CHAPTER EIGHTEEN

Systems of Death Investigation and Certification in Other Jurisdictions

Introduction

18.1 In the course of preparations for Phase Two, Stage Two of the Inquiry hearings, the Medical Advisor to the Inquiry, Dr Aneez Esmail, identified and visited five jurisdictions whose systems of death investigation and certification would, he felt, be of interest to the Inquiry. Those jurisdictions were the states of Victoria (Australia) and Maryland (USA), the province of Ontario (Canada) and the countries of Finland and Scotland. A representative from each of those jurisdictions was invited to attend one of the Inquiry's seminars, held on 16th–17th January 2003. Also participating in the seminar was Professor Richard Baker, Director, Clinical Governance Research and Development Unit at the University of Leicester.

18.2 Before the seminars, the representatives provided a considerable amount of written information about the systems operating in their jurisdictions. Each representative had been asked to consider a brief summary of the facts of four of Shipman's unlawful killings and to provide written comments upon how the system in his/her jurisdiction would have dealt with the death. The object of this exercise was to see whether each of the systems under examination would or might have been effective in detecting Shipman's criminal activities.

18.3 At the seminars, each representative gave a short presentation, describing the system in his/her jurisdiction. Each then answered questions put by Leading Counsel to the Inquiry. Other participants in the seminars also had the opportunity of asking questions. As with the other seminars, persons attending the seminar as observers were able to raise points through Counsel for the consideration of seminar participants.

18.4 I found the presentations interesting and highly instructive. Each has contributed to my thinking about some aspect of my proposals for the future. I wish to express my gratitude to all five representatives for their attendance, their written contributions, their oral presentations and for the lively debate in which they joined.

18.5 In this Chapter, I shall summarise the main points of the systems in the five jurisdictions about which the Inquiry heard, with particular reference to those features of the systems which might with benefit be borrowed or adapted for use in England and Wales.

The System in Victoria, Australia

18.6 Professor Stephen Cordner, Professor of Forensic Medicine and Director of the Victorian Institute of Forensic Medicine, attended the seminar and described the system in Victoria.

Background and Structure

18.7 The coronial and death certification systems differ from state to state in Australia. The eight systems all operate along broadly the same lines, but with differences of detail. All the systems are derived from that in England and Wales.

18.8 The population of Victoria is approximately 4.8 million. The number of deaths is about 35,000 each year, of which about 10% are referred to the coroner. Autopsies are performed on behalf of the coroner in around 3000 of those cases. Toxicology is undertaken in around 2000 cases and, in about 1500 of those cases, toxicological testing extends beyond testing simply for the presence of alcohol.

18.9 The Victoria State Coroner, who is legally qualified, has responsibility for the coronial system as a whole. He is based, together with four full-time coroners, at the Coronial Services Centre in Melbourne. The Institute of Forensic Medicine ('the Institute') operates out of the same building and works closely with, but independently of, the coronial system. The Institute is an independent statutory authority, as well as a University Department. Professor Cordner observed that its functions complement each other. Its coronial service obligations inform its teaching and research functions; those functions in turn support its service obligations. Autopsies for deaths occurring within the city of Melbourne are performed at the Institute. The quality of its forensic pathology services, and the way in which they work in close partnership with the coronial service, are particularly strong features of the Victoria death investigation system. Outside Melbourne, all magistrates, who in Victoria are legally qualified judicial officers, act as coroners. If a contentious matter arises in a country area, a full-time coroner may be sent to deal with it. In those areas, because of the large distances involved, autopsies are carried out by local pathologists, acting as agents of the Institute.

18.10 Professor Cordner referred to the advantages of having a single individual, the State Coroner, responsible for the coroner system. Before that arrangement was introduced, there was considerable variation of practice between different coroners. Now, there is consistency and reliability of outcomes within the jurisdiction. The State Coroner is appointed from the magistracy for three years. He or she may be re-appointed but, if not, returns to the magistracy. As well as the leadership provided by the State Coroner, Professor Cordner also provides advice and guidance to support and assist those working in the fields of death investigation and certification.

Statutory Framework

18.11 Model national legislation was introduced in Australia in the mid-1990s in an attempt to bring national uniformity to coronial law and practice. That legislation has been implemented to varying degrees across the eight states. In Victoria, the Coroners Act 1985 (as amended) remains in force. The Act established the office of the State Coroner. It also defined the categories of death to be reported to the coroner, and the procedure to be adopted by the coroner in the investigation of death and the holding of inquests. The procedure for the registration of deaths is set out in the Births, Deaths and Marriages Registration Act 1996.

Objectives

18.12 The modern emphasis of the coroner's role is on death and injury prevention. It has been recognised in Victoria that there is an important public interest in learning lessons from preventable deaths.

Deaths Not Reported to the Coroner

18.13 Deaths that are 'not unexpected' are not reported to the coroner. Where the death is not to be reported to the coroner, the doctor must give notice of death and cause of death to the registrar and the funeral director within 48 hours of the death. The registrar is notified by post and the family need not take any further steps to register the death. There is no requirement for the family to visit the registration authorities. Any registered doctor has the authority to certify the cause of death, regardless of experience or seniority. The standard of confidence that a doctor should have when diagnosing cause of death should, Professor Cordner said, be the same standard used by that doctor when making a good diagnosis in clinical practice.

18.14 The model national legislation widened the category of doctor authorised to certify the cause of death beyond the treating doctor. It now includes partners in a group practice and any doctor, who may or may not have had previous contact with the deceased, but who has had access to the medical records. Any doctor who has seen the body after death has the authority, at least in theory, to certify the cause of death. In practice, doctors are told not to certify on the basis of an examination of the body after death without a reliable history, including a history of the circumstances of death.

18.15 Like the system in England and Wales, the certification system in Victoria is wholly dependent on the integrity of the certifying doctor. There is no audit or quality assurance of certification. Professor Cordner observed that, in Victoria, as elsewhere, the completion of medical certificates of cause of death is flawed. He referred to the lack of training in the subject and the lack of enthusiasm for it amongst medical students.

Deaths Reported to the Coroner

18.16 The categories of death requiring referral to the coroner differ from state to state but, in general, include violent, unnatural and sudden deaths, together with certain other specific categories of death. Those categories of death also include deaths in custody and deaths where no medical certificate of cause of death has been signed. The coroner's jurisdiction is limited to reportable deaths and does not extend to all deaths within the geographical jurisdiction. The statutory duty to report a reportable death is broad and extends to any person with knowledge of the death who has reasonable grounds to believe that the death has not already been reported. A criminal sanction for failure to report exists but is never imposed in practice. Professor Cordner said that there was not a high degree of awareness among the public of the duty to report. One perceived weakness of the system is its reliance upon persons reporting deaths to the coroner. Also, Professor Cordner observed that a particular emphasis is placed on the need to report deaths that are immediately identified as unnatural, with less emphasis being placed on the need to report and investigate sudden deaths which are thought to have a natural cause.

18.17 The State Coroner's Office in Melbourne is staffed by coroner's clerks. The clerks are the first point of contact for a doctor telephoning to report a death or to make an enquiry as to the need to report. They are administrators who commonly have worked as court clerks and receive no formal training in legal or medical issues. In country areas, the magistrate's

court staff will act as coroner's clerks. When a doctor telephones to report a death, the clerk may, in some circumstances, give advice as to whether or not a doctor should report the death, or may advise the doctor to certify the cause of death. That advice might be given without formal reference to the coroner.

Death Investigation

18.18 Once a death has been reported to the coroner, investigations are undertaken by the police, acting as agents of the coroner. A small team of five police officers is seconded to the State Coroner's Office in Melbourne. Those officers oversee investigations carried out by the local police force. They also carry out investigations into particular types of death which require specific expertise and knowledge. For example, they might investigate a small plane crash or scuba diving accident. Outside Melbourne, coroners are entirely dependent on local police officers to investigate deaths. Coroners have powers to enter and inspect premises and to seize documents and other material in the course of their investigations.

18.19 The decision as to whether an autopsy should be performed is made in the first instance by the coroner. The pathologist will then form his/her own judgement as to whether an autopsy is required or whether s/he can certify the cause of death without carrying out an invasive examination. In reaching that decision, the pathologist will have an opportunity to examine the body externally and will also have available to him/her the police report containing information about the circumstances of death. Medical records are not generally available at that stage, unless the death occurred in hospital. The treating doctor will rarely be contacted unless the pathologist wishes to enquire why the doctor feels unable to certify the cause of death. If a decision is taken not to carry out an autopsy, Professor Cordner said that there will usually be some consultation with the family to ensure that they are happy with the decision.

