



Government of **Western Australia**  
Department of **Health**

# From death we learn 2015

2016 Edition

## Acknowledgements

Ms Ros Fogliani, State Coroner, Western Australia

Ms Evelyn Vicker, Deputy State Coroner, Western Australia

Mr Barry King and Ms Sarah Linton, Coroners, Western Australia

Dr Suzanne Redknapp and Dr Astra Lees, Medical Advisors to the Office of the State Coroner

Professor Gary Geelhoed, Chief Medical Officer, Department of Health, Western Australia

The Office of the State Coroner, Western Australia

The Health Services' Safety, Quality and Performance Units

All medical and nursing staff involved in the reporting and review of death

The patients and their families

The Patient Safety Surveillance Unit (PSSU) welcomes suggestions on how this publication series may be improved. Please forward your comments to [PSSU@health.wa.gov.au](mailto:PSSU@health.wa.gov.au).

Extracts of this document may be reproduced by public hospitals and health care agencies within Western Australia, provided due acknowledgement is given to the PSSU, Department of Health, Western Australia. Reproduction of this work for sale or commercial purposes should only be undertaken following written permission of the Director, Patient Safety Surveillance Unit.

From Death We Learn and coronial inquest finding documents identified in this text can be downloaded from the following website: <http://ww2.health.wa.gov.au/Reports-and-publications/From-Death-We-Learn>.

### Disclaimer

All information and content in this material is provided in good faith by the WA Department of Health, and is based on sources believed to be reliable and accurate at the time of development. The State of Western Australia, the WA Department of Health and their respective officers, employees and agents, do not accept legal liability or responsibility for the material or any consequences from its use.

## Contents

State Coroner's Foreword	2
Editorial	3
Abbreviations	4
Introduction to the Coronial Liaison Unit	5
Introduction to inquested cases	6
Hyperperfusion syndrome	7
Diagnostic fixation	9
Case 1: Chest pain	9
Case 2: Sepsis in a rural hospital	10
Undiagnosed pulmonary embolism	12
Misdiagnosed gastroenteritis	14
Anticoagulant management	16
An uncommon paediatric diagnosis	18
Ingestion of button battery	20
Homebirths	23
Case 1: Perinatal asphyxia	23
Case 2: Neonatal sepsis	25
Case 3: Twins	26
Carbon monoxide fatality	30
Prolonged Emergency Department stay	32
On leave from hospital	34
Case 1: Unescorted leave and smoking	34
Case 2: Motor vehicle collision	35
Cluster of suicides from one health service	37
Case 1: Adolescent suicide	37
Case 2: Poor engagement	38
Case 3: Suicide by uncertain means	39
Case 4: Follow-up after discharge	40
Case 5: Smoking and security	41
Reporting deaths to the Coroner	44
Case Study 1	44
Case Study 2	45

## State Coroner's Foreword

As an independent judicial officer, the coroner investigates a reportable death to find out how the deceased died and what the cause of death was. It is a fact finding exercise, aimed not at apportioning blame, but at establishing the circumstances attending the manner of the death. It is in the public interest for there to be a careful and thorough review of the information so that a sudden, unnatural or unexplained death is properly investigated and the cause and manner of that death is properly found and recorded.

Throughout a coronial investigation, there are opportunities to address matters of public health and safety. The coroner's death prevention role is a matter of extraordinary social utility and a cornerstone of the coronial process. The 2016 Asia Pacific Coroners Society Conference is being held in Perth and the key theme for the event is '*Pathways to Prevention*'. The *From Death We Learn* booklet supports this function in the health care setting by promoting learning from inquest findings and recommendations to prevent future harm to patients.

You will note that the majority of inquests for cases included in this booklet did not result in coronial recommendations being made, and often the supervision, treatment and care was determined to be satisfactory. Nevertheless they provide an opportunity for systemwide learning.

One of the recurring contributory factors identified during health-related coronial investigation and inquests, is a failure in communication, particularly in documentation, discharge and handover. This booklet contains some examples of how lapses in communication can have the potential for serious outcomes for patients. I cannot overstate the importance of effective communication in a health care setting.

Sometimes, as a result of internal investigations that the hospital has undertaken, improvements are implemented and noted at inquest. I commend the ongoing efforts of the health services to improve health care delivery by their own inquiries and implementation of corrective actions, and through the detailed biannual reporting to me on actions taken in response to findings and recommendations.

The Patient Safety Surveillance Unit has provided these short clinical summaries for educational and service improvement purposes. I encourage all health services to utilise these summaries as a means of raising awareness of important messages which have come from the investigation of the circumstances attending these deaths so that lessons learned can protect the living. Whilst the summaries of necessity only provide a snapshot of some of the issues, if clinicians are interested, the full text of the findings and any responses to coronial recommendations can be found on the website of the Coroner's Court of Western Australia.

I acknowledge the friends and families of loved ones whose deaths have been investigated by the coroner. It is with the utmost respect to them that I support this publication in the hope that it helps to prevent harm to others in similar circumstances.

Ms Ros Fogliani  
STATE CORONER

## Editorial

This edition of *From Death We Learn* marks a 10-year milestone for this publication. The Department of Health's Coronial Liaison Unit believes that this is testament to its value as an educational tool. The aim of this publication has always been to raise awareness of the lessons learned from coronial investigations into deaths where health care may not have been to the high standard to which we aspire.

Overall, this sentiment was supported by responses received by respondents to the 'From Death We Learn Evaluation Survey'<sup>1</sup>, which was undertaken in November 2015. The purpose of the survey was to seek feedback about the awareness and utility of *From Death We Learn* in order to identify potential improvements. When asked about the reasons for referring to From Death We Learn, approximately 50 per cent of respondents to the question agreed that they used it as a tool in education or professional development sessions. It is also encouraging to see that approximately 50 per cent of respondents for this question agreed that they referred to *From Death We Learn* booklets to identify local quality improvement opportunities.

Again, we see that the majority of cases in this edition have not resulted in coronial recommendations. Nonetheless, the Coronial Liaison Unit advocates that each of these cases presents an opportunity to learn and improve services across WA Health. The key messages and discussion points included with each of the cases are reflective of some of the concerns expressed by members of the Coronial Review Committee.

