

From Death We Learn

Lessons from the Coroner



Delivering a Healthy WA

Foreword

A high quality health system requires both internal and external processes to review its standard of care. The coronial process involves the investigation of the manner and cause of deaths reportable under the *Coroners Act 1996*. When making Findings, Coroners are permitted to make any comments or recommendations on any matter connected with the reportable death concerned and which they feel will help prevent a similar event happening in the future. This includes making comments and recommendations on public health and safety issues. Coronial findings therefore provide an important source of information for hospitals and health services to draw from for the purpose of reviewing standards of clinical care.

A small proportion of deaths investigated by a coroner proceed to Coronial Inquest, which is a court hearing to determine the manner and cause of the reportable death concerned. Once the Coronial Inquest is complete and the case is closed a written Finding is prepared and that document then, generally, becomes publicly available. Coronial Inquest Findings are useful to clinicians and hospital governance groups as they provide a readily accessible means through which to learn from past adverse events and improve clinical practice.

Inquest Findings can often be lengthy, making it difficult for health professionals to quickly extract important clinical messages contained within the Inquest Findings.

To help overcome this problem, the Office of Safety & Quality has undertaken to provide short clinical summaries of the Inquest Findings. These summaries highlight the key clinical messages and lessons learned, allowing hospitals and health professionals to benefit more easily from the Coroner's work.

All hospitals and health services are encouraged to use these summaries to raise awareness of the important messages contained in Inquest Findings and as a means to educate health professionals about learning from past events. The ultimate aim should always be to improve clinical practice.



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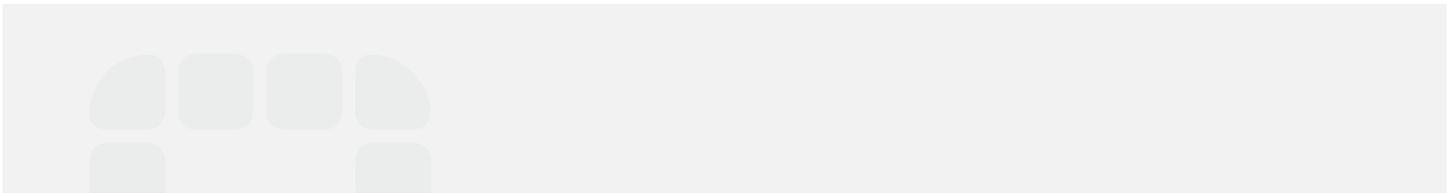
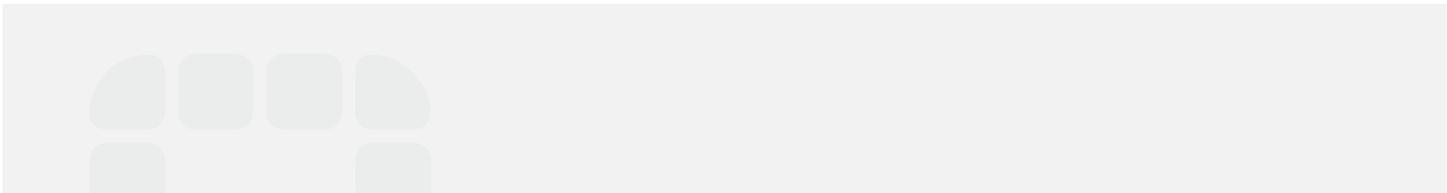




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Executive Summary

The vision of WA Health is to improve and protect the health of Western Australians by providing a safe, high quality accountable and sustainable health care system. The continued success of the health system as a whole is dependant on strong relationships with agencies whose activities impact on health in our community. Health is reliant on such partnerships in the delivery of high quality health care services.

The partnership between the Coroner's Office and the Office of Safety and Quality works within the Western Australian Clinical Governance Framework which aims to provide consumer value, clinical performance and evaluation, clinical risk management, and professional development.

Coronial Inquest Findings provide a wealth of information from which clinicians can learn and clinical systems can improve in order to reduce risks to future patients. From the review of death we can improve the quality of health care for the patients of the future.