18.20 Where it is decided that an autopsy should (or should not) be carried out, relatives have a right to object. The coroner's decision is subject to a right of appeal to the Supreme Court of Victoria; in practice, that right is rarely exercised.

18.21 Extensive toxicology, designed to identify any one of a long list of drugs (including morphine), is carried out in approximately half of the autopsy cases in Victoria. The cost of toxicology in an individual case is approximately £250.

18.22 At the end of an investigation, whatever the outcome, the family has access to a document setting out what is known of the circumstances of their relative's death. Documents arising out of the investigation are entirely public.

18.23 The process for the investigation of deaths potentially caused by adverse medical incidents is undergoing reform. In a recent article on the investigation of deaths caused or contributed to by adverse medical incidents, Dr David Ranson, the Deputy Director at the Institute, noted that a large number of such cases go unreported and those that are reported have traditionally been investigated in the same way as all other deaths investigated by the coroner. The investigation consists of the police taking statements from doctors involved in the provision of treatment, and from other witnesses. Also, a

pathologist will carry out an autopsy, on the basis of the information obtained by the police. Dr Ranson observed that the police have little direct experience or knowledge of the specialist medical issues involved in such a death. A potential problem might be missed because the doctors who are interviewed may not be forthcoming in identifying system failures. He also observed that the issues might not be picked up by the coroner's pathologist, who is unlikely to be aware of current practice issues in the entire range of specialist areas.

18.24 A medical death investigation team has recently been established in Victoria. This adopts a very different approach to the investigation of deaths occurring in a medical setting. Cases are first screened by nursing staff against a set of diagnostic criteria and audit filters, to identify cases where there is a high likelihood that an adverse medical event has occurred. The information from the screening process is then passed, with the medical records, to the forensic pathologist conducting the autopsy. Once the results of the autopsy are available, the death will be reviewed by two clinical medical specialists from different clinical disciplines, who are employed on a part-time basis at the Institute. The specialists evaluate the records and identify areas where it would be prudent to obtain relevant witness statements. The specialists also draft specific questions to be put to witnesses and, if required, to an independent medical expert. The new investigative approach is still in its infancy but it is hoped that, in time, the process will lead to improvements in the safe delivery of healthcare.

Judicial Investigation of Death

18.25 The majority of inquests in Victoria are held at the coroner's discretion, usually because there is a matter of public interest to be investigated. There are certain limited categories of mandatory inquests in cases of homicide, deaths where the deceased person is held in care and cases where the deceased is unidentified. Inquests into suicides are rare, as are inquests into deaths sustained in road traffic accidents, unless an issue of public safety and death prevention arises. Deaths that occur in the workplace commonly result in an inquest because of the potential for learning from the death and preventing future accidents of a similar nature. The views of the family are an important factor when taking a decision whether or not to proceed to an inquest. Inquests in Melbourne are presided over by full-time coroners. Outside Melbourne, magistrates sit in non-controversial cases. There is provision in the legislation for juries to sit on inquests, but no jury has sat for many years. Verdicts following an inquest are descriptive. Recommendations may be made, particularly if a number of deaths have occurred in similar circumstances. In some states, although not in Victoria, the appropriate authority is under an obligation to respond to recommendations made.

Cremation

18.26 If a death is reported to the coroner, the coroner will authorise cremation. Otherwise, a cremation form is completed by the medical practitioner who was responsible for the deceased's medical care immediately before death. A second doctor and the crematorium medical referee must also complete cremation forms. The second doctor is

required to examine the body, but will rarely contact the deceased's relatives or carers. Professor Cordner observed that his impression was that any independent enquiry by a second doctor in a cremation case was a rarity.

National Coroners Information System

18.27 The National Coroners Information System (NCIS) is a computer database, which was established in 2000 and is based at the Monash University National Centre for Coronial Information, Melbourne. The NCIS receives and records information on the 18,000 or so deaths reported to coroners in Australia each year. Prior to the introduction of NCIS, the collection and analysis of coronial data was a slow process. For example, a Commission set up in 1989 to look at work-related deaths spent six years visiting each of the eight states collecting data, much of which was outdated by the time the Commission reported in 1998. Professor Cordner said that the NCIS has transformed the way in which such information can be obtained and studied.

18.28 The database provides coroners with information about deaths occurring in other parts of the country. It allows coroners to identify patterns in preventable deaths which, on the basis of the limited information within an individual coroner's jurisdiction, might otherwise go unnoticed. The database also reduces repetition of work. For example, one coroner might not hold an inquest into a particular type of death if s/he knows that a coroner in another state has already investigated that type of death in detail and that the lessons in terms of death prevention have already been learned.

18.29 Data from the NCIS is made available, not only to coroners, but also to Government agencies and other public sector organisations, particularly those involved in health policy. They use the NCIS to monitor particular types of death and identify health and safety issues.

Detecting Shipman

18.30 On the basis of the summaries describing the circumstances of four of Shipman's unlawful killings, Professor Cordner formed the view that Shipman's activities would not have been detected by the Victoria system. In relation to the case of Mrs Kathleen Grundy, he said that there would be an issue as to whether the death could properly have been certified as due to 'old age'. This cause of death might or might not have been queried by a registrar. However, if the death had been reported to the coroner, the coroner's clerk might well have encouraged the doctor to certify the cause of death, on the ground that, even though the death was possibly unexpected, it was apparently (on the doctor's account) natural. If an autopsy had been carried out, so long as there was sufficient coronary artery disease to account for death, further investigation would probably not have been ordered. In the absence of heart disease, histology would have been ordered and samples for toxicology taken, to be analysed only in the event that the cause of death was not established by histology.

Comments

18.31 The modern role of the Victoria coroner system in the field of death and injury prevention is one which, in my view, the system in England and Wales should also embrace. In order for that to be done, a system such as the NCIS is plainly necessary.

18.32 The evident quality of the independent forensic pathology services in Victoria, their position at the centre of the death investigation and certification system and the close working relationship between the coronial and forensic pathology services are all important features of the system in Victoria. They provide a model which could, with benefit, be adapted for use in England and Wales.

18.33 I was also most interested in the proposals for the identification and investigation of deaths associated with medical care. I shall recommend that similar measures be considered for the investigation of that type of case in England and Wales.

18.34 I was also impressed by the evidence of leadership offered by both the State Coroner and by Professor Cordner, as Director of the Institute with responsibility for forensic pathology. It is clear that the leadership which they offer is of great benefit in achieving consistency, as well as in encouraging good practice and in supporting the work of those with day-to-day responsibility for the operation of the coronial and death certification systems.

The System in Ontario, Canada

18.35 Dr James Young, Chief Coroner for the Province of Ontario and Assistant Deputy Minister of the Solicitor-General, attended the seminar and described the system in Ontario.

Background and Structure

18.36 Each of the provinces and territories in Canada has a Chief Coroner or Medical Examiner, who acts as the head of the coronial and death certification system. Ontario has a population of 13 million, spread over an area of one million square kilometres. Much of the population lives in a relatively densely populated area within 100 miles of the US border, but there are vast areas of the province which are sparsely populated. The geography and climate of Ontario present significant challenges to the coronial system. Approximately 60,000 deaths occur each year, and the Chief Coroner's Office investigates and reports on around 20,000 of those deaths. A limited investigation is carried out in relation to a further 10,000 deaths, which occur in nursing homes and residential homes for the elderly. Autopsies are performed in around 7000 cases, which represents a little over a third of those deaths formally investigated.

18.37 The Chief Coroner has overall responsibility and control over the province-wide system. Authority is delegated to three deputy chief coroners and ten regional supervising coroners, each of whom covers one of the ten geographical areas into which the province's coronial system is divided. There are then about 350 investigating coroners, who attend scenes of death and who are supervised by the regional supervising coroners. All coroners in Ontario are licensed physicians. The investigating coroners have a variety of medical backgrounds, both within and outside hospital, and undertake their coronial duties as part-time additional work for which they are remunerated on a case-by-case basis. Local arrangements are made for rota cover to provide a service 24 hours a day, seven days a week. A system of 'first on call' and 'second on call' is operated, so that a member of staff is always available when needed. Standards in the office require that an investigating coroner should be able to attend at the scene of a death within two to three

hours. Despite the antisocial hours, recruiting for the post of an investigating coroner apparently presents no problems.