It is evident from a number of cases herein that health services are actively working to implement service improvements following a serious clinical incident involving the death of a patient. A number of patient safety initiatives have been acknowledged by coroners at inquests during 2015. Effective clinical incident management is as much about recognising what improvements are not working to reduce preventable harm as it is about implementing improvements. Accordingly it is critical that quality improvement programs include elements of ongoing monitoring and evaluation.

This year the Coronial Liaison Unit (CLU) has included a section that deals with reporting deaths to the Coroner including two brief hypothetical case studies. An inpatient hospital death requires health practitioners to be aware of a number of mandatory and statutory obligations particularly reporting requirements under the *Coroners Act 1996*. The 'Death in Hospital Form' and Guidelines were developed in consultation with the State Coroner to assist health practitioners to navigate the key reporting obligations in a timely manner.

The PSSU encourages all health practitioners to contact the Office of the State Coroner if there are any concerns about whether to report a death to the coroner.

---

<sup>1</sup> The From Death We Learn Evaluation Survey Focus Report is available at: <http://intranet.health.wa.gov.au/osqh/docs/reports/From%20Death%20We%20Learn%20Focus%20report.pdf> (WA Health access only)

## Abbreviations

AHPRA	Australian Health Practitioner Regulation Agency
AORC	Adult Observation and Response Chart
CLU	Coronial Liaison Unit
CMP	Community Midwifery Program
CPR	cardiopulmonary resuscitation
CRC	Coronial Review Committee
CT	computed tomography
ECG	electrocardiogram
ECT	electroconvulsive therapy
ED	emergency department
FBP	full blood picture
GBS	Group B Streptococcus
GP	General Practitioner
HIV	Human Immunodeficiency Virus
ICU	Intensive Care Unit
INR	international normalised ratio
IT	information technology
LFT	liver function tests
MFAU	Maternal Fetal Assessment Unit
MHU	mental health unit
OSC	Office of the State Coroner
PROM	prolonged rupture of membranes
RANZCOG	Royal Australian and New Zealand College of Obstetricians and Gynaecologists
RFDS	Royal Flying Doctor Service
U&E	urea and electrolytes
VBAC	vaginal birth after caesarean section
WACHS	WA Country Health Service
WCC	white cell count

## Introduction to the Coronial Liaison Unit

The CLU is situated within the Patient Safety Surveillance Unit at the WA Department of Health. Currently the CLU consists of two Senior Clinical Advisors and a Senior Policy Officer. It was established in 2005 as a health initiative to improve communication between WA Health and the Office of the State Coroner. The CLU facilitates the allocation of health related findings from coronial inquests for implementation in hospitals and health services.

The Coronial Review Committee operates in connection with the Coronial Liaison Unit by providing executive strategic support. It was formed in January 2014 with its main purpose being to improve the governance and decision making in relation to statewide implementation and response to coronial recommendations. The Committee evaluates coronial recommendations and makes decisions about the level of response required. Members also review stakeholder responses provided for the biannual reports to the State Coroner to assess their completeness.

The CLU, in conjunction with the Coronial Review Committee, reviews all public inquests that have a health care aspect to them and places the recommendations via the Chief Medical Officer with the appropriate area within WA Health. Expert advice and comment on the recommendations and actions taken to improve patient safety in response to the inquest findings are fed back to the State Coroner in a biannual report.

For the purpose of quality improvement, the Coroner's Ethics Committee allows the CLU access to post mortem reports to assist clinicians to undertake mortality reviews. Where clinicians require post mortem findings to effectively review a death, an application for the post mortem reports can be made via the CLU.<sup>2</sup>

The CLU continues to work with the Office of the State Coroner to share lessons learned from mortality review to improve future patient care.

---

<sup>2</sup> Business rules for accessing post mortem reports via the Coronial Liaison Unit can be found at: [http://ww2.health.wa.gov.au/Articles/A\\_E/Business-rules-for-accessing-a-confidential-post-mortem-report-via-the-Coronial-Liaison-Unit](http://ww2.health.wa.gov.au/Articles/A_E/Business-rules-for-accessing-a-confidential-post-mortem-report-via-the-Coronial-Liaison-Unit)

## Introduction to inquested cases

Under the *Coroners Act 1996 (WA)* every regional magistrate is contemporaneously a coroner. However, in practice the majority of Western Australian inquests in 2015 were conducted by: the State Coroner Ms Rosalinda Fogliani, Deputy State Coroner Ms Evelyn Vicker, and Coroners Mr Barry King and Ms Sarah Linton.

There were 2,192 deaths reported to the Office of the State Coroner for full investigation in the 2014-15 financial year. A further 908 deaths were dealt with by review of the treating doctor's death certificate recording a cause of death, and were accepted by the coroner. In 2014-15 there were 46 public inquests held and finalised.<sup>3</sup> Of the 46 inquests, 26 of them were mandated in accordance with the *Coroners Act 1996*.

Public inquests are judicial proceedings conducted in open court. The coroner is a judicial officer and receives evidence that is relevant to the inquiry. The objective of an inquest is to establish the facts surrounding the death of the person; the coroner must not appear to determine any question of civil liability or to suggest any person is guilty of an offence.

After taking the evidence at an inquest, a coroner must find, if possible:

- the identity of the deceased
- how the death occurred
- the cause of death
- the particulars needed to register the death under the *Births, Deaths and Marriages Registration Act 1998 (WA)*.

Where an inquest is mandated, for example, in the case of an involuntary mental health patient, the coroner must also comment on the quality of the deceased's supervision, treatment and care.

The coroner may also make comments and/or recommendations regarding any matter connected with the death, including public health or safety or the administration of justice. For example, comments may be made about the provision of healthcare or the actions of other public sector agencies. Where the death is of a person 'held in care' (which includes involuntary mental health patients, prisoners and persons in the custody of police officers, amongst others), a coroner is required to comment on the quality of the supervision, treatment and care of the person while in that care.

