explained the basis for the technique, theory, or opinion? Is it comprehensible and logical?
- Has the expert evidence been tainted or influenced by inculpatory or adverse information and opinions? Did the experts have close contact with the investigators, or were they formally and substantially independent?
- Has the expert made serious mistakes in other investigations or prosecutions? Has the expert been subjected to adverse judicial comment?
- Does the expert invariably work for the prosecution (or defence)?
- Are the techniques or conclusions based on individual case studies or more broadly based on statistical approaches like epidemiology and meta-analysis?

- How confident is the expert? Does the expert express high levels of confidence or quantify certitude in the absence of validation and accuracy studies? Is this quality a feature of the expert's regular practice?
- Is the expert willing to make concessions?
- How extensive is the expert's education, training, and experience? Is this background directly relevant? Judges should look at overall training and experience, and, in an age of increasing specialization, not be too eager to allow individuals who are not the most appropriate experts to testify.
- Does the expert have a financial interest in the evidence or technique? This question extends beyond employment to issues of intellectual property, proprietary interests, managerial roles, and shareholding. *Conflicts of interest* should be disclosed so they can be factored into assessments of admissibility and weight.[60]

Although he proposed this list of helpful questions, Professor Edmond also cautioned:

> Judges should be reticent in using these (and other) supplementary indicia to overcome a lack of testing. They should inquire about the failure to test and not simply excuse such failures because the inculpatory expert evidence is important, or vital, to the prosecution's case. Where rigorous empirical studies have been undertaken, the results of these studies will tend – though not invariably – to outweigh the other indicia of reliability. Ordinarily, the results of rigorous empirical testing should be preferred to other evidence – no matter how prevalent the view, how authoritative the expert, or how counterintuitive the result. Without more, the fact that a technique or theory has been used by a forensic community for decades and previously admitted into trials will rarely provide a persuasive basis to resist adverse results from validation and accuracy studies.[61]

I agree with this caution. Testing and error rates are optimal, but it is important to reiterate that many kinds of expert opinion are not readily susceptible to empirical testing or reproducibility. The inability to provide testing results does not necessarily render these kinds of expert evidence unreliable. However, it does call for vigilant use of other indicators of reliability which are more germane to the task.

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[60] Edmond, "Pathological Science?" at 126–27.
[61] *Ibid.*, 128.

Forensic pathology provides a good example of a discipline that has not traditionally engaged in random testing or determining rates of error. The reasons are obvious: testing and reproducibility cannot be used to verify a cause of death. The forensic pathologist's opinion must instead rely on specialized training, accepted standards and protocols within the forensic pathology community, accurate gathering of empirical evidence, attention to the limits of the discipline and the possibility of alternative explanations or error, knowledge derived from established peer-reviewed medical literature, and sound professional judgment.

Although it will often not be possible to look to testing and error rates, there are other tools that judges can use to determine the threshold reliability of interpretative sciences such as forensic pathology. Professor Edmond has provided a very useful inventory. Our systemic review also suggests a number of tools that are germane in assessing the threshold reliability of a forensic pathology opinion.

First, it is important that the factors on which a sound forensic pathology opinion rests, and which I described earlier in this Report, be scrutinized to ensure that they have been adhered to in the particular case. Is the empirical evidence accurately recorded? Is the reasoning process clearly explained and logical? And, based on this foundation, does the opinion stated appear to be justifiable?

As the evidence at the Inquiry made clear, the presence or absence of a system of quality assurance and meaningful peer review of post-mortem reports in the work environment from which the opinion comes is also important. So too is whether the expert witness has the training and experience to offer the particular opinion, or whether the witness is stepping beyond the limits of his or her expertise.

In addition, because forensic pathology is an interpretive science, it is important to examine the language in which the expert opinion is expressed. As is often the case in fields where testing and error rates may not be available, the limits placed by the science on the precision or certainty with which a conclusion can be drawn from empirical evidence must be observed. Purported precision or certainty beyond that permitted by the empirical evidence may be a telltale sign of unreliability. This caution is one of the important lessons learned from our systemic review.

We also learned that failure to acknowledge that a proffered opinion is located in an area of particular controversy within the science can matter for threshold reliability. So, too, can the failure to consider and provide reasoned rejection of alternative conclusions that might arguably be drawn from the data.

Thus, like all expert scientific evidence, forensic pathology opinions can be tested for threshold reliability. The challenge for the trial judge as gatekeeper is to access the tools germane to the task when applying the element of judgment

necessary to determine threshold reliability in a reasoned and transparent way.

I discuss later in this chapter the process that trial judges can use when they are deciding whether expert evidence is admissible and, in particular, how it can be made both expeditious and fair through increased reliance on written material, including standardized expert reports. But first it is important to put in context the legitimate concern that a vigilant approach to judicial gatekeeping will prolong the trial process, at least for pediatric forensic cases.

The types of cases considered by this Inquiry, ones where expert evidence was absolutely critical to the ultimate issue in the case, are relatively rare. Cases involving the death of children are, thankfully, uncommon. Even in those few cases, however, many will not hinge on an expert forensic pathology opinion about the cause of death. In those that do, there is a need for judges to play their gatekeeper role with vigilance. Despite their best efforts, this approach may prolong the trial process, but that is necessary when the interests of justice demand it. As seen by this Inquiry, the consequences of allowing unreliable expert opinion can be devastating. That being said, however, the appropriate exercise of the gatekeeper function may in fact reduce the length of the trial process, where it results in the exclusion of some or all of the proposed expert testimony. As Justice Moldaver of the Court of Appeal for Ontario noted in *Johnson v. Milton (Town)*:

> Recognizing, as I do, that expert evidence may not fit neatly into watertight compartments in every case and that shades of grey will inevitably exist, trial judges should do their best to perform the gatekeeper function they have been assigned, if for no other reason than trial economy. Permitting experts to give evidence on matters that are commonplace or for which they have no special skill, knowledge or training wastes both time and resources and adds stress to an already overburdened justice system. It is also legally incorrect.[62]

Drawing on what I heard at the Inquiry, let me offer these concluding thoughts on the gatekeeper task of vetting any scientific evidence for threshold reliability. I recognize that simply reciting a laundry list of factors or questions is of limited utility. It may be helpful to distinguish between those questions that focus on the reliability of the witness and of the relevant scientific field in general and those that focus on the reliability of the particular opinion that the witness proposes to provide. Although some expert evidence can be excluded on the basis that the witness or the discipline, or both, are not sufficiently reliable to justify admission, expert evidence should not be admitted solely on the basis that the

[62] 2008 ONCA 440 at para 48.

witness has impressive credentials and comes from a recognized discipline. In every case, the trial judge should drill down and determine whether the actual evidence to be given by the witness satisfies a standard of threshold reliability.

In determining that threshold reliability, the trial judge should focus on factors related to

1 the reliability of the witness, including whether the witness is testifying outside his or her expertise;
2 the reliability of the scientific theory or technique on which the opinion draws, including whether it is generally accepted and whether there are meaningful peer review, professional standards, and quality assurance processes;
3 whether the expert can relate his or her particular opinion in the case to a theory or technique that has been or can be tested, including substitutes for testing that are tailored to the particular discipline;
4 whether there is serious dispute or uncertainty about the science and, if so, whether the trier of fact will be reliably informed about the existence of that dispute or uncertainty;
5 whether the expert has adequately considered alternative explanations or interpretation of the data and whether the underlying evidence is available for others to challenge the expert's interpretation;
6 whether the language that the expert proposes to use to express his or her conclusions is appropriate, given the degree of controversy or certainty in the underlying science; and
7 whether the expert can express the opinion in a manner such that the trier of fact will be able to reach an independent opinion as to the reliability of the expert's opinion.

These factors obviously do not require the trial judge to be convinced that the proposed opinion is correct. That is a question of ultimate reliability for the trier of fact. The trial judge is to assess whether the particular conclusions and opinions offered by the expert are supportable by a body of specialized knowledge familiar to the expert, and whether the manner in which the expert proposes to present his or her testimony accurately reflects the science and any relevant controversies or uncertainties in it. This full disclosure of the limits and controversies of the science in a way that the trier of fact can understand is especially important in fields such as pediatric forensic pathology.

Recommendation 131

In determining the threshold reliability of expert scientific evidence, the trial judge should assess the reliability of the proposed witness, the field of science, and the opinion offered in the particular case. In doing so, the trial judge should have regard to the tools and questions that are most germane to the task in the particular case.

The Process to Determine the Admissibility and Scope of Expert Evidence

My recommendation that judges should vigilantly exercise their gatekeeper role has implications for the process used by trial judges to decide whether expert evidence should be admitted. Those implications are discussed in the paragraphs that follow.

When There Is No Objection

One major issue is what should be done when there is no objection to the introduction of expert testimony, as happened in a number of the cases examined by this Inquiry. Justice Archibald and Ms. Davies suggest in their article:

> When both parties agree that a potential witness is an expert, the trial judge must nevertheless assess whether all four *Mohan* factors are met. In that situation, the assessment is generally straightforward with the result being the proper admission of the evidence. However, where the trial judge does not agree with counsel, it must be remembered that whether a witness is a qualified expert is a clear question of law. If, after applying all of the *Mohan* principles, the trial judge concludes that the witness is not an expert, the evidence is inadmissible.[63]

I agree that the trial judge retains the responsibility of determining the admissibility of expert scientific evidence, regardless of the absence of an objection from counsel. However, the absence of an objection or, indeed, consent to the admission of the evidence should figure prominently in whether the trial judge embarks on the kind of detailed examination of threshold reliability I have been discussing. Experienced counsel may have no interest in contesting the cause of death, given the nature of the defence. As well, counsel will be aware of factors that remain unknown to the trial judge and which may affect their tactical decisions.

[63] Archibald and Davies, "Law, Science, and Advocacy," 19.

Recognizing how cautious a trial judge must be about exploring counsel's tactical decisions, there may well be circumstances under which the trial judge is best advised to raise the issue with counsel so as to ensure that the failure to object is an informed decision.

The Form of the Voir Dire

Two methods can be used to determine the admissibility of expert evidence. One method is for counsel to provide a summary of the proposed evidence as the basis for the judge's decision. That summary might consist of a "will-say" statement, the expert's report, and/or the testimony given at the preliminary hearing. Jurisprudence has encouraged the adoption of this approach where additional oral evidence is not necessary to resolve the admissibility issues. The second method involves the hearing of evidence, including that of the proposed expert witness, before a decision is made whether to admit the evidence. If the debate is confined to the particular witness's qualifications or expertise to give evidence, that *voir dire* often takes place in the presence of the jury. Where the *voir dire* is more extensive, and the expert's ultimate opinion will be referred to, the jury will generally be excluded.

A detailed and contested examination of threshold reliability will likely compel the hearing of some evidence on a *voir dire*. As I said earlier, this hearing will no doubt prompt the concern that more rigorous gatekeeping by judges will lengthen trials, particularly in an era in which concerns have already been raised that pretrial motions are lengthening criminal trials. These legitimate concerns cannot be lightly dismissed, but I do not believe they should discourage trial judges from playing their important gatekeeping role and ensuring that there is sufficient threshold reliability to justify the admission of expert opinion. Fortunately, I think there are ways that this examination can be done both well and efficiently.

The gatekeeper function can be facilitated by expert reports that meet the requirements for completeness, plain language, and transparency described in Chapter 16, Effective Communication with the Criminal Justice System. It might also be facilitated, in some cases, by written descriptions in the report of the nature of the relevant discipline and how it engages with the criteria of reliability discussed above, such as testing, peer review, standards, general acceptance, and error rates. In forensic pathology, this description could also include areas of controversy relevant to the case and a reading list of pertinent scientific literature. This information would provide the judge and the opposing parties with a solid foundation for an efficient yet searching screening process. Oral hearings would still often be required, but they would be focused and shortened by this written

material. As I contemplate this process working, these descriptions would not have to be reinvented every time an expert witness prepares a report in a particular field of science. Rather, they would simply be adapted by the proposed expert for each case and could provide a means to facilitate effective and focused cross-examination.

Professor Edmond also dealt in his research study with the objections that could be raised from the perspective of trial efficiency to an enhanced screening for the reliability of expert evidence:

> In terms of practice, the exclusion of unreliable expert evidence may increase the length of some preliminary proceedings but overall is likely to reduce the length of trials, avert the need for trial judges to give complex instructions about questionable evidence, and prevent juries from having to make, quite literally, uneducated guesses. Just as important, the exclusion of unreliable expert evidence obviates the need for defence lawyers to undertake long and technical cross-examinations along with the need to identify and secure the services of rebuttal experts. Instead, exhaustive cross-examination and rebuttal expertise will be necessary only where the prosecution adduces demonstrably reliable expertise. Moreover, the emphasis on reliability means that the defence can question or challenge incriminating expert evidence on its own terms rather than being compelled to impugn the reputation or abilities of experienced experts called by the state.[64]

Thus, while it is important to make the gatekeeper process as efficient as possible, it is also true that time devoted at the start of the trial to excluding unreliable expert evidence and to understanding the strengths and limits of the science on which the expert evidence is based will pay off later in the conduct of the trial and in the reduced need for subsequent appeals or even public inquiries. This lesson has emerged clearly from our systemic review.

Recommendation 132

The trial judge's gatekeeping function may be facilitated, in some cases, by written descriptions in the expert reports of the nature of the relevant discipline and how it engages with the various criteria of reliability. In forensic pathology, these descriptions could include areas of controversy relevant to the case and a reading list of scientific literature on the subject.

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[64] Edmond, "Pathological Science?" 92.

The Range of Outcomes from the Admissibility Hearing

The gatekeeper function need not face the trial judge with only a binary choice – to admit expert scientific evidence fully or to exclude it completely. Framed in these terms, the choice presented to the judge would be especially stark. It would be understandable if judges hesitated before disqualifying a proposed witness with impressive credentials and experience. Moreover, such an "all or nothing" approach might inhibit trial judges from considering the threshold reliability of each aspect of a particular opinion.

Given that the admissibility decision should be made about each specific part of the proposed expert evidence, a range of outcomes is possible. A qualified forensic pathologist may be allowed to outline the abnormal findings at autopsy but not offer an opinion as to cause of death where the science does not permit that opinion to be given. Or the pathologist may be permitted to situate his or her opinion as to cause of death within an existing controversy as long as the controversy is fully disclosed. Or the pathologist might be allowed to opine as to cause, but not mechanism, of death. Or the pathologist's opinions might be admitted, but the use of certain misleading or scientifically unsupportable language or expressions of certainty precluded. The point here is that the options should be driven, in large part, by threshold reliability, and not by all-or-nothing propositions advanced by counsel or the witness.

In determining what parts of the expert testimony should be admissible, the judge will also consider all the prerequisites for admissibility articulated in *Mohan,* including the balance between the probative value of the proposed evidence and its prejudicial effect. That balancing might result in the exclusion of some or all of the evidence. The extent to which the evidence approaches the ultimate issue in the case may also inform whether it has sufficient threshold reliability to justify its admission.

Another option that the trial judge should consider in the admissibility *voir dire* has received less attention than it deserves – determining what language can or cannot be used by the proposed expert. If, for example, there is a concern that phrases such as "consistent with" will be potentially misleading, that concern should be discussed at the admissibility hearing, and the judge should make clear at the conclusion of the hearing what phrases can or cannot be used.

A final outcome from the admissibility process is a clear definition of the scope of the expertise that a particular witness is qualified to give. As discussed in the earlier part of this chapter, it will be beneficial to define the range of expertise with as much precision as possible so that all the parties and the witness are alerted to areas where the witness has not been qualified to give evidence. For

example, such an approach would have prevented Dr. Smith from giving evidence on matters of social science that fell well beyond his expertise in pathology. We have come full circle in this respect. As I earlier recommended, the trial judge should take steps at the outset to define clearly the proposed subject area of the witness's expertise. At the conclusion of the *voir dire*, the trial judge will be well situated to rule with precision on what the witness can and cannot say. These steps will help to ensure that the witness's testimony, when given, can be confined to permissible areas and that it meets the requirement of threshold reliability.

Recommendation 133

Judges should consider whether there are parts of the proposed expert evidence that are sufficiently reliable to be admitted and others that are not or which must be modified to be admitted.

Judicial Education to Enhance the Gatekeeping Function

The determination of threshold reliability of expert scientific evidence by a trial judge will be greatly assisted if judges become literate in basic scientific concepts.[65] Judges do not have to be equipped to resolve scientific controversies, but they can learn to understand what constitutes good and bad science, for instance, and the frailties and limits of science.

John Conley and David Peterson[66] have said that "because science plays no part in judicial selection, judges range from closet Einsteins to proud Luddites."[67] An empirical study of state court judges in the United States has concluded that most judges have trouble applying *Daubert* criteria relating to falsifiability and error rate.[68]

One possible remedy would be to assign specialist judges to cases that involve scientific evidence. At our roundtable on expert evidence, this possibility was discussed and rejected by all participants. Professor Beecher-Monas indicated that she did not think that judges should be specialized: "I think that there is a huge

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[65] Gold, *Expert Evidence*, 23.

[66] David Peterson has a PhD and is senior vice-president of Peopleclick. John Conley is the William Rand Kenan Jr Professor of Law at the University of North Carolina, Chapel Hill.

[67] John Conley and David Peterson, "The Science of Gatekeeping: The Federal Judicial Center's New Reference Manuel on Scientific Evidence" (1996) 74 *North Carolina Law Review* 1183 at 1205–6, quoted in Gold, *Expert Evidence*, 21.

[68] Sophia Gratowski *et al.*, "Asking the Gatekeepers: A National Survey of Judges on Judging Expert Evidence in a Post-Daubert World" (2001) 25 *Law and Human Behaviour* 433 at 452.

value in having generalist judges, judges who have experience with regular trials, and who bring that experience to trials that involve scientific evidence." However, she went on to comment:

> At the same time, I think that education of the judiciary is a wonderful thing. I think that continuing legal education is something to be encouraged among the bar, and among the judiciary. And I think that it's important to bring up issues to the judiciary in terms of contrasting viewpoints about science. For example, a panel educating judges on some of the controversies about sudden infant death syndrome, or shaken baby syndrome, would be very helpful. They probably won't take back from the education all the details of the controversy, but what they will remember is that there is a controversy, and if they have a case involving sudden infant death syndrome, or shaken baby, they will worry about the evidence. And I think that's very important. I think that judges should be encouraged in their gatekeeping duties, and education is one of the ways to do it. But I am a firm believer in generalist judges.

She said that continuing legal education is something to be encouraged among both the bar and the judiciary. Indeed, Professor Beecher-Monas has written a book that I found to be extremely helpful in laying out what she calls "intellectual due process" – a framework of analysis that allows lawyers, judges, and others to evaluate a broad range of scientific evidence and to assist in discharging the judge's gatekeeper role under *Daubert*.[69]

Mr. LeSage, as well as my colleague Justice Rosenberg, agreed that specialist judges were not a viable option. As Mr. LeSage said: "From my perspective, a judge is a judge is a judge." I agree entirely. However, both of these long-serving judges supported the important role that continuing judicial education could play in helping judges perform their gatekeeping role. Mr. LeSage referred to his own experience as commissioner in the James Driskell Inquiry in Manitoba (in which he held a roundtable on scientific evidence) and commented:

> I must say it came as somewhat a shock to me, having spent forty (40) years plus in the justice system, to hear some of the scientific experts speaking about the uncertainty and the lack of clarity in areas of science which I had always thought were far more certain than they really are. And I felt very guilty that I had not better educated myself on these areas long before.

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[69] Erica Beecher-Monas, *Evaluating Scientific Evidence: An Interdisciplinary Framework for Intellectual Due Process* (Cambridge: Cambridge University Press, 2007).

Justice Rosenberg suggested that it is difficult for judges to determine threshold reliability. They are being asked to look at an entirely different field in which their ordinary views of what is common sense and what is logic may not help as much as we would hope. He said that judges need to know what questions should be asked. If the lawyers are not asking them, they might be prodded by the trial judge, albeit cautiously, to ensure that they do.

Justice Rosenberg, who has been deeply involved in judicial education, suggested that there is an important role for the National Judicial Institute in developing further courses that raise issues about the scientific method and the threshold reliability of expert evidence. I agree. The Supreme Court's important decision in *Trochym* also makes the present a particularly opportune time for increased judicial education about these and related issues.

Recommendation 134

The National Judicial Institute should consider developing additional programs for judges on threshold reliability and the scientific method in the context of determining the admissibility of expert scientific evidence.

In the wake of *Daubert*, the Federal Judicial Center in the United States prepared a *Reference Manual on Scientific Evidence* that includes an introduction by Justice Stephen Breyer of the United States Supreme Court and chapters dealing with the legal tests for admissibility of expert evidence, the scientific method, the management of expert evidence, and reference guides on topics such as statistics, multiple regression, survey research, estimation of economic loss, epidemiology, toxicology, medical testimony, DNA, and engineering practices.[70] In my view, it would be helpful if a similar guide were prepared in Canada, perhaps under the auspices of the Canadian Judicial Council, which included a guide to forensic pathology. Until that is done, the American *Reference Manual* could serve as a useful resource.

Recommendation 135

It would be useful if the Canadian Judicial Council, in conjunction with the National Judicial Institute, could examine the feasibility of preparing a Canadian equivalent to the *Reference Manual on Scientific Evidence* prepared by the Federal Judicial Center in the United States.

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[70] Federal Justice Center, *Reference Manual on Scientific Evidence*, 2nd ed., 2000, online: Federal Judicial Centre http://www.fjc.gov/public/home.nsf.

The Interaction of the Justice System with Expert Witnesses

A Code of Conduct for Expert Witnesses

Dr. Smith acknowledged that, when he began his work, he did not understand that his duty was to give impartial expert testimony to assist the court, as opposed to serving the adversarial interests of the Crown. In my opinion, it would be helpful to develop a code of conduct for expert witnesses who testify in criminal cases. Because expert witnesses owe their duty to the court to provide impartial and candid evidence, the presiding judge should ensure that they have been made aware of their obligations before they begin their testimony. This check might be done in a variety of ways. For example, as part of their written reports, the experts might be required to certify that they understand this duty and, before giving evidence, agree to be bound by the obligations contained in the Code of Conduct. Or, the court might inquire of counsel whether their experts have so agreed. The court could also make this inquiry of the witness directly.

In his Civil Justice Reform Project, the Honourable Coulter Osborne recommended that Ontario's Rules of Civil Procedure or its *Evidence Act* be amended "to establish that it is the duty of an expert to assist the court on matters within his or her expertise and that this duty overrides any obligation to the person from whom he or she has received instructions or payment."[71] He also recommended that experts be required to certify in their reports that they understand this duty.

In *R. v. Harris and others*, cited in earlier chapters, the Court of Appeal for England and Wales outlined the following duties that expert witnesses owe to the court:

1) Expert evidence presented to the court should be and seen to be the independent product of the expert uninfluenced as to form or content by the exigencies of litigation.
2) An expert witness should provide independent assistance to the court by way of objective unbiased opinion in relation to matters within his expertise. An expert witness in the High Court should never assume the role of advocate.
3) An expert witness should state the facts or assumptions on which his opinion is based. He should not omit to consider material facts which detract from his concluded opinions.

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[71] Coulter A. Osborne, *Civil Justice Reform Project: Summary of Findings & Recommendations* (Toronto: Ministry of the Attorney General, 2007), 83.

4) An expert should make it clear when a particular question or issue falls outside his expertise.
5) If an expert's opinion is not properly researched because he considers that insufficient data is available then this must be stated with an indication that the opinion is no more than a provisional one.
6) If after exchange of reports, an expert witness changes his view on material matters, such change of view should be communicated to the other side without delay and when appropriate to the court.[72]

In England and Wales, these general guidelines for all expert witnesses have been supplemented and particularized in a book for experts prepared by the Director of Public Prosecutions (DPP). It includes the requirement that experts called by the Crown certify that they understand their duties to the court and that they will inform all parties and, where appropriate, the court, in the event that their views change on a material issue. This obligation also requires the expert witnesses to inform the DPP of any pending legal, professional, or disciplinary proceedings against them; any adverse findings by a judge or a coroner against them; or anything else that may adversely affect their professional competence and credibility as expert witnesses.[73] Many of these guidelines now find expression as well in *The Criminal Procedure [Amendment No 2] Rules* 2006.

In addition, the Home Office and the Royal College of Pathologists have prepared their own specific Code of Practice and Performance Standards for Forensic Pathologists. It contains direction specific to forensic pathologists, as well as more general language that could be applied to all experts. In Chapter 15 (Best Practices) and Chapter 16 (Effective Communication with the Criminal Justice System), I recommend the creation of a similar code of practice and performance standards for forensic pathologists in Ontario that targets the entire range of their practice. At this juncture, however, I will consider the advisability of a general code of conduct for *all* experts about testifying in criminal cases.

During the policy roundtable on expert evidence, I asked the participants about the advisability of a code of conduct that would make it clear to expert witnesses that they are not to be advocates but, rather, to give evidence in an impartial and candid manner to assist the court. What I was referring to was something that would go beyond the proposed code of practice and performance standards for forensic pathologists and represent an ethical code for expert witnesses gener-

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[72] *R. v. Harris and others,* [2005] EWCA Crim 1980 at para. 271, citing *National Justice Compania Naviera SA v. Prudential Assurance Co. Ltd. (The Ikarian Reefer) (No.1)*, [1993] 2 Lloyds Rep. 68 at 81.

[73] *Disclosure: Expert's Evidence and Unused Material – Guidance Booklet for Experts,* March 2006, 17–19, online: Policy Directorate http://www.cps.gov.uk/publications/docs/experts_guidance_booklet.pdf.

ally, akin to that proposed by Mr. Osborne. No objections were voiced to this proposal, although both Mr. LeSage and Justice Rosenberg made the valid point that a code in itself would not guarantee the integrity of expert witnesses. Professor Beecher-Monas was supportive of the idea because of its educative function and because it could be cited by expert witnesses to resist overzealous advocates who might try to push them to say things that they were not comfortable with or that were beyond their range of expertise. The consensus seemed to be that a code of conduct would do no harm and that it could achieve some good.

In my view, there are various ways in which such a code of conduct could be incorporated into the criminal justice system. For example, the Superior Court of Justice in Ontario and the Ontario Court of Justice might issue practice directions that require counsel to ensure that the experts they intend to call as witnesses have familiarized themselves with the code of conduct and agree to be bound by its obligations before giving evidence. As well, existing pretrial conference forms could be amended to include a question as to whether counsel have complied with their responsibilities under the practice directions. In the context of criminal proceedings, these approaches might be preferable to an amendment of the criminal rules of procedure or the *Canada Evidence Act.* However, regardless of the precise approach taken, this proposal, like the one advanced by Mr. Osborne for experts in civil proceedings, would ensure that a code of conduct is made applicable to experts testifying in criminal proceedings. Indeed, given that the accused's liberty is at stake, it would be anomalous if a code governed experts when they testified in civil cases but not in criminal cases. Such an approach also tracks what has been done in England and Wales.

Recommendation 136

a) A code of conduct for experts giving evidence in criminal proceedings should be created.

b) It should be incorporated into the criminal justice system. This may best be done through the introduction of practice directions and amendments to pretrial conference forms.

c) The code should provide that experts have a duty to assist the court on matters within their expertise and that this duty overrides any obligation to the person from whom they received instructions or payment.

d) Experts should be required to certify that they understand this duty as part of their reports and agree to be bound by the obligations contained in the code of conduct before giving evidence.

Court-Appointed or Joint Experts

Some commentators have suggested that experts, including forensic pathologists, who are appointed by the court or jointly by the parties represent the best hope for securing reliable, objective expert testimony. In civil cases, interest has been expressed in the use of court-appointed or joint experts, although I note that Mr. Osborne concluded in his review that the mandatory use of such experts was not recommended.[74] In my view, they would not be useful in criminal cases involving complex and controversial questions of pediatric forensic pathology.

Professor Edmond stated in his research study for this Inquiry that people such as Professor Sir Roy Meadow, whose testimony was later discredited in England, or Dr. Smith might have been precisely the type of well-known "experts" appointed by the court or chosen by the parties as joint experts.[75] Reliance on a joint or court-appointed expert follows a view of science that discounts disagreements among scientists on matters of judgment – an area that is particularly relevant with respect to the more interpretive aspects of forensic pathology. As well, one of the benefits of an adversarial system is its ability, through properly resourced and informed cross-examination and presentation of evidence, to best reveal and illuminate areas of scientific controversy. As one leading commentator on the interaction between science and the law has written: "At their most effective, legal proceedings have the capacity not only to bring to light the divergent technical understandings of experts but also to disclose their underlying normative and social commitments in ways that permit intelligent evaluation by lay persons."[76]

Professor Edmond has similarly stressed the ability of the adversarial process, including cross-examination, to provide a focused form of challenge that may not always be present within scientific communities.[77] That said, it is critically important that sufficient resources be provided to ensure effective adversarial challenge. I will address this subject in more detail elsewhere in this Report.

Recommendation 137

Court-appointed or joint experts are not recommended for cases involving pediatric forensic pathology. Rather, effective use of the adversarial system, which

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[74] Osborne, *Civil Justice Reform Project: Summary of Findings & Recommendations*, 82.

[75] Edmond, "Pathological Science?" 137.

[76] Sheila Jasanoff, *Science at the Bar: Law, Science, and Technology in America* (Cambridge: Harvard University Press, 1995), 215.

[77] Gary Edmond, "Secrets of the Hot Tub: Expert Witnesses, Concurrent Evidence and Judge-led Law Reform in Australia" (2008) *Civil Justice Quarterly* 51–82.

allows each party to call its own evidence and to cross-examine the other party's witnesses, is particularly appropriate in areas of dispute or controversy in these cases.

Case Management, Disclosure of Expert Reports, and Meetings between Experts

Subsection 657.3(3) of the *Criminal Code* provides that, "for the purpose of promoting the fair, orderly and efficient presentation of the testimony of witnesses," each party who intends to call expert testimony shall give notice of this intention to the other parties at least 30 days before the commencement of the trial or within any other period fixed by the court. This notice should include the name of the proposed witness, a description of the witness's area of expertise sufficient to permit the other parties to inform themselves about that area of expertise, and a statement of the qualifications of the witness as an expert.

In addition, the prosecutor shall, within a reasonable time before the trial, provide the other party or parties with a copy of the witness's report or, if no report has been prepared, a summary of the anticipated opinion and the grounds on which it is based. The defence shall provide such material no later than the close of the case for the prosecution. Without the consent of the accused, the prosecutor may not produce this defence material in evidence if the proposed defence witness does not testify.

In Chapter 17, The Roles of Coroners, Police, Crown, and Defence, I reject the introduction of additional provisions that would compel the defence to provide early disclosure of its anticipated expert testimony. However, I note there that the defence is often well served (as is the forensic testimony presented to the criminal justice system) by earlier, voluntary disclosure of its anticipated forensic evidence. Indeed, in several of the cases examined at this Inquiry, such disclosure contributed to or resulted in decisions by prosecutors to terminate the criminal proceedings.

In this chapter, I focus on the important role that judges should play in ensuring compliance with the existing disclosure provisions and in encouraging or facilitating additional steps to promote the accurate and expeditious consideration of expert testimony.

Subsection 657.3(4) provides that, where a party calls an expert witness without complying with its obligations under subsection (3), the court shall, at the request of any other party, grant an adjournment to allow preparation for cross-examination; direct the party calling the witness to provide the material that it should have provided earlier; and order the calling or recalling of any witness to

give testimony on related matters, unless the court considers it inappropriate to do so. As well, even where the obligations have been complied with, if the court is of the opinion that another party has not been able to prepare for the evidence of the proposed witness, it may adjourn the proceedings or order that further particulars be given of the evidence or that any witness be called or recalled.