18.38 The Chief Coroner is responsible for establishing standards for death investigations. He also directs, controls and supervises death investigations, together with the delivery of forensic pathology services. He offers advice and guidance, both personally and through his deputies and the regional supervising coroners. There is a clear line of authority and accountability within the coroner service in Ontario.

18.39 There is obvious potential for tension where a doctor in a small, rural community acts as an investigating coroner. He or she may be called upon to investigate deaths of patients of colleagues who are well known to him/her. Investigating coroners are given clear advice about this and are advised to refer a death upwards to the regional supervising coroner, even to the Chief Coroner's Office, if any potential conflict arises. They are also reminded of the importance of considering the 'worst case scenario' in relation to every death, even when dealing with the death of a colleague's patient.

18.40 It is evident from the documents with which the Inquiry has been provided that the coronial service in Ontario seeks, and, is successful in securing for itself, a high public profile. That profile ensures that the public is aware both of the existence of the service and of the mechanism of investigating deaths about which there is any concern or problem. This acts as a positive encouragement to report deaths about which any concern arises.

Statutory Framework

18.41 The statutory framework for the Ontario system is contained in the Coroners Act 1990 and the Anatomy Act 1980.

Objectives

18.42 The motto of the Ontario Chief Coroner's Office is **'We Speak for the Dead to Protect the Living'**. In practical terms, the objective of providing protection to the people of Ontario is achieved by implementing high quality death investigation and using the findings to generate recommendations to improve public safety and to prevent further deaths occurring in similar circumstances. The ethos is that no death should be overlooked, concealed or ignored. The Chief Coroner's Office is assisted in achieving its objectives by the high public awareness of the coroner system. Individuals and organisations are encouraged to 'over-report' deaths, even at the risk of time being wasted investigating deaths which might in the event be found to have been entirely natural.

Deaths Not Reported to the Coroner

18.43 Where a doctor is able and willing to certify the cause of death, the coroner will not become aware of the death until after disposal. A body can be removed to a funeral home only when a certificate as to cause of death has been issued by a doctor or nurse practitioner, or where an investigating coroner has attended and authorised removal of the body. A nurse practitioner can certify the cause of death only in limited circumstances, namely in a case of expected death at home (i.e. not in a nursing home etc.), where the nurse

practitioner has had primary responsibility for care, an established diagnosis of a terminal illness has been made and the patient was receiving palliative care. Any registered doctor is authorised to certify the cause of death in an appropriate case, regardless of experience or seniority. There is no formal requirement for a doctor to examine the body in order to certify the cause of death. The standard of confidence for certifying the cause of death is similar to that in Victoria, i.e. the same standard as for diagnosing a condition in a living patient.

18.44 Although only certain deaths must be reported to the coroner in the first instance, the death certificates in relation to all deaths are ultimately sent to the Chief Coroner's Office. Individual certificates are audited to see if the death should, in fact, have been reported. The ambit of the audit is necessarily limited, since it will detect only errors which are evident on the face of the death certificate.

Deaths Reported to the Coroner

18.45 The coroner's jurisdiction is limited to 'reportable deaths' and does not extend to all deaths within the geographical jurisdiction. The categories of reportable deaths are wide and contain a provision that **'any death requiring investigation'** should be reported. A statutory duty to report deaths to the coroner extends to every person with reason to believe that a person died within a list of particular circumstances, including sudden death, death caused by violence, negligence and other similar categories, as well as some broader categories such as **'death by unfair means'**. The duty is subject to a criminal sanction which is rarely imposed. Literature produced by the Chief Coroner's Office acknowledges that the categories of reportable deaths tend to be **'confusing'**.

18.46 The Coroners Act provides that all deaths that occur in residential or in-patient institutions must be reported to the coroner. In practice, this legislative requirement is fulfilled by requiring nursing homes to keep a book of all deaths and to report every tenth death to the coroner. Those deaths are then investigated by means of a paper review. They are then available for audit, or further investigation at a later time if necessary. A death reportable for any other reason must be reported to the coroner in the usual way. An institutional patient death record is completed following any death in a nursing home. The record addresses issues relevant to the need to report, such as whether the death was accidental, sudden and unexpected, and whether the family has raised concerns. The form is then sent to the coroner's office. Where required, the frequency of deaths to be reported by an institution can be altered and, if there are real concerns, the institution can be required to refer every death to the coroner. There are special requirements for deaths in mental hospitals and developmental homes for children.

18.47 Dr Young told the Inquiry how, on one occasion, his office had a report of a higher than normal death rate at a developmental home. A committee was set up and audited every death which had occurred at the home over a period of five years. This revealed a pattern of withdrawal of medical treatment, leading to death, which could not have been detected in connection with any single death. The coroner's office will carry out similar exercises in relation to a doctor about whom there is concern.

18.48 Deaths caused or contributed to by medical negligence or malpractice fall within the category of reportable deaths. Hospitals are encouraged to err on the side of over-reporting deaths. Dr Young expressed the view that, if deaths where there was an issue about medical care were not reported, this only produced problems in the future. Hospitals within the province have an audit system in place to assess whether or not a death should be reported to the coroner. Often, nursing staff report deaths. Dr Young observed that they tended to be more reliable than doctors in reporting deaths to his office.

18.49 A doctor unsure as to whether or not a death should be reported may contact the coroner. In a straightforward case, the coroner may be happy to allow the doctor to certify the cause of death. However, Dr Young made the point that, once an investigative coroner has invested a certain amount of time in a case, it is in his/her financial interests to take the case on, because of the case-by-case basis by which coroners are paid. Coroners are contacted via 'dispatchers' who act as coroner's clerks or intermediaries. The dispatchers are experienced and will be able to answer questions from doctors about, for example, the content of statutory provisions. However, they will not be expected to exercise judgement as to whether or not a death will be accepted by the coroner. Such judgements are left to the coroners themselves.

Death Investigation

18.50 Following a report of a death, investigating coroners are instructed to attend the scene of death unless there is good reason for not doing so. An investigating coroner should complete a certificate, confirming that s/he has legally seized the body. Investigating coroners are instructed to consider the worst possibility (or **'think dirty'**) and to liaise with the family in investigating the death. The investigating coroner undertakes and directs a medical investigation and, in a case where there is no suggestion of criminal involvement, will interview witnesses, often in the presence of the police. Extensive written guidance is provided for the investigating coroner. Where there is a hint of criminal involvement, the police take over the investigation, so as to avoid the risk of an investigating coroner tainting the criminal investigation. However, even in such cases, the coroner's office works closely with the police and will provide the necessary medical expertise.

18.51 If the coroner is minded not to require an autopsy, s/he will undertake a full external examination of the body *in situ* to ensure that there are no signs of violence. When such an examination is carried out at a person's home, relatives are asked to leave the room and experience has shown that families do not object to such an examination being carried out. There is a practical benefit to families in that, if it is decided that an autopsy is not required, then the body can be released to a funeral home, allowing the relatives to make arrangements for the funeral. The scene, and the body, may be photographed. The coroner has power to seize any evidence necessary for the purposes of his/her investigation.

18.52 The delivery of forensic pathology is controlled by the Chief Coroner. When a decision is taken that an autopsy is required, the investigating and regional coroners will consider what level of pathology expertise is necessary. Local facilities are available for

straightforward cases and, where greater expertise is required, the body is transported to one of the larger regional centres. If necessary, a case can be referred to one of the major centres, such as Toronto or Ottawa, where forensic pathology services are available. In some circumstances, where the circumstances of death are clear, a thorough external examination takes the place of an invasive autopsy, although the use of this technique is restricted to the larger forensic centres. Medical records are obtained in every case which involves a medical issue or where an autopsy is to be performed. The relevant sections of the medical record are photocopied and forwarded with the body to the mortuary.

18.53 Under the Coroners Act, certain defined categories of family member are entitled to information relating to the investigation of a death. A report will be made available to the family, but will not become a public document. If no inquest or regional review (see 18.57–18.59 below) is carried out, there is usually an opportunity for the family to discuss with the coroner any issues relating to the death.