In this document we provide summaries of ten recent Coroner's Inquest Findings involving health care. A key message is illustrated by each case. Complete Coronial Inquest Findings are public documents and are longer and more complex than these summaries. Links to the original documents can be found at the websites of:

- the Office of Safety and Quality; and
http://www.health.wa.gov.au/safetyandquality/programs/inquest_findings.cfm
- the Coroner <http://www.coronerscourt.wa.gov.au/>.

These summaries and their key messages are recommended to be used:

- to assist in the education of clinicians;
- for discussion at safety and quality committees; and
- at clinical departments' meetings.

Case 1: CT Scan and Unrelieved Headache

Key Message: *A CT Scan should be considered for patients presenting with persistent severe unrelieved headache.*

A fit young man with a history of migraine developed headaches while attending his general practitioner for the treatment of asthma and a respiratory infection. He was treated with antibiotics, bronchodilators, and analgesics but developed increasingly severe headaches over a two-day period. He presented to a regional Emergency Department where a senior doctor made a diagnosis of migraine. Therapy with anti-emetics, analgesics and intravenous fluids was commenced. He was observed overnight by nursing staff and a junior medical officer during which his headache was noted to be variable in severity. The following day a junior doctor discharged the patient.

Soon after discharge the patient experienced a severe headache and then attended another General Practitioner who organised a CT Scan for the following day. Later that day the patient collapsed and died. Post mortem examination revealed the cause of death to be a cranial pharyngioma.

The Deputy State Coroner found that death arose by way of 'natural causes' and stated that in this particular circumstance the lack of an early diagnosis was not unreasonable. The Deputy State Coroner did note, however, that a positive diagnosis could not have been made without a CT Scan and there was discussion at Inquest on whether or not a more senior doctor with responsibility for discharging the patient would have transferred the patient for an urgent CT Scan.

The Hospital concerned now has 24 hour CT Scan availability and improved senior doctor cover in the Emergency Department. The Deputy State Coroner commented at Inquest that *“improved resourcing by way of equipment and experience goes some way to addressing issues apparent in many of the State’s regional hospitals.”*

While there is a clear health system message here, there is also a clinical lesson. The urgency of a CT Scan should be carefully considered for presentations with unrelieved persistent severe headache.

For further information pertaining to this case refer to the FURNISS Finding, which can be found on the website of the Department of Health’s Office of Safety and Quality and the WA State Coroner.

Case 2: Undiagnosed Abdominal Pain in the Elderly

Key Message: *At risk patients with undiagnosed abdominal pain should have early surgical review.*

A man in his seventies, with risk factors for vascular disease, died of irreversible shock two days after being admitted to hospital with undiagnosed abdominal pain. The post mortem examination confirmed an ischemic bowel.

At Inquest, the Coroner found that the death occurred by way of ‘natural causes’. The Coroner also commented and advised on the following public health issues:

- the importance of obtaining early surgical opinion in undiagnosed abdominal pain in the elderly.
- the need for regular review of patients admitted acutely with undiagnosed abdominal pain.
- the importance of documentation in communicating management plans to junior medical and nursing staff, particularly when no clear diagnosis has been made.
- the need to educate staff about ischemic bowel as a potential cause of undiagnosed abdominal pain.
- the need for appropriate out-of-hours imaging services to be available at the hospital where the death occurred.

A key point from this case is that the diagnosis of ischemic bowel is often delayed until the onset of irreversible shock as the early signs and symptoms are non-specific.

Undiagnosed abdominal pain in patients with risk factors for vascular disease should prompt early surgical opinion prior to the onset of shock.

For further information pertaining to this case refer to the BERTONCINI Finding, which can be found on the website of the Department of Health’s Office of Safety and Quality and the WA State Coroner.

Case 3: Communication, Documentation and Lines of Responsibility

Key Message: *It is a hospital's responsibility to ensure that all staff, including casual and agency staff, have a clear understanding about lines of clinical responsibility and appropriate hospital policies.*

A female patient in her seventies with a history of ischemic heart disease and hypertension developed abdominal pain and vomiting. A number of diagnoses were made over a two-day period including gastroenteritis. She became more unwell and was admitted to hospital for observation. After surgical assessment she was placed on intravenous fluids. A provisional diagnosis of subacute bowel obstruction or pancreatitis was made.