What these provisions mean is that the trial judge has a vital role to play in enforcing compliance with the existing *Criminal Code* and in taking steps, even where there has been full compliance, to ensure that all parties are fully prepared and informed, and, as a result, can effectively test the expert testimony presented. Most significant, the trial judge may order that further particulars of the evidence be given. These particulars might include, in the context of pediatric forensic pathology, more information about any qualifications on the opinions expressed, the expert's level of confidence in the opinions expressed, and any existing controversy around the issues under consideration and how the expert opinion is situated within that controversy.

The court has an equally vital role to play in case management before the trial. Section 625.1 of the *Criminal Code* provides for pre-hearing conferences to consider matters that promote a fair and expeditious hearing or would be better decided before the start of the proceedings, and to make arrangements for decisions on those matters. Indeed, such conferences are mandated for jury trials. Even apart from these provisions, judicial pretrials in Ontario are well established at all levels of court and, for serious or complex cases, may engage the judge in ongoing pretrial case management.

Case management has particular relevance to trials in which pediatric forensic pathology or other complex expert evidence may figure prominently. The judge can facilitate the narrowing of the issues between the parties that relate to forensic pathology. For example, agreement may be reached as to whether the pathologist's expertise is to be admitted; whether the post-mortem or consultation report, or parts thereof, will be filed on consent; how the underlying facts relied on by the expert will be proven; and what photographs, if any, will be tendered. At the very least, this process can sharply define the issues for the assistance of the trial judge.

In connection with the expert's report, ss. 657.3(1) and (2) of the *Criminal Code* are sometimes overlooked. Subsection 657.3(1) provides that the evidence of an expert may be given by means of a report, accompanied by an affidavit or solemn declaration by the proposed expert setting out his or her qualifications if certain preconditions are met. The court must recognize the person as an expert, and the party intending to produce the report must have given the other party or parties a copy of the report, the affidavit or solemn declaration, and

reasonable notice of the intention to produce the report. Subsection 657.3(2) provides that, notwithstanding subsection (1), the court may require the person to be examined or cross-examined on any of the issues contained in the affidavit or solemn declaration or report. These provisions invite discussion as part of the case management process; ultimately, they invite consideration by the trial judge as to whether an order should be made admitting the report into evidence, and whether it should be accompanied by examination or cross-examination of its author.

Finally, although there is no obligation before the trial for the defence to disclose the report of its proposed witness or a summary of the anticipated opinion of that witness, the pretrial judge can nonetheless explore with the defence whether it would be prepared to do so, and, if it is so prepared, how and when that might take place. The judge may be able to alleviate, through agreed-upon terms, any concerns that the defence may have with early voluntary disclosure.

Recommendation 138

a) Trial judges can play an important role in enforcing compliance with the existing *Criminal Code* provisions respecting disclosure of anticipated expert testimony and in taking steps, even where there has been full compliance, to ensure that all parties are fully prepared and informed and, as a result, can effectively test the expert testimony presented.

b) Pretrial judges have an equally important role to play in cases in which pediatric forensic pathology or other complex expert evidence may figure prominently. They can facilitate the narrowing of the issues between the parties. They can facilitate the production of further particulars of the proposed expert's opinion or the grounds on which it is based. Finally, they can explore with the defence the voluntary early disclosure of the report by its proposed witness or a summary of the anticipated opinion of that witness, as well as how and when that disclosure might take place.

Pretrial Meetings or "Hot Tubs" between Experts[78]

Considerable interest has been expressed in the idea that experts retained by competing parties meet before the trial in an attempt to settle or narrow their differences.

[78] "Hot tubbing" is used here to describe the meeting of experts retained by competing parties to attempt to reach agreement or to narrow issues. It has also been used in another way – to describe the calling of experts in panels, rather than individually.

Mr. Osborne has recently recommended in civil cases that judges in pretrial proceedings be able to order opposing experts in appropriate cases to

a Meet, on a without prejudice basis, to discuss one or more issues in the respective expert reports to identify, clarify and, one would hope, resolve issues on which the experts disagree and
b Prepare a joint statement as to the areas of agreement, or reasons for continued disagreement
where in the opinion of the court
i there may be room for agreement on some or all issues,
ii the rationale for opposing expert opinions is unknown and clarification on areas of disagreement would assist the parties or the court or
iii cost or time savings or other benefits can be achieved proportionate to the amounts at stake or the issues involved in the case.

Of particular note to this Inquiry was his comment that,

> [d]uring consultations, medical experts noted that doctors often work well in forming consensus. They suggested that it would be very useful to have experts meet to consider whether issues can be agreed upon and determine which are still in dispute. For all experts, this reform would provide a level of peer review that expert opinions do not now routinely undergo. It may also assist in clarifying disparate interpretations of underlying facts and assumptions and would introduce a level of accountability that may deter "hired guns."[79]

Meetings between Crown and defence experts could be valuable if, in light of the expert critique from a respected colleague, they lead the experts to rethink, clarify, or narrow their disagreement. It will often be in the best interests of all parties, including the accused, to facilitate meetings between expert witnesses on complex matters involving pediatric forensic pathology. Criminal Procedure Rules in England and Wales have recently been amended to give judges the power to direct experts to meet in order to discuss their evidence and to prepare statements, with reasons, on the matters on which they agree and disagree.[80] Except for such statements, the contents of the meetings between experts are not admissible.[81] These rules also contemplate that the court can refuse to accept expert

[79] Osborne, *Civil Justice Reform Project*, 77, 83.
[80] *Criminal Procedure Rules 2005,* R. 33.5; *R. v. Holdsworth,* [2008] EWCA Crim 971 at paras. 25 and 59.
[81] *Criminal Procedure Rules 2005,* R. 33.5(3).

evidence as a remedy for non-compliance with these requirements.[82] Such an approach in Canada might be vulnerable to the same *Charter* objections, discussed in Chapter 17, The Roles of Coroners, Police, Crown, and Defence, in relation to pretrial mandatory disclosure of defence expert reports. That said, judges can encourage and facilitate meetings between willing experts. This role is yet another that can be fulfilled by pretrial judges, who are also well situated to identify the potential benefits of such meetings and to work toward agreement on the timing and terms of such meetings and any written materials that might come from them.

Recommendation 139

It will often be in the best interests of all concerned for expert witnesses to meet before trial to discuss and clarify their differences. In appropriate cases, judges, particularly pretrial judges, can encourage and facilitate such meetings between willing experts, without requiring that they take place.

Charges to the Jury with Respect to Expert Evidence

Finally, the court can play a role in protecting the criminal justice system from flawed pathology by using the charge to the jury to beneficial effect. The judge should not use instructions designed to address the weight that the jury might give to the expert evidence as a substitute for decisions about threshold reliability. As Justice Ian Binnie has noted, "the Court has emphasized that the trial judge should take seriously the role of the 'gate keeper.' The admissibility of the expert evidence should be scrutinized at the time it is proffered, and not allowed too easy an entry on the basis that all of the frailties could go at the end of the day to weight rather than admissibility."[83]

The Canadian Judicial Council has published model jury instructions, which include instructions on expert evidence. They explain that the expert has given an opinion about some technical matters that the jury may have to consider in deciding the case and that the expert is qualified by training, education, and experience to give an expert opinion. They then provide:

> Remember, the opinions of experts are just like the testimony of any other witnesses. Just because an expert has given an opinion does not require you to accept

[82] *Ibid.*, R. 33.6.

[83] *R. v. J.-L.J.*, [2000] 2 SCR 600 at para. 28.

> it. You may give the opinion as much or as little weight as you think it deserves. You should consider the expert's education, training and experience, the reasons given for the opinion, the suitability of the methods used and the rest of the evidence in the case when you decide how much or little to rely on the opinion. It is up to you to decide. … How much or little you rely on the expert's opinion is up to you. But the closer the facts assumed or relied on by the expert are to the facts as you find them to be, the more helpful the expert's opinions may be to you. How much or little you rely on the expert's opinion is entirely up to you. To the extent the expert relies on facts that you do not find supported by the evidence, you may find the expert's opinion less helpful.[84]

In cases where experts differ and where proof of an essential element depends entirely on the expert evidence, judges are advised to give the following instruction to the jury:

> The issue on which these experts differ is an essential element that the Crown must prove beyond a reasonable doubt. Before you accept the opinion of the Crown's expert on this issue, however, you must be satisfied beyond a reasonable doubt that s/he is correct. If you are not sure that s/he is correct, then the Crown has failed to prove beyond a reasonable doubt that essential element of the offence charged.

These model charges are helpful in reminding jurors that they have an obligation to apply their common sense to the findings of experts and to make their own findings about the ultimate reliability of the expert's testimony; that they are not required to accept an expert's opinion; and that they can reject all or part of the opinion,[85] even if there is no competing expert evidence.[86]

The judge should not tell the jury that the expert's evidence has already been ruled admissible, that its threshold reliability has already been determined,[87] or that the expert has any special skill.[88] It may, however, be advisable in the appropriate case to emphasize areas of controversy in expert evidence or to instruct

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[84] Model Jury Instructions – Instruction 10.4, Expert Opinion Evidence (Conflict in Opinions), online: Canadian Judicial Council http://www.cjc-ccm.gc.ca/english/lawyers_en.asp?selMenu=lawyers_pmf_types_en.asp.

[85] See *R. v. Fisher,* [1961] OWN 94 (Ont. CA), affirmed [1961] SCR 535.

[86] See *R. v. D.D.*, [2000] 2 SCR 275.

[87] *R. v. Logan* (1999), 139 CCC (3d) 57 (Ont. CA) at 61.

[88] That is, in the sense that the witness has a special skill to better understand matters outside of the trier of fact's normal experience; *R. v. A.K* (1999), 137 CCC (3d) 225 (Ont. CA) at 280.

juries that they should carefully evaluate expert scientific evidence, and not simply accept the expert evidence without careful scrutiny.

In cases in which expert evidence is important, trial judges should make use of the charge language provided by the Canadian Judicial Council model instructions, recognizing that they should supplement that language to address the particular needs in the individual case.

Recommendation 140

a) In cases in which expert evidence is important, trial judges should make use of the model charge language provided by the Canadian Judicial Council model instructions.

b) Judges should remind jurors that they should apply their common sense to expert testimony and that it is up to them to decide whether to accept all, part, or none of the expert's opinion.

c) In addition, judges should, in appropriate cases, provide structured questions to assist the jury in determining the ultimate reliability of the expert's opinion. These questions may resemble the ones available to judges to assess threshold reliability as discussed in this Report.

The evidence heard at the Inquiry clearly demonstrated that the criminal justice system can be vulnerable to unreliable expert scientific evidence, including expert evidence relating to pediatric forensic pathology. Fortunately, as I have tried to describe, tools are available to decrease the risk that the system will be misled by unreliable expert testimony. It is important to note that this gatekeeping will not be an "all or nothing" task, but that each part of the proposed expert testimony must be vetted to ensure that it has sufficient reliability to be considered by the trier of fact. Properly prepared expert reports, along with a certification that the expert understands the duty to provide impartial advice to the court, are also helpful and should facilitate the process of ensuring the threshold reliability of expert evidence. Once experts are properly qualified, care should be taken to ensure that they stay within the bounds of their expertise. No justice system can be immunized against the risk of flawed scientific opinion evidence. But with vigilance and care, we can move toward that goal.

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Pediatric Forensic Pathology and Potential Wrongful Convictions

A number of parties made submissions about what should happen to cases dealt with by the criminal justice system in which the forensic pathology is flawed. To discuss these issues, it is necessary to look both backward and forward.

My mandate prevents me from finding that, in any individual case examined at this Inquiry, a wrongful conviction resulted. However, the Chief Coroner's Review concluded that Dr. Charles Smith's work was flawed in a number of cases in which criminal convictions were registered. In one of those cases, the Court of Appeal for Ontario has already determined that errors in pediatric forensic pathology resulted in a wrongful conviction. Others from this group of cases are being pursued in order to establish the same conclusion. All agree that this process should proceed as expeditiously as possible.

However, the flawed pathology in the cases examined in the Chief Coroner's Review also suggests the possibility that there may have been errors of forensic pathology that resulted in wrongful convictions in other past cases involving either Dr. Smith or other pathologists.

Just as important as what has happened in the past is the question of what should be done in future, if, despite the various changes that I propose, flawed pathology should result in convictions that are said to be wrongful.

Finally, I have been urged to address the issue of compensation for those who suffered as a result of the flawed work by Dr. Smith identified in the Chief Coroner's Review. Here, too, both my mandate and the limited evidence I heard present constraints. I have nonetheless been invited to address these questions in some fashion.

For each of these issues, the overarching consideration is restoring and enhancing public confidence in pediatric forensic pathology and its future use in the criminal justice system. What steps should be taken concerning past errors that the criminal justice system may have made because of flawed pediatric foren-

sic pathology, and equally, what should be done to correct such mistakes if they arise in the future? I address these questions in this chapter.

Cases Examined by the Chief Coroner's Review

Criminal convictions were registered in a number of the cases in which the Chief Coroner's Review concluded that Dr. Smith's pathology was flawed. Some of those convicted will undoubtedly seek to put the conclusions of the reviewers before the Court of Appeal as fresh evidence in seeking to have their convictions set aside.

In all these cases, the time limit for appeal will have long passed. Nonetheless, as the evidence before the Inquiry demonstrated, Dr. Smith made a number of errors and, thus, in each case, a substantive issue is raised about whether, in light of that fact, the conviction should be set aside. What is important is to get at this real issue rather than be diverted by skirmishing over, for example, extensions of time. Indeed, the Ministry of the Attorney General acknowledged this priority (and commendably so) during the roundtable we held on this subject.

At that roundtable, Mary Nethery, director and executive lead on justice modernization in the ministry's Criminal Law Division, addressed the approach to be taken to the cases before the Inquiry where extensions will be sought based on the evidence from the Chief Coroner's Review:

> [T]he Ministry wants to expedite those cases where there is this potential fresh evidence; for example, evidence from eminent forensic pathologists presented at this Inquiry, that pathology evidence presented at trial was faulty, or potentially that the science has changed.
>
> So we would be willing to set up an expedited process for dealing with the extension of time to appeal. We would work with the Defence Bar, and the Ontario Court of Appeal to develop that process.
>
> We expect that the process would apply to most of the cases. It may be sort of a group application based on some of the evidence that's been presented here.
>
> So in order to expedite these things … should there be an extension of the process for time to appeal, the real issues would be the merits of the case argued in the Court of Appeal. And [we] would expend our time and energy on that issue, I think both from the defence and the Crown's side.

…

> [A]s Ministers of Justice we do have a role to ensure that justice is done in individual cases and there may be individual cases where we would not agree to that process. I expect that would be rare, if any.

I was advised by James Lockyer, counsel for a number of the convicted parties, that the ministry had followed up on Ms. Nethery's position and "the follow-up … bodes well for the future ... and is in accord with what was said at that roundtable."

I welcome these developments. The question of whether Dr. Smith's work in the cases examined by the Chief Coroner's Review resulted in any other wrongful convictions should be answered as quickly as possible. Such a response will undoubtedly help to restore public confidence.

Recommendation 141

In cases in which it is sought to set aside convictions based on errors in Dr. Charles Smith's work identified by the Chief Coroner's Review, the Crown Law Office – Criminal should assist in expediting the convicted person's access to the Court of Appeal and in facilitating a determination of the real substantive issues in the cases, unencumbered by unnecessary procedural impediments. Such assistance could include

- **consenting to defence applications for extensions of time within which to appeal;**
- **working toward agreement with the defence on evidentiary or procedural protocols for applications to extend time within which to appeal or for introducing fresh evidence on appeal or respecting the appeal itself;**
- **permitting the use of transcripts of the evidence tendered at inquiries (such as this one) by forensic experts or others; or**
- **narrowing the issues that need be resolved by the Court.**

Review of Other Past Cases

A number of the parties, witnesses, and roundtable participants have urged me to recommend that past cases other than the 19 examined at the Inquiry be the subject of one or more reviews. There were varying proposals as to the number,

scope, motivation, and mechanisms of such reviews. The three main proposals were (1) a review of Dr. Smith's cases from 1981 to 1991, (2) a comprehensive review of all Ontario pediatric forensic pathology cases, and (3) a review of all shaken baby syndrome / pediatric head injury cases.

The Chief Coroner's Review initially examined Dr. Smith's criminally suspicious cases from 1991 to 2001. Dr. Michael Pollanen, Chief Forensic Pathologist for Ontario, testified that the Chief Coroner's Review provided a reasonable basis to believe that there might be problems with Dr. Smith's earlier cases. It was therefore decided by the Office of the Chief Coroner for Ontario (OCCO) that his 1981–91 cases should also be reviewed. This review, which is ongoing, is of those cases where Dr. Smith performed the post-mortem examination or was consulted for an opinion, and where the manner of death was recorded by the OCCO as "homicide."

The Mullins-Johnson Group and the Association in Defence of the Wrongly Convicted (AIDWYC) urged me to recommend a comprehensive review of all pediatric forensic cases in Ontario that resulted in convictions from 1981 on. They argued that Dr. Smith's influence and leadership within the province made it likely that others had informally consulted with him or otherwise adopted his flawed approach.

Dr. Pollanen shared with the Inquiry his view that the Chief Coroner's Review also highlighted the need to consider a review of the shaken baby syndrome (SBS) cases – regardless of the pathologist involved – given the scientific uncertainty that has come to characterize that diagnosis. As a result of that uncertainty, he searched the OCCO database for cases between 1986 and 2006 in which the cause of death was coded as SBS or as undetermined head injuries.[1] The search was narrowed to include only deceased children between one month and 12 months. Dr. Pollanen found 142 such cases. He did not know how many of these cases had resulted in convictions.

Dr. Pollanen felt that a review of these cases, such as was undertaken in the United Kingdom under Attorney General Lord Goldsmith, which I discuss later, should be considered in Ontario, and he promoted that position in a presentation he made to Crown counsel in March 2007.

In her testimony, UK forensic pathologist Dr. Helen Whitwell contended that there is a need for a "system where there is the ability to review a case" when research developments or medical advances could affect criminal convictions. She

[1] Dr. Pollanen explained that he included some undetermined head injury cases to account for the fact that the police might have treated those "undetermined" cases as suspicious.

described in some detail the evolution of thinking associated with the SBS cases. Dr. Jack Crane, state pathologist for Northern Ireland, also supported a review of SBS convictions, given the possibility that they may be unsafe or wrongful. He too described the existing controversies in this area, noting that some pathologists remain unconvinced that the syndrome actually exists. Dr. Albert Lauwers, Acting Deputy Chief Coroner, testified that a "moral and ethical and just society" would look at these cases to ensure that no family has been harmed by changing information.

These views from highly qualified and responsible professionals who appeared at the Inquiry are all motivated by the concern that the debate within the global forensic pathology community has evolved and intensified over the last 15 years. As new information has been acquired, the worry expressed by all these doctors is that criminal convictions based on pediatric forensic pathology of former times may be unsustainable in light of the current state of the science. A look at the experience in England and Wales and a brief outline of the current thinking on the subject help to throw light on this concern.

Experience in England and Wales

In their research study for the Commission, Professors Kathryn Campbell and Clive Walker observed that

> [e]rrors made by pathologists reporting in criminal cases on sudden deaths of infants have resulted in serial miscarriages of justice in the United Kingdom. These types of mistakes are exceptionally grievous for bereaved families, for the credibility of experts, and for the justice system itself. Conclusions presented by experts at trial are often cloaked in dense scientific language which implies that such results and testimony are factually unassailable, but, in reality, these conclusions have been found to be interpretations affected by subjective inferences and shoddy case construction.[2]

The lessons that might be learned from the Goldsmith reviews, and the criminal cases that led to them, speak not only to the review processes but also to how the evolution of scientific knowledge might affect the nature and scope of those reviews.

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[2] Kathryn Campbell and Clive Walker, "Medical Mistakes and Miscarriages of Justice: Perspectives on the Experiences in England and Wales," in *Pediatric Forensic Pathology and the Justice System*, vol. 2 of Inquiry into Pediatric Forensic Pathology in Ontario, Independent Research Studies (Toronto: Ministry of the Attorney General, 2008), 325.

In January 2003, the English Court of Appeal quashed the 1999 conviction of Sally Clark for the murder of her two baby sons.[3] Ms. Clark's first appeal had been dismissed in 2000. She maintained her innocence and asked the Criminal Cases Review Commission (CCRC), the independent body set up to investigate possible miscarriages of justice in England, Wales, and Northern Ireland, to review her convictions as alleged miscarriages of justice. It had come to light that pathologist Dr. Alan Williams had ordered microbiological testing of the second son's blood at autopsy. Test results indicating infection in the child were not included in the autopsy report, nor were they disclosed to the defence or mentioned in testimony. They were therefore not known to the jury.

This non-disclosure was significant because Dr. Williams had testified that there was no indication that the child had died as a result of natural disease or infection. Moreover, the death of Ms. Clark's first child had initially been attributed to sudden infant death syndrome (SIDS). It was only after the second child's death was determined to be non-accidental that the first child's death was revisited and similarly diagnosed. Thus, the non-disclosure could have played a role in both murder convictions.

As well, pediatrician Sir Roy Meadow testified as to the unlikelihood that two SIDS deaths would occur within one family. He calculated the risk of a single SIDS death in a family as 1 in 8,543 and then squared that number to calculate the risk of two SIDS deaths in a single family as one in 73 million. (The fallacy of assuming that deaths in the same family must be explained either by coincidence or homicide rather than, for example, some undetected or yet to be discovered hereditary disease or defect seems obvious.)

The CCRC referred this case to the Court of Appeal. The Court regarded this to be a difficult case, and the pathology to be inconclusive. It quashed the convictions on the basis of the non-disclosure – namely, that there was evidence (the microbiology test results) not before the jury that might have caused it to reach a different verdict.[4] It also held that the figure of one in 73 million very likely "grossly overstates the chance of two sudden deaths within the same family from unexplained but natural causes." That evidence, the Court found, should have been excluded.[5]

Following the release of this decision, Attorney General Lord Goldsmith established an Interdepartmental Group (IDG), consisting of members of the police and Crown Prosecution Service, Home Office, Law Society, and the CCRC. It was

[3] *R. v. Clark*, [2003] EWCA Crim 1020.

[4] *Ibid*. at paras. 134–36.

[5] *Ibid*. at paras. 177–78.

to examine other of Dr. Williams' cases to determine whether similar non-disclosure took place. As well, the Director of Public Prosecutions and the Crown Prosecution Service undertook to disclose Dr. Williams' conduct in the *Clark* case to all defence counsel in his ongoing cases.

This review was eclipsed by the later and larger review announced by Lord Goldsmith on January 19, 2004, in the aftermath of the decision of the Court of Appeal in *R. v. Cannings*.[6] In 2002, Angela Cannings was convicted of murdering two of her four children. A third had also died as a baby. The fourth child, the second youngest, had suffered an acute life-threatening episode as an infant, from which she had fully recovered. The prosecution relied on expert evidence that, in effect, said that where multiple infant deaths occur in a family, unnatural cause of death is established, unless it is possible to establish an alternative natural explanation for the deaths.

In 2003, the Court of Appeal quashed Ms. Cannings' convictions. It held that "it does not necessarily follow that three sudden unexplained infant deaths in the same family leads to the inexorable conclusion that they must have resulted from the deliberate infliction of harm."[7] If, on examination of all the evidence in an infant death case, every possible known cause has been excluded, the cause of death remains unknown. Noting that we are at "the frontiers of knowledge" respecting sudden infant deaths, the Court said:

> All this suggests that, for the time being, where a full investigation into two or more sudden unexplained infant deaths in the same family is followed by a serious disagreement between reputable experts about the cause of death, and a body of such expert opinion concludes that natural causes, whether explained or unexplained, cannot be excluded as a reasonable (and not a fanciful) possibility, the prosecution of a parent or parents for murder should not be started, or continued, unless there is additional cogent evidence, extraneous to the expert evidence ... which tends to support the conclusion that the infant, or where there is more than one death, one of the infants, was deliberately harmed. In cases like the present, if the outcome of the trial depends exclusively or almost exclusively on a serious disagreement between distinguished and reputable experts, it will often be unwise, and therefore unsafe, to proceed.[8]

Subsequently, in *R. v. Kai-Whitewind*, the Court of Appeal refuted the argument that its decision in *Cannings* meant that a prosecution should not proceed or

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[6] *R. v. Cannings*, [2004] EWCA Crim 1.

[7] *Ibid*. at para. 148.

[8] *Ibid*. at para. 178.

should be stopped whenever there is a genuine conflict of opinion between reputable experts.[9] The *Cannings* decision must be understood, the Court said, as applicable to cases where the prosecution relied on inferences based on the coincidence of multiple infant deaths in one family, absent evidence of homicide beyond the competing forensic evidence. There is no general rule that disagreement between medical experts is sufficient on its own to render a conviction unsafe. It is the role of the jury to appraise conflicting expert testimony.[10]

Nonetheless, the *Cannings* decision prompted the Attorney General to ask the Crown Prosecution Service to review all ongoing cases involving an unexplained infant death. That review resulted in a decision not to proceed with the prosecution in three cases. Lord Goldsmith also established a review of past cases in which a parent or caregiver had been convicted in the previous 10 years of killing an infant under two years of age. The purpose behind the review of current and past cases was to identify whether any of them "bore the hallmarks described by the Court of Appeal in the *Cannings* case as making a conviction potentially unsafe."[11]

The Goldsmith review identified a total of 297 cases of relevant past convictions. Twenty-eight of those cases raised concerns about the safety of the convictions. Defence solicitors, and, in some cases, the CCRC and the Court of Appeal, were so notified. Another 89 of the 297 cases were shaken baby syndrome cases. These were not referred to the CCRC pending the Court of Appeal's decision in four such cases that were heard together as *R. v. Harris and others*.[12] On July 21, 2005, the Court of Appeal released its decision.

Lorraine Harris had been convicted of manslaughter in the death of her four-month-old son. Raymond Rock had been convicted of murdering his partner's 13-month-old daughter. Alan Cherry had been convicted of manslaughter in the death of his partner's 21-month-old daughter. Finally, Michael Faulder had been convicted of inflicting grievous bodily harm on his seven-week-old son.

The second Goldsmith review had notified Ms. Harris and Mr. Cherry that it might be appropriate for the safety of their convictions to be considered by the Court of Appeal. Each successfully obtained extensions of time in which to apply for leave to appeal, and the leave was granted. Mr. Rock had already filed a notice of appeal and was granted leave to appeal. The CCRC referred Mr. Faulder's case to the Court.

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[9] *R. v. Kai-Whitewind*, [2005] EWCA Crim 1092.

[10] *Ibid.* at paras. 82–89.

[11] UK, House of Lords, *Parliamentary Debates*, vol. 667, col. 1658 (21 December 2004) (Lord Goldsmith).

[12] *R. v. Harris and others*, [2005] EWCA Crim 1980.

In all four cases, the appellants submitted that medical research into SBS since their convictions threw into doubt the safety of these convictions. Twenty-one experts gave oral evidence in the Court of Appeal for the various parties; as well, the testimony of four experts was presented in writing.

At the heart of these cases was a challenge to the accepted hypothesis respecting SBS or non-accidental head injury (NAHI). The accepted hypothesis was that the presence of a triad of head injuries consisting of hypoxic-ischemic encephalopathy (disease of the brain affecting the brain's function and often associated with swelling), subdural hemorrhage (bleeding into the space between the brain and the dura, which is adherent to the inner aspect of the skull), and retinal hemorrhages (hemorrhages seen in the retina) in infants is a "hallmark" of NAHI. The Court noted that not all three of the injuries are necessary for NAHI to be diagnosed, but doctors supporting the triad stated that no diagnosis of pure SBS (as opposed to impact injuries or impact and shaking) could be made without both encephalopathy and subdural hemorrhages.[13]

One of the experts testifying was Dr. Jennian Geddes, a neuropathologist. Between 2000 and 2004, a team of doctors led by Dr. Geddes produced three papers setting out their research on the triad. The third paper (Geddes III) put forward a new hypothesis suggesting that there was one unified cause of the triad that was not necessarily trauma. The "unified hypothesis" was that brain swelling combined with raised intracranial pressure could cause both subdural and retinal hemorrhages. Since brain swelling and raised intracranial pressure can be explained by the mere cessation of breathing (absent trauma), the hypothesis, if accurate, would mean that the triad could never be regarded as diagnostic of NAHI. Dr. Geddes was challenged in cross-examination on the validity of the unified hypothesis. She conceded that the hypothesis was advanced to stimulate debate, and not meant to be used as proof in court or as fact (despite having been used as such in various courts). The Court concluded that the unified hypothesis could not be regarded as a credible or alternative cause of the triad. However, this conclusion did not determine the appeals since there remained a body of opinion that cautioned against the use of the triad as a certain diagnosis in the absence of other evidence.[14]

The Court agreed with that body of opinion. Although the Court found that the triad is a "strong pointer" to NAHI on its own, it should not automatically and necessarily lead to a diagnosis of NAHI. All the circumstances, including the clinical picture, must be taken into account.[15] Ultimately, the Court's decision

[13] *Ibid.* at para. 56.
[14] *Ibid.* at para. 69.
[15] *Ibid.* at para. 70.

means that the triers of fact must resolve the diagnostic value of the triad on a case-by-case basis, having regard to all the available evidence.

The Court also considered the first two papers prepared by Dr. Geddes and her team (Geddes I and II). This research was relevant to the degree of force required to cause death. It strongly suggested that severe traumatic axonal damage (damage to the nerve tissues) is a rarity in infant NAHI unless there is considerable impact. It also suggested that the diffuse brain damage that is generally responsible for a loss of consciousness results from oxygen starvation rather than direct trauma to the brain. (As Dr. Whitwell, a member of the Geddes team, explained at our Inquiry, this research meant, among other things, that death might be caused by much less force than previously believed.)

The Court observed that knowledge respecting the growing science of biomechanics (and to an extent Geddes I and II) has moderated the conventional view that strong force is required to cause the triad of injuries.[16] On the issue of how much force is necessary to cause injuries such as the triad, the Court reflected that it is generally agreed that there is no scientific method of correlating the amount of force used and the severity of the damage caused. There is a divide between those who maintain that severe injuries can confidently be attributed to a traumatic cause and those who contend that very little force may cause serious injuries. The Court declined to resolve this issue, referring instead to some general propositions:

- as a matter of common sense, the more serious the injury, the more probable that it was caused by force greater than mere "rough handling";
- if rough play could cause serious injury, then hospitals would be full of such injuries and they are not;
- the cases where serious injuries were caused by minor force would be very rare; and
- the age of the victim is not necessarily a factor in deciding the degree of force or impact. However, the vulnerability of an infant arises from the fact that its head is larger in proportion to its body and its neck muscles are weaker than those of older children. Consequently, injuries at the site of the craniocervical junction are significant.[17]

The Court then evaluated the merits of each appeal. Ultimately, in two of the cases, the Court quashed the convictions as unsafe. In the third, manslaughter

[16] *Ibid.* at para. 148.
[17] *Ibid.* at paras. 76–80.

was substituted for murder. In the fourth, the appeal was dismissed. It is noteworthy that, in Lorraine Harris' appeal, the Court concluded that the Crown's evidence and arguments were powerful. No defence witnesses identified to the Court's satisfaction a specific alternative cause of the child's injuries. But the triad stood alone, and the clinical evidence pointed away from NAHI. Indeed, the finding of the triad itself might be uncertain (given the competing expert testimony on that point). In any event, the Court noted that the mere presence of the triad on its own cannot automatically or necessarily lead to a diagnosis of NAHI. The Court concluded that the fresh evidence as to the reduced capacity of the triad and the reduced amount of force that might be necessary to cause the triad might reasonably have affected the verdict. Accordingly, the conviction was unsafe.[18] The fresh evidence was extensive. It included evidence from the growing science of biomechanics as well as the Geddes I and II findings that might have caused one doctor to have taken a less firm stance in rejecting the explanation that the injuries were caused by shaking to revive the deceased child.