The CLU notes all coronial recommendations pertaining to healthcare and provides regular reports to the Office of the State Coroner outlining the responses to each recommendation from relevant stakeholders. These responses have been included in this report where the timeframe has allowed a response to be formulated prior to publication. In accordance with agreement from the members of the Coronial Review Committee, the executive summaries of the biannual 'Progress Report for Health Related Coronial Recommendations' have been made available online<sup>4</sup> since February 2015.

---

<sup>3</sup> Office of the State Coroner. Annual Report: 2014-2015 [internet]. 2015. Government of Western Australia. [cited 2016 May 2]. Available from: [http://www.coronerscourt.wa.gov.au/files/Annual\\_Report\\_2014\\_2015.pdf](http://www.coronerscourt.wa.gov.au/files/Annual_Report_2014_2015.pdf).

<sup>4</sup> <http://intranet.health.wa.gov.au/osqh/reports/> (WA Health access only)

## Hyperperfusion syndrome

### Key Messages

- A clinical review should include checking the nursing notes and observation chart.
- Challenging behaviour from patients can be difficult to deal with and is a potential barrier to good patient care.

A 52-year-old woman died from an intracerebral haemorrhage eight days after successful carotid endarterectomy.

The deceased was a school teacher who had noticed intermittent blurring of her vision. Investigations showed she had moderately severe cerebrovascular disease with complete occlusion of her left carotid artery, and severe stenosis of the right carotid. Her risk of stroke and death was high so she was referred for a carotid endarterectomy. She had an untreated anxiety disorder, normal blood pressure, high cholesterol, and smoked both tobacco and marijuana daily.

The operation was uncomplicated and successful, but post-operatively she suffered from pain, headaches, nausea and constipation. She had a challenging relationship with nursing staff on the ward, and was angry at how she perceived she was being treated. The night before discharge, a junior doctor spent over an hour with the deceased and her husband addressing her concerns.

Her surgeon left orders that her blood pressure was to be well controlled, to minimise post-operative complications such as haemorrhage, stroke, and the rare post-operative hyperperfusion syndrome. Initially her blood pressure was normal but it gradually rose over the course of the four days she remained in hospital. Nursing staff appeared to have attributed high blood pressure readings to her emotional state and post-operative pain, and did not alert medical staff to the rising blood pressure, even when her systolic pressure rose above 200mmHg.

Unaware of the change in her condition, she was discharged home four days after the operation. The following day she suffered a non-survivable intracerebral haemorrhage, and died in the intensive care unit (ICU) four days later.

### Hyperperfusion Syndrome

This rare and difficult to predict condition occurs after reopening a major vessel such as the carotid artery. A loss in vascular elasticity and changes to auto-circulation may lead to cerebral oedema or haemorrhage. It is estimated to occur in between one and eight per cent of patients undergoing carotid endarterectomy, with onset of symptoms up to two weeks post-operatively. Whilst it is associated with rising blood pressure it is not clear if this is causative or symptomatic, and there is no evidence that controlling blood pressure makes any difference to outcome.

## Inquest findings and comments

The cause of death was found to be intracerebral haemorrhage in a lady with underlying cerebrovascular disease and hypertension following a recent right carotid artery endarterectomy. The coroner found the manner of death was by way of natural causes as death was as a result of a known complication of the surgical procedure.

No recommendations were made.

The coroner observed that whilst the deceased “did not endear herself to the nursing staff by some of her more direct and challenging behaviour... she was left feeling, quite rightly, that her post-operative care was not as attentive and compassionate as it should have been”. The coroner also commented on the inadequacy of the inpatient notes made by both medical and nursing staff, which contributed to the decision to discharge the deceased despite her labile blood pressure and headaches.

The coroner noted that many of the staff involved have reviewed and altered their practice following the death of the deceased.

A number of new tools and policies have been introduced to the hospital in the years following the deceased’s death, including a Clinical Deterioration Policy with Adult Observation and Response Chart (AORC), and a Clinical Handover Policy which supports improved handover practices.

## References

- [MacFarlane inquest findings](#)<sup>5</sup>
- [Clinical Governance, Safety and Quality Policy Framework: WA Health Clinical Deterioration Policy](#)<sup>6</sup>

### Discussion points

- What behaviour would you classify as challenging? How does it affect the quality of care you provide? How can you endeavour to provide best care to a patient whose behaviours may be considered challenging?
- How does the Adult Observation and Response Chart (AORC), or the Children’s Early Warning Tool (CEWT), aid in managing patients with abnormal vital signs?

<sup>5</sup> [http://www.coronerscourt.wa.gov.au/Inquest\\_into\\_the\\_death\\_of\\_helen\\_christine\\_macfarlane.aspx?uid=2179-2397-8748-7184](http://www.coronerscourt.wa.gov.au/Inquest_into_the_death_of_helen_christine_macfarlane.aspx?uid=2179-2397-8748-7184)

<sup>6</sup> [http://www.health.wa.gov.au/CircularsNew/circular.cfm?Circ\\_ID=13070](http://www.health.wa.gov.au/CircularsNew/circular.cfm?Circ_ID=13070)

## Diagnostic fixation

### Key Messages

- Reassessing the working diagnosis is important when the patient's condition changes.
- Undifferentiated chest pain is a common presentation to emergency departments, and can be caused by a wide range of conditions. It is important to consider potentially lethal diagnoses such as coronary ischemia, pulmonary embolism and aortic dissection.
- Early sepsis can be difficult to recognise and should be considered in a patient who deteriorates.

### Case 1: Chest pain

A 55-year-old man who died as a result of ruptured thoracic aortic dissection. He was based in Sydney, where he ran a bakery for many years. Following a car crash he suffered chronic back pain and was no longer able to work as a baker. He started using illicit drugs, eventually becoming involved in drug-dealing. Whilst on an interstate trip, he was arrested, charged, and eventually convicted of offences relating to the supply of illicit drugs. He was sentenced to prison in Western Australia, though after a year arrangements were put in place to transfer him back to New South Wales to be closer to his family.

In addition to his back pain, the deceased had recurrent headaches, stuttering and right sided paraesthesia as a result of multiple surgeries for cerebral aneurysm when he was younger. He had inactive Hepatitis C, was a carrier of Hepatitis B, and had prostatic hypertrophy which was well-managed by medication. During his time in prison he received ongoing medical care through clinics at a tertiary hospital.