Overnight she developed low blood pressure and was treated with analgesia and increased intravenous fluids. Her managing surgeon was not contacted. After 6 hours of hypotension the patient collapsed and required resuscitation and transfer to a tertiary hospital where she died. A post mortem revealed a perforated diverticulum and peritonitis.

At Inquest, the Coroner found that the patient died by way of 'natural causes'. However, the Coroner made a number of comments on the patient's care. In particular:

- That the frequency of performing and recording observations was inadequate for the clinical setting of intravenous therapy to treat hypotension. Hypotension was at one point attributed to the failure of an automated measuring device without any further steps taken to clarify the issue.

- That there were communication problems and misunderstandings over lines of responsibility between the ward and medical staff. A contributing factor was the use of agency nurses unfamiliar with the hospital's work practices protocol.

While the hospital concerned has taken action on this case there are some general lessons worthy of review by all hospitals. The main lesson to be learned is that lines of clinical responsibility and communication need to be clear to all staff involved in the care of patients. Staff unfamiliar with these responsibilities, such as agency staff, need adequate orientation and/or supervision.

A second lesson to be learned from this case relates to appropriate clinical observation of patients. Observations should be checked, verified, and recorded. The frequency of observations should be increased in a clinically appropriate way when changing therapy in response to abnormal observations.

The Coroner comments on the role and responsibility of the hospital: *"Hospitals must be vigilant in ensuring their nurses appropriately record significant and relevant clinical actions and observations."*

For further information pertaining to this case refer to the DONATELLI Finding, which can be found on the website of the Department of Health's Office of Safety and Quality and the WA State Coroner.

Case 4: Sepsis and Delay

Key Messages:

1. *That delays in resuscitation can lead to death.*
2. *That a hospital's clinical governance process should include audit and reconciliation of medication charts, clinically based mortality and morbidity meetings, and a system for staff performance management.*¹

A previously healthy woman in her forties died of sepsis after an elective surgical procedure. At Inquest, the State Coroner found that there were delays and multiple irregularities in the patient's management including:

- a hospital admission procedure that converted day surgery cases to inpatient care without the knowledge of the medical team;
- delays in request for medical review despite abnormal observations;
- delay in medical review despite request;
- absent or ambiguous medical documentation on inpatient notes and the medication chart, resulting in delay;
- verbal communication failures and inaccuracies between medical staff;
- inappropriate clinical decision-making and performance by medical staff.

The State Coroner further found that there had been a delay in the patient's resuscitation and therapy for septic shock. The patient was found to have died from septic shock and multiple organ failure and the State Coroner returned a finding of 'death by way of misadventure'.

As well as referring this matter to the Medical Board of WA, the State Coroner made the following comments and recommendations on public health and safety:

1. That all hospitals in WA conduct routine audits of Medication Charts to ensure that they are correctly written up and that medical practitioners, newly appointed or transferred, are familiar with the particular charts in use and know how to correctly fill out those charts.
2. That hospitals with a busy surgical practice need to have Morbidity-Mortality conference procedures to help identify patterns of complications and to aid in the early identification of impaired practitioners who may benefit from available help.
3. That future medical contracts in Western Australia specifically require the provision of medical and psychiatric diagnostic information which would be relevant to the performance of that practitioner.

This case has a number of important lessons. At a clinical level the importance of an appropriate response to abnormal physiological observations, and the role of good verbal and written communication in the timely delivery of therapy is highlighted. There are also administrative lessons about the role of quality improvement systems in mortality and morbidity reviews and the surveillance of staff for impaired performance.

For further information pertaining to this case refer to the EDMISTON Finding, which can be found on the website of the Department of Health's Office of Safety and Quality and the WA State Coroner.

1. *Western Australian Clinical Governance Framework, 2005*

Case 5: Mental Health, Alcohol Abuse, Illicit Drug Use and Prescription Drug Abuse in a Rural Town

Key Message: *Appropriate case management is needed when patients present with complex multiple drug abuse, social and mental health problems.*

A middle aged female patient in a rural town died of an hypoxic brain injury having taken a mixed overdose of alcohol and prescription medications to self treat an underlying anxiety disorder. The Coroner found that death arose by way of accident.