Following the release of the *Harris* decision, Lord Goldsmith announced a review of the shaken baby cases identified earlier. Since one of those 89 cases had already been referred to the Court of Appeal, the number of cases subject to Lord Goldsmith's review was reduced to 88. On February 14, 2006, Lord Goldsmith reported to the House of Lords that this review had been completed. He identified only three convictions as potentially problematic, and notified counsel for those individuals that it might be appropriate for their clients' convictions to be referred to the Court of Appeal or the CCRC. Nine shaken baby cases had previously been referred.[19]

I did not examine the internal workings of the Goldsmith reviews. I am not well positioned to express an opinion on how complete their work was, or whether they drew on the right people to determine which cases were of concern. Dr. Christopher Milroy and Dr. Whitwell did not know whether, or to what extent, forensic pathologists were used during the review process. But the Goldsmith reviews and the English cases that spawned them are nevertheless instructive. They illustrate that a process can be designed to examine criminal convictions involving work of a discredited pathologist (Dr. Williams) or evolving pediatric forensic pathology and related science (SBS). It is appropriate that such reviews, if needed, should be led by government, given their resource implications, the need to access documents in the possession of the authorities, and the implications for the administration of justice. It is also appropriate that their

[18] *Ibid.* at paras. 152–53.

[19] UK, House Lords, *Parliamentary Debates*, vol. 678, col. 1079 (14 February 2006) (Lord Goldsmith).

results be shared with the affected parties in a spirit of cooperation. The Goldsmith reviews were driven by problems identified in individual cases. Thus, there was an evidentiary foundation for revisiting other cases in which similar issues arose.

The Goldsmith reviews and the cases that led to them – most particularly *Harris* – underline both the limits to and the controversies surrounding pediatric forensic pathology. These were discussed in Chapter 6 of this Report, The Science and Culture of Forensic Pathology. But what must be reiterated is that these limits and controversies come up in the head injury cases dealt with by Dr. Smith that were of concern to the Chief Coroner's Review. In Amber's case, controversies surrounding SBS and the possibility of short household falls causing her death figure prominently. In Tyrell's case, the possibility that a fall explains the child's head injuries is, again, central to the case. In Dustin's case, the issue of what inference can safely be drawn from the presence of the triad is raised. In Gaurov's case, the controversial area of re-bleeding is present.[20] In several of these cases, Dr. Whitwell expressed the view that Dr. Smith's opinions represented mainstream or conventional thought at the time, and indeed continue to represent the views of some pathologists. However, in all these cases, the expert reviewers agreed that Dr. Smith expressed opinions that, upon a correct appreciation of pediatric forensic pathology and its limitations, are unreasonable.

Considering a Review Process

Before I turn to my precise recommendations, some general observations should be made. First, any review I recommend must be based on the evidence I heard at this Inquiry. That evidence pointed to the need to look to the past, but also the future. It cannot be denied that miscarriages of justice have resulted from flawed pathology in Ontario, elsewhere in Canada, and around the world. In the future, there may be pathologists other than Dr. Smith whose work generates concerns about potential miscarriages of justice. It is equally clear that, as forensic pathology evolves and controversies are resolved or replaced with others, concerns will inevitably arise about the evidence given in earlier proceedings. Thus, in addition to any review of past cases, there is the need to ensure that ongoing processes or mechanisms exist to enable cases that arise in future, whether from flawed pathology or a changing science, to be considered when they arise.

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[20] Re-bleeding refers to the controversy in pediatric forensic pathology about whether a relatively insignificant old or healing subdural hemorrhage can develop into a massive and life-threatening acute subdural hemorrhage as a result of normal handling or minor trauma.

Second, any review I recommend must arise out of this Inquiry's mandate. For example, the Mullins-Johnson Group and AIDWYC urged me to recommend a review of all "Eastern Ontario" forensic pathology cases resulting in criminal convictions, based on some evidence at the Inquiry concerning the quality of the work of a particular pathologist in Ottawa. That evidence was heard because it related to the existence or lack thereof of adequate OCCO oversight of forensic pathology. But the evidence did not demonstrate that the pathologist was conducting autopsies in *pediatric* death cases. The Inquiry did not address – nor could it – the quality of his work respecting non-pediatric cases. Accordingly, I make no such recommendations.

Third, any review should, in my view, be focused on identifying cases in which there were convictions and where flawed pathology opinions raise concerns that the convictions were potentially wrongful. Such a review is thus distinguished from the scope of the Chief Coroner's Review, which examined 45 of Dr. Smith's cases – whether or not they resulted in criminal convictions. That review was designed to assist in restoring public confidence in pediatric forensic pathology. It therefore could not be confined to cases involving criminal convictions, particularly because the concerns about Dr. Smith's work came in part from high-profile cases that had not resulted in convictions. Today it is, hopefully, unnecessary to review historical cases unrelated to potential wrongful convictions in order to restore and enhance public confidence, given the other measures now in place and recommended in this Report.

Fourth, reviews are time consuming and costly. They strain already scarce human and financial resources. There are a limited number of forensic pathologists, and I am proposing that they should be given additional responsibilities to meet ongoing forensic pathology needs. Of course resource considerations alone should not determine whether a review should take place. Indeed, it is arguable that resource considerations cannot predominate in circumstances where a review is likely to expose one or more potential wrongful convictions. Rather, any recommended review should be carefully crafted to recognize the limited resources available and to choose the mechanisms that make best use of those resources.

It is against this background that I have evaluated the need for a review of past cases to identify those in which unreasonable pathology opinions raise significant concerns that the convictions were potentially wrongful. I have carefully considered the three alternatives discussed above. Beyond these three alternatives, there is no reasonable basis, in my view, in the evidence I heard for a review of any other cases because of a concern for possible wrongful convictions due to flawed pediatric forensic pathology. I turn then to the three alternatives proposed.

A Review of Dr. Smith's 1981–1991 Cases

The Chief Coroner's Review examined "criminally suspicious" cases involving Dr. Smith for the period 1991–2001. A review of his cases for the period 1981–91 is ongoing. On June 26, 2008, Chief Coroner Dr. Andrew McCallum tasked Dr. Pollanen with the completion of the review. I endorse this ongoing review and see no need to recommend modifications to a process that appears to me to be working well. It will complete a review of Dr. Smith's cases where wrongful convictions could have resulted.

Recommendation 142

The ongoing review of Dr. Charles Smith's 1981–91 homicide cases should be completed. The results should be made known to the public in a manner consistent with the privacy interests of those concerned, and in a manner that will not interfere with any future legal proceedings.

A Comprehensive Review of Ontario Pediatric Forensic Pathology Cases

As previously indicated, the Mullins-Johnson Group and AIDWYC submitted that Dr. Smith's iconic status in the province, the direction he provided to other pathologists, and the likelihood that he was informally consulted in undocumented cases invite a review of all pediatric death cases which resulted in convictions from 1981 to 2001.

In my view, there was no evidence provided to this Inquiry to permit me to conclude that Dr. Smith's influence on other pathologists was sufficient to compel a review of all pediatric death cases in this province. Indeed, on the evidence I heard, Dr. Smith's influence with other pathologists was not as significant as may have been believed. He tended to work in isolation from other pathologists. I heard of many opinions expressed by other pathologists with much more caution than Dr. Smith often exhibited. I cannot recommend a review of such unwarranted breadth.

A Review of Shaken Baby Syndrome / Pediatric Head Injury Cases

As noted earlier in this report, one of the deepest controversies surrounding pediatric forensic pathology concerns shaken baby syndrome and, more generally, the

cause and mechanism of head injuries. As pathology has evolved, controversies remain and indeed have grown. Forensic pathologists find themselves situated at different places along a spectrum of views on what can and cannot be said with confidence about these issues. The following illustrates both the controversies and the challenges surrounding a review of these cases.

Dr. Pollanen told the Inquiry that, given the views of many doing forensic pathology during Dr. Smith's time, there are undoubtedly instances of pure "triad" cases without other pathology evidence, where expert testimony attributed the death to shaking. Such testimony might have been equally firm in rejecting a caregiver's explanation of a short household fall. The traditional view was that short falls in the home could not cause serious injury or death.

At the time, contrary views (both about the triad and about household falls) were less prevalent and, indeed, might have been regarded as fringe opinions. Today, many forensic pathologists question whether shaking can be diagnosed based on the triad alone. Others continue to hold the opposite view, although it is less commonly held than before. In *Harris,* the English Court of Appeal characterized the triad as "a strong pointer" to non-accidental head injury (NAHI), but cautioned against use of the triad as "automatically and necessarily lead[ing] to a diagnosis of NAHI."[21] The Court's decision raised questions of whether or when the triad alone can be the foundation of proof beyond a reasonable doubt. As for short household falls, there would appear to be much greater acceptance today that they may cause death or serious injury, although many regard such occurrences as extremely unusual.

The evolution in forensic pathology in this area has three components. First, the predominant view is no longer that the triad on its own is diagnostic of SBS. Instead, the issue is fraught with controversy. Some still say it can be. Others say it can never be. The conservative view is to say that one must look not just to the triad but to all the circumstances, acknowledging that a diagnosis of the cause of death may often be difficult, leaving the death as "undetermined."

Second, the predominant view now is that short falls can cause fatal injury, although rarely. Fifteen years ago, the mainstream view was that they never could.

Third, most pathologists agree that this area of their specialty has become much more explicitly controversial than it was in the early or mid-1990s.

Accordingly, the question is validly raised in cases of convictions based on the pure "triad," where no other pathology evidence is identified, and possibly in other SBS cases: Can it be concluded in such cases that a miscarriage of jus-

[21] *R. v. Harris and others*, [2005] EWCA Crim 1980 at para. 70.

tice may have occurred, given the current debate among pathologists? Put another way, does the evolution of pathology compel us to revisit these cases because of both the changing views and the increased controversy among forensic pathologists?

In my view, the answer may depend on factors other than the pathology evidence alone. For example, if the triers of fact were advised only that the triad was completely diagnostic of shaking and not advised of the controversy, then it is certainly arguable that they were deprived of important evidence on whether the case had been proven beyond a reasonable doubt. The same might be said if the triers of fact in a particular case were unequivocally advised that short household falls do not cause death. However, if the controversies were known to the triers of fact and they convicted nonetheless, there may be less compelling reasons for post-conviction intervention.

A recent decision of the Wisconsin Court of Appeals in *State v. Edmunds* – which was decided in the context of a motion for a new trial on the grounds of newly discovered evidence – reflects that this issue is more nuanced than simply whether a controversy was previously known to the court.[22] The Wisconsin Court of Appeals recognized that, in the 10 years since the original trial and post-conviction motion for a new trial, a shift occurred in the medical community with respect to SBS. As a result, views that were on the fringe in 1997 (when the appellant filed her first post-conviction motion) became part of a significant and legitimate debate. At the time of both her trial and her original motion, the debate within the medical community on SBS had not yet matured. Thus, the state was able to easily overcome the appellant's argument by pointing out that the jury would have had to disbelieve the weight of the medical evidence in order to have had a reasonable doubt as to the appellant's guilt. By the time of her second post-conviction motion (brought in 2006), however, the state of the medical evidence was such that a trier of fact would be faced with competing credible medical opinions in determining whether there was a reasonable doubt as to guilt.[23] This situation provided the foundation for the Court of Appeals to order a new trial.

The 2007 *Truscott* reference to the Court of Appeal for Ontario is also instructive.[24] Although it was decided in the context of a reference to the Court of Appeal from the minister pursuant to a s. 696.1 application – which raises its own special issues – it illustrates how earlier knowledge of the scientific controversy,

[22] 746 NW 2d 590 (Wis. App. 2008).

[23] *Ibid.* at para. 23.

[24] *Reference re: Truscott* (2007), 225 CCC (3d) 321 (Ont. CA).

while an important consideration, is not always determinative. At trial in 1959, the prosecution expert had testified about what inferences could be drawn about the time of death from the deceased's stomach contents, the extent of rigor mortis, and the state of decomposition. His evidence was that there was a definable 45-minute window for the infliction of the fatal injuries and time of death. That evidence, if accepted, meant that Steven Truscott had exclusive opportunity to commit the murder.

On a reference to the Supreme Court of Canada in 1966, fresh expert evidence on the same forensic issues was received by the Court.[25] That evidence included testimony from two leading English forensic pathologists, who took opposing views to each other. Eight members of the Supreme Court concluded that the weight of the new evidence supported the Crown expert's position at trial, but that the decisive point remained the one put to the jury by the trial judge and decided against Mr. Truscott.[26]

More recently, the minister of justice referred the *Truscott* case to the Court of Appeal for Ontario. On the 2007 reference, the Court of Appeal received further fresh expert evidence as to stomach contents, rigor mortis, and decomposition and the significance of that evidence for the time of death. The Court of Appeal determined that, although the fresh evidence related to the same issues canvassed at the trial and on the Supreme Court reference (which would ordinarily tell against the admission of the fresh evidence), the experts here brought significant new considerations to bear on these issues.[27] The Court was satisfied that the state of expert evidence relevant to the time of death in this case was significantly different from how it was at trial and at the first reference. The fresh evidence established that the Crown evidence at trial with respect to the time of death had to be rejected as "scientifically unsupportable."[28] Thus, even where a scientific controversy was previously known to the court, this may not always dispose of the issue where that controversy has evolved significantly. The truth-seeking function of the criminal justice system may sometimes require greater responsiveness to the development of scientific knowledge and opinion.

Another factor that might well be relevant in a review is evidence other than the pathology evidence itself. For example, there may have been significant corroborative evidence, independent of the pathology evidence, that justified the verdict.

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[25] *Reference re R. v. Truscott*, [1967] SCR 309.

[26] *Ibid.* at 342–43.

[27] *Reference re: Truscott* (2007), 225 CCC (3d) 321 (Ont. CA) at para. 201.

[28] *Ibid.* at para. 211.

It follows from the above discussion that, in light of the evolution in this area of forensic pathology, pediatric death cases categorized as SBS or NAHI invite scrutiny. There may or may not ultimately be compelling reasons for post-conviction intervention in individual cases; that would depend on all of the circumstances, including a consideration of the pathology opinion in each case in light of modern views; the extent to which the triers of fact were aware of the now well-known controversies; whether the case relied on categorical evidence, rejecting as impossible explanations such as short household falls; and the nature and extent of corroborative evidence.

In addition, Dr. Pollanen raised the possibility of there being cases within those categorized as SBS or NAHI that were simply misdiagnosed as triad cases, and where, apart from the mischaracterization, other pathology evidence supported the innocent explanation given. This possibility of error in identifying the triad is not a sufficient basis for a review of all cases of SBS or pediatric head injuries, but it would nevertheless be captured by such a review undertaken because of changes in the science and the growing controversy that has resulted.

Simply put, the changes in pathology knowledge concerning SBS and pediatric head injuries provide cogent reasons for a carefully constructed review of these cases. Not all these cases will ultimately make their way to full external pathology review. Triaging these cases is of critical importance to ensure a focused and manageable review. I also recognize that it is very difficult, on the available evidence, to predict the ultimate scope of such a review – in particular, how many cases will ultimately have to undergo the same kind of detailed external review of pathology that was done for Dr. Smith's 45 cases.

Nonetheless, our systemic examination has identified this particular area of forensic pathology as one where change has raised the real possibility of past error. In other words, there may be cases where convictions were registered on the basis of pediatric forensic pathology that today would be seen as unreasonable, either in a substantive sense (for example, by categorically dismissing short falls as a possible cause of fatal injury), or in a procedural sense (by not explaining the controversy to the trier of fact). A similarly motivated examination has taken place in England. And responsible leaders in the field have told me that they think such a review should be carried out.

I agree. In my view, restoring public confidence in pediatric forensic pathology requires that such a review be conducted. Its objective would be to identify those cases in which the pathology opinion can be said to be unreasonable in light of the understandings of today and in which the pathologists' opinions were sufficiently important to the case to raise significant concerns that the convictions were potentially wrongful.

The starting point for a review should be the 142 cases identified by Dr. Pollanen. It is likely that the subset of those cases that resulted in criminal convictions will be significantly smaller. Similarly, the 142 cases likely include a number of cases where the pathology evidence shows clear findings of abuse that put the ultimate outcome beyond a reasonable controversy. For example, the pathology evidence may have revealed a wide array of serious injuries that render any existing medical controversies irrelevant.

It is equally likely that the non-pathology evidence may further reduce the number of cases that raise concerns about miscarriages of justice. For example, if the deceased's caregiver, because of mental illness, undeniably brought about the child's death, the pathology opinion may have been flawed, but the verdict would not have been.

In addition, the convicted person's consent should be a precondition to referring his or her case to an external review. It is possible in some instances that individuals desire only to put such tragic incidents behind them.

That being said, counsel for the Mullins-Johnson Group and AIDWYC made the valid point that some convicted parties may be unresponsive to giving their consent, perceiving that a review provides little or no hope of success. In my view, this point is best addressed by the timing of *when* the individuals are contacted (that is, after their cases have been otherwise triaged), rather than *whether* they are contacted. When contacted, they will therefore be made aware of why their cases have been selected for external review.

Some of the triaging that should take place (such as a preliminary examination of the pathology to determine whether findings of NAHI are self-evident and beyond reasonable controversy) can be based on the files available at the OCCO. The balance of the triaging (such as determining cases that resulted in criminal convictions; cases in which the non-pathology evidence excludes further consideration; and cases in which the convicted parties have no interest in pursuing the matter) can generally take place only after information is collected from other sources, such as police services, prosecution briefs, or defence files. I say "generally" because the OCCO files, in some instances, may also happen to contain non-pathology information of the kind described above.

Although it would be tempting to begin with the cases that resulted in criminal convictions, there was no system in place at the OCCO to track the verdicts in these pediatric death cases. Therefore, it seems most reasonable to commence by determining the cases in which the pathology invites further scrutiny.

A number of the cases examined at this Inquiry involved guilty pleas. Most of the convicted parties now challenge their convictions, arguing that their guilty pleas were induced by various factors, including the serious conse-

quences of potentially being convicted of murder charges and the acknowledged difficulties in challenging Dr. Smith's opinions. Without commenting on the merits of any individual claims, I am satisfied, based on the evidence at this Inquiry, that cases should not be excluded from the review only because an accused pleaded guilty. Nor should a review be confined to cases in which a convicted person remains in custody. Although a review of in-custody cases should be given priority, the fact that other convicted persons may not be in custody does not diminish the importance of addressing their cases if their convictions were wrongful.

The end result of the review I propose will be to identify cases in which the pathology opinion offered at trial is now said to be unreasonable, and was sufficiently important to the case to raise a significant concern that the conviction was potentially wrongful. The convicted person can then determine whether to access the processes available to address individual cases of wrongful conviction.

Such a review, unless carefully managed, could clearly burden the Ontario Forensic Pathology Service (OFPS) and affect its ability to conduct its ongoing work to the standards that will be required in future. This straining of resources cannot be permitted to happen. Because the review is directly related to the administration of justice, the Ministry of the Attorney General should be responsible for it. That ministry should ensure that, where pathology resources are needed for this review, they be obtained from outside the OFPS, whose resources, at least in the immediate term, will have to be totally focused on ongoing service of the highest quality.

In summary, I think the review I have recommended is necessary in the interests of justice. I am also confident that a review of the kind I have recommended will make an important contribution to the restoring of confidence in pediatric forensic pathology and its vital role in the criminal justice system.

Recommendation 143

The significant evolution in pediatric forensic pathology relating to shaken baby syndrome and pediatric head injuries warrants a review of certain past cases because of the concern that, in light of the change in knowledge, there may have been convictions that should now be seen as miscarriages of justice.

a) **The objective of that review should be to identify those cases in which there was a conviction and in which the pathology opinion, if now viewed as unreasonable, was sufficiently important to raise significant concern that the conviction was potentially wrongful.**

b) Guided by the example provided by the Chief Coroner's Review, the review should utilize a small volunteer subcommittee of the Forensic Services Advisory Committee representing the Crown, the defence, the Office of the Chief Coroner for Ontario (OCCO), and the Chief Forensic Pathologist.

c) Human and financial resources to support the subcommittee's work should be provided by the Ministry of the Attorney General, not the OCCO, because the objective concerns the administration of justice. As well, the ministry should be responsible for compensating any external reviewers retained in connection with this review.

d) The review should include convictions after either plea or trial.

e) The review should not be limited to cases where the convicted person is still in custody.

f) The review should be completed only in those cases where the convicted person consents.

g) Although the procedure used should be up to the subcommittee, the following approach is recommended for its consideration:

   i) the subcommittee should begin with the 142 cases identified by Dr. Michael Pollanen;

   ii) the subcommittee should review the cases with the help of the OCCO records to eliminate those cases in which the available pathology or non-pathology information makes it clear that there would be no significant concern about a potential wrongful conviction;

   iii) the subcommittee should then obtain the information necessary to determine those cases in which there was a conviction and eliminate the remainder;

   iv) the subcommittee should then obtain the requisite records (such as police files) for the identified cases and use that additional information to further eliminate cases using the criterion in paragraph (ii) above;

   v) the subcommittee should proceed further with the cases that remain only if the consent of the convicted person is obtained;

   vi) the subcommittee should, where the convicted person gives consent to the review, obtain transcripts of relevant court proceedings, if possible;

   vii) the subcommittee should refer the cases that remain for external review by

forensic pathologists, where the subcommittee is of the view that the pathology was sufficiently important that, if it is unreasonable procedurally or substantively in light of current knowledge, there is a significant concern that the conviction was potentially wrongful. The external review cannot be permitted to have an adverse impact on the ability of the Ontario Forensic Pathology Service to perform its regular duties;

viii) **the external reviewers should report on the reasonableness of the pathology opinions expressed in these cases, in light of current knowledge, including whether the court was fairly advised of the extent of the controversy relating to shaken baby syndrome / pediatric head injury, as it is now understood; and**

ix) **the convicted persons should be advised of the results of the external review so that they can determine whether to utilize the existing processes available to address individual cases of potential wrongful conviction.**

h) **The public should be advised of the results of the review, in a manner consistent with the privacy interests of those involved, and in a manner that will not interfere with any future legal proceedings.**

Future Role of the Forensic Services Advisory Committee

Using a subcommittee of the Forensic Services Advisory Committee (FSAC) was invaluable in expediting the Chief Coroner's Review. I also recommend that a subcommittee of the FSAC play a central role in the review I have proposed. In my view, such a subcommittee could also address individual cases brought to it in future by a convicted person in which it is alleged that flawed forensic pathology contributed to a wrongful conviction. It could examine larger concerns brought about by the work of a particular pathologist in the criminal justice system. It could address concerns about past criminal cases brought about by further evolution in medical knowledge. The subcommittee's role could have the incidental effect of helping to educate both forensic pathologists and participants in the justice system about practices to be avoided with respect to forensic pathology. In other words, it could perform a useful institutional role.

Recommendation 144

The Forensic Services Advisory Committee through a subcommittee should be available to consider other cases in which it is alleged that flawed pediatric

forensic pathology may have contributed to wrongful convictions and to recommend to the Office of the Chief Coroner for Ontario what further steps, if any, should be taken.

a) **Depending on the workload created by such referrals, the subcommittee should either be made a standing committee or be constituted as needed.**

b) **The Ministry of the Attorney General should provide the subcommittee with adequate human and financial resources to staff its work. The Office of the Chief Coroner for Ontario should also not be required to compensate any external reviewers retained in connection with its work.**

c) **Where the subcommittee has referred a case for external review, and where that review results in findings that the pathology opinion earlier expressed was unreasonable and sufficiently important to raise significant concern that the conviction was potentially wrongful, the Crown Law Office – Criminal should assist in expediting the convicted person's access to the Court of Appeal and in facilitating a determination of the real substantive issues in the cases, unencumbered by unnecessary procedural impediments. Such assistance should be similar to that provided where the Chief Coroner's Review identified errors in Dr. Charles Smith's work.**

d) **The Crown Law Office – Criminal should also provide similar assistance, to the extent to which it is applicable, to a convicted person seeking ministerial review pursuant to s. 696.1 of the *Criminal Code*, if that is the appropriate forum to address the issue of a potential wrongful conviction.**

Application for Review to the Minister of Justice

The *Criminal Code*, RSC 1985, c. C-46, provides that an application for review on the grounds of a miscarriage of justice may be made to the federal minister of justice by or on behalf of a person who has been convicted of an offence under the Code or other federal acts or regulations and whose rights of judicial review or appeal have been exhausted. In investigating the merits of such an application, the minister has wide statutory powers. As well, the minister's power to take evidence, issue subpoenas, enforce the attendance of witnesses, compel them to give evidence, and otherwise conduct an investigation may be delegated. The ultimate decision on the application is made by the minister who, if satisfied that there is a reasonable basis to conclude that a miscarriage of justice likely occurred, may direct a new trial or refer the matter to the court of appeal for hearing and determination as if it were an appeal. The minister may also, at any time, refer any

question, in relation to an application on which the minister desires assistance, to the appropriate court of appeal for its opinion.

In making a decision, the minister is required to consider, among other things, whether the application is supported by new matters of significance that were not previously considered; the relevance and reliability of information presented; and the fact that any remedy available is an extraordinary one because the application is not intended to serve as a further appeal.

In practice, there are four stages in the review process: the preliminary assessment by the Criminal Convictions Review Group (CCRG) of the Department of Justice; the investigation; the report on the investigation (which the applicant is entitled to comment on); and the minister's decision. In reaching that decision, the minister considers the applicant's submissions, the investigation report, and a memorandum of legal advice prepared by the CCRG or outside counsel who conducted the investigation.

The process is application-based, meaning that, among other things, the applicant is expected to present the evidence relied on to support the minister's determination that there is a reasonable basis to conclude that a miscarriage of justice likely occurred. That does not mean that the minister, or those investigating on the minister's behalf, cannot, for example, retain an expert forensic pathologist to inform the minister's determination. They can. But it is clear that the applicant must first present new and significant information as part of the initial application. Practically speaking, if applicants seek to allege that changing science explains their wrongful convictions, they will have to present some scientific evidence to support this position at first instance.

Alastair MacGregor, deputy chairman of the CCRC for England, Wales, and Northern Ireland, described the post-conviction process there. The Criminal Cases Review Commission is an independent body with responsibility for investigating alleged miscarriages of justice. It was created in 1997 to replace an earlier review process by the home secretary or secretary of state. Convictions and sentences are assessed by the CCRC and, when it determines that there is a "real possibility" that the conviction or sentence would not be upheld, it is referred to the appropriate court – the Court of Appeal in cases dealt with on indictment.[29]

The CCRC proactively investigates all claims of wrongful convictions that are, in Mr. MacGregor's words, "not obviously frivolous." Mr. MacGregor indicated that there is no legally articulated threshold for investigation by the CCRC. Each case is screened to determine whether it merits investigation based on common

[29] *Criminal Appeal Act 1995* (UK), 1995, c. 35, ss. 9(1), 10(1), 13(1)(a).

sense that is exercised on "a very generous basis to the applicant." The CCRC, according to Mr. MacGregor, does not rely on the applicants to know what is relevant to post-conviction review or to know what information may be available to assist them in their application. He explained that, if there was reason to believe there was a problem with the pathology evidence, the CCRC would almost certainly seek its own report.

Dr. Crane confirmed, based on his own experience, that the CCRC will retain forensic pathologists to review the evidence in a case. The retainer is with the CCRC, not the parties. Applicants need not have counsel or pay for forensic testing.

AIDWYC and the Mullins-Johnson Group urged me to recommend that the current model for post-conviction review be replaced by an effective and independent mechanism modelled on the CCRC and that the Province of Ontario advocate for that change with the federal minister of justice. They also urged me to recommend that there be an adequate funding structure for the post-conviction review process. This structure would include access to post-conviction consultation and review by pathologists and funding for it by the OCCO, akin to post-conviction forensic testing at the defence's request by the Centre of Forensic Sciences.

In support of this position, the two groups made a number of submissions. One is of particular relevance to the evidence I heard. They submitted that the current ministerial review process, constrained by the legislative framework, is not sufficiently proactive. The onus of properly preparing an application, conducting an investigation, searching for fresh evidence, seeking out helpful experts, compiling the required documentation, and retaining counsel rests on the applicant. The steps in preparing a s. 696.1 application are costly and time-consuming. Applicants often do not have the necessary resources or information to put an application together, particularly in cases involving expert evidence. This problem, I am told, is even more acute when forensic pathologists are required because of the shortage of these experts.

I was also pointed to four Inquiry reports that recommended change in this area:

The 1989 Nova Scotia *Royal Commission on the Donald Marshall, Jr., Prosecution* recommended that the provincial Attorney General commence discussions with the federal minister of justice and the other provincial attorneys general with a view to creating an independent body to facilitate the reinvestigation of cases of alleged wrongful conviction.[30]

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[30] Nova Scotia, *Royal Commission on the Donald Marshall, Jr., Prosecution: Findings and Recommendations*, vol. 1 (Halifax: The Commission, 1989), 145 (Chair T. Alexander Hickman).

In the 1998 *Report of the Commission on Proceedings Involving Guy Paul Morin*, the Honourable Fred Kaufman recommended that the Government of Canada study the advisability of creating, by statute, a criminal case review board to replace or supplement the current process of review of conviction by the federal minister of justice.[31]

In the 2001 report of the Inquiry Regarding Thomas Sophonow, the Honourable Peter Cory said:

> [I]n the future, there should be a completely independent entity established which can effectively, efficiently and quickly review cases in which wrongful conviction is alleged. In the United Kingdom, an excellent model exists for such an institution. I hope that steps are taken to consider the establishment of a similar institution in Canada.[32]

Similarly, in the 2007 report of the Driskell Inquiry, the Honourable Patrick LeSage echoed and supported the recommendation of the Sophonow Inquiry that an independent body be created for post-conviction review. Commissioner LeSage expressed his concern about the adversarial nature of the present process:

> Driskell could not launch an application until he had sufficient disclosure to satisfy the Department of Justice standard for launching a section 696.2 review. However, the WPS [Winnipeg Police Service] would not make disclosure for purposes of a section 696.2 review until Driskell's application was made. This is a classic "catch 22" situation. If there was an independent inquisitorial body, as in the U.K., it could, after having been satisfied that a threshold, not necessarily a high threshold, has been met, commence the section 696.2 process of its own initiative. In this way, information that is unavailable to the applicant because of their inability to compel disclosure, would be available to the independent agency to allow them to make a better determination of whether a miscarriage of justice occurred.[33]

I found these reports, all prepared by distinguished judicial colleagues, worthy of serious consideration and, indeed, persuasive. My recommendations, however,

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[31] Ontario, *The Commission on Proceedings Involving Guy Paul Morin: Report*, vol. 2 (Toronto: Ministry of the Attorney General, 1998), 1237.

[32] Manitoba, *The Inquiry Regarding Thomas Sophonow: The Investigation, Prosecution and Consideration of Entitlement to Compensation* (Winnipeg: Manitoba Justice, 2001), 101.