The day before his death he developed chest pain, and was promptly transferred to hospital for review. Initial investigations including electrocardiogram (ECG) and chest X-ray were normal, and his pain settled with a combination of painkillers, antacid and nitro-glycerine. He remained in the emergency department (ED) for serial troponins, which were normal, however he continued to complain of epigastric pain, nausea and vomiting.

The following morning he became unwell with low blood pressure and an elevated heart rate. A bedside ultrasound showed a pericardial effusion, and so he was transferred urgently to a tertiary hospital for further management. A computed tomography (CT) scan confirmed a Type-A thoracic aortic dissection, and he died on the operating table later that day.

### Inquest findings and comments

The coroner found that death was caused by ruptured dissection of the thoracic aorta, and the manner of death was by way of natural causes.

Expert opinion was sought regarding the delay to diagnosis and transfer to a tertiary centre. The coroner agreed with the opinion provided that the initial care provided was reasonable, given the diagnostic challenge of undifferentiated chest pain that clinicians face.

## Case 2: Sepsis in a rural hospital

A 21-year-old woman died of septic shock with multi-organ failure after being transferred to a metropolitan ICU from a remote site.

The deceased was a healthy young woman from New Zealand. She became ill with fever, cold-like symptoms, abdominal cramping and vomiting, and was taken to the local hospital. She had persistently high fevers up to 40°C whilst in the ED, with tachycardia up to 146bpm and tachypnoea up to 24. Blood was taken on presentation (for FBP, U&E and LFT); however results were not immediately available as the blood samples needed to be transported to another town for processing. She was admitted to hospital under the care of the local general practitioner (GP) for intravenous hydration with a diagnosis of gastroenteritis.

Overnight she remained febrile with a fast heart rate, but by 7.00am the following morning her vital signs had normalised. Nursing staff noted she appeared a little jaundiced. The GP noted she had lower abdominal tenderness and lethargy but that her condition had improved. The deceased continued to feel nauseous and developed high fevers again later in the day. Whilst she was able to shower independently, she was unable to keep food down and remained in hospital overnight.

Late in the evening her blood pressure was low, with a systolic recording of 93mmHg, however the GP was not notified until 2.00am when she had become very agitated and hypotensive with a blood pressure of 63/33mmHg. The GP attended, commenced a dopamine infusion, and arranged for retrieval by the Royal Flying Doctor Service (RFDS), still believing the diagnosis to be gastroenteritis with dehydration. When RFDS attended seven hours later, the deceased was given intravenous ceftriaxone and changed to a noradrenaline infusion. She was taken to Perth and admitted to ICU with septic shock and multi-organ failure, and despite intensive treatment died two days later.

Biochemistry results were not available until around the time of her final deterioration and showed low potassium, low bicarbonate, mildly elevated bilirubin and mild renal impairment. The first FBP result was not available until after the deceased had been flown to Perth and showed a mild neutrophilia.

## Inquest findings and comments

The coroner found that death arose by way of natural causes, with the cause of death multiple organ failure due to undefined sepsis, with no site of infection identified.

Expert opinion provided at inquest centred on the following points:

1. The possible influence the white cell count might have had on the GP's decision to give antibiotics, and if the earlier administration of antibiotics may have influenced the outcome.
2. What the appropriate threshold for giving broad spectrum antibiotics might be.
3. The difficulties in the provision of health care, including ICU level care, in remote areas.

## Coroner's recommendations

1. That clinicians in remote settings consider their capacity to resuscitate patients with sepsis, when assessing a patient's clinical presentation and the threshold for the administration of broad spectrum antibiotics, following the taking of bloods for diagnostic purposes.
2. That additional education and audits on use of the Adult Observation and Response Chart (AORC) [at the site] to ensure appropriate use of those charts.
3. That user-friendly flow charts summarising the guidelines and procedures in operation in rural and remote health services for the successful collection of bloods be placed in collection areas where they are not already in existence.

## WA Health actions

The WA Country Health Service (WACHS) has utilised their periodic publication *Public Safety Matters* to raise awareness of the issues from Case 2. This publication intends to share lessons from adverse events, communicate outcomes and emerging trends and prompt reflection and discussion amongst clinical staff.

Further, WACHS has implemented an audit program to review the adult observation and response chart to improve the recording of physiological observations and escalation following a patient's deterioration.

Wall chart information will be regularly and reliably updated at the site – these charts work in conjunction with collection guidelines and instructions as well as PathWest's Online Test Directory.

## References

- [Nguyen inquest findings](#)<sup>7</sup>
- [Tauai inquest findings](#)<sup>8</sup>
- [Clinical Governance, Safety and Quality Policy Framework: Antimicrobial Stewardship Policy](#)<sup>9</sup>
- [National Antimicrobial Resistance Strategy](#)<sup>10</sup>

## Discussion points

- Aortic dissection can be easily missed. What types of cognitive bias can interfere with the diagnostic process?
- What are the current thoughts for the recognition and treatment of sepsis?
- Discuss the role of antibiotic stewardship.

<sup>7</sup> [http://www.coronerscourt.wa.gov.au/l/inquest\\_into\\_the\\_death\\_of\\_tien\\_chung\\_nguyen.aspx?uid=2950-6824-7076-6948](http://www.coronerscourt.wa.gov.au/l/inquest_into_the_death_of_tien_chung_nguyen.aspx?uid=2950-6824-7076-6948)

<sup>8</sup> [http://www.coronerscourt.wa.gov.au/l/inquest\\_into\\_the\\_death\\_of\\_amanda\\_dana\\_tauai.aspx?uid=1901-1986-3149-8255](http://www.coronerscourt.wa.gov.au/l/inquest_into_the_death_of_amanda_dana_tauai.aspx?uid=1901-1986-3149-8255)

<sup>9</sup> [http://www.health.wa.gov.au/CircularsNew/circular.cfm?Circ\\_ID=13252](http://www.health.wa.gov.au/CircularsNew/circular.cfm?Circ_ID=13252)

<sup>10</sup> <http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-amr.htm#tocstrategy>

## Undiagnosed pulmonary embolism

### Key Messages

- ECGs should be immediately labelled with patient details.
- It is important to ask patients for full details of medications when taking a medical history, particularly for oral contraceptives and other supplements/alternative medications that may not be considered as a medication by the patient.