Public Investigation of Death

18.54 The number of inquests held in Ontario each year is low in comparison with England and Wales. The aim of the system is to hold a small number of representative inquests which examine issues in detail, as opposed to a larger number of routine inquests, which allow for only superficial examination of the issues and give limited scope for learning lessons in public safety. The statute allows for one inquest to be held into a number of deaths where they have arisen from the same event or from a common cause. Inquests are mandatory in certain categories of case, for example, deaths in custody and construction and mining deaths. Discretionary inquests are held when the public interest requires it. In 2002, there were 54 mandatory inquests, together with 18 discretionary inquests. Included in the statutory list of considerations taken into account when determining whether or not the public interest would be served by the holding of an inquest, is the likelihood that **'recommendations directed to the avoidance of death in similar circumstances'** will arise out of the proceedings. Recommendations, typically numbering between 1200 and 1500 each year, are made following both mandatory and discretionary inquests. The public have a right of challenge against a decision not to hold an inquest. Such a challenge is determined by a Government Minister.

18.55 Inquests in Ontario are presided over by coroners, who do not have formal legal qualifications. The category of coroner that can sit on an inquest is limited to the Chief Coroner, his three deputies, the ten regional supervising coroners and 50 of the most experienced investigating coroners. The more senior members of that group conduct inquests in the most complex cases. Some limited legal training is provided and a detailed inquest manual is provided to assist the coroners while acting in their judicial capacity. Crown attorneys are appointed to act as counsel to the coroner at the inquest hearings and interested parties are often represented by lawyers.

18.56 Juries sit on all inquests and are responsible for reaching a verdict and making recommendations in the light of the evidence and submissions from interested parties. In many cases, the submissions will include suggested recommendations, which can be adopted in full or in part and supplemented by the juries' own recommendations. The

coroner then produces a letter of explanation, setting out the circumstances of death, the procedural history of the inquest, his/her interpretation of the significant parts of the evidence and the jury's rationale for making each of its recommendations. The letter is intended to supplement, not replace, the verdict of the jury.

18.57 In more complex cases, detailed reviews will be undertaken by standing committees of experts. These include an Anaesthetic Death Review Committee, a Paediatric Death Review Committee, an Obstetrical Care Review Committee and a Geriatric and Long Term Care Review Committee. The committees are chaired by deputy chief or regional coroners and their members are, in general, experts in the field concerned. The Paediatric Death Review Committee has a particularly diverse membership, reflecting the complexity of the topic. The committees review cases at the request of the Chief Coroner.

18.58 In medical cases, the committees usually look at the hospital notes, the autopsy results and the coroner's investigation to date. One member of the committee will conduct an initial review and the case is then discussed with the whole membership of the committee. A preliminary opinion and set of concerns are formulated and passed on to the regional and investigating coroners. No formal witness statements are taken at that stage.

18.59 The review is often followed by a meeting between the review committee, the regional coroner and the institution and doctors, or other professionals, involved in the case. A detailed discussion ('a regional review') takes place and this will frequently result in a set of recommendations being agreed. The family is then informed of the results of the review and a decision taken as to whether the case needs to proceed to a public inquest. If such an inquest is thought necessary, the committee member who reviewed the case first is usually retained as an expert witness for the inquest.

18.60 The advantage of the review committee system is its ability to examine complicated subject matter in a relatively informal manner, more efficiently than the inquest process. Thus, effective recommendations for improvement to systems can be made expeditiously. Dr Young said that the success of the review system was such that hospitals would sometimes report deaths themselves and ask that a review be undertaken, knowing that it would result in useful recommendations.

18.61 The coroner is under a statutory duty to forward recommendations to any organisation whose failures may have caused or contributed to the death. There is no legal obligation on the organisation to respond. However, in practice, a report is forwarded to the coroner about 12 months later, describing the steps taken to implement the recommended steps. The report is made public and failure to take appropriate preventative measures will receive widespread critical coverage in the press.

Registration

18.62 The practical aspects of registration are carried out by the funeral director. The certificate of the cause of death, or the coroner's death certificate in cases where the coroner has become involved, is taken to the funeral home. The family will complete a request for burial at the funeral home and the funeral director will take the forms (together with the cremation certificate if relevant) to the registrar, who will register the death. A short form death

certificate is available for administrative purposes. This does not include any details of the circumstances of death or cause of death.

Cremation

18.63 The authorisation of the coroner is required for cremation. Before authorising cremation, the investigating coroner will attend at the funeral home and review the relevant documentation, including the certificate of cause of death and a form filled out by the family. He or she will speak to the funeral director and enquire whether there are any problems associated with the death. The investigating coroner will rarely examine the body.

Coroners Information System

18.64 Data about deaths is entered into the coroners information system by the local investigating coroner and is subsequently checked by personnel at the offices of the regional coroner and Chief Coroner. The information is used for research projects into public safety issues, such as drinking and driving, or drownings. A Canada-wide database is currently being built which will facilitate the collection of statistical data on the circumstances of deaths.

Detecting Shipman

18.65 On the basis of the summaries describing the circumstances of four of Shipman's unlawful killings, Dr Young expressed the view that there was some prospect that Shipman's activities would have been detected by the Ontario system. For example, the sudden and unexpected nature of Mrs Grundy's death would probably have caused the friends who discovered her body to contact the police, who in turn would have called the coroner. The investigating coroner, if following procedures correctly, would have spoken to Mrs Grundy's daughter. She would undoubtedly have expressed surprise at the sudden nature of the death. It is most likely that an autopsy would have been ordered with histology. If the cause of death had not been established at autopsy, toxicology would have been ordered. In any event, a blood sample would have been taken, frozen and kept for five years. 'Old age' is not, according to Dr Young, a cause of death which is usually accepted in Ontario. He said that the issue of whether or not the case would have come to the coroner would probably have depended upon the level of concern felt and expressed by the family.

Comments

18.66 Dr Young expressed the view that the best way of ensuring that the coroner service learned of all relevant deaths was to ensure that it had a high public profile and to make the public aware that there was a mechanism for reporting suspicious deaths. I agree that it is vital that the public has a high degree of awareness of the coroner service, together with the confidence to approach the service in the event of concern.

18.67 It is evident to me that the Ontario coroner service has strong leadership, together with a positive philosophy, which enables it to meet the practical difficulties presented by the

state's geography and climate. The high element of medical expertise available to the service is plainly a strength, as is the emphasis (similar to that in Victoria) on public safety issues and the benefits of learning from deaths which have occurred in the past. I shall suggest that in England and Wales, deaths should be selected for inquest, as in Ontario, on the basis of public interest, with particular emphasis on the prevention of death and injury in future.

18.68 I also regard as extremely significant the ethos that encourages all concerned to have a high index of suspicion when viewing the circumstances of any particular death. It is essential, if any system of death investigation is to work, that the personnel employed within the system do not approach their task on the assumption that all will be well. If they do, there is a real risk (exemplified by the Shipman case) that they will fail to detect problems which are there to be seen.

18.69 I was impressed by the robustness of some of the investigative methods, such as attendance at the scene of the death, the taking of photographs and the taking and preservation of blood samples.

18.70 I was particularly interested in the system by which medical mishaps are investigated, using the services of standing committees of experts. It seems to me that this type of system might well be adopted in England and Wales. It would complement the identification and investigation methods being developed in Victoria, which I also found interesting.

18.71 I think it highly desirable that England and Wales, like Ontario and Australia, should have a computerised information system.

The System in Maryland, USA

18.72 Dr David Fowler, Chief Medical Examiner, attended the seminars and described the system in Maryland.

Background and Structure

18.73 The organisation of post-death procedures differs from state to state in the USA. Some states, including Maryland, have a medical examiner system, others have a coroner system and some hybrid arrangements exist. Maryland is a state with areas of high and low population density. The overall population is 5.7 million. Around 10,000 deaths are referred to the medical examiner each year, which represents just less than 25% of all deaths. Investigations are carried out in about 8000 cases and autopsies are performed in about half of those cases. Toxicology is performed in almost every case where an autopsy is performed, as well as in a small number of other cases.

18.74 The medical examiner system is controlled and operated by the Post Mortem Examiners Commission ('the Commission'), which is a statutory body established to ensure independence from the state. On the Commission sit the Heads of Pathology from each of the major teaching hospitals in the state, the Superintendent of the State Police, the Commissioner of Health for Baltimore City and the Secretary of Health for Maryland.

The Commission therefore comprises representatives from the spheres of academic pathology, law enforcement and public health. The Commission takes all operational decisions and deals with staffing issues. In Baltimore, death investigations are run from the central Office of the Chief Medical Examiner (OCME). Based at the OCME are the Chief Medical Examiner, his two deputies, seven assistant medical examiners, ten forensic pathologists, and 14 full-time investigators, together with support staff, including seven toxicologists. All autopsies in the state are carried out at the OCME.