[33] Manitoba, *Report of the Commission of Inquiry into Certain Aspects of the Trial and Conviction of James Driskell* (Winnipeg: Manitoba Justice, 2007), 121–22 (Commissioner Patrick J. LeSage).

must be based on the evidence I heard and my own mandate. As was pointed out by counsel for both the federal and the provincial governments, in only one case included in my review (Mr. Mullins-Johnson) was s. 696.1 engaged, and there it worked very well. I have no evidence of the s. 696.1 process working poorly in cases involving pediatric forensic pathology. As well, such cases form only a subset of the cases presented to the minister for review. Neither my mandate nor the individual cases I examined enable me to address how the s. 696.1 process operates generally for all other kinds of cases. Nor can it be said that a complete overhaul of the current process is necessary to restore confidence in pediatric forensic pathology.

However, it is clear from what I have heard about the science of forensic pathology and the challenge of presenting it to the criminal justice system, that advancing an application to the minister under s. 696.1, in a case where pediatric forensic pathology was important in the conviction and is now attacked, will undoubtedly be challenging. The science is complex. Finding and retaining experts may well be difficult and expensive. For the minister, passing judgment on pediatric forensic pathology opinions may require a scientific context that may not be easy to acquire.

As well, for indigent convicted persons, engaging the s. 696.1 process in a case involving pediatric forensic pathology poses additional challenges. As I understand it, as one precondition to funding a s. 696.1 application, Legal Aid Ontario must be provided with a legal opinion as to the merits of the appeal. The opinion need not demonstrate that the application will ultimately succeed. This precondition is like that required for Legal Aid Ontario to fund appeals of convictions.

Where post-conviction relief is dependent on fresh pathology evidence, the convicted person may be in a Catch-22 situation. If legal aid funding is dependent on some showing that the application has merit, and a demonstration of merit is dependent on fresh pathology evidence, the convicted person may be unable to obtain funding to retain a forensic pathologist. This concern has been addressed in part through an earlier recommendation that contemplates an enhanced role for the FSAC subcommittee in referring appropriate cases for external review. But that earlier recommendation does not address the capacity of individual applicants to retain their own forensic pathologists when needed.

Given these challenges, two aspects of a process like the CCRC are attractive in cases like these:

1. A structure like the CCRC may make it easier to find the necessary expertise because the institution, not the individual, is retaining the requisite expertise; and

2 The independence of a process like the CCRC may tend to secure for difficult decisions a greater degree of public confidence, because the complex science at the core of these decisions means that the usual basis for public confidence – namely, lay understanding and assessment of their validity – is not as available. Adding the element of independence may help.

In my view, a CCRC model cannot be justified simply as something necessary to restore confidence in pediatric forensic pathology and its use in the criminal justice system. The attributes of the CCRC system I referred to could, however, assist in enhancing public confidence. If there should be a conviction in future based on flawed pathology, and the appellate process is no longer available, such a system would have the two advantages described above in addressing an alleged wrongful conviction.

Recommendation 145

The Province of Ontario should bring to the attention of the federal government the two advantages identified in this Report of the model of the Criminal Cases Review Commission (CCRC) – a structure that may make it easier to find the necessary expertise, and an independence that may secure a greater degree of public confidence in its decisions – for cases involving pediatric forensic pathology. These points should inform any future discussion about adopting a CCRC model in Canada.

Recommendation 146

The Province of Ontario should address the difficulties faced by those seeking to access the s. 696.1 *Criminal Code* process on the basis of flawed pediatric forensic pathology by

a) ensuring, together with Legal Aid Ontario, that they can obtain legal aid funding for the necessary pathology expertise to support their applications. Legal Aid Ontario should adequately fund s. 696.1 applications. As well, consideration should be given to having Legal Aid Ontario fund, under appropriate circumstances, the retention of defence forensic pathologists as a basis for determining whether an application to the minister of justice has sufficient merit to be filed; and

b) urging the federal government to enhance the investigative role of the Criminal Convictions Review Group (CCRG) of the Department of Justice to address

allegations that flawed forensic pathology contributed to wrongful convictions. This could include enhanced use of forensic experts retained by the CCRG to investigate and evaluate an application for ministerial relief.

Legal Aid

In Chapter 17, The Roles of Coroners, Police, Crown, and Defence, I address some of the issues surrounding the defence of pediatric death cases on legal aid. Immediately above, I also address the challenges of obtaining legal aid funding for s. 696.1 applications.

It need only be added here that the same challenges exist for appeals of conviction based on flawed pediatric forensic pathology. Where appellate relief is entirely dependent on fresh pathology evidence, the convicted person may be in the same Catch-22 situation discussed in connection with s. 696.1 applications. If legal aid funding is dependent on some demonstration that the appeal has merit, and a demonstration of merit is dependent on fresh pathology evidence that by its nature is difficult to assemble, the convicted person may be unable to obtain funding to retain a forensic pathologist.

Recommendation 147

The Province of Ontario, together with Legal Aid Ontario, should consider enabling legal aid funding, under appropriate circumstances, of forensic pathologists prior to a determination that the appeal has sufficient merit to be funded and as a basis for determining whether an appeal based on fresh evidence has merit.

Compensation

Several parties urged me to make a recommendation concerning compensation for those harmed by flawed pediatric forensic pathology. The submissions suggested that compensation be extended to those wrongly charged or convicted, and to those families affected as a result of criminal allegations against the parent. The Affected Families Group suggested that not only is compensation within my mandate, but that it is essential to the fulfillment of my mandate. They submitted that compensation of those who have suffered as a result of faulty pediatric forensic pathology is necessary to restore public confidence in the system. Accordingly, they asked that I recommend a process to effect compensation.

Similarly, the Mullins-Johnson Group and AIDWYC maintained that the

injustices visited on innocent families and individuals by bad pathology evidence warrant some form of compensation. They suggested that, because civil litigation of each individual claim is inefficient and ineffective, this Inquiry should recommend the development of an alternative mechanism to consider claims for compensation. They recognized that it is beyond my mandate to recommend compensation for any named individual or family affected by the testimony or opinions of Dr. Smith. Defence for Children International – Canada also urged me to make recommendations regarding financial compensation for those victimized by flawed pathology.

The Province of Ontario maintained that my mandate does not permit me to make determinations with respect to compensation because I am prohibited from reporting on individual cases and because the Order in Council implicitly, if not explicitly, assumes that existing civil mechanisms are to be used. Additionally, the province suggested that it would be inappropriate for me to recommend compensation because the Inquiry received no evidence on which to base determinations about that complex issue (including who should be entitled, and for what, from whom, and on what basis). I was urged to leave the issue of compensation to established processes: civil actions, arbitrations, mediations, and the joint federal-provincial protocol for compensation of the wrongfully convicted.

I have struggled with this issue.

On the one hand, my mandate prevents me from reporting on individual cases. It also focused me on a systemic examination of pediatric forensic pathology, and particularly its use in the criminal justice system. Thus, I did not examine all aspects of the identified cases in which Dr. Smith's work was flawed. Nor did I hear anything about systems of compensation, either through civil courts or otherwise, that might be used for any of those involved.

On the other hand, it appears from what I did hear that some individuals involved in these cases – some well publicized – were tragically harmed by becoming involved in the criminal justice system because of this flawed pathology and through no fault of their own. Whether they were intensively investigated, charged, or convicted, or where there were surviving children seized for no other reason, there is no doubt that they have suffered tragic and devastating consequences. In my view, it would assist the restoration of public confidence if a way could be found, within or outside any civil litigation, to compensate them expeditiously and appropriately.

I should be clear that I can address only the 19 cases about which I heard and in which Dr. Smith made errors. Moreover, it would appear that, in some of them, the individuals may well have become involved in the criminal justice system regardless of flawed pathology.

Thus, there are significant challenges that would have to be addressed in creating a compensation scheme for those who were involved in the 19 cases and who tragically became involved in the criminal justice system simply because of flawed pediatric forensic pathology and through no fault of their own. Some important questions include

- Who should be considered for compensation – only those wrongly investigated, wrongly charged, or wrongly convicted, or family members as well, particularly those wrongly separated from each other as a result of flawed pediatric forensic pathology?
- How is "wrongly" to be defined? For example, does it relate to those who would not have become involved in the criminal justice system without the flawed pathology? Or does it refer to the factually innocent?
- Who should pay, and how should that be determined? Who beyond the government should be responsible to pay, in what proportions, and how? At what stage is that determined?
- Is the flawed pathology identified by the Chief Coroner's Review sufficient failure or must more be established?
- How should compensation be quantified?

These should not be regarded as reasons for taking no action, but instead as some of the challenges to be overcome in the interest of full restoration of public confidence.

The 2006 *Report of the Events Relating to Maher Arar: Analysis and Recommendations*, by Associate Chief Justice Dennis O'Connor, recommended that "[t]he Government of Canada should assess Mr. Arar's claim for compensation in the light of the findings in this report and respond accordingly."[34] The terms of reference for that inquiry specifically prohibited Commissioner O'Connor from expressing any conclusion or recommendation regarding the civil or criminal liability of any person or organization. Commissioner O'Connor acknowledged this limitation and commented in Recommendation 23:

> I wish to make two comments about Mr. Arar's claim for compensation. First, in addressing the issue of compensation, the Government of Canada should avoid applying a strictly legal assessment to its potential liability. It should recognize the suffering that Mr. Arar has experienced, even since his return to Canada. ... In

[34] Canada, *Report of the Events Relating to Maher Arar: Analysis and Recommendations* (Ottawa: Public Works and Government Services Canada, 2006), 362.

> addition, as the Inquiry has proceeded, some of the mental suffering that Mr. Arar experienced in Syria has re-surfaced. Based on the assumption that holding a public inquiry has served the public interest, Mr. Arar's role in it and the additional suffering he has experienced because of it should be recognized as a relevant factor in deciding whether compensation is warranted.
>
> The only other observation that I wish to make is that, if the Government of Canada chooses to negotiate with Mr. Arar, negotiated arrangements can be more creative than a mere damage award. A compensation agreement could involve anything from an apology to an offer of employment or assistance in obtaining employment.[35]

I would echo Commissioner O'Connor by encouraging the government, in addressing the challenge of compensation, to avoid applying a strictly legal assessment to its own potential liability. Any compensation should recognize the suffering that innocent individuals have experienced and continue to experience as a result of flawed pediatric forensic pathology.

Recommendation 148

The Province of Ontario should address the identified challenges to see if it is possible to set up a viable compensation process. The objective is to provide expeditious and fair redress for those who, through no fault of their own, have suffered harm as a result of these failures of pediatric forensic pathology, thereby helping to fully restore public confidence.

[35] *Ibid.*, 363.

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First Nations and Remote Communities

Guiding Principles

My mandate requires me to consider what recommendations should be made to restore and enhance public confidence in pediatric forensic pathology in Ontario. Implicit in that mandate is that the revelations surrounding Dr. Smith have caused the people of Ontario to lose the confidence in pediatric forensic pathology that they previously had. There is undeniably much reason for that. However, I must also recognize that, for some, there may have been little or no confidence in how forensic pathology services were being delivered generally, even before the revelations concerning Dr. Smith. I am referring, in particular, to remote First Nations communities, although this observation may not be confined to them alone. This lack of confidence is related more broadly to the concerns about the delivery of medical and coronial services both to remote First Nations and to other remote communities in Ontario.

For First Nations, inadequacies in the delivery of pediatric forensic pathology services are seen as only part of much larger systemic issues: inadequate medical care; limited financial and human resources; high mortality rates, particularly for children and young people in a number of communities; and what are seen as institutional failures to respond to the unique cultural, spiritual, religious, and linguistic character of First Nations.

To illustrate the depth of these larger systemic issues, it is reported that, between 1982 and 2001, 52 per cent of the deaths in one First Nations community, Mishkeegogamang, were accidental, compared to 6 per cent in the general Canadian population. A large number of deaths were alcohol-related and involved young people. Infant mortality rates are two to three times higher in First Nations and Inuit communities than in non-Aboriginal communities, and they are attributed more frequently to sudden infant death syndrome (SIDS). Jim Morris, executive director of the Sioux Lookout First Nations Health Authority,

described the many suicides in First Nations communities in his region – by his count, 276 since 1986. Most of them involved young people under the age of 16.

Early in the mandate of this Inquiry, I visited two remote First Nations communities, Mishkeegogamang and Muskrat Dam, to get a better sense of the challenges they face. These visits were expressly not made to permit me to make findings of fact, but to help me appreciate the evidence and roundtables as they later unfolded. These communities are very different, but they share strong leadership and a commitment to improve the lives of their people. I am grateful to both of them and their leaders for their hospitality and insights.

The Inquiry also conducted a series of roundtables in Thunder Bay to address the systemic issues in providing pediatric forensic pathology services to remote and First Nations communities. Although First Nations issues require a special understanding, a number of the systemic issues identified there, and dealt with in this chapter, apply equally both to First Nations and to other remote or northern communities. All these issues are addressed in this chapter.

The First Nations roundtables were facilitated jointly by former Grand Chief Wally McKay of the Nishnawbe Aski Nation and, on behalf of the Inquiry, Mark Sandler. The roundtables greatly informed my understanding of the issues and the recommendations that follow. They also brought together people in positions of leadership from the Office of the Chief Coroner for Ontario (OCCO) and the First Nations to talk with one another. That dialogue is important. It must continue and be built upon to establish trust and result in positive change.

I recognize that the limits of my mandate prevent me from addressing the larger issues I identified earlier, ones that are always present in the hearts and minds of many from whom I heard. For some, this is, no doubt, a source of frustration. Reciting the terms of my mandate may be cold comfort to those concerned, for example, with teen suicides or the high number of childhood accidental injuries or deaths from drowning and other causes. However, I could not possibly do justice to those issues within the framework of this Inquiry.

That being said, even within the confines of my mandate, important recommendations can be made that may also speak to the larger issues. To cite one example only, effective communication between the OCCO and the First Nations leaders, communities, and people on issues within my mandate may well facilitate more effective communication on the larger issues.

Many witnesses or roundtable participants, including the most senior coroners in the province, emphasized the importance of coroners attending the death scene for criminally suspicious deaths. However, the reality is that coroners generally do not attend the death scene in remote communities. Indeed, many communities in the North never see a coroner or even know what coroners do.

Also, affected families may know little or nothing about what has been done or will be done with the body of their deceased child. They may be equally uninformed about how or why their child died. This situation cannot be allowed to persist. My recommendations address how the system can better address the challenges of providing pediatric forensic pathology services to First Nations and to remote communities. The bottom line is that these challenges must be addressed and overcome simply because the people in all these areas are entitled to satisfactory pediatric forensic pathology services. Public confidence in pediatric forensic pathology requires no less.

Before turning to my specific recommendations, there are two overarching principles that should be remembered. First, Ontario's diverse geography, population, cultures, and languages mean that solutions in some parts of Ontario may have little or no application to others. Indeed, the vastness and diversity of Northern Ontario means that what works for one community often will not work for another. Recommendations must be designed with this understanding. Second, recommendations that have any impact on First Nations communities should recognize the new relationship that is to exist between Aboriginal peoples and the Province of Ontario. In the spring of 2005, the province issued a document outlining *Ontario's New Approach to Aboriginal Affairs*:

> The … government is committed to creating a new and positive era in the province's relationship with Aboriginal peoples in all their diversity. We look forward to working with Aboriginal communities and organizations across the province to make this new relationship a reality. In this way we will be able to sustain new, constructive partnerships and achieve real progress…[1]

The province also recognizes that First Nations have existing governments and commits to dealing with them in a cooperative and respectful manner consistent with their status as governments. Recommendations must, accordingly, reflect the status of First Nations governments and their people. When decisions are to be made that affect the First Nations or, more generally, the Aboriginal population in Ontario, they must recognize the importance of true partnerships, including prior consultation with the governments and communities involved.[2]

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[1] Ontario, Native Affairs Secretariat, *Ontario's New Approach to Aboriginal Affairs* (Toronto: Queen's Printer for Ontario, 2005), 2.

[2] Although I heard from First Nations leaders and those working in First Nations communities (and hence the use of the term "First Nations"), I recognize that virtually all of what is said has equal application to the larger Aboriginal context.

The Current Structure of Forensic Services in the North

Coroners

Dr. David Eden is at present the only regional coroner for all of Northern Ontario. The region he is responsible for extends from the Manitoba border in the west to Parry Sound in the south, the Quebec border in the east, and Hudson Bay in the north. It is, according to Dr. Eden's predecessor, Dr. David Legge, a "massive" area. The evidence from senior coroners, including Dr. Eden and Dr. Legge, made it obvious that this region is too vast and diverse for a single regional office and one regional coroner. Not only is the level of service adversely affected but the affected communities have the perception that their issues are less important than those in other areas. That perception is aggravated by the rare attendance of coroners at death scenes in remote communities.

The vastness of Northern Ontario, and the complex issues that it faces, warrant the creation of two coronial regions: Northwest Ontario, based in Thunder Bay, and Northeast Ontario, based in Sudbury. The current regional office is in Thunder Bay. The selection of Sudbury as the base for the Northeast Region complements my recommendation that a formal regional forensic pathology unit be created there. I heard from several senior coroners, including Dr. Andrew McCallum, who has since become the Chief Coroner for Ontario, that teamwork and efficiency are enhanced when the regional coroner's office and the regional forensic pathology unit are in close proximity to each other.

Each coronial region should be headed by its own regional coroner and provided with adequate support staff and facilities. Dr. Eden discussed some of the resource issues that presently exist, and they begin with such basic issues as a lack of adequate Internet access.

Recommendation 149

a) Northern Ontario should be divided into two coronial regions – the Northwest Region, to be based in Thunder Bay; and the Northeast Region, to be based in Sudbury.

b) Each of these two regions should be headed by its own regional coroner and properly resourced to fulfill its duties under the *Coroners Act*.

c) More generally, the Province of Ontario should provide adequate resources to ensure coronial and forensic pathology services in Northern Ontario that are

reasonably equivalent to those services provided elsewhere in the province, even though doing so will cost more in the North.

Forensic Pathologists in Pediatric Cases

In March 2002, the OCCO announced that all forensic autopsies of children under the age of two were to be conducted in one of the four regional pediatric centres, none of which is in the North. As necessary, cases in Northwestern Ontario were to be directed to Dr. Susan Phillips, a pathologist at the Health Sciences Centre in Winnipeg.[3]

What this situation has meant is that pediatric forensic cases emanating from Northern Ontario, with very few exceptions, are performed in Toronto at the Ontario Pediatric Forensic Pathology Unit (OPFPU) or in Winnipeg. I was advised that the Chief Forensic Pathologist, Dr. Michael Pollanen, currently reviews the post-mortem reports for Ontario cases autopsied by Dr. Phillips in Winnipeg. Given the importance of ensuring that the same standards of peer review, accountability, and quality assurance are applied to these pediatric forensic autopsies as to others, I am of the view that the OCCO should seek to enter into a service agreement with the Winnipeg Health Sciences Centre to formalize the provision of forensic pathology services by Dr. Phillips to the OCCO. This would ensure that comparable protocols and procedures with respect to these standards are in place in Winnipeg for Ontario cases autopsied there.

Recommendation 150

The Office of the Chief Coroner for Ontario should seek to enter into a service agreement with the Winnipeg Health Sciences Centre to ensure that the same or analogous protocols and procedures as recommended in this Report with respect to peer review, accountability, and quality assurance are in place in Winnipeg for Ontario cases autopsied there.

Dr. Martin Queen, who participated in our Thunder Bay roundtables, is a fully accredited forensic pathologist based in Sudbury. He is also an assistant professor of laboratory medicine and pathology at the Northern Ontario School of Medicine. He works within "an informal unit" called the Northeastern regional

[3] Some coroner's autopsies are also performed in Thunder Bay. However, none are pediatric cases. As well, most of the adult homicides or criminally suspicious cases from this area are autopsied by Dr. Martin Queen in Sudbury.

forensic pathology unit, which is housed within the Sudbury Regional Hospital. It has no designated director and no contractual arrangement for funding, but, nonetheless, it effectively operates as a regional forensic pathology unit. Dr. Queen, its only forensic pathologist, does all the autopsies for the Sudbury and Manitoulin regions, and most, if not all, for the Timmins and Cochrane regions and the James Bay coast area. More recently, he has taken over coverage for homicides and for criminally suspicious and other complex cases for the North Bay and Thunder Bay regions. He performs, on average, 250 autopsies a year, 90 per cent of which are coroner's cases. Consistent with the OCCO policy described earlier, his pediatric forensic practice is limited. He performs some straightforward pediatric autopsies, such as witnessed drownings or the occasional death relating to a car accident, but the most serious and complicated pediatric cases continue to be sent to the OPFPU in Toronto. When he first arrived in Sudbury nine years ago, however, he also conducted autopsies on sudden infant death syndrome (SIDS) and SIDS-like cases.

Dr. Queen and the OCCO both support the conversion of the current unit in Sudbury into a formal regional forensic pathology unit with its own director and appropriate funding. It is anticipated that this unit will continue to be headed by a forensic pathologist and to draw on specialty expertise existing at the Sudbury Regional Hospital. The OPFPU can provide specialized consulting to this unit as well as the other regional units for pediatric cases.

In my view, the creation of a formal regional forensic pathology unit in Sudbury would have a number of benefits. If frontline pediatric forensic pathology services could be provided in the North, this would obviate the need for the transfer of some children's bodies to Toronto.[4] Second, it could encourage coroners and forensic pathologists to locate in the North. Indeed, I am impressed by the initiatives shown by the Northern Ontario School of Medicine to attempt to address this need. Medical education in the North, exposure to coroner's autopsies, and electives in forensic pathology and family medicine residencies that include coroner's work are some of the measures that should stimulate interest in practising forensic medicine in northern areas. Dr. Queen has played an important role in working with the medical school in this regard.

[4] Detective Inspector Dennis Olinyk of the Ontario Provincial Police indicated that the long-distance transportation of bodies to pathology units often entails several moves that may compromise the quality of the post-mortem examination and result in a loss of evidence. It is preferable, therefore, that bodies be transported only once to minimize the loss of evidence. The chain of continuity may also be affected with the passage of time. (The performance of pediatric forensic autopsies in Sudbury would reduce these difficulties, albeit only in some cases.)

Recommendation 151

The Northeastern regional forensic pathology unit should become a formal forensic pathology unit with a director and funding for transfer payments. As such, it should perform pediatric forensic autopsies as determined by the Chief Forensic Pathologist.

The Coroner's Attendance at the Death Scene

I begin this topic by outlining what the OCCO Guidelines for Death Investigation say about the attendance of coroners at death scenes, and how that accords with the present reality. The preamble to the guideline regarding "Investigative Coroner's Attendance at Scene" in the OCCO Guidelines for Death Investigation provides that investigating coroners should attend the death scene whenever possible and view the body before it is removed because there is "value added" by the coroner's active participation in death scene investigation. The coroner's presence is said to be critical when the apparent means of death is homicide or suicide, though it also remains "extremely important" for the investigation of apparent accidental or natural deaths. While making this point, the preamble also states that the distance travelled to get to the death scene must be considered in developing guidelines.

The guidelines themselves provide that, in urban areas, the investigating coroner is expected to attend the death scenes and to view the body. I heard that this expectation is being met in urban areas and in a number of rural communities. For example, in the Niagara Region, in the absence of exceptional circumstances, coronial attendance is 100 per cent at non-natural death scenes.

In non-urban areas, the investigating coroners are still expected to attend the death scene where the travel time is less than 30 minutes. When it is 30 to 60 minutes, the guidelines provide that investigating coroners should attend all apparent homicide, suicide, or accident death scenes, all pediatric death scenes (children under 12 years of age), and, whenever possible, apparent natural death scenes, especially if requested by the police.

Even where the time to travel to a death scene exceeds 60 minutes, the guidelines state that investigating coroners should attend all scenes of apparent homicide or suicide; all scenes where the deceased is less than 12 years old; and accidental death scenes where the police specifically request the coroner's assistance. When unable to attend, the investigating coroner should call the regional coroner and review the circumstances of the death before the body is released from the scene.

In the past, the OCCO did not have a tracking system to record when coroners did or did not attend death scenes in remote communities. Dr. Barry McLellan, the former Chief Coroner for Ontario, indicated that, while it does not have a formal computerized tracking system, the OCCO has begun tracking these visits as part of its new quality assurance and audit process.

That being said, the evidence at this Inquiry was clear that coroners have not been attending death scenes in many remote communities, including but not limited to First Nations communities. Mishkeegogamang Chief Connie Gray-McKay described coroner's services as "virtually non-existent" in her community. In her 13 years as leader, she has never seen a coroner, nor did one attend for any of the 233 deaths that have taken place there since 1981. Deputy Chief John Domm of the Nishnawbe Aski Police Service (NAPS) could not recall a coroner attending a remote scene except by telephone.The guidelines provide that whenever an investigating coroner does not attend a scene, that fact and the reasons for non-attendance should be documented in the investigating coroner's narrative to the coroner's investigation statement and discussed with the regional coroner. Dr. Legge acknowledged that, during his tenure as regional coroner, the guideline requiring consultation with the regional coroner was regularly not followed by the investigating coroners.

The status quo is not acceptable. Although it is recognized by everyone that investigating coroners may frequently be unable to attend death scenes in a timely way because of weather, distances, and travelling logistics, it does not follow that their non-attendance should be presumed or effectively be treated as the norm. The death investigation is enhanced by their attendance in ways that are not always fully compensated for by surrogates, technological substitutes, or telephone consultations. Dr. McLellan expressed the opinion that "there is no substitute for being at the scene oneself."

This is especially true for complex death investigations, such as the pediatric forensic pathology cases examined at this Inquiry. Given the limited number of forensic pathologists and where they are located within the province, and the demands made on them, it is unrealistic to believe that forensic pathologists will often be attending death scenes in remote communities. This reality heightens the importance of the coroner attending in some of these cases to assist in gathering information for the forensic pathologist.

Equally important, the non-attendance of coroners represents a lost opportunity for them to speak directly with affected families and to build relationships with communities. As conceded by Dr. Legge and others, that discussion is simply not happening as it should. As a result, affected families are frequently uninformed about the cause of death (a topic revisited below), and communities are

left with the perception that their deaths are less important than others to the system. That was certainly the message communicated to our Inquiry by First Nations leaders and those who work in those communities.

Several reasons were given at the Inquiry to explain why coroners do not attend the scene in remote communities, apart from the obvious ones of weather, distance, and travelling logistics that sometimes make these attendances difficult or even impossible. The shortage of physicians generally servicing remote areas is one reason, leading to the fact that physicians who already work in underserviced areas may be reluctant to assume additional coroner's responsibilities. The coroners who do work in the North may be reluctant or unable to leave their busy practices (and waiting rooms full of untreated patients) to attend remote death scenes. Moreover, these attendances also involve a financial sacrifice for the coroner, given the compensation provided. Dr. McLellan told me that an additional 25 to 50 coroners would provide the desired amount of coverage in the North. However, it is difficult to recruit the needed number of coroners because the compensation offered for coronial work, particularly in comparison to clinical work, is insufficient to attract doctors. These challenges need to be addressed if the number of scene attendances by coroners is to increase.

Recommendation 152

Steps should be taken to enhance the likelihood that investigating coroners will attend the death scene in accordance with the Office of the Chief Coroner for Ontario's existing guidelines. Such attendances improve the quality of many death investigations and provide an opportunity for coroners to communicate with affected families and build relationships with affected communities.

Recommendation 153

The attendance or non-attendance of investigating coroners at death scenes should be tracked as part of the quality assurance processes of the Office of the Chief Coroner for Ontario (OCCO). Similarly, compliance with the OCCO guideline indicating that coroners must document their reasons for not attending the scene and discuss them with the regional coroner should also be tracked.

Recommendation 154

The Office of the Chief Coroner for Ontario should consider, in consultation with remote communities and First Nations, the development of specific guidelines that

better address those circumstances in which investigating coroners will be expected to attend death scenes in remote communities.

Recommendation 155

The medical profession and medical schools, such as the Northern Ontario School of Medicine, together with the Province of Ontario, the Nishnawbe Aski Nation, the Office of the Chief Coroner for Ontario, and others, should work in partnership to increase the numbers of physicians working in remote areas. Even more specific to the mandate of this Inquiry, the fee provided to coroners to attend death scenes, particularly in remote communities, should be increased so that it is not a disincentive to attendance.

When the Coroner Cannot Attend the Death Scene

The Technology

Although the above recommendations are intended to promote a greater number of scene attendances by investigating coroners, it is inevitable that in some cases, even within the best-resourced system, coroners will not be able to attend the scene. Given this situation, how can technology assist in addressing this problem, and to whom should coroners delegate their investigative powers when they cannot attend the death scene?

During the Inquiry, I was advised of the variety of technological tools that might be used to assist the coroner (and ultimately the forensic pathologist). They include:

- transmission of digital photographs and images before the body is removed from the scene;
- real-time photography that would enable the coroner (and the forensic pathologist) to view a death scene remotely; and
- establishment of a remote teleconferencing network similar to the TeleHealth facilities where a physician can examine patients remotely. Dr. Legge envisioned a "future of possibilities of direct visualization of death scenes where the coroner location is remote, technology is available and properly funded in remote communities."

The first tool has already been employed with some success. Detective Inspector Dennis Olinyk of the Ontario Provincial Police explained how scene photographs

have been taken by police officers at remote death scenes and then transferred to a disk for electronic transmission to a coroner, pathologist, or even the Chief Forensic Pathologist, if necessary.

As I have reflected elsewhere in this report, technology can also be used by a forensic pathologist conducting an autopsy to consult with other pathologists, including the Chief Forensic Pathologist. This technology is particularly useful for telemedicine, which is becoming more widely used in the North. It should be encouraged further to enable, for example, real-time consultation with the OPFPU about difficult non-criminally suspicious pediatric autopsies that might not then have to be conducted in Winnipeg.

Recommendation 156

a) Where it is not feasible for investigating coroners to attend the scene, all available technology, such as digital photography, should be used to provide timely information to the coroners and enable them, in turn, to provide direction or guidance, as may be needed, to the police or the forensic pathologist.

b) The Office of the Chief Coroner for Ontario should develop, in partnership with remote communities and First Nations, enhanced technology, such as remote teleconferencing, which is ultimately designed to provide "real-time" information to the coroner and the forensic pathologist. Resources should be made available to enable this technology to be developed and used.

Delegation of the Coroner's Investigative Powers

Subsections 16(1) to (5) of the *Coroners Act*, RSO 1990, c. C.37, contemplate that coroners may delegate investigative powers to a legally qualified medical practitioner or a police officer. They read:

> **16.** (1) A coroner may,
>
> (a) view or take possession of any dead body, or both; and
>
> (b) enter and inspect any place where a dead body is and any place from which the coroner has reasonable grounds for believing the body was removed.
>
> (2) A coroner who believes on reasonable and probable grounds that to do so is necessary for the purposes of the investigation may,
>
> (a) inspect any place in which the deceased person was, or in which the coroner has reasonable grounds to believe the deceased person was, prior to his or her death;
>
> (b) inspect and extract information from any records or writings relating

to the deceased or his or her circumstances and reproduce such copies therefrom as the coroner believes necessary;

(c) seize anything that the coroner has reasonable grounds to believe is material to the purposes of the investigation.

(3) A coroner may authorize a legally qualified medical practitioner or a police officer to exercise all or any of the coroner's powers under subsection (1).

(4) A coroner may, where in his or her opinion it is necessary for the purposes of the investigation, authorize a legally qualified medical practitioner or a police officer to exercise all or any of the coroner's powers under clauses (2) (a), (b) and (c) but, where such power is conditional on the belief of the coroner, the requisite belief shall be that of the coroner personally.

(5) Where a coroner seizes anything under clause (2) (c), he or she shall place it in the custody of a police officer for safekeeping and shall return it to the person from whom it was seized as soon as is practicable after the conclusion of the investigation or, where there is an inquest, of the inquest, unless the coroner is authorized or required by law to dispose of it otherwise.