A 28-year-old woman died as a result of an undiagnosed pulmonary embolism. She was fit and active and had no known medical health problems and her only medication was the oral contraceptive pill, which is known to increase the risk of thromboembolic disease.

The deceased initially presented to the ED complaining of a left sided chest pain that worsened on movement and breathing. An ECG was performed and was reported to the patient and her mother to be normal. She was diagnosed with musculoskeletal chest pain and discharged home.

She went to a GP two weeks later with worsening shortness of breath. An echocardiogram was performed on a Thursday, which showed chronic pulmonary hypertension. The reporting cardiologist rang that evening and left a message for the GP. The GP returned the call the next morning and was advised by the cardiologist to make an urgent specialist appointment. The GP faxed a referral to a specialist, but was unable to contact him and decided to wait until after he had spoken to this specialist before he contacted the deceased with the results (which would be after the weekend).

The following day, the deceased became extremely unwell and collapsed while being driven to the hospital. After almost one hour of resuscitation, she had a return of spontaneous circulation. However, a CT scan of her head showed brain damage consistent with deprivation of oxygen and CT angiogram of her lungs showed a massive blood clot. Brain stem testing confirmed that she was brain dead. The decision was then made to take her off life support.

### Inquest findings and comments

The coroner found the cause of death was brain damage due to deprivation of oxygen following a cardiac arrest, associated with chronic pulmonary hypertension due to chronic thromboembolic disease. Death occurred by natural causes.

With regards to the deceased's ED presentation, the coroner commented that the hospital failed to label and file the ECG taken during her initial ED presentation. There was an unlabelled and unsigned ECG bearing a date 10 years earlier in her medical file. This unlabelled ECG was abnormal showing features compatible with right heart strain consistent with pulmonary hypertension. However, the coroner was unable to make a finding that the unlabelled ECG was the one taken during the deceased's initial ED presentation.

During her initial ED presentation, the deceased was reviewed by a junior ED registrar, who noted no risk of blood clots and that the deceased was not taking any medications. The registrar had no recollection of having reviewed an ECG. On review by the Medical Board, the registrar was found to have an unsatisfactory professional performance in that the assessment to exclude the diagnosis of pulmonary embolism did not include asking the deceased about

being on the oral contraceptive pill. The Medical Board decided not to impose a penalty, after taking into account the registrar's remorse and insight after the event and her willingness to modify her practice.

At the commencement of the inquest hearing, it was noted that the AHPRA had finalised proceedings in relation to three of the doctors involved in the care of the deceased and documentation from those proceedings formed part of the brief of evidence at inquest. The GP was cautioned for failing to urgently refer the deceased to an alternative hospital or specialist when he couldn't contact the specialist. Otherwise, no further action was taken. The cardiologist was found to have no case to answer.

## WA Health action

The coroner noted that, since the inquest, the health service has instituted better review processes to investigate all clinical incidents. The importance of labelling all ECGs has also been reinforced with staff. A nurse is obliged to label all ECGs, and doctors have been instructed not to accept an ECG for review unless it is labelled. The hospital also has implemented its own 'Diagnostic Pathway for Pulmonary Embolism', which notes that the assessment may require specific enquiry about the oral contraceptive pill.

## Coroner's recommendation

1. That general practitioners advise patients to whom they are prescribing the oral contraceptive pill, whether newly prescribed or a repeat prescription, that it is a medication that should be reported when the patient is asked to complete a medical questionnaire, provide a medical history or is asked whether they are taking any medications. This recommendation, and a copy of the finding, will be forwarded to the Western Australian office of the Royal Australasian College of General Practitioners.

## References

- [Zeke inquest findings](#)<sup>11</sup>

### Discussion points

- How are abnormal results managed at your site?
- What clinical decision-making tools would be relevant when reviewing a young woman with chest pain? Are they available and used at your site?

<sup>11</sup> [http://www.coronerscourt.wa.gov.au//inquest\\_into\\_the\\_death\\_of\\_petra\\_zele.aspx?uid=7101-3032-7395-1386](http://www.coronerscourt.wa.gov.au//inquest_into_the_death_of_petra_zele.aspx?uid=7101-3032-7395-1386)

## Misdiagnosed gastroenteritis

### Key Messages

- The diagnosis of gastroenteritis should include consideration of serious differential diagnoses.
- A disproportionately elevated urea can be a sign of gastrointestinal bleeding.
- Normal vital signs in the elderly may be profoundly abnormal for an individual patient.
- There can be a fine line between reassuring patients and appearing to be dismissive of their concerns. Always encourage the patient to return to the ED if they are concerned.
- There is a need for improved sharing of information between health care providers.

A 70-year-old man died as a result of gastrointestinal haemorrhage associated with gastric ulcers. He had a complex medical history, with a background of Type II diabetes, hypertension, chronic renal impairment, gout, obstructive sleep apnoea and phrenic nerve palsy, and had suffered a stroke in his fifties. His chronic diseases were well controlled with medications including metoprolol and aspirin. He lived independently with his wife and worked as a taxi driver.

His wife and son took him to an emergency department when he complained of feeling unwell with dizziness and having passed diarrhoea that was black in colour. He had no nausea, vomiting or fever, and no further episodes of diarrhoea that day. His heart rate was noted to be 92bpm, and his blood pressure described as normal.

Examination of the deceased revealed dark stool but no fresh blood per rectum. Blood tests showed his haemoglobin to be 92, with creatinine of 208 and urea 32. A diagnosis of infectious gastroenteritis with dehydration was made, and despite his son's concerns that admission was required and gastrointestinal bleeding be considered, he was discharged home with loperamide. He was given verbal advice to rest, to see his GP, to pursue endoscopy if the black diarrhoea recurred, and to return to ED if he felt unwell again.