Evidence at the Coronial Inquest included:

- a long history of alcohol, prescription, and illicit drug use;
- a recent history of prescription drug dependence;
- drug prescriptions from multiple sources;
- non-attendance at Mental Health referrals;
- a lack of multidisciplinary services to manage combined drug and psychiatric problems in the rural setting; and
- limited voluntary ambulance services in the rural setting.

The Coroner highlighted limitations to services encountered in rural towns compared with metropolitan standards and recommended that consideration be given to the formation of acute response teams in the town concerned.

The case also demonstrates a pattern of alcohol abuse, illicit drug use, and prescription drug abuse, combined with a mental health disorder. While the first step in managing these patients is to recognise the problem, appropriate intervention, referral, and compliance can be difficult in both rural and metropolitan settings.

For further information pertaining to this case refer to the KELLY Finding, which can be found on the website of the Department of Health's Office of Safety and Quality and the WA State Coroner.

Case 6: Pulmonary Embolus - A Diagnostic Delay

Key Message: *The management of thrombo-embolic illness can be improved by the use of diagnostic pathways, which utilise screening D-dimer tests. These pathways can be applied in both the General Practice and Emergency Medicine settings.*

A man in his thirties collapsed and died in hospital of an undiagnosed pulmonary embolus five weeks after a period of prolonged international air travel. He had several presentations in General Practice complaining of occasional calf pain and shortness of breath and had been treated with a ventolin inhaler. On the day of his death he became increasingly unwell and presented to an Emergency Department with shortness of breath and fever. He was initially diagnosed with a chest infection until further deterioration made his diagnosis clear. He died despite advanced resuscitation and thrombolytic therapy.

The Deputy State Coroner found that death arose by way of 'natural causes'.

In her comments, the Deputy State Coroner noted that thrombo-embolic illness can be extremely hard to diagnose and that the patient was low risk for deep vein thrombosis and pulmonary embolus according to published internationally accepted Wells criteria. Despite this, there is reasonable evidence that prolonged airline travel is a risk for deep vein thrombosis.

In addition the Deputy State Coroner noted, that if the patient had undergone D-dimer screening in a General Practice setting this may have led to a correct diagnosis and the progression of the patient's illness may have been averted by treatment.

The recommendation is that General Practitioners review the practicalities of applying sensitive bedside D-dimer screening as part of their diagnostic and therapeutic pathways in the management of thrombo-embolic illness.

This is also a timely reminder for Emergency Departments to review their diagnostic pathways for thrombo-embolic illness to ensure they are up to date.

For further information pertaining to this case refer to the McKAY Finding, which can be found on the website of the Department of Health's Office of Safety and Quality and the WA State Coroner.

Case 7: Death in Custody after Emergency Department Presentation

Key Message: Intoxicated patients present a challenge for health professionals. Staff have a duty to act in the patient's best interests and determine treatment to assist health and welfare.

After being involved in a motor vehicle accident rollover, an uncooperative and verbally abusive young man was discharged to police custody from an Emergency Department without being examined. He died in custody and post mortem examination revealed multiple injuries including chest injuries, abrasions and a fractured pelvis.

The Deputy State Coroner found that death occurred by 'way of accident', and referred the staff involved to the Medical and Nursing Boards of WA. The Deputy State Coroner re-stated the community's expectation that patients brought to an Emergency Department should at least be examined to determine whether or not there is treatment available which may assist the patient's health and welfare.

The lesson from this case is that reasonable attempts should be made to assess, examine and treat intoxicated persons who present for medical care. In such situations staff have a duty to act in the patient's best interest.

For further information pertaining to this case refer to the SAMSON Finding, which can be found on the website of the Department of Health's Office of Safety and Quality and the WA State Coroner.