I was advised that, in the North, coroners most often delegate their investigative powers to police officers. Dr. McLellan acknowledged that it is entirely possible that the complete death investigation in remote communities will be handled by police officers rather than investigating coroners. Dr. Legge confirmed that it is very unlikely that coroners will attend on site in remote locations in the North. Many of the experienced coroners work on the presumption that matters relating to the death investigation can be dealt with over the telephone via conversations with on-site police officers. Dr. Legge admitted that the situation "isn't ideal" and that he has "carried on with some trepidation for eleven years as a regional coroner in those scenarios."

The systemic inability or failure of coroners to attend death scenes in remote communities prompted Aboriginal Legal Services of Toronto / Nishnawbe Aski Nation (ALST/NAN) to propose that the legislation be amended to permit community-based individuals to perform the delegated duties of coroners. These individuals might include trained health care professionals, such as nurses, with specialized training. Dr. John Butt testified that such a model has been successfully adopted in Alberta. The OCCO opposed such an approach, arguing that community-based individuals may not have the requisite independence and emotional detachment, given the relationships that necessarily exist in small remote communities. As well, it might be difficult to provide specialized training to individuals in each community and to ensure that the training remains current. Instead, the OCCO favoured more specialty training for police officers to

serve in this capacity. That position was, in turn, resisted by ALST/NAN. It noted the already inadequate funding provided to police services such as NAPS, and it also cited historical difficulties between the First Nations and police services that might not favour their use as coroner's surrogates. As well, it argued that the Supreme Court of Canada's decision in *R. v. Colarusso* casts doubt on the legitimacy of using police officers in this role.[5]

In *Colarusso*, the validity of s. 16(2) of the *Coroners Act* was in issue. Although the Court ultimately declined to decide that issue, Justice Gérard La Forest, speaking for the Court's majority, stated:

> Section 16(4), which provides that a coroner may authorize a police officer or a medical practitioner to exercise all the investigative powers granted to the coroner in s. 16(2), is equally troubling [as s. 16(5)]. This provision was evidently enacted to allow a coroner to delegate certain powers in emergency situations where he or she is unable to attend at the scene immediately. Certainly, this provision will be of assistance in more remote areas where a coroner may be several hours' drive away from where the evidence is located. Yet, the potential for unacceptable overlap between the coroner's investigation and the criminal investigative sphere is extensive. When a coroner delegates s. 16(2) investigative powers to a police officer, the danger that the distinction between the coroner's investigation and the criminal investigation will be obliterated and the two investigations amalgamated into one is immediately obvious. It would seem difficult, as a practical matter, for the police to act for the coroner completely independently of their criminal investigation while exercising delegated power under s. 16. Whatever the police learn while acting for the coroner will readily become part of a foundation on which to build a case against a defendant. As well, by delegating s. 16(2) powers to the police, a coroner is giving the police investigatory powers beyond that which they normally possess given the reduced procedural requirements with which the investigator must comply under s. 16.
>
> In my view, the dependency of the coroner on the police during the investigative stage mandated under s. 16(4) and s. 16(5) of the *Coroners Act* brings these provisions dangerously close to the boundary of legislation in the sphere of criminal law, an area within the exclusive jurisdiction of Parliament. As s. 16(4) and s. 16(5) operate in concert with s. 16(2), the problems I have identified affect s. 16(2) as well. I would, however, leave the question as to whether s. 16(2) of the *Coroners Act* is *ultra vires* unanswered as s. 16(4) and s. 16(5) have not been argued fully before this Court, and I have already found that the actions of the police constituted an unreasonable seizure, but I would reiterate that the previous

[5] [1994] 1 SCR 20.

> decisions of this Court have not affirmed the validity of the investigative powers of the coroner and it is open to this Court in the future to determine that the interrelation between the police and the coroner under s. 16 of the *Coroners Act* impermissibly infringes on the federal criminal law power.[6]

It is not my place to determine the constitutional issues raised, but not decided by, the Supreme Court of Canada in *Colarusso.* Moreover, s. 16(3) of the *Coroners Act*, which permits the delegation of more limited investigative powers than s. 16(1), received more attention at this Inquiry. That being said, Justice La Forest's comments raise concerns about the implications of delegating coronial powers to police officers generally, given the need to maintain the distinction between coronial and criminal investigations. Equally important, his comments reinforce the view that the delegation of powers was intended to be reserved for emergency situations where the coroner is unable to attend the scene immediately. It was not intended to represent the norm, as it does now for much of the North.

In my view, the resolution of this debate – which has implications far beyond the scope of my mandate – is best accomplished through a full consultative process with those communities most affected by it. Of course, the Nishnawbe Aski Nation should figure prominently in that consultative process. All models should be explored in a spirit of partnership and common interest, including the introduction of health care professionals such as nurses. Although I take Dr. Bonita Porter's point that the system benefits from medically trained coroners, this is not a compelling reason, standing alone, for declining to introduce others as on-site surrogates when the medically trained coroners are unable to attend death scenes. I am also of the view that there needs to be greater clarity around which investigative powers are indeed being delegated to police officers at the scene by coroners who instruct them by telephone. Again, this lack of clarity should be the subject of the consultative process.

Recommendation 157

a) The use of police officers as coronial surrogates was evidently intended for emergency situations only. It should not be the norm or the default position for all deaths within the coroner's jurisdiction.

b) The Office of the Chief Coroner for Ontario should engage in a consultative process with those communities most affected to evaluate various models for

[6] *Ibid*. at paras. 57–58.

delegating coronial investigative powers to others, including health care professionals or community-based individuals with specialized training.

Cultural Issues

When Dr. Legge testified at the Inquiry, he indicated that a number of the coroners working in the North are familiar with the needs of and challenges faced by First Nations communities. He pointed out, however, that there has been no training on Aboriginal issues offered for coroners practising in the North.

At the Thunder Bay roundtables, there was also discussion about the sensitivities around how deceased bodies are dealt with, particularly in the context of Aboriginal spiritual beliefs. Elder Elizabeth Mamakeesic of the Sandy Lake First Nation movingly described the impact of the death of a child in a First Nations community, as did Chief Connie Gray-McKay, who has too often been compelled to witness these events in her community.

Aboriginal spiritual or religious practices and beliefs concerning death are of course diverse. But as ALST/NAN noted in its submissions:

> For many Aboriginal people there is an ongoing relationship between ancestors who have passed through the western door and the descendents who remain to carry on their legacy. The descendants have responsibilities to their ancestors, an integral part of which is to ensure that their relatives are not subject to disturbance or desecration. Failure to adhere to such spiritual obligations harms not only the Dead but also the Living.

These practices and beliefs raise important considerations for when autopsies should or should not be conducted. For some Aboriginal people, an autopsy of a child represents a terrible desecration and an added grief for the family. For others, a post-mortem examination can help them to understand and come to terms with their loss.

These practices and beliefs also have implications for organ retention, which may be a source of major upset for members of Aboriginal communities, particularly if advance notification has not been provided. Dr. Legge therefore recommended that the Chief Forensic Pathologist meet with Aboriginal leaders to discuss culturally specific and sensitive ways to handle the issue of organ retention. I mention these two examples, and there are many others, simply to make the point that these kinds of issues should be discussed with Aboriginal leaders in a spirit of partnership, and then possibly addressed in OCCO policy guidelines. This consultation should be part of a larger communication strategy, which is discussed below.

Recommendation 158

The Office of the Chief Coroner for Ontario should consult with Aboriginal leaders in developing policies for accommodating, to the extent possible, diverse Aboriginal practices concerning the treatment of the body after death.

Recommendation 159

Coroners should receive training on cultural issues, particularly surrounding death, to facilitate the performance of their responsibilities.

Communication between the OCCO and First Nations

The evidence at the Inquiry and the policy roundtables made it clear that there are significant deficiencies in the way coroners and the OCCO communicate with First Nations. Those deficiencies exist at three levels. Investigative and regional coroners may fail to communicate adequately (or, for some in the North, fail to communicate at all) with families affected by the death of a loved one. Second, they may fail to communicate with community leaders (Chiefs, Band Councils, and Elders) in remote communities who play critical roles in providing support and guidance to immediate family members and to the close-knit community members following a death. Third, at the highest levels, there needs to be enhanced communication between the OCCO, including the Chief Coroner, and First Nations political organizations and governments in building trust and establishing protocols to improve all aspects of communication. Each of these three points is briefly discussed below.

Informing Affected Families

The OCCO Institutional Report states that "[a] key component of the coroner's role during a death investigation involves communication with the family of the deceased early and throughout the investigation." Such communication enables the coroner to share information about the process and to learn of any concerns family members have. The coroner also advises the family if a post-mortem examination has been ordered and offers them the opportunity to review the results. In turn, the coroner may also learn important information about the deceased as well as the events leading up to his or her death.

In remote communities, this communication is of particular importance. The body will likely be transported some distance away for autopsy. The affected families may not know where it is being transported, when it is likely to arrive, what

will be done with it on arrival, and when it is likely to be returned for burial. As noted earlier, the death may engage cultural or religious practices or beliefs that should also be discussed. James Sargent, a funeral director in Thunder Bay, spoke of the trauma to the families on losing a child, and the additional stress of having the funeral delayed because of the death investigation. Lack of information greatly compounds the trauma and stress.

The investigative process, which includes a review by the Deaths under Five Committee in all cases involving the sudden and unexpected death of a child under the age of five, may take several years to complete. This delay can be especially agonizing if those affected have no sense of what is happening or how long it is likely to take.

Unfortunately, as noted earlier, the sad reality is that there have been significant shortcomings on the part of the OCCO in communicating effectively with First Nations families who have lost a loved one. Dr. Legge acknowledged that frequently there is no direct contact between the coroner and the deceased's family. He characterized this as a "breakdown in that communication system."

Barbara Hancock, the director of services at Tikinagan Child and Family Services, similarly described as devastating the failure to communicate with First Nations families already grieving the loss of a family member. She also reported that it is not atypical for families to have no information about where the body of the deceased is going, when it will be returned for burial, or whether a post-mortem examination will be conducted. Many families turn to her and her workers for information. This responsibility places a great burden on her staff, who are tasked with communicating technical information with which they are not familiar.

The OCCO Institutional Report states that the answer to the five coronial questions in the death investigation should be made available to family members upon request. These questions are the identity of the deceased and how, when, where, and by what means the deceased came to his or her death. Dr. Legge acknowledged that many First Nations members were reticent about initiating such requests or requesting anything from persons in authority. Given this reticence, Dr. Legge noted that, in an ideal world where he had the time, he would call up all the affected families and give them the results of the death investigation. In response, Dr. Eden was concerned that such an initiative might violate s. 18(2) of the *Coroners Act*, which provides that information shall be available to affected family members "upon request." He agreed, however, with Commission counsel that the coroner could ensure, at the very outset, that affected families are fully aware of their right to make that request:

MR. SANDLER: The approach to take is to recognize that it is upon request but ensure that the families are well aware of their ability to make the request? That's what I hear you saying.
DR. EDEN: Yes. Yes, that's correct.

In Chapter 21, Pediatric Forensic Pathology and Families, I recommend that the OCCO hire dedicated personnel whose sole task is to communicate with the families in a caring and compassionate manner. However, it was recognized by everyone involved that communicating well with First Nations families requires an understanding of and familiarity with their culture, languages, and spiritual or religious beliefs and practices, as well as the means to address linguistic challenges. In my view, protocols should be created, in full consultation with First Nations, to improve and enhance existing communications.

Recommendation 160

Coroners play an important role in communicating with affected families about the death investigation. Such communication should include information about where the body is being transported, whether and why a post-mortem examination is being conducted, what that involves, when it is expected to take place, what if any issues arise in connection with organ or tissue removal, when the body or any organs or other body parts will be returned, and, if requested, what the results of the post-mortem examination or other relevant reviews reveal. In the absence of compelling reasons in the public interest, it is unacceptable for a family already suffering the loss of a child to be left uninformed and unaware of this and other information relating to the death investigation.

Communication between Coroners and Community Leaders

I was advised that leaders in remote First Nations communities also have minimal contact with the regional coroner or investigating coroners. At the Thunder Bay roundtable, Deputy Grand Chief Alvin Fiddler of the Nishnawbe Aski Nation told the Inquiry that "the relationship between the Coroner's Office and the First Nation leadership in the communities – is non-existent."

Dr. James Cairns confirmed that it was entirely possible that First Nations leaders or band councils would never have met or heard of an investigating coroner. At best, contact would have been by telephone.

Dr. McLellan described the importance of the regional coroner meeting with the First Nations leaders in the region. That would surely be a reasonable expecta-

tion of a regional coroner, and, in the case of a remote community, particularly important.

At the Thunder Bay roundtables, Dr. Eden expressed a desire, as the new regional coroner for the Northern Region, to visit a number of remote First Nations communities and meet with First Nations leaders. This desire is commendable, and it will provide opportunities to build relationships and promote understanding.

Recommendation 161

In remote communities, community leaders play a vital role in providing support for families and community members affected by a death, particularly that of a child. They can also help to identify systemic issues that are raised by individual deaths, including the pediatric forensic pathology work associated with those deaths. Community leaders can work with the OCCO and, where applicable, First Nations governments and political organizations toward needed change. It is therefore important that regional coroners and investigating coroners meet with community leaders to build relationships and facilitate partnerships.

Communication with First Nations Governments and Political Organizations

It was generally agreed at the Inquiry that there is a need for the OCCO and First Nations governments and political organizations, such as the Nishnawbe Aski Nation, to work together to produce communication protocols. Such protocols could also engage community organizations, agencies, and police services, as may be desirable. The goal of such protocols should be to build respectful relationships and to improve communications between the OCCO and the First Nations on issues of importance, including those identified at this Inquiry. The protocols should conform to the principles identified earlier in this chapter, including *Ontario's New Approach to Aboriginal Affairs*.

To improve communications, the OCCO has recommended the appointment of an Aboriginal liaison officer. Dr. Eden envisioned that such an individual could engage in a therapeutic relationship with the family, while acting as a liaison with the OCCO, to ensure that all the facts are communicated as promptly and as fully as possible. The liaison officer would be trained for the position and would bring to the job a relevant background, such as in social work, medicine, or nursing. In addition, the officer would have a clear understanding of Aboriginal issues. According to Dr. Eden, this individual would enable the family to ask questions

through a trusted intermediary. He also saw some role for the liaison officer in advocating for the family, when necessary, concerning the investigative process.

ALST/NAN and the First Nations leaders at the policy roundtables disagreed with the proposal, as well as with the OCCO's failure to consult with the First Nations before purporting to impose a solution on them. In their view, it was critical to talk to communities first to ascertain their needs before developing a policy. As well, the description of the role as that of an Aboriginal liaison officer invited concern as to whether it was truly responsive to the needs identified at this Inquiry.

In fairness to Dr. Eden, this idea originated in possible recommendations raised with him for the first time while testifying in examination-in-chief. His response reflected a good-faith desire to put in place new measures to promote culturally sensitive communications by the OCCO with affected First Nations families. That being said, it is my view that the better course is to engage in consultations to develop communication protocols and strategies, including the staffing of the OCCO, that might advance the relationship between the OCCO and the First Nations.

One particular feature of the proposal made by the OCCO cannot be denied. Whatever model is developed as a result of the communications protocols, it must involve people within the coroner's system who understand and are familiar with the relevant Aboriginal cultures, languages, and spiritual or religious beliefs and practices. As reflected in an earlier Ontario Law Reform Commission *Report on the Law of Coroners*, "First Nations issues, including the problems associated with life in remote communities will require responses that are consistent with the cultural and social context. This has not always been the case." [7]

At the Thunder Bay roundtable, Nathan Wright, the justice coordinator for the Chiefs of Ontario, supported the desirability of communication protocols. However, he warned that there needs to be a respect for and an understanding of the uniqueness and diversity of the First Nations, if we are to improve and strengthen the relationship between Ontario and the First Nations, and for that relationship to continue to be strong. I agree.

Recommendation 162

a) The Office of the Chief Coroner for Ontario should work in partnership with First Nations governments and political organizations to develop communication

[7] *Report on the Law of Coroners* (Toronto: Ontario Law Reform Commission, 1997), 192, n. 27.

protocols. Priority should be given to the development of such protocols for the North, where the need is particularly acute.

b) **Whatever model is developed to enhance communications, it should involve people within the coroner's system who understand and are familiar with the relevant Aboriginal cultures, languages, and spiritual or religious beliefs and practices.**

There are, no doubt, formidable challenges in delivering adequate coronial and forensic pathology services to First Nations and other remote communities in Northern Ontario. But these challenges cannot be a licence for acceptance of the status quo – and no one at this Inquiry suggested that they should be. But attention must be paid to these challenges by governments, by the OCCO, and by those who work with the coronial system. Through true partnerships and consultation, I am confident that positive change can occur. The people of Northern Ontario, Aboriginal and non-Aboriginal, deserve no less.

21

Pediatric Forensic Pathology and Families

Early in this Report, I describe the devastating impact that the sudden unexpected death of a child has on parents, surviving siblings, extended family members, and the community. When these deaths are suspicious, it is imperative that the criminal justice system handles these complex and emotionally charged cases correctly and fairly. Without compromising ongoing criminal investigations, the authorities must proceed sensitively and even compassionately, in recognition of the trauma that families have already endured and the tragic consequences for an individual wrongly accused of fatally abusing a child.

Although my mandate requires me to focus on the role of pediatric forensic pathology in the criminal justice system, the same pathology may also play a decisive role in parallel child protection proceedings. Indeed, the difficulties for child protection workers are, in some respects, more pronounced than for criminal investigators. After all, they are dealing not with the criminal responsibility for a child who has died, but the immediate safety of living children. When a parent is suspected of having fatally abused or neglected a child, pressing decisions must be made about the best interests of the parent's remaining children. Those decisions are necessarily time-sensitive. Weighed against those pressing concerns is the recognition that separating parents from their remaining children – particularly where the parents have done no wrong – only compounds the tragedy for all those affected.

In my view, to fully restore public confidence in pediatric forensic pathology, we need to look at how it can better serve child protection proceedings and the needs of the families affected by a suspicious pediatric death. Most important is the issue of how pediatric forensic pathology can meet the requirements of both criminal justice and child protection proceedings. It is important that, consistent with the needs of the ongoing criminal investigation, pathology findings be accurately provided to those involved in child protection proceedings as promptly as

possible. It is true that this objective can produce tensions between the systems. I recognize the concern that criminal investigations not be jeopardized by the sharing of information that makes its way to those suspected of abuse. But there is also the concern about the severe time lines that face the child protection system in making decisions about the placement of children, and the importance that those decisions be the right ones. There is a significant role for police to play in ensuring that the information provided to those involved in child protection proceedings is accurate and remains current. Up-to-date information, particularly on forensic pathology, may build a stronger case for abuse, or may expose weaknesses in or limitations on earlier expressed opinions. Either way, the information is critical to accurate fact-finding.

First, we need to recognize, but not overemphasize, the concern that the sharing of information may undermine the criminal investigation. At the same time, we need to recognize, but not underestimate, the significance of decisions being made in the child protection forum and how the sharing of information can promote better fact-finding in that forum. My recommendations concerning protocols between the police and children's aid societies are intended to address both objectives.

A second question I discuss in this chapter is how the Office of the Chief Coroner for Ontario (OCCO) can better communicate with families affected by the sudden unexpected death of a child to assist them in understanding what has happened. This role includes explaining the autopsy results and, if it applies, the contemplated retention of the child's organs and tissue samples. As I will explain, I think much more can be done.

Third, I address the issue of how child protection proceedings in which Dr. Charles Smith and flawed pediatric pathology may have played a part should be dealt with.

Finally, I deal with the issue of legal aid funding for child protection proceedings involving pediatric forensic pathology.

Information Sharing

When a child dies under suspicious circumstances, and there are surviving children, there are likely to be parallel criminal and child protection investigations. In these circumstances, it is imperative that relevant information be shared between the police and children's aid societies to the fullest extent possible. A key component of the relevant information to be shared is what the post-mortem examination may yield about the cause of death. The statutory obligation on the police and others to report suspected child abuse reinforces the obligation of the police

to share such information. The obligation is a continuing one. As the police acquire additional relevant information, including new or modified pediatric forensic pathology findings and opinions, it should be shared with children's aid societies as far as possible. The additional information may, as I earlier noted, build a stronger case for abuse, or it may expose weaknesses in or limitations on earlier expressed opinions. Either way, the information is critical to accurate fact-finding in the child protection proceedings. Moreover, it is vital that the information be provided promptly to ensure that it is available when crucial decisions are being made both by children's aid societies and by the court determining whether to bring a surviving sibling into care.

Jenna's case is illustrative of the concern here. Jenna died on January 22, 1997. Her sister, Justine, who was seven years of age, was apprehended by the local children's aid society (CAS) that same day. She remained in foster care or with her aunt and uncle for approximately three-and-a-half months. She was then returned to the care of her mother, Brenda Waudby, and remained there until Ms. Waudby was arrested on September 18, 1997, and charged with murder, approximately eight months after Jenna's death. Justine was reapprehended on that date. The CAS subsequently apprehended a second child, M.W., born to Ms. Waudby in 1999. M.W. was placed in his father's custody.

During this period, as Jenna's case proceeded beyond the preliminary hearing and toward the trial, the defence disclosed to the Crown expert medical evidence in its possession that challenged the Crown theory as to the timing of the fatal injuries and cast doubt on the prosecution's case. Ultimately, once this information was fully investigated, and corroborated, at the Crown's request by Dr. Bonita Porter, Deputy Chief Coroner of Inquests, the Crown withdrew the most serious charges against Ms. Waudby. Before the withdrawal, however, she pleaded guilty to a charge of child abuse, in relation to an incident sometime in the one to three weeks before Jenna's death, pursuant to s. 79 of the *Child and Family Services Act,* RSO 1990, c. C.11.[1]

After the criminal charge was withdrawn, Ms. Waudby applied for interim care and custody of both Justine and M.W. The family court judge granted the application in relation to Justine, but ordered that M.W. remain in his father's care with access granted to Ms. Waudby. The CAS opposed Ms. Waudby's applications and later appealed the family court orders. The appeal was dismissed, and the orders were upheld by the reviewing judge.

At the Inquiry, counsel for Ms. Waudby explored whether the police and the

[1] The pathology evidence that formed the basis of the guilty plea could not be confirmed upon review by Dr. Michael Pollanen.

prosecution had kept child protection workers informed of the status of the criminal case, and particularly the progressive disintegration of the theory implicating Ms. Waudby, as new evidence became available. The prosecutor, who testified at the Inquiry, felt that he had complied with his obligations. Moreover, he made it clear that criminal counsel for Ms. Waudby was well placed, indeed better placed, to ensure that the developing evidence was known to those involved in the child protection proceedings. The record is not entirely clear as to precisely what information was communicated by the police or prosecutors to the CAS or when it was communicated. The prosecutor indicated that, in his view, there needs to be a better protocol for determining what parts of the brief should be turned over to the CAS. What the case demonstrates for me, accepting the good faith of all involved, is that there was no clear protocol or practice ensuring that the relevant developments in the criminal case were communicated in a timely and complete way to the child protection workers involved. This problem of course cannot simply be addressed for information arising out of the post-mortem examination. There must be a more general approach.

There are at least two Ontario government documents that are of significance in addressing information sharing between the police and the children's aid societies: Child Protection Standards in Ontario, issued by the Ministry of Child and Youth Services in February 2007, and the Policing Standards Manual, issued by the Ministry of the Solicitor General (now the Ministry of Community Safety and Correctional Services) in 2000.

The Child Protection Standards in Ontario are intended to "promote consistently high quality service delivery to children, youth and their families receiving child protection services from Children's Aid Societies across the province."[2] The document sets

> new standards [that] are the *mandatory* framework within which these services will be delivered. They establish a *minimum level of performance* … and create a norm that reflects a desired level of achievement. The standards will provide the baseline for demonstrating the level of performance within the ministry's overall accountability framework for child welfare. [Emphasis added.][3]

The third standard contained in this document requires that, when the CAS receives information alleging a criminal offence perpetrated against a child, its

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[2] Ministry of Child and Youth Services, Child Protection Standards in Ontario, February 2007, online http://www.gov.on.ca/children/english/resources/child/STEL02_179886.html, p. 2.
[3] *Ibid.*

child protection worker must immediately inform the police and then work with them in accordance with established investigative protocols. Every CAS is directed to have established protocols with the local police departments to cover the investigation of such allegations.[4]

Beyond the basic requirement that local protocols exist, the Child Protection Standards provide little or no direction as to what should be contained within the protocols. In relation to pediatric forensic pathology, these standards do not specifically address the scenario in which a child dies and other siblings remain whose care must be decided on, nor do they articulate the role of the coroner or the forensic pathologist.

The Policing Standards Manual describes itself as stating "the ministry's position in relation to policy matters" and "provid[ing] recommendations for local policies, procedures and programs." Policing agencies and municipalities use the guidelines as primary tools to assist with their understanding and implementation of the *Police Services Act,* RSO 1990, c. P.15, and its regulations.[5]

The Policing Standards Manual sets out a number of guidelines for multidisciplinary coordination in cases of child abuse and neglect, including information sharing. It states:

1. Every Chief of Police *should*, in partnership with local Crown, Children's Aid Societies (CAS), municipalities, school boards and other appropriate service providers, including hospital staff, work to establish a committee to coordinate the development of a local strategy for preventing, and responding to issues and complaints of, child abuse and neglect.
2. The mandate of the committee *should* include:
   a) addressing information sharing among the member organizations, in order to facilitate a coordinated response to child abuse and neglect;
   b) the implementation of local community strategies and education/awareness initiatives/programs for addressing issues related to child abuse and neglect; and
   c) liaising with the local Child Abuse Review Team(s) (CART), where one(s) exists within the community.

…

4. Every Chief of Police *shall* enter into a child abuse protocol with their local Children's Aid Societies (CAS), which should:

[4] *Ibid.,* pp. 2, 4, 25.

[5] Ministry of Community Safety and Correctional Services, Policing Standrds, online http://www.mcscs.jus.gov.on.ca/English/police_serv/pol_stand.html.

…

f) require procedures for undertaking and managing joint investigations that:
   i) set out the respective roles and responsibilities;
   ii) address interviewing children, non-offending parents and/or person having charge of the child and alleged offenders, including the use of audio/videotaping and *R. v. K.G.B.* statements where appropriate; and
   iii) set out the procedures for the collection, handling and preservation of evidence taking into consideration the unique circumstances of child physical and sexual abuse investigations, including for arranging for the child to be medically examined;

g) *address information sharing and disclosure at the time of initial notification, during the joint investigation and after the investigation has been completed, including the sharing of information on any legal proceedings arising from the investigation;*

…

j) *address the investigation requirements / procedures following the death of a child, including where foul play is suspected or the death is sudden and unexpected, in accordance with the Ontario Major Case Management Manual and the Chief Coroner's memorandum on the protocol to be used in the investigation of the sudden and unexpected death of any child under 2 years of age;*

k) *address the requirement for an assessment of the risk to other children be completed in any case following the death of a child where foul play is suspected;* … [Emphasis added].

The manual also provides a "Framework for Model Child Abuse Protocol." The Framework identifies the following topics to be addressed within the local protocol:

Planning the Joint Investigation
Collection and Preservation of Evidence
Conducting Joint Investigative Interviews of the Child(ren)
Post-Interview Consultation
Interview with the Non-Offending Parent
Interview of the Alleged Offender
Victims' Assistance
Ongoing Consultation and Case Tracking

The Framework also indicates that the local protocols should address the issue of "Information Sharing and Disclosure," including

- at the time of initial notification;
- dispositions of investigations, including consultation in cases involving a failure to report;
- dispositions of court proceedings and/or orders;
- during joint investigation; and
- ongoing joint investigation.

The Framework also identifies the investigation of child deaths as a separate topic to be covered by the local protocols, including the role of the police and the CAS in such investigations, information sharing, the role of the local coroner, and protocols between the police and the coroner.

As I understand it, the investigation arising out of a child's death is sometimes described in local existing protocols as a "joint" investigation by the police and the CAS, but might sometimes more accurately be described as involving "parallel" investigations conducted by the police and the CAS. For example, homicide investigators will often conduct their own interviews and collect the bulk of the expert and non-expert evidence pertaining to the case without any CAS involvement, whereas the police investigating an alleged sexual assault within the home will often conduct interviews jointly with the assigned child protection worker. It is well beyond the scope of this Report to analyze when and to what extent investigations are or should be joint or parallel. What is important is that, to the extent to which investigations are not conducted jointly – in whole or in part – information sharing becomes all the more vital.

As reflected above, although the Policing Standards Manual is said to contain guidelines only, it does stipulate that the chiefs of police *shall* enter into local protocols with the CAS. In any event, the manual does set out topics to be covered by local protocols, but not their specific content.

In Toronto, Peel, and other jurisdictions across the province, such local protocols do exist. The Toronto protocol is entitled "Protocol for Joint Investigations of Child Physical & Sexual Abuse: Guidelines & Procedures for a Coordinated Response to Child Abuse in the City of Toronto," and provides, in part:

a) A joint police/CAS investigation will occur in all situations where a child has died under suspicious circumstances, or as a result of abuse and/or neglect, and there may be other children at risk.
b) Where there appear to be no other children at risk, police will, at a minimum, inform a CAS as to the circumstances surrounding the child's death if it is suspected or known that the child died as a result of abuse and/or neglect.

c) The principles of mutual reporting and information sharing are essential and continue to apply in these serious situations. However, in the event of the death of a child, the police may limit the sharing of information so as not to compromise an investigation.
d) The Coroner has jurisdiction in all instances involving the death of a child, and involved systems must take direction from the Coroner.

The Toronto protocol also directs that police officers shall keep child protection workers informed of the reasons for criminally charging or not charging, of the outcome of any criminal proceedings, and of dates of future court appearances. Where child protection proceedings are initiated, the CAS worker shall keep the police informed of any order that may have an impact on criminal proceedings and of dates of future court appearances.

The Peel Child Abuse Protocol, which covers the Peel Regional Police, Peel CAS, and Peel Crown Attorney's Office, states the following with respect to information sharing:

a) Effective response requires full co-operation and co-ordination between the police and the Children's Aid Society.
b) To facilitate the joint investigative process, there shall be full disclosure between the police officer and the CAS worker at all times.
c) The police officer has primary responsibility for the criminal investigation of the alleged offender. The CAS worker has primary responsibility for the child welfare investigation / evaluation and for protection of the child. Fullest possible disclosure will be maintained between the police investigators and the CAS workers.

The police officer is also obligated to inform the CAS worker of any conditions of bail, the decision of the criminal court, and the reasons for that decision.

Despite the existence of local protocols such as these, several experts at the Inquiry described deficiencies in the existing interplay between those involved in the investigation or prosecution of pediatric forensic cases (whether they are coroners, police, forensic pathologists, or Crown attorneys) and children's aid societies.

Jane Fitzgerald, executive director of the CAS of London and Middlesex and member of the board of directors of the Ontario Association of Children's Aid Societies (OACAS), confirmed that local protocols do exist. However, in her view, information is shared in most cases because of the personal relationships of those involved in the investigation and not as a result of the protocols. She also

explained that current protocols are generally entered into between police and children's aid societies, and do not include coroners and forensic pathologists. She characterized the investigation of suspicious children's deaths as a "three-legged stool," which requires all three "legs."

Andrew Koster, executive director of the Brant CAS, stated that, because child protection workers have to make very fast decisions about remaining children in the home of a deceased sibling, they need as much information as possible as quickly as possible from police and forensic pathologists. He noted that, in practice, the sharing of information by police with the CAS is intermittent across the province. In some jurisdictions, the police will not share such information out of concern that they will thereby jeopardize the ongoing criminal investigation.