18.75 The full-time death investigators investigate deaths that occur within Baltimore City. In the outlying counties, deputy medical examiners, who work on a part-time basis, have responsibility for the control and review of the provision of local services. Individual deaths are investigated in the first instance by part-time forensic investigators, who report to the deputy medical examiners. Forensic investigators usually have a paramedic background and their training includes forensic medicine, anatomy, physiology and interview techniques. Employed paramedics often work as part-time forensic investigators by way of secondary employment. The medical examiner system provides cover 24 hours a day, seven days a week.

18.76 Dr Fowler has a significant educative role. He lectures law enforcement agencies about the work of the medical examiner system. As part of his/her training, every police recruit in Maryland receives lectures from staff from the OCME and will visit the OCME. They also receive continuing education.

Statutory Framework

18.77 The statutory framework is operated on a state, not a federal, level. In Maryland, the main statute regulating the medical examiner system is the Health-General Article. Title 5 of the statute establishes the Commission and also defines its composition, powers and duties. The statute defines cases to be examined by the OCME and authorises the Commission to issue guidelines on the categories of reportable cases. The statute also covers autopsy procedures, forensic investigation, record keeping and death certification.

Objectives

18.78 The system in Maryland has an emphasis on law enforcement issues. Police recruits are told to report every death that is not ‘solely’ and ‘exclusively’ due to natural causes. They are told that ‘solely’ and ‘exclusively’ are not negotiable terms. They are encouraged to approach deaths with a high index of suspicion, keeping in mind the possibility that there may be suspicious circumstances. Medical investigations carried out within the medical examiner system support the work of the police. The service works in very close co-operation with the police.

18.79 Dr Fowler stressed that the objective of the system was purely to discover the cause of death, not the circumstances.

18.80 There is a high public awareness of the OCME and the work of the Chief Medical Examiner is widely publicised in the press.

Deaths Not Reported to the OCME

18.81 In practice, most deaths occurring outside a hospital or hospice are referred to the medical examiner. It is rare for a doctor to attend the home of a living patient in Maryland and, if a person dies at home, it is unlikely that a doctor will attend in the first instance. It is more likely that the emergency services will be summoned to the death and will contact the OCME. If a doctor is contacted first, s/he is likely to advise the caller to contact the emergency services.

18.82 Only doctors licensed to practise in Maryland are able to certify the cause of death and, because obtaining a licence is a relatively expensive process, very few junior doctors have such a licence. There is no set period within which a doctor must have seen a patient in order to certify the cause of death. Doctors will rarely certify a home death. Indeed, the problem in Maryland is in persuading doctors that they are able to certify the cause of death, rather than restraining them from doing so. Dr Fowler explained that this was largely because of concern about medico-legal issues which might arise from an inaccurate certification of the cause of death.

18.83 Registration of the death is done by the funeral home. The death certificate must be filed with the Vital Records Department. No personal attendance by the family is required.

18.84 Although only certain categories of death must be reported to the medical examiner in the first instance, an audit of deaths not reported to the OCME is undertaken by the Vital Records Department. A process of screening of death certificates is in place, checking for proscribed words in the certified cause of death. A list of proscribed terms is drawn up by the OCME and, if terms from that list appear on a death certificate, the Vital Records Department forwards the death certificate to the OCME for further investigation. Each year, around 2000 death certificates are referred to the OCME by the Vital Records Department in this way.

Deaths Reported to the OCME

18.85 The Chief Medical Examiner's jurisdiction is limited to 'reportable deaths' and does not extend to all deaths within the geographical jurisdiction. There is a long list of reportable deaths. This list includes, for example, categories such as death due to violence or suicide, and deaths which are sudden and unexpected, deaths which are **'unusual'** and deaths which occurred **'suddenly while in apparent good health'**. There is a statutory duty on all doctors, funeral directors and any other person who believes a death is suspicious, or has occurred in unusual circumstances, to report the death to the police who, in turn, report the death to the OCME.

18.86 When a death is reported to the OCME, a decision is taken as to whether or not jurisdiction is to be accepted. In a case which does not obviously fall within the medical examiner's jurisdiction, discussion will take place between the deceased's doctor and, in the first instance, a forensic investigator. Ultimately, a medical examiner will discuss the case with the doctor and determine whether or not the death should be the subject of an investigation. Jurisdiction is accepted in approximately four out of every five cases that are referred.

Death Investigation

18.87 When jurisdiction over a death is accepted, a variety of investigative steps can be taken. These steps are set out in a series of detailed protocols. In the first instance, a forensic investigator will go to the scene to inspect the body and undertake an investigation as to the circumstances of the death. Forensic investigators have a comprehensive manual which directs the investigation at the scene. Members of the family and other witnesses are interviewed. The body will be examined thoroughly and photographs taken. In an appropriate case, the body is released to the family, so that it can be taken to a funeral home. The permission of the medical examiner is required in order to remove a body from the scene of death. This will be given only in a case where no further investigation is required. Where it is not possible to examine the body at the scene, or the deceased's relatives object to the examination, the body will be removed and taken to the mortuary for detailed external examination or autopsy. Where there is some doubt on the part of the forensic investigator, s/he will consult the medical examiner as to the future conduct of the investigation. In some cases, a blood sample will be taken for future toxicological investigation. The OCME encourages the police to carry out as much of the investigation as possible, even in cases where no criminality is suspected. Often, the scene investigation is carried out in company with the police. This results in some duplication of resources. However, Dr Fowler said that it provided a valuable safeguard and that he found the team approach between the medical examiner service and the law enforcement agencies to be most effective.

18.88 An investigation report is completed by the forensic investigator, providing details of the scene, what is known about the circumstances of the death and the medical history. If the body has to be transported by the funeral director, s/he must have a copy of that report, together with the death certificate, with him/her whilst transporting the body. On the basis of that report, the medical examiner will then either certify the cause of death or order that an autopsy be carried out. If an autopsy is not to be carried out, the investigation report will also be reviewed by a fellow in forensic pathology, who is someone with at least five years' pathology training. It will then be reviewed separately by a chief investigator. Finally, the medical examiner will have an opportunity to review the case before deciding whether or not to certify the cause or whether further investigation is required.

18.89 Outside Baltimore, if a forensic investigator decides that a case does not require autopsy, s/he will telephone a forensic investigator at the OCME to discuss the case and the two of them may well have a conference call with the on-call medical examiner. If it is determined that the body should not undergo autopsy and is to be released to a funeral home, the investigation report is sent to a deputy medical examiner at county level who will sign the death certificate. If that deputy is not satisfied that s/he is able properly to certify the cause of death in the absence of an autopsy, s/he will telephone the Chief Medical Examiner or one of the two deputy chief medical examiners and request arbitration. In any event, prior to disposal, one of the two deputy chief medical examiners, or one of the two most senior forensic pathologists, will review such cases on paper.

18.90 One category of case is dealt with differently, by a process called 'approval'. Where a deceased person had been in hospital for an extended period prior to death, in a case

which would otherwise be reportable to the medical examiner (e.g. in the case of a driver in a single-vehicle collision with a bridge who had died from his injuries), the case might well be suitable for approval. The reasoning behind the process is to avoid carrying out an autopsy in circumstances where the injuries are well identified during life. The death certificate is signed by the hospital doctor and approved by the medical examiner who will have had sight of the deceased's medical records.

18.91 The decision as to whether or not an autopsy is to be carried out is made in the first instance by the medical examiner. The deceased's family has a right to challenge the decision to carry out an autopsy. Such a challenge is typically made on four or five occasions each year, usually on grounds of religion. Discussions take place to see if the autopsy can be avoided altogether or steps can be taken to remove or minimise the objection to the autopsy. If the objection cannot be met and it is still proposed to carry out an autopsy, there is a right to challenge a decision before a judge, whose ruling is final.

18.92 Prior to an autopsy being carried out at the OCME, the salient points of the history are discussed by a group of pathologists and trainee pathologists, who convene at the OCME each morning. The autopsies are then performed and the meeting reconvened in the afternoon, when the autopsy findings are presented to the entire pathology staff and the cause of death is discussed. Partial autopsies are rarely carried out.