That evening and during the following day the deceased refused his family's encouragement to seek further medical care when he continued to feel unwell and passed more dark diarrhoea. He collapsed at 3.00am the following day and was unable to be revived.

### Inquest findings and comments

The coroner found the cause of death was gastrointestinal haemorrhage in a man with gastric ulcers. The manner of death was by way of misadventure (following misdiagnosis).

Expert opinion at inquest was the appropriate standard of care was not provided as the incorrect diagnosis was made, despite adequate information available to make the correct diagnosis.

The deceased's condition was incorrectly diagnosed and as a consequence progressed untreated. Whilst the deceased had some anaesthetic risks due to his other illnesses, he may not have died when he did had he received appropriate care, namely urgent endoscopy.

The inquest highlighted the unfortunate problem of diagnostic errors in emergency departments, and contributing factors such as difficulties in accessing patients' full medical records, including pathology results. It was speculated that having access to previous renal function and haematology results may have influenced the doctor's diagnosis.

The treating doctor was referred to the Medical Board of Australia through the AHPRA.

## Coroner's recommendation

1. If it is not already doing so, the Western Australian Department of Health, take steps to attempt to identify and have in place a means of giving clinicians in emergency departments timely access to patients' health information from all sources.

## WA Health action

The coroner noted that, since the death of this man, the ED of the treating hospital has made changes to its staffing level, ensuring a good skill mix and consultant support. Discharge summaries are now expected to be provided to patients to promote adequate follow-up care. In addition, a system is now put in place for reviewing abnormal results of discharged patients, allowing patients to be recalled to the ED or advised to see their GP for assessment.

Operating within legislative constraints, health services have reported a number of existing strategies to address concerns about access to patient health information. This includes, but is not limited to clinical documentation standards, ongoing rollout of the webPAS (electronic patient administration system), which will facilitate the sharing of information across regional service providers, and the use of the Picture Archiving and Communication System (PACS). The use of the national electronic health record (My Health Record) is being promoted as an option to share patient information across services.

## References

- [Weiser inquest findings](#)<sup>12</sup>

### Discussion points

- What barriers exist to obtaining all relevant information about patients? How can these barriers be overcome?
- How is safe and appropriate follow-up care organised at your site? How can it be improved?

<sup>12</sup> [http://www.coronerscourt.wa.gov.au//inquest\\_into\\_the\\_death\\_of\\_david\\_yehuda\\_weiser.aspx?uid=4144-3668-9390-3198](http://www.coronerscourt.wa.gov.au//inquest_into_the_death_of_david_yehuda_weiser.aspx?uid=4144-3668-9390-3198)

## Anticoagulant management

### Key Messages

- Practitioners should be aware of relevant practice guidelines.
- It is important to provide patients with written discharge instructions to reinforce verbal instructions.

A 68-year-old woman died of post-operative bleeding following dental extractions whilst on warfarin.

The deceased had been on stable doses of warfarin for many years following replacement of her damaged aortic valve. She had previously suffered infective endocarditis following a dental procedure, leading to damage to her bicuspid aortic valve. Subsequently she was very anxious about seeing a dentist, and was long overdue for dental review when she finally went.

Her dentist recommended many fillings, and also the removal of two teeth. One year later she returned to proceed with the treatment. She disclosed her history of infective endocarditis, valvular heart disease with valve replacement, and long-term warfarin therapy, stating her international normalised ratio (INR) was usually stable in a therapeutic range.

Following appropriate prophylactic antibiotic dosage, the dentist extracted two of the deceased's teeth. He noted clots forming in the socket, so fitted the sockets with dampened gauze, providing extra gauze to take home. He gave her verbal post-operative instructions regarding leaving the gauze in place, not rinsing or brushing her teeth, using usual painkillers, and to call the rooms if she had any concerns.

The deceased was dropped off at home by her daughter's friend. The following day, her daughter visited to check on her, and was concerned that she had dried blood around her mouth and was weak and pale. The deceased refused her daughter's suggestion of going to hospital. Her daughter called her again later that day, but on the following morning her phone call was unanswered. The deceased's daughter rushed to her house to find her dead, with copious amounts of blood seen throughout the bathroom.

### Inquest findings and comments

The coroner found the cause of death was ongoing bleeding from the tooth sockets following extractions whilst on long term warfarin therapy, and that death arose by misadventure.

Two main considerations for dental work in the deceased were discussed. These were the risk of infective endocarditis due to her prosthetic heart valves; and the increased risk of bleeding due to the warfarin. The risk of infective endocarditis was managed appropriately with prophylactic antibiotics.

Oral and Dental Therapeutic Guidelines are available and provide management recommendations for patients taking warfarin who require minor oral surgery. This includes checking the INR within 24 hours prior to surgery, cancelling surgery if the INR is above 4, and using tranexamic acid mouthwash, sutures, and a haemostatic agent to pack the socket if the

INR is between 2.2 and 4. Tranexamic acid mouthwash should also be used for two to five days postoperatively.

Expert opinion was sought, and it was agreed that the lack of excessive bleeding seen at the time of the procedure was likely due to the presence of adrenaline in the local anaesthetic, and that haemorrhage two to four hours later as the anaesthetic wears off is a recognised complication in patients on anticoagulation. It was also noted that post-operative bleeding may occur despite every possible precaution.

The coroner was of the view that clear written instructions should have been provided to the deceased in addition to verbal instructions, and these should have included after-hours emergency telephone numbers and instructions to seek help in the event of bleeding.

The coroner could not conclude that the failure to apply the guidelines or provide written post-operative instructions contributed to the death, however the coroner did conclude that management of the deceased was deficient.

The dentist was referred to the Dental Board of Australia for inquiry into his conduct.

## References

- [Moriarty inquest findings](#)<sup>13</sup>

### Discussion points

- How are post-operative and post-procedural instructions conveyed to patients at your site? How can this be improved?
- What tools or guidelines exist to help manage anticoagulation treatment?
- How do you manage the bleeding risk for patients undergoing procedures?