Nicholas Bala, a well-recognized expert in child protection issues and a law professor at Queen's University, advised the Inquiry that children's aid societies sometimes have had to litigate against the police to obtain information from ongoing criminal investigations in order to carry out the appropriate child protection investigations. The CAS has to make rapid decisions about the placement of surviving siblings, bringing the placement issues to court, and providing disclosure to the parents, but the police or the coroner's office may not have completed their investigations and may therefore be unwilling to release information. He indicated that courts tend to order disclosure to the CAS when the issue is litigated, but that litigation is not the best way to resolve these issues. He agreed that the child welfare system would benefit from better protocols between police forces and children's aid societies on information sharing so that litigation would not be necessary.

There was some discussion at the Inquiry as to whether such protocols should be province wide or negotiated locally. Both Professor Bala and Mr. Koster advocated for a system in which there were provincial standards, implemented locally to allow for regional differences.

The OCCO has also recognized the need for standardization of joint investigative protocols. In June 2007, the OCCO released the second report of the Paediatric Death Review Committee (PDRC). The PDRC reported that, in its review of deaths in 2005 and 2006, it found as a repeated theme inconsistencies in whether investigative protocols between police and the CAS were followed and used; it also found poor communication and sharing of information with co-investigators and other professionals involved with the families. As a result, the PDRC recommended enhanced sharing of information and mandatory police and CAS protocols for joint investigations and reporting of all child deaths.

The Inquiry revealed that province-wide standardization still does not exist. There are local protocols, but they are often poorly understood and

compliance varies. In other instances, they fail to address the sharing or exchange of information in a timely way. The extent to which information can be shared, and indeed must be reported, remains the subject of misunderstanding or confusion.

I agree with Professor Bala and Mr. Koster that there is a need both for province-wide standards, supplementing those that already exist, and for local protocols to facilitate their implementation. The provincial standards should specifically address the expectations surrounding the sharing of information relating to joint or parallel investigations arising out of child deaths where other children may be at risk. They should emphasize the importance of timely and accurate communication of such information, and of its being updated as circumstances change; in particular, the police need to keep child protection workers updated to ensure that decisions regarding surviving children are accurate. The standards should remove any misconceptions that inhibit the appropriate sharing of information, and they should reinforce the point made earlier that, although it is important to protect the integrity of an ongoing criminal investigation, the need to withhold information from the child protection system in order to do so should not be overstated. Similarly, the significance of decisions being made in the child protection forum, and how the sharing of information can promote better fact-finding in that forum, should not be underestimated. The standards should also articulate the roles to be played by coroners, forensic pathologists, and Crown counsel in the sharing of information in investigations arising out of the suspicious death of a child. It would be helpful if the standards were accompanied by a template for local protocols to facilitate their timely adoption across the province.

As I have said, the provincial standards should be sufficiently flexible to permit local jurisdictions to implement them in a manner that best suits their particular communities. However, that flexibility must not be so broad that it defeats their fundamental purpose – standardization across Ontario. This is a delicate balance that will need to be addressed by those who will be responsible for developing these standards and local protocols. Of course, once such a protocol is developed, local agencies will need to be trained in order to ensure its effective implementation.

Recommendation 163

a) The Province of Ontario, with the assistance of the Ontario Association of Children's Aid Societies and others, should develop province-wide standards, supplementing those that already exist, on the sharing of information arising

out of the investigations of suspicious child deaths by the police and children's aid societies.

b) The provincial standards should:

- Specifically address the expectations surrounding the sharing of information relating to joint or parallel investigations arising out of child deaths where other children may be at risk.
- Emphasize the importance of the timely and accurate communication of such information, and its updating as circumstances change, particularly by the police to child protection workers to ensure that decisions regarding surviving children are accurate.
- Remove any misconceptions that inhibit the appropriate sharing of information, and reinforce the point that, although it is important to protect the integrity of an ongoing criminal investigation, the need to withhold information from the child protection system in order to do so should not be overstated. The significance of decisions being made in the child protection forum, and how the sharing of information can promote better fact-finding in that forum, should also not be underestimated.
- Articulate the roles to be played by coroners, forensic pathologists, and Crown counsel in the sharing of information in investigations arising out of the suspicious death of a child.

c) Local protocols should also be created across the province to permit local jurisdictions to implement the provincial standards in a manner that best suits their particular communities.

d) The timely development of these local protocols should be facilitated through the creation of a template for such protocols to accompany the provincial standards.

e) Local children's aid societies, police, coroners, forensic pathologists, and Crown counsel should receive joint training on the provincial standards and their local implementation to ensure that all parties have common understandings and interpretations of the standards and protocols and their application locally.

Communicating with Affected Families

There was no dispute among the parties at the Inquiry that the families of a deceased child are entitled to receive timely information about the death investigation and its results in a caring and compassionate manner. In particular, the forensic pathology concerning the cause of the child's death can be vitally important to the family. As stated by the Baroness Helena Kennedy in *Sudden Unexpected Death in Infancy* (Kennedy Report), the 2004 report of the inquiry set up after the acquittal of Sally Clark in England:

> Parents suffering a terrible tragedy need sensitive support to help deal with their loss. It is every family's right to have their baby's death properly investigated. Families desperately want to know what happened, how the event could have occurred, what the cause of death was and whether it could have been prevented. This is important in terms of grieving, but is also relevant to a family's high anxiety about future pregnancies and may identify some underlying cause, such as a genetic problem. And if there happens to be another sudden infant death in the family, carefully conducted investigations of an earlier death also help prevent miscarriages of justice.[6]

It is vital that the family of the deceased child be kept informed as much as possible. The reality, however, is that coroners and forensic pathologists are already overburdened.

In its written submissions, the OCCO proposed the creation of a Family Liaison Service to provide information and guidance to the public when navigating through the complexities of the death of a family member, particularly in pediatric death cases. The terms of reference of the Family Liaison Service would be posted on the newly created OCCO website. In addition, a full description of the services that families can expect would be provided, including information on where complaints should be directed, where applicable.

I endorse the OCCO's proposal. The development of such a service would, I hope, go a long way toward ensuring that the families of deceased children are properly, and compassionately, informed and updated about the status and results of the death investigation. Of course, the development of such an office will require appropriate funding from the province.

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[6] *Sudden Unexpected Death in Infancy: A Multi-Agency Protocol for Care and Investigation* (London: Royal College of Pathologists and Royal College of Paediatrics and Child Health, September 2004) (Chair Baroness Helena Kennedy), 1, online http://www.rcpath.org and http://www.rcpch.ac.uk.

Recommendation 164

The Office of the Chief Coroner for Ontario (OCCO) should develop a Family Liaison Service dedicated to communicating with families, particularly those that have suffered the loss of a child. The service should ensure that it communicates with the affected families in an effective, timely, caring, and compassionate manner. The Province of Ontario should provide additional funding to the OCCO to enable this service to be developed.

Releasing Post-Mortem Reports to Families

One of the proposals made at the Inquiry to resolve the issue of inadequate communication was that the family of the deceased child be given immediate access to the post-mortem report on its completion. Concerns were raised, however, that criminal investigations might be jeopardized by the early release of the post-mortem report in every case.

The Kennedy Report recommended that the results of post-mortem examination be discussed with the parents at the earliest opportunity. It was anticipated that a pediatrician specializing in sudden unexpected deaths in infants would discuss the autopsy results with the parents. The Kennedy Report also recommended that the pediatrician "write a detailed letter to the parents, giving information concerning the cause of the infant's death and make arrangements to meet them to explain the contents of the letter, answer questions and offer future care and support."[7]

I am hopeful that the OCCO's hiring of dedicated personnel to deal with families of a deceased child will go a long way toward resolving concerns about inadequate communication. I also propose that guidelines be established to assist those personnel in communicating with the families. Those guidelines should, in my view, include a provision that disclosure of the autopsy results should be made to the family, both verbally and in writing, in a timely and sensitive manner.

Where there is an ongoing criminal investigation, the issue of what information should be released to the affected families, including the post-mortem report, is a contentious one that needs to be addressed. The OCCO encouraged me to recommend that it convene a meeting with the OACAS to develop a policy respecting the timely release of the cause of death information where there is an ongoing criminal investigation. I agree that such a meeting would be appropriate to allow the parties to find the appropriate balance between keeping the family

[7] *Ibid.*, 20.

informed on the one hand, and, on the other, protecting any possible criminal investigation. That meeting should also involve leading police forces to ensure that their position(s) are understood and incorporated into the policy.

Recommendation 165

a) Disclosure of autopsy results to parents should be made verbally and in writing in a timely manner that is sensitive to the parents' loss and bereavement.

b) The Office of the Chief Coroner for Ontario should meet with the Ontario Association of Children's Aid Societies and leading police forces to develop a policy respecting the timely release of the post-mortem information where there is an ongoing criminal investigation.

Organ and Tissue Retention and Disposition

Another area that highlights communication concerns is the retention and disposition of organs and tissues taken at autopsy.[8] Some families may have cultural or religious objections, while others may wish to be informed by the OCCO of what is being done in this regard.

The current OCCO memorandum on the issue recognizes that, "[t]he importance of communication with families at all stages of the Coroner's investigation cannot be overemphasized." It provides that the investigating coroner is to make reasonable efforts to advise the family, before the autopsy, that there may be a need to retain tissue specimens. When the forensic pathologist communicates the initial autopsy findings to the coroner, both the pathologist and the coroner must decide together whether it would be beneficial to retain whole organs and en bloc tissue specimens. The purpose of such organ and tissue retention is to advance the death investigation in homicides, and in undetermined or suspicious deaths. The forensic pathologist will record all organ and tissue retentions and convey this information to the investigating coroner and the regional coroner.

The investigating coroner must make reasonable efforts to let the family know about the results of the post-mortem examination as soon as possible following the autopsy. This notification is supposed to include information about any whole organs or en bloc specimens retained and about how they can be returned to the family for burial or cremation. The investigating coroner is to inform the

[8] This is to be distinguished from organ *donation*, for which there is a separate OCCO policy. I endorse the OCCO's policy with respect to organ *donation*.

family that it is common practice for the retained organs and en bloc specimens to be cremated by the hospital or forensic pathology unit once they are no longer required for the death investigation. However, the coroner should advise the family that, if they wish to have the organs or tissues returned, a funeral home should be contacted to assist.

In its written submissions, the OCCO recognized the cultural and personal concerns that can arise regarding organ retention as a component of the post-mortem examination. The OCCO suggested the continuation of its current policy of notifying families when pathologists request the retention of organs for further testing. This includes discussion with the family about the disposition of organs following the completion of the testing. I agree with the OCCO's submissions and endorse its current policy on organ and tissue retention. I wish to add only one comment. Should there be a conflict between the OCCO and the family as to whether organs and tissues should be retained, I am of the view that, if the death investigation truly needs to retain tissues and organs, that need must prevail over the cultural and religious beliefs of the families. But retention must be for the shortest time possible and with a full and sensitive explanation to the family.

Recommendation 166

The Office of the Chief Coroner for Ontario's current policy for organ and tissue retention and disposition should be continued. Coroners should be encouraged to communicate with families about the need for organ and tissue retention in a timely manner that is respectful of these families and their cultural or religious beliefs.

Reviews of Child Protection Cases Involving Dr. Smith

Defence for Children International – Canada (DCI–Canada) submitted that child protection cases where Dr. Smith was involved should be reviewed. The goal would be to identify whether faulty pediatric forensic pathology played a part in separating children from their parents or guardians, and, if so, to address how best to remedy that wrongful separation. The Affected Families Group supported DCI–Canada's recommendation that appropriate steps should be taken to notify children adopted or subject to Crown wardship as a result of the errors made by Dr. Smith.

In my opinion, there is no basis for me to make such a recommendation. The

Chief Coroner's Review has already identified all the cases involving Dr. Smith between 1991 and 2001 in which the child's death was criminally suspicious. The cases from that group in which there were other siblings constitute the cases in which Dr. Smith may have given a pathology opinion that mattered in child protection proceedings. The universe of cases between 1991 and 2001 involving Dr. Smith is known.

The ongoing review for 1981 to 1991 will achieve the same for that period. Although it will identify only those cases in which there was a conviction, it is unlikely that there would be any other cases that were criminally suspicious in which there were surviving siblings who are still in care and in which Dr. Smith gave pathology evidence in child protection proceedings. Dr. Smith was involved in few forensic cases during those years, and, given the length of time that has elapsed, any children affected are likely to be grown.

Finally, nothing in the record suggests that the testimony of any other pediatric forensic pathologist requires a review.

While no further review is warranted, our mandate permits us to assist families in the cases already identified. The Inquiry has already facilitated counselling for those families affected by flawed pediatric forensic pathology. For a number of the individuals, the counselling has been very helpful in assisting them to deal with these tragic episodes and move on with their lives. The Inquiry was initially able to commit to funding counselling for a two-year period – the duration of the Inquiry. Where the counselling began during the life of the Inquiry, I recommend that funding be provided for up to a further three years if the individual and the counsellor think it would be useful.

Recommendation 167

The Province of Ontario should provide funding to permit counselling for individuals from families affected by flawed pediatric forensic pathology in cases examined at this Inquiry for up to a further three years, for a total of five years from the time of commencement, if the individual and the counsellor think it would be useful.

Those whose names have been placed on the Child Abuse Register as a result of Dr. Smith's flawed pathology should be assisted. The Child Abuse Register is a database that contains the names of individuals who have been found to have abused or neglected a child in their care. The *Child and Family Services Act* (*CFSA*) and regulations govern the Child Abuse Register. The register is made up of information of child abuse or neglect received and verified by a CAS. Once information is verified by a CAS, it must be reported to the director of the regis-

ter within 14 days. When an individual is entered into the register, the *CFSA* requires that the director give written notice to the registered person.

The threshold for determining whether an individual's name should be entered into the register is lower than the standard of proof in civil and criminal matters. Such a decision can be made simply on the basis that there exists credible evidence to support the registration. In *Ridley v. Children's Aid Society for the County of Hastings*, Justice Sydney Robins held that, for the register to achieve its purposes, entries should not be limited to cases in which abuse was established on a criminal or civil standard of proof. Instead, credible evidence supporting the information in the register is adequate: "[I]f credible evidence is adduced it remains for the Director to determine in light of the circumstances of the request before him whether the information should remain in the register. In the absence of credible evidence the name must be expunged."[9]

If a request is made for the removal or amendment of information in the register, the director may either grant the request or hold a hearing under ss. 76(4) – (12) of the *CFSA*. If, after a hearing, the director decides that the information in the register is in error or should not be there, the director must remove it or otherwise amend the register. The director may also order that the CAS amend their records to reflect this decision.

In their study, Professors Nicholas Bala and Nico Trocmé suggested that I recommend the "removal of names from the Child Abuse Register if there is no longer credible evidence of a history of abuse."[10] In its written submissions, DCI–Canada adopted Professors Bala and Trocmé's recommendation and similarly urged me to recommend the removal of names from the Child Abuse Register.

In my view, people whose names have been placed on the Child Abuse Register as a result of faulty pediatric forensic pathology should no longer bear the stigma associated with that registration. The director of the register should be encouraged to grant the request of such persons to have their names removed.

Recommendation 168

In the discharge of his or her mandate, the director of the Child Abuse Register in Ontario should be encouraged to grant the request of persons wrongly listed on

[9] [1981] OJ No. 174 (HCJ) at para. 20.

[10] Nicholas Bala and Nico Trocmé, "Child Protection Issues and Pediatric Forensic Pathology," in *Pediatric Forensic Pathology and the Justice* System, vol. 2 of Inquiry into Pediatric Forensic Pathology in Ontario, Independent Research Studies (Toronto: Ministry of the Attorney General, 2008), 87.

the register as a result of faulty pediatric forensic pathology to have their names removed from the register if there is no longer credible evidence of abuse.

Legal Aid Funding in Child Protection Proceedings Involving Pediatric Forensic Pathology

Elsewhere in this Report, I make recommendations relating to increased funding of counsel and pathology experts for pediatric homicide prosecutions and for applications for ministerial review of wrongful convictions. Here, I would like to address funding by Legal Aid of counsel and experts in child protection proceedings involving pediatric forensic pathology.

At the roundtable on pediatric forensic pathology and potential child abuse, Ms. Fitzgerald indicated that when there is a homicide in a family, child protection workers have to make very complex decisions about whether to bring surviving siblings into care. Child protection workers have to consider the best interests of the siblings and their safety. To do so, Ms. Fitzgerald explained, CAS workers necessarily rely on information they receive from other professionals. She said that CAS workers are not in a position to question medical evidence or act as a check against potentially flawed expert opinions on pediatric forensic pathology. Ms. Fitzgerald noted, however, that, in child protection proceedings, counsel for the parents or experts retained on behalf of the parents can perform this check on expert medical opinions. Ms. Fitzgerald's experience in child welfare court was, however, that parents unfortunately often did not have access to the Legal Aid support that would have enabled them to obtain the legal advice or expert opinion they needed to question the forensic pathologist's evidence. Professor Bala advised the Inquiry that it can be very difficult for parents to obtain counsel for child protection proceedings:

> Our Legal Aid system is often woefully inadequate in the child protection context, in particular. And parents are often having great difficulty getting adequate counsel. Issues about Legal Aid are certainly true in the criminal system. They're even worse in a child protection system. In many parts of Ontario now, it's not possible to find lawyers who will take certificates to do child protection work because of the nature of the fee schedule and the difficulty of the work.

Rob Buchanan, vice-president of Legal Aid Ontario (LAO), said that in some parts of Ontario it is difficult, for economic reasons, to find a capable lawyer to assist with a child protection matter. Mr. Buchanan also explained that there is no big case management process available for family law matters. He said that a

lawyer preparing for a child protection hearing would have a maximum of 50 hours of preparation. Additionally, Mr. Buchanan told me that eligibility cut-offs for LAO funding are very low. For example, for a single person to be eligible for a Legal Aid certificate, he or she must have an annual income of no more than $13,000 per year.

Professors Bala and Trocmé urged me to recommend that Legal Aid provide better support for parents involved in child protection proceedings:

> One way to promote fairness to parents and the best informed judicial decision making is to ensure that parents have access to effective advocates, and, in appropriate cases, to independent experts who can credibly challenge the opinions of government-retained or -employed experts. While Legal Aid does provide funding for the most indigent parents involved in the child protection process, the amount of funding per case is often inadequate, making it very difficult for parents and their counsel to effectively challenge agency decisions and experts. Further, many parents of limited means have incomes just above the very low Legal Aid ceilings but are unable to afford the often enormous costs of child protection litigation.[11]

While I appreciate the comments of Professors Bala and Trocmé and others, I am not in a position, by virtue of my limited mandate, to address Legal Aid funding for family counsel and experts in all child protection proceedings. My mandate is confined to restoring confidence in pediatric forensic pathology in the province. Thus, any recommendations I make with respect to funding from LAO are confined to cases in which pediatric forensic pathology plays an important role in the child protection proceeding.

As the evidence at the Inquiry has demonstrated, pediatric forensic pathology is a complex science. Counsel must have a heightened degree of knowledge and skill to be able to comprehend and, if appropriate, challenge pediatric forensic pathology evidence. It is for that reason that in Chapter 17, The Roles of Coroners, Police, Crown, and Defence, I recommend that only knowledgeable, skilled, and experienced counsel take on these cases in the criminal context. As discussed in that chapter, Legal Aid Ontario needs to increase the compensation in cases involving pediatric forensic pathology to ensure that qualified counsel will take on these complex cases.

The same principles apply in child protection proceedings in which pediatric forensic pathology plays an important role. I accept that counsel and experts

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[11] *Ibid.*, 88.

available to parents are a necessary protection against miscarriages of justice caused by flawed pediatric forensic pathology not only in criminal cases but also in child protection proceedings. Accordingly, in child protection cases where pediatric forensic pathology plays an important role, necessitating the involvement of counsel with heightened experience, knowledge, and skill, LAO should fund those counsel at an increased rate. I note that Professor Michael Trebilcock's recent *Report of the Legal Aid Review 2008* also highlights the need for the legal aid tariff to be increased, particularly for criminal and family lawyers, to help ensure that qualified counsel take on legal aid cases.[12] He, too, recommended that the tariff be significantly raised in the immediate future. Additional hours may also need to be funded because of the complex nature of these cases. In addition, these cases typically require the involvement of a forensic pathologist to assist counsel and the family. LAO should also provide funding for the retention of a forensic pathologist at a rate commensurate with that of the expert being relied on by the Crown. Again, LAO may need to authorize additional hours, as required, for the expert.

Recommendation 169

a) Legal Aid Ontario should work with the family law bar to ensure that family lawyers are funded for child protection proceedings in which pediatric forensic pathology plays an important role. The tariff for counsel who litigate these cases should be increased to create incentives for experienced and specially trained lawyers to take on legally aided cases and to reflect their added expertise. Legal Aid Ontario should fund an adequate number of hours to ensure that family counsel can properly fulfill their duties.

b) In appropriate cases, Legal Aid Ontario should authorize funding for one or more forensic pathologists and, where necessary, out-of-jurisdiction pathologists, including their travel expenses.

c) Legal Aid Ontario should raise the hourly rate for forensic pathology experts to a level that is commensurate with funding of experts retained by the Crown. This is necessary to ensure that experts of comparable skill to that of experts retained by the Crown are prepared to assist the family lawyer. This increase should occur expeditiously in pediatric forensic pathology cases.

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[12] Michael Trebilcock, *Report of the Legal Aid Review 2008*, http://www.attorneygeneral.jus.gov.on.ca/english/about/pubs/trebilcock/legal_aid_report_2008_EN.pdf (accessed August 14, 2008).

d) Legal Aid Ontario should increase the number of hours of funding authorized for forensic pathologists.

I end this Report where I began. The sudden, unexpected death of a child is a terrible tragedy. For the parents, the loss is shattering. It is all the more devastating when flawed pathology focuses suspicion on a grieving parent and invites legal proceedings to separate that parent from surviving children. It is of course no less troubling when flawed pathology imperils the search for the truth – wherever it may lead.

Public confidence in pediatric forensic pathology requires that it serve the child protection proceedings and the needs of affected families. Those dual needs demand that the child protection system has the facts necessary to make timely informed decisions. Suspected family members and their counsel must be able to evaluate and, if need be, challenge the existing pathology evidence. Most important, families must be treated fairly and compassionately both in assisting them to understand what has happened, when they do not know, and in providing them with counselling when they have been adversely affected by flawed pediatric forensic pathology. My recommendations in this chapter are intended to assist in restoring public confidence in pediatric forensic pathology by addressing these issues.

22

Conclusion and Consolidated Recommendations

As we have seen, a number of serious incidents occurred through the 1990s that cast grave doubt on the ability of pediatric forensic pathology, as it was then carried on in Ontario, to properly perform the important role required of it in the criminal justice system. The impact on the individuals involved was often tragic. The systemic review conducted by our Inquiry revealed serious flaws in many aspects of the way forensic pathology was practised. It also revealed serious shortcomings in the mechanisms of accountability and oversight that were responsible for forensic pathology in Ontario. In this volume, I recommend the steps that, in my view, must be taken to address and correct these systemic failings. These changes are necessary if public confidence in pediatric forensic pathology and its future use in the criminal justice system is to be restored and enhanced.

Of primary importance is the creation of a truly professionalized Ontario forensic pathology service. I have described the cornerstones on which such a service must be built. They include legislative recognition of the vital role that forensic pathology plays in death investigation; the provision of proper forensic pathology education, training, and certification in Canada; recruitment and retention of qualified forensic pathologist; and adequate sustainable funding to grow the profession.

Equally important is the need for change in the mechanisms for oversight of forensic pathology in Ontario. Most important, a major institutional change is essential in the governance of the Office of the Chief Coroner for Ontario (OCCO) itself, to ensure the public of effective oversight of both the forensic pathology service and the coronial service. This requires the creation of a Governing Council for the OCCO. In addition, it is important that there be organizational changes to rationalize and clarify the roles and responsibilities of the various parts of the Ontario Forensic Pathology Service and its senior officials.

The work of forensic pathologists in individual cases must be addressed as

well. I have made recommendations designed to build on the significant progress that has occurred in this regard since 2001, to further promote accurate, understandable, and transparent forensic autopsies. In addition, I address the vital need to ensure that forensic pathologists are able to communicate their opinions effectively to the criminal justice system.

At the same time, we must recognize that other participants in the criminal justice system have important roles to play in protecting the public against the introduction of flawed or misunderstood forensic pathology into investigations and criminal proceedings. I make recommendations about how coroners, police, prosecutors, defence counsel, and the courts themselves can help achieve that objective.

Finally, in this volume, I turned to three other issues. The first is what, if anything, can and should be done about the flawed pediatric forensic pathology we examined with regard to potential wrongful convictions. The second addresses the challenges presented by the need to provide for adequate coronial and forensic pathology services to First Nations and other remote communities in Northern Ontario. The third is the changes that should be made if pediatric forensic pathology is to be as sensitive as possible to the devastating impact that the sudden, unexpected death of a child has on the families involved.

I conclude with the consolidated list of my detailed recommendations on each of these important subjects. They arise directly out of the review I was required to conduct for the years from 1981 to 2001. They address the systemic failings in the practice and oversight of pediatric forensic pathology that were identified at the Inquiry. In my opinion, these are the steps that must be taken to restore and enhance public confidence in pediatric forensic pathology in Ontario and its future use in the criminal justice system.

In the last few years, new leadership has made a significant start in addressing this challenge. But, as they acknowledge, much more must be done. To stop now, risks a return to the troubled years examined at the Inquiry. However, the steps taken so far, together with the sense of hope and enthusiasm for the future they have begun to engender in those who continue in the field, provide a firm foundation on which to build.

My recommendations are intended to build on that foundation. If acted upon, they represent the best way to protect the justice system from flawed pathology, to leave behind the dark times of the recent past, and to create the forensic pathology service that the criminal justice system needs and the people of Ontario deserve.

Consolidated Recommendations

The complete recommendations are found below, numbered sequentially and identified by chapter and page reference in the text.

Chapter 11
Professionalizing and Rebuilding Pediatric Forensic Pathology

1 The Province of Ontario should amend the *Coroners Act* in order to

a) establish the Ontario Forensic Pathology Service as the provider of all forensic pathology services for the province;
b) recognize and define the principal duties and responsibilities of the Chief Forensic Pathologist;
c) recognize one or more Deputy Chief Forensic Pathologists;
d) require that all post-mortem examinations performed under coroner's warrant be performed by "pathologists," a term that should be defined in the *Coroners Act*; and
e) create a Governing Council to oversee the duties and responsibilities of the Office of the Chief Coroner for Ontario. [See page 288.]

2 As expeditiously as possible, the Royal College of Physicians and Surgeons of Canada should

a) approve the accreditation of one-year training programs in forensic pathology offered by Canadian medical schools to candidates with Royal College certification in either anatomical or general pathology;
b) certify forensic pathologists upon successful completion of an accredited training program and a Royal College examination in the subspecialty of forensic pathology; and
c) finalize the process by which pathologists currently practising forensic pathology in Ontario may become certified by the Royal College. [See page 295.]

3 The Ontario Forensic Pathology Service and the Chief Forensic Pathologist should actively encourage

a) faculties of medicine to promote interest in forensic pathology by exposing students in the early years of their programs to forensic pathology; and
b) forensic pathologists to work with the faculties of medicine to educate students about forensic pathology. [See page 296.]

4 The Governing Council and the Chief Forensic Pathologist should ensure that the Ontario Forensic Pathology Service is built upon the three essential and interdependent pillars of service, teaching, and research. [See page 298.]

5 The Province of Ontario, the Governing Council, and the Chief Forensic Pathologist should work with the University of Toronto to establish a Centre for Forensic Medicine and Science, which would

a) educate both practitioners and students in a variety of medical disciplines related to the forensic sciences; and
b) be affiliated directly with the Provincial Forensic Pathology Unit and the Ontario Pediatric Forensic Pathology Unit. [See page 299.]

6 All individuals and institutions that provide or oversee the education of medical students in Ontario should focus on the critical importance of the criminal justice system in medico-legal education. In particular, the Royal College of Physicians and Surgeons of Canada should ensure that any accredited fellowship programs in forensic pathology provide education in relation to expert evidence, the justice system, and the relevant aspects of evidence law and criminal procedure. [See page 301.]

7 All individuals and institutions that provide or oversee the provision of forensic pathology services in Ontario should focus on the critical importance of continuing medical education and, in particular,

a) the Chief Forensic Pathologist or designate should assume primary responsibility for fostering ongoing and interdisciplinary education about the role of the forensic pathologist in the justice system; and
b) the Province of Ontario should adequately fund continuing education for forensic pathologists regarding recent developments in the science of forensic pathology and the role of the forensic pathologist in the justice system. [See page 301.]

8 The Province of Ontario should provide the resources necessary to address the acute shortage of forensic pathologists in Ontario. In particular, the Province of Ontario should

a) provide adequate and sustainable funding for fellowships in forensic pathology in each of the regional forensic pathology units across the province;
b) fund full-time positions within the profession that will support the three pillars of service, teaching, and research, including but not limited to,

Deputy Chief Forensic Pathologist(s), director positions at the regional forensic pathology units, and staff forensic pathologist positions;

c) provide sufficient resourcing to ensure that forensic pathologists' caseloads do not exceed recommended standards;

d) include Ontario Forensic Pathology Service pathologists in the Laboratory Medicine Funding Framework Agreement, to ensure that all pathologists are compensated fairly, whether they work on staff at a hospital or at the Provincial Forensic Pathology Unit, or take steps that will achieve and maintain an equivalent result;

e) increase the number of full-time-equivalent positions in Ontario's regional forensic pathology units;

f) ensure that each unit where post-mortem examinations are performed pursuant to coroner's warrant is fully equipped, up to date, and properly resourced; and

g) fund the construction of a new, modern facility to house the Office of the Chief Coroner for Ontario and related forensic sciences. [See page 305.]

9 The Ontario Forensic Pathology Service should immediately recruit appropriately credentialed forensic pathologists offshore to address the shortage in the province. [See page 306.]

10 The Province of Ontario should provide sufficient resources to permit the recruitment of appropriately credentialed forensic pathologists from other countries. [See page 306.]

11 The Province of Ontario should commit to providing funding sufficient to sustain the changes required to restore public confidence in pediatric forensic pathology. [See page 307.]

Chapter 12
Reorganizing Pediatric Forensic Pathology

12 The *Coroners Act* should be amended to establish and define the Ontario Forensic Pathology Service as follows:

"Ontario Forensic Pathology Service" means the branch of the Office of the Chief Coroner for Ontario which, as directed by the Chief Forensic Pathologist, provides all forensic pathology services performed under or in connection with a coroner's warrant.[1] [See page 309.]

[1] The language of this and other proposed amendments to the *Coroners Act* is recommended language only.

13 The *Coroners Act* should be amended to include the following definitions for pathologist and certified forensic pathologist:

a) "Pathologist" means a legally qualified medical practitioner certified by the Royal College of Physicians and Surgeons of Canada or its equivalent as a specialist in anatomical or general pathology;
b) "Certified forensic pathologist" means a pathologist certified by the Royal College of Physicians and Surgeons of Canada or its equivalent as a specialist in forensic pathology. [See page 310.]

14 The *Coroners Act* should be amended to provide that the Lieutenant Governor in Council appoint a certified forensic pathologist to be the Chief Forensic Pathologist for Ontario to

a) direct the Ontario Forensic Pathology Service and be responsible for the services it provides;
b) supervise, direct, and oversee the work of all pathologists in Ontario under, or in connection with, a coroner's warrant;
c) conduct programs for the instruction of pathologists in their duties;
d) prepare, publish, and distribute a code of ethics for the guidance of pathologists;
e) administer a Registry of pathologists approved to perform post-mortem examinations under coroner's warrant; and
f) perform such other duties as are assigned to him or her by, or under, this or any other Act, or by the regulations, or by the Lieutenant Governor in Council. [See page 311.]