18.93 Toxicology is carried out in virtually every case where an autopsy is performed, as well as every case where the body is taken to the OCME for external examination. Toxicology is also taken in some cases which do not reach the OCME; forensic investigators have toxicology kits available to them and, if directed to do so by the medical examiner, can obtain a sample of blood at the scene which is sent to the toxicology laboratory at the OCME for screening. Around 200 samples are sent in from the counties and tested in this way each year. Having a toxicological laboratory at the OCME means that results are available very quickly. The fact that toxicology is performed in a relatively large number of cases reduces the cost of the testing in an individual case and also has demonstrated the implication of drugs in a number of deaths in which it had not been suspected. After the seminars, Dr Fowler provided the Inquiry with details of a number of cases where drugs had been found in babies, young children and the very elderly. In one of those cases, that of a 91 year old woman who died in a nursing home, the death was found to have resulted from homicide.

18.94 The medical examiner will examine a death retrospectively, if a concern arises, for example, about a particular nursing home or physician. Dr Fowler said there was no reason why a medical examiner should not investigate certain categories of death prospectively also.

Judicial Investigation of Death

18.95 There is no such thing as an inquest under the Maryland system. Findings of fact as to the circumstances of death are not made, just findings as to the cause of death. Medical examiners have the power to administer oaths and take affidavits as part of the investigative process, but they do not have the ability to subpoena witnesses. An expression of opinion is given at the end of the autopsy report, which includes comment

about the circumstances of death. However, although the opinion is expressed in good faith, it holds no legal status and, in subsequent criminal or civil litigation, is commonly redacted out of the report. An interested person can seek a review of the cause of death, as found by the medical examiner. The review is carried out by the Chief Medical Examiner, and is itself subject to review by an administrative judge and, thereafter, there is a final right of appeal to a circuit court judge.

18.96 With deaths relating to medical care, the medical examiner will gather all relevant information and obtain expert specialist advice on the case. That information is then passed to the Board of Physician Quality Assurance, which is the body responsible for monitoring the standard of care given by doctors.

18.97 Although there is no formal judicial investigation of death, information obtained during the course of the medical investigation is harnessed for the purpose of improving public safety and passed on to a number of relevant bodies, usually the local health officer who is responsible for injury prevention and community health. Industrial accidents are investigated, not only by the OCME, but also by the occupational safety administration. The OCME contributes information to a national clearing house for information relating to product failures.

Cremation

18.98 The same standards of investigation and the same procedures apply, regardless of the method of disposal. Cremation is used much less than burial as a means of disposal in Maryland.

Detecting Shipman

18.99 On the basis of the summaries describing the circumstances of four of Shipman's unlawful killings, Dr Fowler formed the view that Shipman's activities would have been detected by the Maryland system. In relation to the case of Mrs Grundy, he said that, as hers was a death at home discovered by friends, it is likely that the emergency services would have been summoned and the OCME would have been informed of the death. Unless a medical history to support a cause of death had been established, the medical examiner would have ordered that an autopsy be carried out, which would automatically have included toxicological testing. If no autopsy had been carried out, there would have been an external examination together with toxicology. Prior to the hearings, Dr Fowler put the summaries in the four cases to his two deputy chief medical examiners and seven assistant medical examiners. In relation to three of the cases, all nine would have ordered an autopsy and, in relation to the fourth, seven out of nine said they would have done so. 'Old age' is not an acceptable cause of death in Maryland and would be rejected by the Vital Records Department. Even had the death not otherwise come to the attention of the OCME earlier, it would have been referred to the OCME as part of the routine screening process of death certificates. However, this might not have been done until after disposal of the body.

Comments

18.100 The systems for death investigation in Maryland appear highly developed and extremely robust. The level of training of forensic investigators is high. The Inquiry was told that, as in Ontario, their philosophy is to approach deaths critically and with a degree of suspicion. The forensic investigation of the circumstances of death runs in tandem with the medical investigation. The use of external examinations and toxicology, both alone and in combination, constitutes a valuable investigative tool.

18.101 I noted with interest the views of Dr Fowler and his staff that the Maryland system would have detected Shipman. However, this is at least in part due to the fact that doctors do not visit patients at home in Maryland, that the emergency services are likely to be summoned to any death at home and that such deaths are highly likely to be reported to the medical examiner. I can see that once that happens, the investigation is so robust that detection of wrongdoing is highly likely. I consider that those responsible for setting up the new systems of death investigation in England and Wales could learn much from studying the methods used in Maryland. I was particularly interested in the use made of toxicology.

18.102 Another strength of this system appears to be its highly developed procedures for audit and quality assurance.

The System in Finland

18.103 Professor Antti Sajantila, Professor of Forensic Biology, Deputy Head of the Division of Forensic Pathology and Director of the Laboratory of Forensic Biology at the Department of Forensic Medicine, University of Helsinki, attended the seminars and described the system in Finland.

Background and Structure

18.104 Finland has a medical examiner system and there are 13 medical examiners spread over the whole of Finland, six of whom are based in the largest province of South Finland. The population of South Finland is around 1.4 million. About 10,000 deaths occur in the province each year and forensic autopsies are performed in about a quarter of those cases.

18.105 Those involved in the certification of death are provided with extensive training. All medical students are required to undertake modules in forensic medicine and the completion of death certificates. The module consists of 22 hours of small group teaching on the completion of death certificates and external examination of the body. As part of university final examinations, medical students are required to complete five death certificates on the basis of hypothetical medical histories and information as to the circumstances of death. All students attend five forensic autopsies and specialist seminars on forensic pathology. In order to become a forensic pathologist, further comprehensive post-graduate training is undertaken in forensic pathology, clinical forensic medicine and clinical histopathology.

18.106 In South Finland, most of the medical examiners are based at the Department of Forensic Medicine at the University of Helsinki. The medical examiners have the same training as forensic pathologists and check all death certificates. They also have responsibility for educating doctors in medico-legal matters. Certain academic staff from the university forensic medicine departments are accredited to carry out forensic autopsies. Toxicology services in Finland are centralised and all toxicological testing is done at the University of Helsinki. Testing is carried out in 5000 cases each year, in addition to some limited biochemical analysis.

Statutory Framework

18.107 Statutes 1973/459 and 1973/948 specify the circumstances in which police, medical examiners and forensic teams are required to investigate deaths. In addition, separate regulations relating to the notification of death and burial of the deceased, payment of costs associated with certification and autopsy, disclosure of information and other provisions relating to autopsy and forensic examination are contained within statutes 1991/114, 1992/1131, 1997/858 and 1998/99.

Objectives

18.108 Death certification is considered to be an important aspect of medical practice in Finland. The aim of the system is to form as accurate and detailed information as possible about the cause of death, in order to inform future public health policy. Emphasis is placed on the importance of ascertaining the cause of natural, as well as unnatural, deaths and on the importance of the accurate death certificate to society, as well as to members of the deceased's family.

Preliminary Death Investigation

18.109 There is a duty on every person in Finland to report, to either a doctor or a police officer, the fact that a death has occurred. A police officer attending at a scene of death will summon a doctor from the public healthcare centre or a police surgeon. In some cases, the doctor will be able to certify the cause of death without the need to refer the death to the medical examiner or the need for further medical or police investigation. If further investigation is required, two types of investigation can be pursued. The first is a medical investigation as to the cause of death, which will not involve the medical examiner or the police. The second is a forensic, or medico-legal investigation, into the cause of death, which will be ordered in any case that is 'reportable' to the medical examiner. The medical examiner has no investigative role in respect of the factual circumstances surrounding the death and such investigations are carried out by the police.

Deaths Not Reported to the Medical Examiner and Not Investigated by the Police

18.110 If a doctor is able to certify the cause of death without further medical investigation, s/he will complete a death certificate, certifying the cause and manner of death. The Finnish death certificate is comprehensive and contains a considerable amount of information. The deceased's personal details are recorded, together with the certified causes of death.

The cause of death is then classified into one of eight categories (disease, occupational disease, accident, medical treatment or investigative procedure, suicide, homicide, war or 'obscure'). Further classification is required in the case of an accident. A question is then asked as to whether, in the four weeks prior to death, anything more than a minor medical procedure has been carried out. There is then a large section of the form in which the doctor provides a narrative as to the circumstances of death, including the health of the deceased prior to the immediate events leading up to death, essential test results and treatment, and a detailed description of any injury or poisoning linked to the death.