---

<sup>13</sup> [http://www.coronerscourt.wa.gov.au/l/inquest\\_into\\_the\\_death\\_of\\_myosotis\\_julianna\\_moriarty.aspx?uid=6819-1479-7342-1806](http://www.coronerscourt.wa.gov.au/l/inquest_into_the_death_of_myosotis_julianna_moriarty.aspx?uid=6819-1479-7342-1806)

## An uncommon paediatric diagnosis

### Key Messages

- Parents should be encouraged to re-present to the ED if their child shows signs of deterioration or if there is no improvement.
- Discharge advice given to parents should be clear, including signs of deterioration that they should watch out for and when to seek further medical help.

A fully immunised, fit and well toddler died after a prolonged febrile illness, as a result of myocarditis, induced by Kawasaki's Disease.

The child initially became unwell with persistent fever, lethargy, and decreased oral intake. On day three of the illness, he was taken to a paediatric ED, where he was diagnosed with tonsillitis and cervical lymphadenitis and was discharged home on oral antibiotics and ibuprofen. His parents were instructed to return if there was any increase in the lymph node swelling in his neck or if they had any other concerns. A discharge letter was sent to his GP.

The next day, the child developed a widespread rash and diarrhoea. He was refusing all food and drink, and still had a high fever. He was taken to his GP, who thought the rash was a reaction to the new medications, and advised the antibiotics and ibuprofen be stopped. On day six of the illness, the child continued to have a high fever and had also developed dry cracked lips, a slight cough and red eyes. His parents took him to the paediatric ED where he was seen by a paediatric registrar and a consultant. Both doctors felt that the child had a viral illness and that Kawasaki's Disease was unlikely as he was not extremely unwell, and did not have peeling of the skin. This was, however, not documented in the notes. A throat swab for streptococcus came back negative and so the deceased was discharged home with no further antibiotics. His parents were extremely concerned, and wanted him to be admitted for further tests, but were assured that the deceased was not seriously ill. Both parents felt that they were not encouraged to return to the ED if they still had concerns. A discharge letter was sent to his GP.

On day seven of the illness, his cough and diarrhoea had worsened, he continued to have a high temperature, and was vomiting any oral fluids. In the consultation, the GP considered other diagnoses such as measles and whooping cough. His attempts to reassure the parents led them to believe they were being discouraged from returning to the hospital.

The next day, the deceased deteriorated further. He was still febrile with a rash, cough, profuse diarrhoea, and now swelling of his face, feet and ankles. At 11.30pm his parents heard a gurgling noise from his room and rushed in to find him unresponsive. Cardiopulmonary resuscitation (CPR) was commenced and an ambulance called. The ambulance arrived eight minutes after receiving the call to find him apnoeic and asystolic. Resuscitation was continued by the ambulance officers and the ED, but the child was declared dead half an hour after his arrival in ED.

### Inquest findings and comments

The coroner found the cause of death to be myocarditis, induced by Kawasaki's Disease and that the death occurred by natural causes.

Expert opinion was that whilst Kawasaki's Disease can be difficult to diagnose and would not have been obvious on his first ED presentation, his second ED presentation was consistent with a diagnosis of Kawasaki's Disease. It was impossible to say with certainty whether admission for the second ED presentation would have changed the outcome, but the coroner considered there was a possibility it might have.

The coroner expressed concern that the parents felt they were discouraged from taking him back to hospital for further review and there was discussion at inquest around the fine line between reassuring parents and appearing to be dismissive of their concerns.

Whilst the Coroner made no clear recommendations, she highlighted the importance of elevating suspicion of Kawasaki's Disease in paediatric EDs, of encouraging re-presentation of the sick child, and improving the quality of discharge letters and discharge advice to parents/carers.

The Coronial Review Committee members acknowledged that this was a rare and tragic case and recognised the difficulty in diagnosing Kawasaki's Disease. Members agreed that, whilst the criteria for Kawasaki's Disease were evident in hindsight, early symptoms are common to many other illnesses. Members echoed the coroner's concerns with regard to considering family concerns and encouraging their return to hospital.

## References

- [Tao inquest findings](#)<sup>14</sup>

### Discussion points

- What is Kawasaki's Disease and why might it be difficult to diagnose?
- How can discharge advice to patients and their families be improved?

<sup>14</sup> [http://www.coronerscourt.wa.gov.au/l/inquest\\_into\\_the\\_death\\_of\\_christopher\\_ling\\_tao.aspx?uid=1902-1742-3223-5370](http://www.coronerscourt.wa.gov.au/l/inquest_into_the_death_of_christopher_ling_tao.aspx?uid=1902-1742-3223-5370)

## Ingestion of button battery

### Key Messages

- Ingestion of button batteries may be fatal.
- No clear history of ingestion may be apparent.

This case occurred in Queensland, and findings were delivered by the Coroners Court in Brisbane. The coroner identified that the death highlighted that action should be taken at national and state level and his recommendations are of significance to all States and Territories.

A four-year-old girl ingested a button battery and later died<sup>15</sup> of haemorrhage due to an aorto-oesophageal fistula. The ingestion was unwitnessed and undetected until an X-ray was done. She died within three hours of the battery being discovered.

Two weeks prior to her death, she had been diagnosed with giardiasis by her GP. Four days later, she was witnessed spitting and when questioned by her mother, she responded “there is something in my throat”. In the next four days, the deceased stayed with her grandmother and her symptoms included black stools, abdominal cramping and a high temperature, which were attributed to Giardia. Otherwise, she was eating, playing and sleeping normally.

In the morning of the day she died, the child had a bloody nose and vomited blood twice soon afterwards. The ambulance attended and provided a provisional diagnosis of epistaxis with secondary survey stating “bleeding from the nose and mouth”. She arrived in the ED, where she was diagnosed with epistaxis. Upon leaving the ED, the deceased vomited blood again. She was observed in ED over the next four and-a-half hours and a fluid balance chart was commenced. During this time the child’s heart rate trended to the upper limit of normal range. Further vomiting prompted a phone consultation with a paediatric registrar, after which the deceased was again discharged.

One hour after reaching home, the child started vomiting blood again and collapsed onto the floor beside the lounge. Emergency services were called. Observations at ED revealed a blood pressure of 70/50mmHg and a heart rate of 150bpm. With a complete recent history, the possibility of gastrointestinal bleed was considered. Transfer to a tertiary paediatric centre was sought and blood transfusion commenced. Before the transfer could take place, the child collapsed and vomited again. She was intubated and it was as a result of the routine post-intubation X-ray that the battery was detected.