15 The Governing Council should create a document outlining additional duties and responsibilities of the Chief Forensic Pathologist, which would include to

a) ensure that the Ontario Forensic Pathology Service (OFPS) provides a high quality of service;
b) ensure effective oversight of the work performed throughout the OFPS;
c) take responsibility for the service, teaching, and research mission of the OFPS;
d) encourage a collaborative culture of quality within the OFPS;
e) be responsible for the preparation and administration of the annual budget for the OFPS; and
f) be responsible for determining the pathologist who will conduct each post-mortem examination under coroner's warrant in Ontario. [See page 311.]

16 The Chief Coroner for Ontario should direct investigating coroners to issue all warrants for post-mortem examination to the Chief Forensic Pathologist or designate. [See page 312.]

17 The *Coroners Act* should be amended to provide that the Lieutenant Governor in Council may appoint one or more forensic pathologists to be Deputy Chief Forensic Pathologist(s) in Ontario who may act as, and have all the powers and authority of, the Chief Forensic Pathologist during the absence of the Chief Forensic Pathologist, or during his or her inability to act. [See page 312.]

18 The Governing Council, on the recommendation of the Chief Forensic Pathologist, should appoint a regional director for each regional forensic pathology unit who will

a) provide oversight of and be accountable for the work of their regional units;
b) be a member of the Forensic Pathology Advisory Committee; and
c) assist the Chief Forensic Pathologist and the Deputy Chief Forensic Pathologist(s) to create quality assurances processes, peer review processes, and other mechanisms of review. [See page 314.]

19 To ensure quality of service across the province, the Ontario Forensic Pathology Service should utilize and build on the regional forensic pathology units. [See page 315.]

20 The Province of Ontario should fund the actual costs of the regional forensic pathology units. [See page 315.]

21 The Office of the Chief Coroner for Ontario should enter into service agreements regarding each of the regional forensic pathology units. These agreements should, at a minimum, provide that

a) the unit will assume responsibility for a designated geographic area of the Ontario Forensic Pathology Service;
b) each regional director will be accountable to the Chief Forensic Pathologist for the work of his or her unit and will be responsible for the oversight, timeliness, and quality control of all post-mortem examinations performed under coroner's warrant within the unit's designated area;
c) the Chief Forensic Pathologist will be responsible for the general supervision

of the units, for providing direction and guidelines as they relate to acceptable standards of forensic pathology practice in the units, and for ensuring appropriate quality control measures are in place;

d) forensic pathologists performing work for the Ontario Forensic Pathology Service must be included on the Registry of pathologists and will be primarily accountable to their regional director; and

e) each regional director will hold a salaried position with the regional unit, although that may be a full- or part-time position, depending on the local circumstances. [See page 318.]

22 Ontario hospitals should create policies requiring them to report any serious concerns about the work of any hospital pathologist who performs autopsies under coroner's warrant to the Chief Forensic Pathologist, whether or not the concerns arise out of work performed under coroner's warrant. The Office of the Chief Coroner for Ontario should also create policies requiring it to report any serious concerns about the work of a forensic pathologist to the hospital where the pathologist practises. [See page 319.]

23 The Ontario Forensic Pathology Service should ensure that, as a requirement for inclusion on the Registry, pathologists consent to hospitals reporting serious concerns to the Chief Forensic Pathologist and to the Chief Forensic Pathologist reporting serious concerns to the hospitals. [See page 319.]

24 With the support of the Ministry of Health and Long-Term Care and the Ministry of Community Safety and Correctional Services, the Ontario Forensic Pathology Service and each hospital with which a regional unit is associated should create protocols to clearly define the areas and limits of the hospital's responsibilities, to avoid confusion about the oversight roles of the Chief Forensic Pathologist and the hospital. [See page 319.]

25 The Ontario Forensic Pathology Service should increase the number of full-time-equivalent positions in all the units, as well as the proportion of forensic autopsies that are performed within those units. [See page 320.]

26 The Province of Ontario should fund a telemedicine portal in the Provincial Forensic Pathology Unit and at each of the regional forensic pathology units, if not already a part of the particular hospital system. [See page 321.]

27 The Ontario Pediatric Forensic Pathology Unit should continue as a regional forensic pathology unit located at SickKids. Its director must be a certified forensic pathologist. [See page 323.]

28 For pediatric forensic cases that are to be done in Toronto, the Chief Forensic Pathologist or designate should direct that

a) for pediatric forensic cases that do not appear to be criminally suspicious, the post-mortem examination should usually be conducted at the Ontario Pediatric Forensic Pathology Unit;
b) for criminally suspicious pediatric forensic cases, the post-mortem examination should be conducted by an appropriate pathologist at the Ontario Pediatric Forensic Pathology Unit or at the Provincial Forensic Pathology Unit, as determined by the Chief Forensic Pathologist or designate; and
c) particularly in difficult cases, the pathologists at each unit should take advantage of the expertise available at the other unit. [See page 325.]

29 For pediatric deaths outside the area regularly serviced by the Ontario Pediatric Forensic Pathology Unit, the Chief Forensic Pathologist or designate should direct that

a) for pediatric forensic cases within the geographical area of the designated regional units that do not appear to be criminally suspicious, the post-mortem examination should be conducted at the appropriate regional forensic pathology unit or by Dr. Susan Phillips or another approved forensic pathologist in Winnipeg; and
b) for criminally suspicious pediatric forensic cases, the post-mortem examination should be conducted by the pathologist and at the unit designated by the Chief Forensic Pathologist or designate. [See page 326.]

30 Until the Registry of pathologists is created, the provisions of the 2007 Guidelines on Autopsy Practice for Forensic Pathologists: Criminally Suspicious Cases and Homicides should be followed in all criminally suspicious pediatric forensic cases. [See page 327.]

31 Once the Registry is created, the Chief Forensic Pathologist or designate should ensure that, in all criminally suspicious pediatric forensic cases, the post-mortem examination is conducted by an approved pediatric forensic pathologist. [See page 327.]

32 As soon as numbers permit, the Chief Forensic Pathologist should ensure that, in all criminally suspicious pediatric forensic cases, the post-mortem examination is conducted by a certified forensic pathologist with pediatric forensic experience. [See page 327.]

33 For all forensic cases, but particularly for criminally suspicious pediatric cases, the Ontario Forensic Pathology Service should reinforce a policy that encourages collaboration between the forensic pathologist and other relevant professionals.[2] [See page 328.]

34 The Ontario Forensic Pathology Service should establish a protocol for pediatric forensic cases that appear non-criminally suspicious at the outset, but become criminally suspicious during the post-mortem examination. The pathologist must trigger the application of the protocol as soon as a suspicion arises, and the protocol should provide for immediate access to a forensic pathologist and, ultimately, to the Chief Forensic Pathologist. [See page 329.]

35 Until the Registry of pathologists is created, the provisions of the 2007 Guidelines on Autopsy Practice for Forensic Pathologists: Criminally Suspicious Cases and Homicides should be followed in all criminally suspicious adult forensic cases. [See page 330.]

36 Once the Registry is created, the Chief Forensic Pathologist or designate should ensure that in all criminally suspicious adult forensic cases, the post-mortem examination is conducted by an approved forensic pathologist. [See page 330.]

37 As soon as numbers permit, the Chief Forensic Pathologist should ensure that, in all criminally suspicious adult forensic cases, the post-mortem examination is conducted by a certified forensic pathologist. [See page 330.]

[2] I have not always distinguished between policies, protocols, guidelines, and practices in my recommendations, although others sometimes do draw distinctions on the basis that some of these documents are intended to be mandatory, others discretionary. From my perspective, they all provide instructions that should be followed.

Chapter 13
Enhancing Oversight and Accountability

38 The Province of Ontario, having created the Governing Council by statute, should amend the *Coroners Act* to set out the powers and responsibilities of the Governing Council, including

a) oversight of the strategic direction and planning of the Office of the Chief Coroner for Ontario, including the coronial service and the Ontario Forensic Pathology Service;
b) budgetary approval;
c) senior personnel decisions; and
d) administration of the public complaints process. [See page 338.]

39 The Chief Coroner should be accountable to the Governing Council for the operation and management of the coronial service. The Chief Forensic Pathologist should be accountable to the Governing Council for the operation and management of the Ontario Forensic Pathology Service. [See page 339.]

40 The Governing Council should report annually to the Ministry of Community Safety and Correctional Services. Its annual report should be available to the public. [See page 339.]

41 The Province of Ontario should establish the membership of the Governing Council through a regulation to the *Coroners Act*. The Lieutenant Governor in Council should appoint the following members to a fixed term:

- a nominee of the Chief Justice of Ontario. He or she may act as chair of the council, or the chair may be otherwise designated by the Ministry of Community Safety and Correctional Services;
- the Chief Coroner for Ontario;
- the Chief Forensic Pathologist for Ontario;
- the dean of medicine of an Ontario medical school or his or her delegate;
- a nominee of the Minister of Health and Long-Term Care;
- a nominee of the Attorney General of Ontario;
- a nominee of the Minister of Community Safety and Correctional Services;
- the Director of the Centre of Forensic Sciences or his or her delegate; and
- three others named by the Ministry of Community Safety and Correctional

Services, one of whom should be a certified forensic pathologist from outside Ontario. [See page 339.]

42 The Governing Council should guide the development of quality assurance, oversight, and accountability mechanisms for the work of the Office of the Chief Coroner for Ontario, including both the Ontario Forensic Pathology Service and the coronial service. [See page 341.]

43 The Ontario Forensic Pathology Service should create a publicly accessible Registry of pathologists who have been approved to perform post-mortem examinations under coroner's warrant. [See page 344.]

44 The Chief Forensic Pathologist should have responsibility for administering the Registry. [See page 344.]

45 With the approval of the Governing Council, the Chief Forensic Pathologist should design the details of the Registry, including fair and transparent procedures for admission, renewal, and removal. The Registry should have separate categories for those forensic pathologists approved to perform criminally suspicious adult cases, those approved to perform criminally suspicious pediatric cases, and those approved only to perform routine coroner's cases. [See page 344.]

46 As the Ontario Forensic Pathology Service grows in size and skill, the criteria for inclusion in the Registry should become more rigorous. As soon as possible, only certified forensic pathologists should be approved to perform criminally suspicious adult cases and only certified forensic pathologists with significant pediatric forensic experience should be approved to perform criminally suspicious pediatric cases. [See page 344.]

47 The Governing Council should appoint an executive director with responsibility for the administration of both the coronial service and the Ontario Forensic Pathology Service. [See page 346.]

48 The positions of Chief Coroner and Chief Forensic Pathologist should be full-time. [See page 347.]

49 A Forensic Pathology Advisory Committee should be formed to advise the Chief Forensic Pathologist in setting objectives, policies, protocols, and

guidelines for the provision of forensic pathology services. Its membership should include the regional directors. [See page 348.]

50 The Ontario Forensic Pathology Service should appoint dedicated quality assurance staff, including a full-time quality assurance manager, to track quality assurance mechanisms. [See page 349.]

51 In order to enhance quality assurance of the work of pathologists, the Ontario Forensic Pathology Service should

a) in accordance with the October 2007 Autopsy Guidelines, continue to require direct notification of the Chief Forensic Pathologist of preliminary autopsy results in all criminally suspicious deaths;
b) in accordance with the October 2007 Autopsy Guidelines, continue to require full peer review of all reports of post-mortem examination in criminally suspicious cases by either a regional director, a staff pathologist at the Provincial Forensic Pathology Unit, or the Chief Forensic Pathologist or designate;
c) develop a system for peer review of reports of post-mortem examination in non-criminally suspicious cases where the autopsy was conducted at a regional forensic pathology unit or the Provincial Forensic Pathology Unit. The review system may be less comprehensive than the peer review system for criminally suspicious cases;
d) develop a system for peer review of opinions made supplementary to the report of post-mortem examination in criminally suspicious cases;
e) develop a system for peer review of consultation opinions in criminally suspicious cases; and
f) develop best practices for daily morning rounds at the regional forensic pathology units. The regional directors should report to the Chief Forensic Pathologist regarding implementation of these best practices. [See page 353.]

52 The Chief Forensic Pathologist should institute a program of annual performance reviews. He or she should conduct annual performance reviews of the work of the regional directors. The regional directors should conduct annual performance reviews of the work of forensic pathologists within their units. [See page 355.]

53 The Chief Forensic Pathologist and the senior leadership of the Ontario Forensic Pathology Service should lead the creation of a culture in which

constructive criticism of a forensic pathologist's work is encouraged regardless of position and reputation. [See page 356.]

54 In order to ensure adequate oversight of the casework of the Chief Forensic Pathologist, beyond that provided for in the October 2007 Autopsy Guidelines, out-of-province expertise should be used on a random basis to assess the casework of the Chief Forensic Pathologist. [See page 356.]

55 The Paediatric Death Review Committee, the Forensic Services Advisory Committee, and the Deaths under Five Committee should continue. [See page 357.]

56 The Office of the Chief Coroner for Ontario should implement a central tracking system for, at a minimum, coroner's cases in which post-mortem examinations are conducted. The Province of Ontario should provide the resources necessary to create, implement, and administer the central tracking system. [See page 358.]

57 In order to enhance quality assurance of the work of forensic pathologists during criminal proceedings, the Ontario Forensic Pathology Service should develop

a) a system of peer review of testimony given by forensic pathologists in criminal proceedings; and
b) a program to obtain feedback from defence and Crown counsel regarding the work of forensic pathologists in criminal proceedings. [See page 359.]

58 Where brought to his or her attention, the Chief Forensic Pathologist should review any adverse comments made by judges about the work of forensic pathologists in criminal proceedings, and take whatever steps are appropriate as a result. [See page 359.]

59 In order to ensure quality through impartial review mechanisms, the Ontario Forensic Pathology Service should

a) develop a system of random external audits of a sample of autopsy reports from the regional units and the Provincial Forensic Pathology Unit; and
b) strive to make itself accountable to external organizations that benchmark services. [See page 360.]

60 The Ontario Forensic Pathology Service should strive to enhance the continuing education of forensic pathologists listed on the Registry. [See page 361.]

Chapter 14
Improving the Complaints Process

61 The Office of the Chief Coroner for Ontario should establish a public complaints process that

a) is transparent, responsive, and timely; and
b) encompasses all the medical practitioners and specialists involved in the death investigation process, including coroners and forensic pathologists. [See page 366.]

62 The complaints process to be established by the Office of the Chief Coroner for Ontario should be separate and apart from the complaints process offered by the College of Physicians and Surgeons of Ontario, and should focus on forensic pathologists' performance of their roles and their compliance with Ontario Forensic Pathology Service requirements. [See page 367.]

63 The College of Physicians and Surgeons of Ontario should continue its practice of investigating complaints about forensic pathologists acting under coroner's warrant. [See page 367.]

64 With the approval of the Governing Council, the Chief Coroner for Ontario and the Chief Forensic Pathologist should design the specific procedures for the complaints process to

a) reflect the principles of transparency, responsiveness, timeliness, and fairness;
b) focus on remedial and rehabilitative responses, rather than punitive ones, except where the public interest is jeopardized; and
c) provide for appeals by the complainant or the physician to the complaints committee of the Governing Council where they are not satisfied with the initial resolution of the complaint by the Chief Coroner or the Chief Forensic Pathologist or their designates. [See page 368.]

65 The complaints committee of the Governing Council should deal with complaints concerning the work of the senior leadership of the Office of the

Chief Coroner for Ontario, with a further review by the deputy minister if necessary. [See page 369.]

66 The Office of the Chief Coroner for Ontario and the College of Physicians and Surgeons of Ontario should each be prepared to inform the other of

a) the fact that it has a serious concern about the work or conduct of a forensic pathologist or coroner;
b) relevant information it has gathered during the investigation process; and
c) the outcome of its investigation. [See page 371.]

67 The Chief Forensic Pathologist should ensure that all forensic pathologists are required, as a condition of their inclusion on the Registry, to consent to the Office of the Chief Coroner for Ontario and the College of Physicians and Surgeons of Ontario sharing information relating to serious concerns about their work or conduct. [See page 371.]

Chapter 15
Best Practices

68 The Ontario Forensic Pathology Service should explicitly adopt a set of basic principles that include those set out in this chapter; guidelines for best practices at autopsy should be founded on these principles. [See page 374.]

69 a) Evidence-based forensic pathology is incompatible with an approach of "thinking dirty." It, instead, involves keeping an open mind to the full range of possibilities that the evidence might yield, without preconceptions or presumptions about abuse, and collecting evidence both to support and to negate any possibilities.
b) "Thinking truth," the orientation now adopted by the Office of the Chief Coroner for Ontario, accurately captures the appropriate approach to forensic pathology and helps promote an evidence-based culture. [See page 377.]

70 a) The Ontario Forensic Pathology Service should encourage forensic pathologists throughout the province to attend the scene of death more frequently.
b) The Office of the Chief Coroner for Ontario should develop guidelines

with respect to scene attendance by forensic pathologists throughout the province. The guidelines should draw upon the Toronto memorandum and the experience with scene attendance by forensic pathologists at the Provincial Forensic Pathology Unit and the Hamilton Regional Forensic Pathology Unit. Such guidelines should

i) recognize the strengths and limitations of scene attendance;
ii) identify the circumstances in which scene attendance by the forensic pathologist would be valuable;
iii) emphasize the need for communication between the investigating coroners, police, and forensic pathologists in determining when scene attendance will take place; and
iv) outline a protocol to be followed at the scene when forensic pathologists are in attendance. [See page 379.]

71 Where it is not feasible for the forensic pathologist to attend the scene, the Ontario Forensic Pathology Service (OFPS) should develop and encourage enhanced "real time" communication, including the transmission of digital photographs, and even the use of video and telemedicine technology, so that the forensic pathologist can view the scene, where helpful, prior to the body being removed. The OFPS should be provided with the resources necessary to do so. [See page 380.]

72 Compensation for forensic pathologists should reflect the added work represented by their attendances at the scene. [See page 380.]

73 a) The contents of warrants for post-mortem examination should conform to the current guidelines of the Office of the Chief Coroner for Ontario.
b) In accordance with current guidelines of the Office of the Chief Coroner for Ontario, the investigating coroner should strive to provide full and accurate information to the forensic pathologist. In particular, all relevant hospital and medical records should, if at all possible, be provided to the forensic pathologist prior to the commencement of the post-mortem examination.
c) The coroner should refrain from expressing medical conclusions in any early communications with the forensic pathologist. Although the coroner makes the final determination about cause and manner of death, the coroner is well advised to await the considered opinions of the forensic pathologist before expressing those conclusions.
d) In accordance with existing policy of the Office of the Chief Coroner for Ontario, direct telephone or in-person communication between the

coroner and the forensic pathologist should take place prior to the autopsy for every criminally suspicious case and for autopsies of children under the age of five.

e) Province-wide protocols for police officers should be developed that articulate the types of information that should and should not be provided to the forensic pathologist. Such protocols should also address how police and coroners can coordinate what information is provided to the forensic pathologist and by whom. [See page 384.]

74 a) The police and coroners should be encouraged to provide initial information to the forensic pathologist in writing.

b) Additional information communicated to the forensic pathologist at any time should be provided in writing or, if verbal, should be recorded by both the person communicating the information and the person receiving it.

c) Investigation questionnaires should be utilized by police and coroners to provide information to forensic pathologists in all cases of sudden infant death. The completed questionnaire should be provided to the forensic pathologist before the post-mortem examination begins. [See page 386.]

75 a) As a general rule, police and coroners should not "filter out" relevant information that is to be provided to the forensic pathologist. The forensic pathologist is best situated to determine what is relevant to his or her work.

b) That being said, police and coroners should generally not transmit information that is clearly irrelevant, innuendo, or purely speculative. Coroners and police officers also have discretion as to how relevant information is communicated to the forensic pathologist. This might mean, for example, that information is communicated in ways that reduce its potential misuse or its inflammatory character.

c) The forensic pathologist should remain vigilant against confirmation bias or being affected by extraneous considerations. This is best done through increased professionalism and education, an enhanced awareness of the risks of confirmation bias, the promotion of an evidence-based culture, complete transparency concerning both what is communicated and what parts of it are relied upon by the pathologist, and a cautious approach by the pathologist to the use of circumstantial or non-pathology information. [See page 390.]

76 Any information provided by the coroner or the police to the forensic pathologist should be carefully recorded both by the conveyor of the information and by its recipient. [See page 391.]

77 a) Autopsies should not normally be audiotaped or videotaped. However, what is done at the autopsy should be fully transparent and independently reviewable. Therefore, what is done and by whom at the autopsy should be carefully documented. This documentation includes careful recording through photographs and contemporaneous note-taking by support staff and the forensic pathologist.

b) Best practice also requires the appropriate retention, storage, and transmittal of organs, tissues, samples, and exhibits in accordance with the current autopsy guidelines of the Office of the Chief Coroner for Ontario and policies in place at hospitals where forensic autopsies are performed.

c) In accordance with the current guidelines of the Office of the Chief Coroner for Ontario, materials kept for testing and independent reviewability should be carefully documented. [See page 392.]

78 a) In accordance with the October 2007 Autopsy Guidelines, the Office of the Chief Coroner for Ontario should continue to encourage forensic pathologists to exercise caution in providing preliminary opinions. In particular, a preliminary opinion on the cause of death or other forensic issues, such as timing or mechanism of injury, should not be provided if ancillary investigations have any reasonable chance of altering the preliminary opinion. In such circumstances, the cause of death should be given as "pending further tests."

b) Whether forensic pathologists express a preliminary opinion or indicate that the cause of death is "pending," they should ensure that this is fully understood, including in particular any qualifications or limitations that exist for the preliminary opinion. [See page 395.]

79 a) When a forensic pathologist provides a preliminary opinion at the conclusion of the autopsy, it should be reduced to writing. Either the pathologist should provide the opinion in writing to the police, retaining a copy for his or her records, or the attending police should carefully record the opinion in their notebooks. If this second procedure is followed, the forensic pathologist should review what the police have recorded for accuracy, and indicate in writing that it conforms with her or his opinion, including its limitations. The forensic pathologist should also retain a copy of the relevant entries.

b) If the notification form of the Office of the Chief Coroner for Ontario is used to record the forensic pathologist's preliminary opinion, it should be provided to the police and coroner with a copy retained by the pathologist. [See page 397.]

80 a) Using the suggestions contained in this Report, the Office of the Chief Coroner for Ontario (OCCO), and in future the Ontario Forensic Pathology Service (OFPS), should address the important challenge of timely production of forensic pathology reports needed by the criminal justice system.

b) The components of a solution to this difficult problem should include the following:

i) There should be realistic and well-understood timelines for the completion of post-mortem reports. Those set out in the OCCO's July 2004 memorandum would seem to be appropriate.

ii) The OCCO should develop a central tracking system which will permit better knowledge, and therefore better management, of the problem of untimely production of reports.

iii) Growing the profession of forensic pathology will be of great assistance.

iv) The OCCO should be provided with sufficient resources to ensure that there are no administrative impediments to the timely production of reports.

v) The development of better lines of communication between the OCCO and the regional forensic pathology units through their service agreements will assist in minimizing the pressure of clinical pathology work as an impediment to timely forensic pathology reports.

vi) Particularly for difficult, criminally suspicious cases, the OCCO should develop a guideline for prioritizing reports that are urgently needed by the criminal justice system.

vii) Sanctions must be available. Those in positions of responsibility, starting with the regional director, should use their management skills to address the problem. Ultimately, the Chief Forensic Pathologist can utilize the tool of possible removal from the Registry. With increased remuneration for reports provided to the fee-for-service forensic pathologists, this may be enough. At the extreme, actual removal from the Registry may in fact be necessary to preserve the integrity of the OFPS. [See page 401.]

81 a) To shorten delays in producing post-mortem reports, the Office of the Chief Coroner for Ontario should continue to instruct forensic pathologists to submit samples for toxicology testing as soon as possible.
b) The Office of the Chief Coroner for Ontario and the Centre of Forensic Sciences should together quickly create a guideline that prioritizes and expedites toxicology testing in clearly articulated types of cases, such as those that are criminally suspicious.
c) The Office of the Chief Coroner for Ontario and the Centre of Forensic Sciences should continue their discussions on a priority basis to improve the turnaround times for toxicology reports needed by forensic pathologists to complete their reports. [See page 402.]

82 Forensic pathologists should practise teamwork in conducting autopsies. The Ontario Forensic Pathology Service should be charged with creating a culture in which this is expected. [See page 404.]

83 The Office of the Chief Coroner for Ontario should continue to develop guidelines to assist forensic pathologists in adhering to best practices at or surrounding the autopsy. Those guidelines should incorporate, where appropriate, the specific recommendations about best practices made in this Report. Such guidelines should complement the proposed Code of Practice and Performance Standards for forensic pathologists. [See page 405.]

Chapter 16
Effective Communication with the Criminal Justice System

84 Several general principles should inform the way that pathology opinions are communicated:

a) Pathology opinions often depend on technical knowledge and expertise that are not easily understood by lay persons. Particularly in pediatric forensic pathology, opinions may be highly nuanced. However, the criminal justice system in which these opinions are used craves certainty and simplicity. This divergence in the cultures of the two professional areas poses a serious risk of misunderstanding between them, one that is further increased by an adversarial process designed to push and pull these opinions in different directions. To reduce the risk of their being misunderstood, the most important parts of a forensic pathologist's opinion should be expressed in writing at the earliest opportunity.

b) The ability of the various consumers of a forensic pathologist's opinion – including peer reviewers, coroners, and stakeholders in the criminal justice system or child protection proceedings – to understand, evaluate, and potentially challenge the opinion requires that it be fully transparent. It should clearly state not just the opinion but the facts on which the opinion is based, the reasoning used to reach it, the limitations of the opinion, and the strength or degree of confidence the pathologist has in the opinion expressed.

c) Although some of the consumers of a forensic pathologist's opinion are experts, such as peer reviewers, many are lay persons who have little or no understanding of technical language. It is essential that the pathologist's opinion be understood by all the users. It must therefore be communicated in language that is not only accurate but also clear, plain, and unambiguous.

d) In expressing their opinions, forensic pathologists should adopt an evidence-based approach. Such an approach requires that the emphasis be placed on empirical evidence, and its scope and limits, as established in large measure by the peer-reviewed medical literature and other reliable sources. This approach places less emphasis on authoritative claims based on personal experience, which can seldom be quantified or independently validated. [See page 408.]

85 a) The use of the term "asphyxia" should be avoided as an articulated cause of death. If it must be used to describe the mechanism of death, it should be elaborated on to avoid confusion.

b) Forensic pathologists in Ontario should be educated as to the dangers associated with the term "asphyxia" and, under the auspices of the Chief Forensic Pathologist, reach a common understanding as to when it should and should not be used.

c) More generally, forensic pathologists should be careful to express their opinions in terms that are not susceptible to varied meanings, but that do elucidate the issues addressed by the opinions. [See page 410.]

86 a) Forensic pathologists should analyze the level of confidence they have in their opinions and articulate that understanding as clearly as they can. Pending the development of a common language for this purpose, pathologists should use their own formulations to capture, as accurately as possible, their own level of confidence.

b) Under the auspices of the Chief Forensic Pathologist, work should be done, in a multidisciplinary setting, to develop, to the extent possible, some common language to describe what forensic pathologists have to say. That multidisciplinary setting should include leading practitioners and academics from both forensic pathology and the legal profession.
c) One objective should be to build consensus on how levels of confidence should be articulated.
d) The results of this work should be reflected in a proposed Code of Practice and Performance Standards for forensic pathologists. [See page 413.]

87 a) Proof beyond a reasonable doubt is a legal standard applicable to the totality of evidence, and it has no correlation with science or medicine. Forensic pathologists should be educated and trained not to think in terms of "proof beyond a reasonable doubt," and they should not formulate or articulate their opinions in terms of this legal standard.
b) Participants in the justice system should similarly be educated to avoid efforts to compel forensic pathologists to express their opinions in terms of this legal standard. [See page 414.]

88 Forensic pathologists should be educated and trained so that their level of confidence or certainty in their opinions remains essentially the same and not dependent on the forum in which those opinions are expressed. [See page 414.]

89 a) Forensic pathologists should not engage in "default diagnoses." The absence of a credible explanation is not a substitute for sufficient pathology findings to support the existence of abuse or non-accidental injury. In particular, a formulation such as "in the absence of a credible explanation, the post-mortem findings are regarded as resulting from non-accidental injury" should not be used.
b) If the evidence is not sufficient to support a cause of death, it should be characterized as "undetermined." [See page 417.]

90 a) Forensic pathologists should outline in their post-mortem or consultation reports the alternative or potential diagnoses that may arise in a case. They should also evaluate alternative explanations that are raised by the pathology or by the reported history associated with the deceased's death. They should describe precisely what alternative explanations have been

considered and why they can or cannot be ruled out. The same principles should inform all forensic pathologists' communications, including their testimony.

b) More generally, forensic pathologists' opinions, written or verbal, should be responsive to the needs of the justice system. They should address the live or pertinent issues in the case, for instance, and articulate in a transparent way what they have to say about those issues and why. [See page 417.]

91 a) Forensic pathologists should clearly communicate, where applicable, areas of controversy that may be relevant to their opinions and place their opinions in that context.

b) They should also clearly communicate, where applicable, the limits of the science relevant to the particular opinions they express.

c) They should remain mindful of both the limits and the controversies surrounding forensic pathology as they form their opinions and as they analyze the level of confidence they have in those opinions.

d) These obligations extend to the content of post-mortem or consultation reports, to verbal communications, and to testimony. [See page 419.]

92 Forensic pathologists have a positive obligation to recognize and identify for others the limits of their expertise. They should avoid expressing opinions that fall outside that expertise. When invited to provide such opinions, they should make the limits of their expertise clear and decline to do so. [See page 420.]

93 a) Forensic pathologists should never use circumstantial evidence or non-pathology information to bear the entire burden of support for an opinion.

b) Caution in using such evidence or information at all should be particularly pronounced where the circumstantial evidence is potentially unreliable or contentious or comes close to the ultimate issue that the court must decide.

c) Forensic pathologists' opinions must ultimately fall within their particular area of expertise. They should not rely on circumstantial evidence to a point where the opinion no longer meets that requirement.

d) There is some limited scope for forensic pathologists quite properly to use non-pathology or circumstantial evidence in forming their opinions. They need not operate in complete isolation. However, their use or consideration of circumstantial evidence should always be transparent: they

should always disclose both the extent to which they have used or relied on such evidence and the impact such evidence has had on their reasoning and opinions.

e) Forensic pathologists can consider hypothetical questions that involve circumstantial evidence in determining whether, or to what extent, a reported history can be excluded or supported by the pathology findings. [See page 422.]

94 a) When forensic pathologists base their opinions, in whole or in part, on consultation with other experts, they should identify those experts as well as the content of the opinions those experts expressed.

b) When informal "corridor" consultations influence formal opinions, the same identification and acknowledgment procedures should be followed. In addition, the consulted experts should express in writing, where feasible, any significant findings or opinions they contributed. [See page 423.]

95 a) The articulation of the basis for the forensic pathologist's opinion in a completely transparent way is at the cornerstone of evidence-based pathology.

b) Forensic pathology opinions, whether given in writing or in oral communication, should articulate both the pathology facts found and the reasoning process followed, leading to the opinions expressed. [See page 427.]