18.111 The signing of a death certificate is taken very seriously in Finland and is seen as analogous to giving evidence under oath in court. In order to complete the form properly, it is necessary for the certifying doctor to make enquiries of relatives and carers and to read the deceased's medical records. Professor Sajantila was unaware of any complaints or problems arising out of the comprehensive nature of the death certificate or the amount of time taken to make investigations and complete each certificate. The Inquiry has seen examples of completed death certificates from Finland and they provide an excellent account of the medical events leading up to death. They are usually completed in typed form. Most certificates are filed within the recommended period of three months from the death and, if no autopsy is required, are generally completed within a few days of death.

18.112 The certifying doctor authorises disposal, then forwards the completed death certificate to the population register centre in order for the death to be registered. The families of deceased persons are entitled to see the death certificate. If not satisfied, they can report the death to the Bureau of Medico-Legal Affairs, which will then refer it to the medical examiner.

18.113 Where a doctor is satisfied that a death is natural, but requires further investigation in order to determine the precise cause of death, s/he can request that a clinical autopsy be performed. The permission of the next of kin is required in order for a clinical autopsy to be carried out, unless the deceased consented during life to the carrying out of the autopsy. Permission can also be obtained from the medical examiner. A clinical autopsy is carried out by a clinical pathologist or a histopathologist (as opposed to a forensic pathologist), on behalf of the clinician, to enable the clinician to certify the cause of death. The cause of death is not certified by the pathologist, in contrast to the position following a forensic autopsy. Although the clinical autopsy is a full invasive autopsy, toxicological analysis is almost never carried out. If, during a clinical autopsy, there is any indication for a medico-legal investigation, the pathologist will contact the police and a forensic investigation will be ordered.

18.114 Although not all deaths are reported to the medical examiner in the first instance, death certificates are audited by the medical examiner, who checks the certificate in every case. In addition, Statistics Finland, the body responsible for collecting mortality statistics, carries out an administrative check of all death certificates. If defects (e.g. relating to the coding of the cause of death) are found in a death certificate, this may be brought to the attention of the certifying doctor.

Deaths Reported to the Medical Examiner and Investigated by the Police

18.115 Certain categories of death are reportable to the medical examiner and fall to be investigated by the police. The police are under a statutory duty to investigate any death

that is not caused by illness, or where the deceased was not attended by a doctor during his/her last illness, together with those caused by crime, accident, suicide, poisoning, etc. and those caused by occupational disease. Although the medical examiner's jurisdiction is strictly limited to 'reportable deaths', s/he can ask for all deaths of a certain category (for example, from a particular nursing home) to be investigated and referred to him/her. The police investigate the death and, as part of the investigation, may instruct a forensic pathologist to perform an external examination or an autopsy. Although the decision whether or not to request an autopsy is for the police, they will be guided by the pathologist in reaching their decision. The family does not have the right to challenge the decision taken by the police to carry out a forensic autopsy.

18.116 In an appropriate case, the pathologist will certify the cause and manner of death on the basis of an external examination, together with the information contained in the police report and the deceased's medical records. Otherwise, a forensic pathologist will perform a full autopsy. If necessary, the pathologist can request that further investigative steps be taken by the police, for example that further medical records be obtained or that photographs of the scene of death be taken.

18.117 The body is released to the family for disposal soon after autopsy, commonly on the same day. The pathologist will inform the population register centre of the death and provide a preliminary autopsy report. Then, usually within a period of three months, the pathologist will produce a full autopsy report, a death certificate and a final written statement. A death certificate provided by one pathologist will be checked by a second pathologist.

18.118 Toxicology is not automatically ordered in the case of every forensic investigation and a decision as to whether toxicology will be ordered is generally taken following the autopsy. Professor Sajantila orders some form of toxicology in around 80–90% of the forensic autopsies he undertakes. The relatively extensive toxicological testing undertaken in Finland has produced unexpected results and demonstrated otherwise unsuspected links between deaths and alcohol, illicit drugs and even medically prescribed drugs.

Judicial Investigation of Death

18.119 Although information gathered in forensic and medical investigations is passed on to various government institutions and organisations, the medical examiner does not hold any judicial hearing into the circumstances of a death and will not make any formal recommendations in the interests of public safety.

Cremation

18.120 There is no distinction in the investigative and procedural requirements according to the method of disposal, and bodies to be disposed of by way of cremation are dealt with in exactly the same way as bodies disposed of by way of burial.

Detecting Shipman

18.121 Professor Sajantila commented on the summaries describing the circumstances of four of Shipman's unlawful killings. In relation to the case of Mrs Grundy, he said that, in Finland,

a forensic investigation should have been ordered because she had led an active life, was not known to suffer from any terminal or life-threatening illness and her death would have had to be regarded as sudden. If a forensic autopsy had been carried out, histology would have been ordered as a matter of course and, although the decision to order toxicology would have depended on the findings of the autopsy, there is extensive use of toxicological testing, which would probably have been carried out. However, before a forensic investigation was ordered, it would have been necessary for the death to have come to the attention of the police. Mrs Grundy's case was reported to the police. However, my understanding of Professor Sajantila's evidence was that, if Shipman had been able to provide a plausible explanation for the death then, even if the police had become involved, they would not have initiated a forensic examination. This is because of what Professor Sajantila described as a natural tendency on the part of police officers to trust the opinion of a doctor. He thought that it would only be in an extreme case that the police officer would challenge the opinion of a doctor. 'Old age' would be an unacceptable cause of death. If certified, it would have been picked up by the medical examiner or Statistics Finland during routine review of the death certificate. However, as Professor Sajantila pointed out in his written evidence, in most cases the body will have been disposed of by the time the check is carried out.

Comments

18.122 The most impressive aspect of the Finnish system of death certification was the emphasis on the importance of accurately ascertaining the cause of death, even where the death was apparently natural. This is of considerable significance, not only for the deceased's family, but also for society generally; it has significant implications for public health. The importance accorded to death certification is demonstrated by the attention paid to the topic of forensic medicine in the training of the medical profession in Finland and in the continuing education offered.

18.123 I was particularly interested in the design of the Finnish death certificate and the detail with which the examples I saw had been completed. This brought home to me how useful a careful summary of the medical history and chain of events leading to death would be for certification or investigation.

The System in Scotland

18.124 Ms Elizabeth Anne Paton, Procurator Fiscal Principal Depute, Crown Office and Procurator Fiscal Service, Edinburgh, attended the seminar and described the system in Scotland.

Background and Structure

18.125 The Crown Office and Procurator Fiscal Service (COPFS) is a Department within the Scottish Executive, headed by the Lord Advocate, assisted by the Solicitor-General, and is responsible for independent public prosecution and deaths investigation in Scotland. The COPFS headquarters are based at the Crown Office, in Edinburgh. The Procurator Fiscal Service is divided into 11 areas and the boundaries conform as closely as possible

to the boundaries of the Scottish police forces. Those 11 areas are divided further into a total of 49 districts. In larger districts, the district procurator fiscal is assisted by a procurator fiscal depute. Both are legally qualified. The Lord Advocate and Solicitor-General are assisted by Crown counsel, who are senior members of the Scottish legal profession, seconded to the Department for a period of about three years. Crown counsel prosecute in the High Court and review and advise on individual cases dealt with by the procurator fiscal.

18.126 In Edinburgh, the Crown Office has a deaths department, with a Procurator Fiscal and a Procurator Fiscal Depute (Ms Paton), who are assisted by a part-time member of the legal staff, an administrator and a secretary. Approximately 2000 deaths are reported in the Edinburgh district each year and autopsies are carried out on approximately half that number. Although the Procurator Fiscal directs investigations, s/he does so with police assistance, particularly in the undertaking of preliminary enquiries, which enables the Procurator Fiscal to take decisions as to the future conduct of an investigation. The Edinburgh police force has a dedicated team of inquiry officers. However, outside Edinburgh, preliminary investigations are undertaken by all police officers.

Statutory Framework

18.127 The Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976 defines the statutory duties of the procurator fiscal in respect of the investigation of deaths. The Registration of Births, Deaths and Marriages (Scotland) Act 1965 provides a statutory framework for the registration of deaths.

Objectives

18.128 The Scottish system bears many similarities to the system in England and Wales. However, it focuses on the holding of a public inquiry in a case giving rise to serious public concern.