Case 8: Rehabilitation Patients, Supervision and Resting Points

Key Message: *Use of jargon can lead to misunderstanding and compromised patient care.*

A ninety-year old in-patient, under a ‘Stand by Assist’ physiotherapy instruction during rehabilitation from a hip operation, fell backwards from a Zimmer frame and suffered a fatal head injury. The fall was heard while the patient was left unsupervised. The nurse briefly left the patient’s side to locate a commode chair. While the Deputy State Coroner found that death arose by ‘way of accident’ she also made a number of comments on public health and safety. In particular:

- that the inquest demonstrated that the term ‘Stand by Assist’ is interpreted differently by physiotherapy and nursing disciplines. The importance of clear interdisciplinary communication and the avoidance of jargon terminology was highlighted.
- that there was shortage of resting points generally, and of commode chairs in particular, on a ward involved in the rehabilitation of patients from lower limb surgery.
- that nursing best practice in planning and communication is defined in this situation as a checking process between nurses as to what their intentions are with pieces of equipment and patients.

Final recommendations made by the Deputy State Coroner were for a review of equipment on the ward concerned, and for nurses to check with each other about the distribution and use of equipment in their patient routine. This case also demonstrates the importance of good communication between and within disciplines in the clinical care and safety of patients.

For further information pertaining to this case refer to the SWEET Finding, which can be found on the website of the Department of Health’s Office of Safety and Quality and the WA State Coroner.

Case 9: Isolated Care and Medical Cover

Key Message: Good communication and handover to appropriate medical cover are vital for treating patients in a rural setting.

A fit man in his forties died suddenly on a Sunday morning of acute upper airway obstruction while being transferred by ambulance from a rural hospital without medical cover to a rural hospital with medical cover after a two-day admission with tonsillitis. Prior to his transfer the patient had failed to respond to intravenous antibiotics. The significance of the symptoms of a partial upper airway compromise may have been unrecognised. A post mortem found marked laryngeal oedema associated with haemorrhagic tonsillitis.

While at Inquest, the Deputy State Coroner found that death arose by 'way of natural causes', comments were made in respect of the provision of medical care in the country where isolated general/medical practitioners have difficulty in organising cover.

In particular, the Deputy State Coroner commented that while General Practitioners are out-of-town the care of patients should ideally have been handed over to another available medical practitioner.

A system is under development by WA Country Health Services for country doctors to form a network of cover and consultation. The system aims to allow rural General Practitioners reasonable respite from on call duties while providing proper medical assistance for all hospital patients.

The Deputy State Coroner was informed of the above initiative at Inquest and commended this course of action in order to address her very real concerns about country medical cover.

For further information pertaining to this case refer to the WARETINI Finding, which can be found on the website of the Department of Health's Office of Safety and Quality and the WA State Coroner.



Case 10: Risks of Co-Sleeping with Infants

Key Message: Parents of babies need information and education about the risks of bed sharing and co-sleeping.

A one-month-old baby died while co-sleeping with his mother on a couch. A post mortem found that the death was consistent with restricted breathing and asphyxiation. The Coroner's finding was that death arose by 'way of accident'.

The health risks of sleeping with a baby were reviewed in detail at the Inquest with particular reference to the expertise and advice of the organisation 'SIDS and Kids'.

The Coroner's recommendations included that the advice provided by 'SIDS and Kids' be strengthened and developed for the education of both parents and midwives. For further information refer to www.sidsandkids.org or phone 1300 308 307.

Sharing a sleep surface, including bed sharing and co-sleeping, increases the risk of a fatal sleep accident. The risks are particularly high when a baby shares a sofa or couch with an adult during sleep.

Sharing of sleep surfaces must be avoided in the following circumstances:

- where a baby shares a sleep surface with a smoker;
- where there is adult bedding, doonas or pillows;
- where the baby can be trapped between the wall and the bed, can fall out of bed or be rolled on;
- where the adult is under the influence of alcohol, or drugs that cause sedation, or is overly tired;
- where babies are sharing a sleep surface with other children or pets; and
- where the baby is placed to sleep on a sofa, beanbag, waterbed, or sagging mattress.

Babies must never be left alone on an adult bed or put to sleep on a sofa.

SIDS and Kids does not recommend sharing sleep surfaces with babies but does recommend that babies sleep in a cot or another separate sleeping surface next to the parent's bed for the first six to twelve months of life.

For further information pertaining to this case refer to the VISSER Finding, which can be found on the website of the Department of Health's Office of Safety and Quality and the WA State Coroner.

The Office of Safety & Quality would welcome suggestions on how this publication series may be improved. Please forward your comments to safetyandquality@health.wa.gov.au

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