96 Forensic pathologists, in order to communicate their opinions in plain language to their lay readers, should consider including a glossary of medical terms, and, in some cases, relevant secondary literature, in their post-mortem or consultation reports. [See page 427.]

97 The Office of the Chief Coroner for Ontario should develop a Code of Practice and Performance Standards for forensic pathologists in Ontario which describes, among other things, the principles that should guide them as they write their reports and the information that should be contained in them. It should draw on existing sources, including the *Code of Practice and Performance Standards for Forensic Pathologists* in England and Wales. It should include at least the following:

a) the principles set out in Recommendation 84;

b) guidance on the content of their autopsy and consultation reports (particularly where they may be used by the justice system), including

i) the subjects mandated by the *Code of Practice and Performance Standards for Forensic Pathologists* in England and Wales;
ii) details of each expert's academic and professional qualifications, experience, and accreditation relevant to the opinions expressed in the report, as well as the range and extent of this expertise and any limitations on it;
iii) the levels of confidence or certainty with which the opinions are expressed;
iv) any alternative explanations that are raised by the pathology or by the reported history associated with the deceased's death, with an analysis of why these alternative explanations can or cannot be ruled out;
v) what the pathologist has to say that is relevant to the live or pertinent issues in the case and why;
vi) any area of controversy that may be relevant to their opinions, placing their opinions in that context;
vii) any limits of the science relevant to the particular opinions;
viii) the extent to which circumstantial or non-pathology information has been used or relied on, and its impact on the reasoning and opinions;
ix) any other expert opinions relied upon;
x) the pathology facts found and the reasoning process that was followed, leading to the opinions expressed; and
xi) a glossary of medical terms, if helpful, to assist in communicating opinions in plain language to lay readers.

c) guidance on

i) language to be used or avoided, and the dangers associated with the use of particular terms;
ii) how best to think about and articulate levels of confidence or certainty;
iii) the need to avoid the formulation or articulation of opinions in terms of proof beyond a reasonable doubt;
iv) the need to avoid default diagnoses;
v) the importance of recognizing and identifying for others the limits of their own expertise and of avoiding the expression of opinions that fall outside that expertise; and
vi) the cautions that should surround the use of circumstantial evidence or non-pathology evidence. [See page 429.]

98 The Code of Practice and Performance Standards for forensic pathologists in Ontario should also address giving evidence, again drawing on existing sources for its content, particularly the *Code of Practice and Performance Standards for Forensic Pathologists* developed in England and Wales. It should also include specific guidance on how forensic pathologists should deal with hypothetical questions and the differing views of colleagues. [See page 433.]

99 a) Forensic pathologists should avoid potentially misleading language, such as the phrase "consistent with," and adopt neutral language that clearly reflects the limitations of the opinion expressed.
b) Work should be done in a multidisciplinary setting to build consensus on words and phrases that forensic pathologists should utilize or avoid as potentially misleading. The results of this work should be reflected in the Code of Practice and Performance Standards for forensic pathologists. [See page 435.]

100 Forensic pathologists should be regularly reminded of the dangers of being misinterpreted or misunderstood by the criminal justice system. To that end, those engaged in forensic pathology should be provided with regular continuing education and training to enhance their effective communication with the criminal justice system. [See page 436.]

Chapter 17
The Roles of Coroners, Police, Crown, and Defence

101 The coroner and forensic pathologist should work in close cooperation where there is a post-mortem examination. In doing so, the coroner should respect the forensic pathologist's expertise and independent professional judgment. [See page 438.]

102 The Office of the Chief Coroner for Ontario should continue to facilitate early and ongoing case conferencing, particularly for criminally suspicious pediatric death investigations. Such case conferencing promotes the exchange of relevant information among the participants, an objective and informed investigation, and forensic pathology opinions that are accurate and address the real issues in the case. [See page 442.]

103 Case conferences should be recorded in notes that ultimately form part of disclosure in criminal cases. [See page 442.]

104 Case conferences are excellent opportunities for members of the death investigation team to communicate among themselves. However, they do not provide the only opportunity for communication. The members of the death investigation team should engage in regular and ongoing communication, particularly when the death investigation uncovers new evidence. That evidence should be presented to the forensic pathologists to allow them to reconsider their opinion in light of the new information. Any such communications should be documented by the parties involved in those communications. [See page 443.]

105 Participants at case conferences should understand the respective roles of coroners and forensic pathologists, and how those roles affect the scope and nature of the opinions that they are able to render. A proper understanding of those roles may assist in preventing pressure from being exerted on forensic pathologists to change their opinions in order to conform to a coroner's determination of cause or manner of death. It may also assist in preventing police and Crown counsel from placing unwarranted reliance on non-expert opinions rendered by coroners for purposes other than the criminal justice system. [See page 443.]

106 Coroners should avoid offering opinions in court proceedings that do not fall within their expertise. The danger is not only that the opinions may be wrong but also that they may be accorded undue weight because they emanate from the coroner's office. [See page 444.]

107 The Ministry of Community Safety and Correctional Services, police colleges, and the Ontario Forensic Pathology Service should work together to provide specialized training on pediatric forensic death investigations for select officers, and more basic training for other officers on forensic pathology and the issues identified at this Inquiry. [See page 446.]

108 Criminally suspicious pediatric death investigations should be conducted, where possible, by officers having specialized training and expertise in such cases. [See page 447.]

109 a) The Ministry of Community Safety and Correctional Services should create and maintain a roster of officers with specialized training and expertise in pediatric death investigations.
b) Those officers should be available, when needed, to provide advice to any police service in Ontario respecting the investigation of these cases.
c) This roster, together with 24-hour contact information for the on-call officer(s), should be disseminated to all police services in Ontario. [See page 447.]

110 The police should be trained to be vigilant against confirmation bias in their investigative work generally, and for pediatric forensic cases in particular. This training is best accomplished through increased professionalism, an enhanced awareness of the risks of confirmation bias, the promotion of an evidence-based culture, and complete transparency regarding what is communicated between the police and the forensic pathologist. [See page 447.]

111 The Ministry of the Attorney General (Criminal Law Division) should implement its initiatives on the prosecution of child homicide cases and the use of a Child Homicide Team as soon as possible. [See page 450.]

112 Members of the Child Homicide Team should be experienced in homicide prosecutions and knowledgeable about the scientific method generally and pediatric forensic pathology in particular. Their education should be ongoing. [See page 450.]

113 Defence counsel should be entitled to approach the Child Homicide Team when significant disagreements between the defence counsel and the prosecutor arise in individual child homicide cases. That right should be formalized in ministry policies and made known to Crown counsel and the defence bar. [See page 450.]

114 The Child Homicide Team should, as an important component of its role, review cases in which plea offers have been made to the defence. This role will arise either as part of the mandated consultation by the prosecuting Crown with the team at every stage of the prosecution, or at the initiative of the defence. [See page 452.]

115 a) In accordance with Ministry of the Attorney General initiatives, a prosecuting Crown should report to his or her supervisor and to the division

lead for child homicide cases adverse judicial comments or his or her own concerns about the participation of a pediatric forensic pathology expert witness in the criminal justice system.

b) To enhance the oversight and accountability of such witnesses, the division lead for child homicide cases should report such comments or concerns to the Chief Forensic Pathologist. [See page 454.]

116 In furtherance of the ministry initiatives, the ministry should develop, in consultation with others, guidelines or protocols modelled on the protocols for the Crown and the Centre of Forensic Sciences that followed the Commission on Proceedings Involving Guy Paul Morin. These would address:

a) what adverse judicial comments or other identified concerns about pediatric forensic pathology expert witnesses should be reported;
b) how these comments or concerns should be reported;
c) what transcripts, if any, should be obtained, and by whom; and
d) under what circumstances this information is disclosable, and in relation to what categories of cases. [See page 455.]

117 Crown counsel should properly prepare forensic pathologists for giving evidence. This preparation involves, among other things, meeting with the pathologist in advance of the court proceedings. Such meetings will assist the Crown in understanding the limitations on the expert's expertise and opinions. The preparation of the expert should also focus on presenting the evidence in a way that is clear, unambiguous, understandable, and grounded in the witness's expertise. [See page 456.]

118 The following principles should inform the approach of both parties to the evidence of forensic pathologists:

a) Both parties should ensure that they understand the scope and limitations of the forensic pathologists' expertise and opinions. They should exercise care not to ask questions that invite forensic pathologists to speculate, or to stray outside of their expertise or the outer boundaries of the science.
b) Both parties should be vigilant not to introduce, through their questions, terminology that breeds misunderstanding or misinterpretation.
c) Subject to the court's discretion, both Crown and defence counsel should also allow forensic pathology experts reasonable time to consider their responses to new information that may be relevant to their opinions or any limitation on them. [See page 457.]

119 In accordance with a lawyer's ethical duty of competence, no lawyer should defend a criminal pediatric homicide or similar case that is beyond his or her competence or skills. [See page 460.]

120 The Province of Ontario, together with Legal Aid Ontario, should ensure that serious criminal cases involving pediatric forensic pathology are defended by lawyers who possess the necessary skill and experience to do so. This means, among other things, that the compensation for defending these cases should be significantly increased, and that the eligibility criteria for defending these cases should be appropriately defined.

The following represent ways in which these objectives may be achieved:

a) The Extremely Serious Criminal Cases Panel should be extended to cover all criminal pediatric homicide cases, including charges of manslaughter and criminal negligence causing death, as well as similar cases which involve forensic pathology or other complex medical evidence that must be critically evaluated and potentially challenged.
b) At least for pediatric homicides or similar cases, the eligibility criteria for Extremely Serious Criminal Cases should be tightened to ensure that these cases are defended by highly skilled lawyers. Although the experience and skills of some lawyers will be sufficient to meet heightened eligibility criteria without specific education and training in pediatric forensic pathology, such education and training should also inform the eligibility criteria.
c) Legal Aid Ontario should consider the criminal specialty designation by the Law Society of Upper Canada as a factor in determining whether counsel fulfill heightened eligibility criteria.
d) Legal Aid Ontario should regularly authorize junior or associate counsel for these cases, also to be paid at correspondingly increased rates. These counsel should not have to meet all of the eligibility criteria applicable to the lead or senior counsel. [See page 460.]

121 For criminal pediatric homicides and similar cases, Legal Aid Ontario normally should, if requested, fund the attendance of forensic pathologists in court when pathologists retained by the Crown or other significant experts relevant to the pathology issues present testimony in the case. [See page 462.]

122 Legal Aid Ontario's hourly tariff rates for forensic pathologists and similar experts should be increased to ensure defence access to their expertise and provide relative equivalence to the fees paid by the Crown. As well, in determining the number of hours to be authorized, whether an out-of-province

forensic pathologist should be authorized, or whether more than one forensic pathologist or expert should be authorized, Legal Aid Ontario's discretion should be informed by the lessons learned at this Inquiry – including the complexity of criminal pediatric homicide cases and the potential for miscarriages of justice where forensic pathology evidence cannot be skilfully evaluated and, if necessary, challenged. [See page 462.]

123 The total funding available to Legal Aid Ontario should be sufficient to enable the recommendations in this chapter to be implemented. [See page 463.]

124 Expert witnesses to be called by the prosecution should make themselves available to meet with defence counsel in advance of the court proceedings to explain their opinions and any limitations on them. As part of their trial preparation, defence counsel should seriously consider meeting with such experts. This is particularly appropriate in forensic pathology cases. [See page 463.]

125 The defence is often well served (as is the forensic testimony presented to the criminal justice system) by early, voluntary disclosure of its anticipated forensic evidence. The defence should be encouraged, in its own interest, to provide such early disclosure. It should not be compelled to do so. [See page 466.]

126 A court-monitoring program for forensic pathologists should be established by the Office of the Chief Coroner for Ontario, in consultation with the Ministry of the Attorney General and the Criminal Lawyers' Association. [See page 467.]

127 a) The Ministry of the Attorney General and the Ministry of Community Safety and Correctional Services should fund regular joint courses for defence counsel and the Crown dealing with forensic pathology generally and pediatric forensic pathology in particular.

b) This education should assist lawyers in developing the specialized knowledge necessary to act as counsel in pediatric forensic pathology cases. Educational programs could be live or online, but there should also be web-based materials so that lawyers in pediatric forensic pathology cases may access them as a resource when the course is not being offered. [See page 468.]

128 Law schools should be encouraged to offer courses in basic scientific literacy and the interaction of science and the law. [See page 469.]

Chapter 18
The Role of the Court

129 When a witness is put forward to give expert scientific evidence, the court should clearly define the subject area of the witness's expertise and vigorously confine the witness's testimony to it. [See page 475.]

130 A concern about the reliability of evidence is a fundamental component of the law of evidence. Threshold reliability plays an important role in determining whether proposed expert evidence is admissible under the *Mohan* test. Reliability can be an important consideration in determining whether the proposed expert evidence is relevant and necessary; whether it is excluded under any exclusionary rule, including the rule that requires evidence to be excluded if its prejudicial effect exceeds its probative value; and whether the expert is properly qualified. Trial judges should be vigilant in exercising their gatekeeping role with respect to the admissibility of such evidence. In particular, they should ensure that expert scientific evidence that does not satisfy standards of threshold reliability be excluded, whether or not the science is classified as novel. [See page 487.]

131 In determining the threshold reliability of expert scientific evidence, the trial judge should assess the reliability of the proposed witness, the field of science, and the opinion offered in the particular case. In doing so, the trial judge should have regard to the tools and questions that are most germane to the task in the particular case. [See page 496.]

132 The trial judge's gatekeeping function may be facilitated, in some cases, by written descriptions in the expert reports of the nature of the relevant discipline and how it engages with the various criteria of reliability. In forensic pathology, these descriptions could include areas of controversy relevant to the case and a reading list of scientific literature on the subject. [See page 498.]

133 Judges should consider whether there are parts of the proposed expert evidence that are sufficiently reliable to be admitted and others that are not or which must be modified to be admitted. [See page 500.]

134 The National Judicial Institute should consider developing additional programs for judges on threshold reliability and the scientific method in the context of determining the admissibility of expert scientific evidence. [See page 502.]

135 It would be useful if the Canadian Judicial Council, in conjunction with the National Judicial Institute, could examine the feasibility of preparing a Canadian equivalent to the *Reference Manual on Scientific Evidence* prepared by the Federal Judicial Center in the United States. [See page 502.]

136 a) A code of conduct for experts giving evidence in criminal proceedings should be created.
b) It should be incorporated into the criminal justice system. This may best be done through the introduction of practice directions and amendments to pretrial conference forms.
c) The code should provide that experts have a duty to assist the court on matters within their expertise and that this duty overrides any obligation to the person from whom they received instructions or payment.
d) Experts should be required to certify that they understand this duty as part of their reports and agree to be bound by the obligations contained in the code of conduct before giving evidence. [See page 505.]

137 Court-appointed or joint experts are not recommended for cases involving pediatric forensic pathology. Rather, effective use of the adversarial system, which allows each party to call its own evidence and to cross-examine the other party's witnesses, is particularly appropriate in areas of dispute or controversy in these cases. [See page 506.]

138 a) Trial judges can play an important role in enforcing compliance with the existing *Criminal Code* provisions respecting disclosure of anticipated expert testimony and in taking steps, even where there has been full compliance, to ensure that all parties are fully prepared and informed and, as a result, can effectively test the expert testimony presented.
b) Pretrial judges have an equally important role to play in cases in which pediatric forensic pathology or other complex expert evidence may figure prominently. They can facilitate the narrowing of the issues between the parties. They can facilitate the production of further particulars of the proposed expert's opinion or the grounds on which it is based. Finally, they can explore with the defence the voluntary early disclosure of the report by its proposed witness or a summary of the anticipated opinion of that witness, as well as how and when that disclosure might take place. [See page 509.]

139 It will often be in the best interests of all concerned for expert witnesses to meet before trial to discuss and clarify their differences. In appropriate cases, judges, particularly pretrial judges, can encourage and facilitate such meetings between willing experts, without requiring that they take place. [See page 511.]

140 a) In cases in which expert evidence is important, trial judges should make use of the model charge language provided by the Canadian Judicial Council model instructions.
b) Judges should remind jurors that they should apply their common sense to expert testimony and that it is up to them to decide whether to accept all, part, or none of the expert's opinion.
c) In addition, judges should, in appropriate cases, provide structured questions to assist the jury in determining the ultimate reliability of the expert's opinion. These questions may resemble the ones available to judges to assess threshold reliability as discussed in this Report. [See page 513.]

Chapter 19
Pediatric Forensic Pathology and Potential Wrongful Convictions

141 In cases in which it is sought to set aside convictions based on errors in Dr. Charles Smith's work identified by the Chief Coroner's Review, the Crown Law Office – Criminal should assist in expediting the convicted person's access to the Court of Appeal and in facilitating a determination of the real substantive issues in the cases, unencumbered by unnecessary procedural impediments. Such assistance could include

- consenting to defence applications for extensions of time within which to appeal;
- working toward agreement with the defence on evidentiary or procedural protocols for applications to extend time within which to appeal or for introducing fresh evidence on appeal or respecting the appeal itself;
- permitting the use of transcripts of the evidence tendered at inquiries (such as this one) by forensic experts or others; or
- narrowing the issues that need be resolved by the Court. [See page 516.]

142 The ongoing review of Dr. Charles Smith's 1981–91 homicide cases should be completed. The results should be made known to the public in a manner consistent with the privacy interests of those concerned, and in a manner that will not interfere with any future legal proceedings. [See page 527.]

143 The significant evolution in pediatric forensic pathology relating to shaken baby syndrome and pediatric head injuries warrants a review of certain past cases because of the concern that, in light of the change in knowledge, there may have been convictions that should now be seen as miscarriages of justice.

a) The objective of that review should be to identify those cases in which there was a conviction and in which the pathology opinion, if now viewed as unreasonable, was sufficiently important to raise significant concern that the conviction was potentially wrongful.
b) Guided by the example provided by the Chief Coroner's Review, the review should utilize a small volunteer subcommittee of the Forensic Services Advisory Committee representing the Crown, the defence, the Office of the Chief Coroner for Ontario (OCCO), and the Chief Forensic Pathologist.
c) Human and financial resources to support the subcommittee's work should be provided by the Ministry of the Attorney General, not the OCCO, because the objective concerns the administration of justice. As well, the ministry should be responsible for compensating any external reviewers retained in connection with this review.
d) The review should include convictions after either plea or trial.
e) The review should not be limited to cases where the convicted person is still in custody.
f) The review should be completed only in those cases where the convicted person consents.
g) Although the procedure used should be up to the subcommittee, the following approach is recommended for its consideration:

    i) the subcommittee should begin with the 142 cases identified by Dr. Michael Pollanen;
    ii) the subcommittee should review the cases with the help of the OCCO records to eliminate those cases in which the available pathology or non-pathology information makes it clear that there would be no significant concern about a potential wrongful conviction;

iii) the subcommittee should then obtain the information necessary to determine those cases in which there was a conviction and eliminate the remainder;
iv) the subcommittee should then obtain the requisite records (such as police files) for the identified cases and use that additional information to further eliminate cases using the criterion in paragraph (ii) above;
v) the subcommittee should proceed further with the cases that remain only if the consent of the convicted person is obtained;
vi) the subcommittee should, where the convicted person gives consent to the review, obtain transcripts of relevant court proceedings, if possible;
vii) the subcommittee should refer the cases that remain for external review by forensic pathologists, where the subcommittee is of the view that the pathology was sufficiently important that, if it is unreasonable procedurally or substantively in light of current knowledge, there is a significant concern that the conviction was potentially wrongful. The external review cannot be permitted to have an adverse impact on the ability of the Ontario Forensic Pathology Service to perform its regular duties;
viii) the external reviewers should report on the reasonableness of the pathology opinions expressed in these cases, in light of current knowledge, including whether the court was fairly advised of the extent of the controversy relating to shaken baby syndrome / pediatric head injury, as it is now understood; and
ix) the convicted persons should be advised of the results of the external review so that they can determine whether to utilize the existing processes available to address individual cases of potential wrongful conviction.

h) The public should be advised of the results of the review, in a manner consistent with the privacy interests of those involved, and in a manner that will not interfere with any future legal proceedings. [See page 533.]

144 The Forensic Services Advisory Committee through a subcommittee should be available to consider other cases in which it is alleged that flawed pediatric forensic pathology may have contributed to wrongful convictions and to recommend to the Office of the Chief Coroner for Ontario what further steps, if any, should be taken.

a) Depending on the workload created by such referrals, the subcommittee should either be made a standing committee or be constituted as needed.
b) The Ministry of the Attorney General should provide the subcommittee with adequate human and financial resources to staff its work. The Office of the Chief Coroner for Ontario should also not be required to compensate any external reviewers retained in connection with its work.
c) Where the subcommittee has referred a case for external review, and where that review results in findings that the pathology opinion earlier expressed was unreasonable and sufficiently important to raise significant concern that the conviction was potentially wrongful, the Crown Law Office – Criminal should assist in expediting the convicted person's access to the Court of Appeal and in facilitating a determination of the real substantive issues in the cases, unencumbered by unnecessary procedural impediments. Such assistance should be similar to that provided where the Chief Coroner's Review identified errors in Dr. Charles Smith's work.
d) The Crown Law Office – Criminal should also provide similar assistance, to the extent to which it is applicable, to a convicted person seeking ministerial review pursuant to s. 696.1 of the *Criminal Code*, if that is the appropriate forum to address the issue of a potential wrongful conviction. [See page 535.]

145 The Province of Ontario should bring to the attention of the federal government the two advantages identified in this Report of the model of the Criminal Cases Review Commission (CCRC) – a structure that may make it easier to find the necessary expertise, and an independence that may secure a greater degree of public confidence in its decisions – for cases involving pediatric forensic pathology. These points should inform any future discussion about adopting a CCRC model in Canada. [See page 541.]

146 The Province of Ontario should address the difficulties faced by those seeking to access the s. 696.1 *Criminal Code* process on the basis of flawed pediatric forensic pathology by

a) ensuring, together with Legal Aid Ontario, that they can obtain legal aid funding for the necessary pathology expertise to support their applications. Legal Aid Ontario should adequately fund s. 696.1 applications. As well, consideration should be given to having Legal Aid Ontario fund, under appropriate circumstances, the retention of defence forensic pathologists as a basis for determining whether an application to the minister of justice has sufficient merit to be filed; and

b) urging the federal government to enhance the investigative role of the Criminal Convictions Review Group (CCRG) of the Department of Justice to address allegations that flawed forensic pathology contributed to wrongful convictions. This could include enhanced use of forensic experts retained by the CCRG to investigate and evaluate an application for ministerial relief. [See page 541.]

147 The Province of Ontario, together with Legal Aid Ontario, should consider enabling legal aid funding, under appropriate circumstances, of forensic pathologists prior to a determination that the appeal has sufficient merit to be funded and as a basis for determining whether an appeal based on fresh evidence has merit. [See page 542.]

148 The Province of Ontario should address the identified challenges to see if it is possible to set up a viable compensation process. The objective is to provide expeditious and fair redress for those who, through no fault of their own, have suffered harm as a result of these failures of pediatric forensic pathology, thereby helping to fully restore public confidence. [See page 545.]

Chapter 20
First Nations and Remote Communities

149 a) Northern Ontario should be divided into two coronial regions – the Northwest Region, to be based in Thunder Bay; and the Northeast Region, to be based in Sudbury.

b) Each of these two regions should be headed by its own regional coroner and properly resourced to fulfill its duties under the *Coroners Act*.

c) More generally, the Province of Ontario should provide adequate resources to ensure coronial and forensic pathology services in Northern Ontario that are reasonably equivalent to those services provided elsewhere in the province, even though doing so will cost more in the North. [See page 549.]

150 The Office of the Chief Coroner for Ontario should seek to enter into a service agreement with the Winnipeg Health Sciences Centre to ensure that the same or analogous protocols and procedures as recommended in this Report with respect to peer review, accountability, and quality assurance are in place in Winnipeg for Ontario cases autopsied there. [See page 550.]

151 The Northeastern regional forensic pathology unit should become a formal forensic pathology unit with a director and funding for transfer payments. As such, it should perform pediatric forensic autopsies as determined by the Chief Forensic Pathologist. [See page 552.]

152 Steps should be taken to enhance the likelihood that investigating coroners will attend the death scene in accordance with the Office of the Chief Coroner for Ontario's existing guidelines. Such attendances improve the quality of many death investigations and provide an opportunity for coroners to communicate with affected families and build relationships with affected communities. [See page 554.]

153 The attendance or non-attendance of investigating coroners at death scenes should be tracked as part of the quality assurance processes of the Office of the Chief Coroner for Ontario (OCCO). Similarly, compliance with the OCCO guideline indicating that coroners must document their reasons for not attending the scene and discuss them with the regional coroner should also be tracked. [See page 554.]

154 The Office of the Chief Coroner for Ontario should consider, in consultation with remote communities and First Nations, the development of specific guidelines that better address those circumstances in which investigating coroners will be expected to attend death scenes in remote communities. [See page 554.]

155 The medical profession and medical schools, such as the Northern Ontario School of Medicine, together with the Province of Ontario, the Nishnawbe Aski Nation, the Office of the Chief Coroner for Ontario, and others, should work in partnership to increase the numbers of physicians working in remote areas. Even more specific to the mandate of this Inquiry, the fee provided to coroners to attend death scenes, particularly in remote communities, should be increased so that it is not a disincentive to attendance. [See page 555.]

156 a) Where it is not feasible for investigating coroners to attend the scene, all available technology, such as digital photography, should be used to provide timely information to the coroners and enable them, in turn, to provide direction or guidance, as may be needed, to the police or the forensic pathologist.

b) The Office of the Chief Coroner for Ontario should develop, in partnership with remote communities and First Nations, enhanced technology, such as remote teleconferencing, which is ultimately designed to provide "real-time" information to the coroner and the forensic pathologist. Resources should be made available to enable this technology to be developed and used. [See page 556.]

157 a) The use of police officers as coronial surrogates was evidently intended for emergency situations only. It should not be the norm or the default position for all deaths within the coroner's jurisdiction.

b) The Office of the Chief Coroner for Ontario should engage in a consultative process with those communities most affected to evaluate various models for delegating coronial investigative powers to others, including health care professionals or community-based individuals with specialized training. [See page 559.]

158 The Office of the Chief Coroner for Ontario should consult with Aboriginal leaders in developing policies for accommodating, to the extent possible, diverse Aboriginal practices concerning the treatment of the body after death. [See page 561.]

159 Coroners should receive training on cultural issues, particularly surrounding death, to facilitate the performance of their responsibilities. [See page 561.]

160 Coroners play an important role in communicating with affected families about the death investigation. Such communication should include information about where the body is being transported, whether and why a post-mortem examination is being conducted, what that involves, when it is expected to take place, what if any issues arise in connection with organ or tissue removal, when the body or any organs or other body parts will be returned, and, if requested, what the results of the post-mortem examination or other relevant reviews reveal. In the absence of compelling reasons in the public interest, it is unacceptable for a family already suffering the loss of a child to be left uninformed and unaware of this and other information relating to the death investigation. [See page 563.]

161 In remote communities, community leaders play a vital role in providing support for families and community members affected by a death, particularly that of a child. They can also help to identify systemic issues that are

raised by individual deaths, including the pediatric forensic pathology work associated with those deaths. Community leaders can work with the OCCO and, where applicable, First Nations governments and political organizations toward needed change. It is therefore important that regional coroners and investigating coroners meet with community leaders to build relationships and facilitate partnerships. [See page 564.]

162 a) The Office of the Chief Coroner for Ontario should work in partnership with First Nations governments and political organizations to develop communication protocols. Priority should be given to the development of such protocols for the North, where the need is particularly acute.

b) Whatever model is developed to enhance communications, it should involve people within the coroner's system who understand and are familiar with the relevant Aboriginal cultures, languages, and spiritual or religious beliefs and practices. [See page 565.]

Chapter 21
Pediatric Forensic Pathology and Families

163 a) The Province of Ontario, with the assistance of the Ontario Association of Children's Aid Societies and others, should develop province-wide standards, supplementing those that already exist, on the sharing of information arising out of the investigations of suspicious child deaths by the police and children's aid societies.

b) The provincial standards should:

- Specifically address the expectations surrounding the sharing of information relating to joint or parallel investigations arising out of child deaths where other children may be at risk.
- Emphasize the importance of the timely and accurate communication of such information, and its updating as circumstances change, particularly by the police to child protection workers to ensure that decisions regarding surviving children are accurate.
- Remove any misconceptions that inhibit the appropriate sharing of information, and reinforce the point that, although it is important to protect the integrity of an ongoing criminal investigation, the need to withhold information from the child protection system in order to do so should not be overstated. The significance of decisions being

made in the child protection forum, and how the sharing of information can promote better fact-finding in that forum, should also not be underestimated.

- Articulate the roles to be played by coroners, forensic pathologists, and Crown counsel in the sharing of information in investigations arising out of the suspicious death of a child.

c) Local protocols should also be created across the province to permit local jurisdictions to implement the provincial standards in a manner that best suits their particular communities.

d) The timely development of these local protocols should be facilitated through the creation of a template for such protocols to accompany the provincial standards.

e) Local children's aid societies, police, coroners, forensic pathologists, and Crown counsel should receive joint training on the provincial standards and their local implementation to ensure that all parties have common understandings and interpretations of the standards and protocols and their application locally. [See page 576.]

164 The Office of the Chief Coroner for Ontario (OCCO) should develop a Family Liaison Service dedicated to communicating with families, particularly those that have suffered the loss of a child. The service should ensure that it communicates with the affected families in an effective, timely, caring, and compassionate manner. The Province of Ontario should provide additional funding to the OCCO to enable this service to be developed. [See page 579.]

165 a) Disclosure of autopsy results to parents should be made verbally and in writing in a timely manner that is sensitive to the parents' loss and bereavement.

b) The Office of the Chief Coroner for Ontario should meet with the Ontario Association of Children's Aid Societies and leading police forces to develop a policy respecting the timely release of the post-mortem information where there is an ongoing criminal investigation. [See page 580.]

166 The Office of the Chief Coroner for Ontario's current policy for organ and tissue retention and disposition should be continued. Coroners should be encouraged to communicate with families about the need for organ and tissue retention in a timely manner that is respectful of these families and their cultural or religious beliefs. [See page 581.]

167 The Province of Ontario should provide funding to permit counselling for individuals from families affected by flawed pediatric forensic pathology in cases examined at this Inquiry for up to a further three years, for a total of five years from the time of commencement, if the individual and the counsellor think it would be useful. [See page 582.]

168 In the discharge of his or her mandate, the director of the Child Abuse Register in Ontario should be encouraged to grant the request of persons wrongly listed on the register as a result of faulty pediatric forensic pathology to have their names removed from the register if there is no longer credible evidence of abuse. [See page 583.]

169 a) Legal Aid Ontario should work with the family law bar to ensure that family lawyers are funded for child protection proceedings in which pediatric forensic pathology plays an important role. The tariff for counsel who litigate these cases should be increased to create incentives for experienced and specially trained lawyers to take on legally aided cases and to reflect their added expertise. Legal Aid Ontario should fund an adequate number of hours to ensure that family counsel can properly fulfill their duties.

b) In appropriate cases, Legal Aid Ontario should authorize funding for one or more forensic pathologists and, where necessary, out-of-jurisdiction pathologists, including their travel expenses.

c) Legal Aid Ontario should raise the hourly rate for forensic pathology experts to a level that is commensurate with funding of experts retained by the Crown. This is necessary to ensure that experts of comparable skill to that of experts retained by the Crown are prepared to assist the family lawyer. This increase should occur expeditiously in pediatric forensic pathology cases.

d) Legal Aid Ontario should increase the number of hours of funding authorized for forensic pathologists. [See page 586.]