Deaths Not Reported to the Procurator Fiscal

18.129 Only certain categories of death are reported to the procurator fiscal. In those cases where the death is not reported, the deceased's treating doctor certifies the cause of the death. The certification procedure for those deaths is similar to the procedure in place in England and Wales, in that a doctor who has treated the deceased during his/her last illness is under an obligation to issue an MCCD. One significant difference in the Regulations is that, under the Scottish system, there is no provision making reportable to the procurator fiscal a death where the certifying doctor has not seen the deceased within a specified period. There is no requirement on the doctor to examine a body after death in order to certify the cause of death; however, Ms Paton said that good practice dictates that this should be done.

Deaths Reported to the Procurator Fiscal

18.130 A large number of specific categories of death are reported to the procurator fiscal for investigation, including any uncertified death. The procurator fiscal also retains a broad

discretion to examine any death where it is in the public interest for him/her to do so. Deaths are generally reported by general practitioners, hospital doctors and the police, and, to a lesser extent, registrars of deaths, where reportable deaths have progressed to the stage of registration. Occasionally, reports are received from members of the public. A telephone call from a person reporting a death will often be put through directly to the procurator fiscal; otherwise, in the first instance, the call will be taken by an administrator or secretary. Details of the report of death are noted on a specifically designed form, recording administrative details as well as the history. Only a member of the legal staff is authorised to advise a doctor to certify the cause of death. The procurator fiscal may ask the police to verify certain factual matters before allowing a doctor to certify.

Death Investigation

18.131 In cases where a death is to be investigated, the procurator fiscal will typically instruct the police to carry out preliminary enquiries. In some areas, dedicated police officers (or 'inquiry officers') are available to carry out investigations on behalf of the procurator fiscal. The police will then submit a report, containing the deceased's personal details, information as to the circumstances of death and the medical history. The procurator fiscal will then determine what further investigative steps should be taken. The precise investigative steps will, of course, depend on the circumstances of the individual case. If there is no certificate of cause of death, the next step is likely to be an autopsy. In most parts of Scotland, however, the procurator fiscal would have the opportunity of a 'view and grant' as an alternative to an autopsy. The Inquiry has received evidence on the 'view and grant' procedure, which derives its name from the fact that a pathologist will view the external aspects of the body, and if s/he can confidently provide a cause of death, grant an MCCD. When carrying out the examination, the pathologist will have available to him/her the police report and the deceased's medical records.

18.132 Further witness statements might be taken by the procurator fiscal or a member of the legal staff. Potential witnesses might be called in for interview to the procurator fiscal's office, a process known as precognition. The procurator fiscal might also meet the families of the deceased. Medical advice might be sought from a pathologist in the first instance and, in a case where the death is associated with medical care, an independent expert with appropriate expertise will be instructed to review the case and prepare a report. As in England and Wales, the investigation is directed by a lawyer, not a doctor.

18.133 In Edinburgh, autopsy services are provided under a block contract with the Department of Forensic Medicine at the University of Edinburgh. Two full-time forensic pathologists carry out the autopsies and are also available to provide medical advice when the need arises. This is the only medical expertise immediately available to the procurator fiscal. The decision to order an autopsy is made by the procurator fiscal and, although there is no formal right on the part of the family to object to the carrying out of an autopsy, in practice any objections made will be taken into account during the decision-making process. The procurator fiscal will request histology or toxicology in an appropriate case and, where the need arises, the pathologist will approach the procurator fiscal and request permission to carry out further investigation. If there is a suspicion of criminal involvement, the autopsy will be carried out by two pathologists. If not, a single-doctor

autopsy will be ordered. Following an autopsy, the pathologist prepares a report, which is significantly more comprehensive and detailed than the equivalent report produced following a coroner's autopsy in England and Wales.

18.134 In the Edinburgh district, the practice is to carry out full autopsies in every case. The 'view and grant' system is not available in Edinburgh. One further noteworthy exception to the full autopsy in Scotland was the practice adopted following the murder of a number of children at a school in Dunblane in 1996. They were shot by a gunman who went on to take his own life. In those circumstances, and on the basis that there could be no subsequent criminal proceedings, the murderer having taken his own life, x-ray examinations of the bodies were taken, in place of autopsies.

18.135 The procurator fiscal is under an obligation to report certain categories of death to the Crown Office, for Crown counsel to decide as to the future conduct of the case and as to whether it is necessary for a prosecution to be brought or a fatal accident inquiry to be held. If the case does not fall into one of those categories, at the conclusion of the investigation the procurator fiscal will make an order that there be 'no further proceedings'.

18.136 When a death is first reported to the procurator fiscal, a provisional cause of death will be provided where possible and the registrar informed of the provisional cause. At the conclusion of the procurator fiscal's investigations, the registrar will either be told that the provisional cause of death is confirmed or be informed of the amended cause. Personal attendance for the purposes of registration is required in Scotland, as in England and Wales.

Judicial Investigation of Death

18.137 The closest equivalent in Scotland to the inquest that is held in England and Wales is the fatal accident inquiry. There is only a relatively small number of fatal accident inquiries and, in the year 2001–2002, only 64 were held, out of a total of 13,625 deaths reported to the procurator fiscal. Fatal accident inquiries are chaired by a sheriff, who is a legally qualified judge, and the case is presented by a procurator fiscal. Fatal accident inquiries are held in public.

18.138 Fatal accident inquiries are mandatory in the case of a death caused by an accident in the course of employment or in the case of a death in legal custody. Fatal accident inquiries are also held at the Lord Advocate's discretion, which is guided by a number of principles, including whether the death occurred in circumstances such as to give rise to serious public concern. In the case of a discretionary inquiry, the views of the bereaved family as to the holding of an inquiry are taken into account. Where a death is apparently caused by a system failure, it is more likely that an inquiry will be held than if it appears to have been caused by an individual failure. The purpose of the inquiry is to establish where and when a death took place, the cause of the death and, in general terms, the cause of any accident that resulted in the death. Findings will be made about any reasonable precautions that might have prevented the death. Following a fatal accident inquiry, it is open to the sheriff to make recommendations for the purposes of future public safety. The recommendations are forwarded to the relevant body or organisation by the procurator

fiscal. Although the recommendations do not have legal status, they apply political pressure to implement changes in furtherance of public safety.

18.139 Where there is no fatal accident inquiry, no formal report or document is prepared summarising the investigation carried out by the procurator fiscal. However, the procurator fiscal will hold discussions with the family and, where the family is interested in receiving further information, details of the investigation and the evidence obtained can be provided. In addition, the autopsy report will be made available to the family. Where appropriate, the report can be sent to a general practitioner in order for the medical aspects of the report to be explained. Alternatively, the family will be invited to a meeting with the procurator fiscal and a pathologist, who will explain the medical aspects of the report.

Detecting Shipman

18.140 On the basis of summaries describing the circumstances of four of Shipman's unlawful killings, Ms Paton formed the view that Shipman's activities would probably not have been detected by the procurator fiscal system, as it is implemented in Edinburgh. In relation to the case of Mrs Grundy, she said that 'old age' would have been acceptable as a cause of death because Mrs Grundy was over 80 years of age. Although the death should have been reported to the procurator fiscal, on the basis that it was sudden, the doctor could have certified the cause of death without reporting it. Even if the death had come to the attention of the procurator fiscal, depending on the precise circumstances and discussion with the treating doctor, the procurator fiscal might well have given the treating doctor permission to certify the cause of death. It is possible that the police would have been instructed to undertake a preliminary investigation into the circumstances of death, but neither the procurator fiscal nor any member of his/her staff would necessarily have made any direct enquiries of the family.

18.141 In relation to the death of Mrs Ivy Lomas, who was unlawfully killed by Shipman on his surgery premises, Ms Paton said that the list of reportable deaths to the procurator fiscal had been amended in the light of Shipman's crimes to include deaths that occur in a general practitioner's surgery. At the time of the death, however, the death might well not have been brought to the attention of the procurator fiscal and, in any event, as in the case of Mrs Grundy, the investigation would have been unlikely to have uncovered Shipman's unlawful activity.

Comments

18.142 The system in Scotland is similar in many respects to that in England and Wales. However, the discretion to select for public hearing only those cases which raise issues of serious public concern has the effect of reducing the number of cases in which a public hearing is necessary and of ensuring that hearings are not held in cases where they can serve no useful purpose.

18.143 I was also interested to hear about the involvement of families in the decision as to whether or not a public hearing should take place and, in the event that no such hearing is thought appropriate, of the arrangements made to inform the family about the deceased's death and its cause.