Immediate transfer was arranged to a tertiary centre. The child went into cardiac arrest upon landing of the aircraft. Within 10 minutes the child was in the operating theatre where she remained in cardiac arrest. The size of the aortic defect prevented any corrective procedures and the team decision was that the situation was futile. She was pronounced deceased.

---

<sup>15</sup> This death and inquest occurred in Queensland but as it has broader implications for public health and safety in WA, it is included in this publication.

## Inquest findings and comments

The coroner found the cause of death was haemorrhage due to an aorto-oesophageal fistula, which was caused by an oesophageal foreign body (battery).

## Coroner's recommendations

The coroner made 13 recommendations; the following recommendations are relevant to WA Health. For a full account of all recommendations refer to the full inquest findings.

### Recommendation 6

That all State Health Departments:

- a. Coordinate with a view to developing a national reporting system for battery related exposures and injuries
- b. Promote Poisons Information Centre services as a first point of information for families following a battery exposure
- c. Develop retrieval and management protocols for button battery related injuries for their particular jurisdiction. This protocol should be shared with the Poisons Information Centre network
- d. Redesign their 24-Hour Fluid Balance Charts and introduce protocols to ensure that it is clear where vomit and blood should be recorded, and to standardise the way in which loss of blood is described (in relation to volume, consistency and colour). The form should include the patient's weight and a formula for calculating circulating volume. (This form re-design is a broader health issue, not just related to button battery ingestion).

### Recommendation 7

That all Paediatric Hospital sites:

- a. Increase awareness of the identification of button battery ingestion amongst staff, patients, and patients' families
- b. Develop algorithms for foreign body related injury and upper gastrointestinal bleeding that highlight the potential involvement of disc batteries. Such algorithms should be accessible externally.

## WA Health actions

The Coronial Review Committee reviewed these recommendations and determined that the focus of response should be on raising awareness of the symptomology and management following ingestion of hazardous materials. The CLU disseminated these findings to all WA Health sites operating an emergency department to raise awareness and promote education. A number of resources and public awareness campaigns using different media have highlighted the risks associated with the ingestion of button batteries, particularly for children.

## References

- [Steer inquest findings](#)<sup>16</sup>
- [Kidsafe Button Battery Ingestion: An analysis of differences in injury severity outcomes between countries](#)<sup>17</sup>

### Discussion points

- Why are button batteries so dangerous when ingested?

<sup>16</sup> [http://www.courts.qld.gov.au/\\_data/assets/pdf\\_file/0004/444289/cif-steer-sa-20151103.pdf](http://www.courts.qld.gov.au/_data/assets/pdf_file/0004/444289/cif-steer-sa-20151103.pdf)

<sup>17</sup> [http://www.kidsafe.com.au/Kidsafe%20ACT%20Inc%20-%20Research%20Report%20-%20Button%20Battery%20Ingestion%20-%20An%20analysis%20of%20differences%20in%20injury%20severity%20outcomes%20between%20countries\[1\].pdf](http://www.kidsafe.com.au/Kidsafe%20ACT%20Inc%20-%20Research%20Report%20-%20Button%20Battery%20Ingestion%20-%20An%20analysis%20of%20differences%20in%20injury%20severity%20outcomes%20between%20countries[1].pdf)

## Homebirths

### Key Messages

- Many factors may influence a woman's decision to have a homebirth.
- Planned home birth with a qualified home birth practitioner is a safe alternative for women determined to be at low risk of pregnancy and birth complications.
- WA Health supports publicly funded models of planned homebirth with community-based midwifery care that have clear management guidelines.
- Women should be counselled about the potential for transfer to hospital should complications arise.
- Systems and communication processes should be put in place for a smooth transition to hospital care in the event of complications.

### Case 1: Perinatal asphyxia

A newborn baby suffered severe hypoxic ischaemic encephalopathy due to perinatal asphyxia and was palliated.

The mother's first pregnancy in Europe resulted in unexpected perinatal asphyxia. Initially she had elected to deliver at home, as is common in parts of Europe, but she decided to move to hospital after progressing more slowly than she had expected. No signs of foetal distress were detected, however when born the baby required resuscitation and time in ICU. The child subsequently had a good outcome with normal growth and development.

During her second pregnancy, the mother enrolled in the Community Midwifery Program (CMP) and disclosed the events around her first delivery. Her initial assessment occurred when she was 14 weeks pregnant. The first midwife assured her that her choice of home birth would probably be okay, but would be dependent on advice from the obstetrician.

She and her partner met with the obstetrician when she was around 33 weeks pregnant; however, the midwife she'd met previously was not able to attend the meeting.

The obstetrician advised that home birth was not suitable, given the previous unexplained perinatal asphyxia. This opinion was written in the hand-held pregnancy record and in a letter to the CMP, along with requests for the midwife to contact the obstetrician to discuss the plan, by which he meant the choice of hospital for delivery. He was happy for the CMP to continue to provide antenatal care. The parents were upset at the recommendation, but accepted it and later made plans to deliver at hospital.

Unfortunately there was some ongoing confusion over the obstetrician's recommendation and request for further communication. The midwife believed that home birth was still a safe option, and that the obstetrician was overreacting. She reassured the mother that she could give birth safely at home, with two midwives present.

The day prior to the birth, the mother felt unwell. She called the midwife, who called her manager for advice. The midwife was directed to call the obstetrician which she did, but only

mentioned the current symptoms and did not discuss the plans for home-birth, despite the previous miscommunications.

The obstetrician recommended the mother be reviewed at a Maternal Foetal Assessment Unit (MFAU), and that took place late afternoon. She was more than 41 weeks pregnant at this point. She discussed her plan to birth at home with the MFAU staff, but did not mention the obstetrician's concerns as she believed that had been addressed by the midwife. She mentioned she was feeling tightenings but was reassured this was not early labour, and after review she was discharged home with plans for review in two days' time. The obstetrician's notes in the pregnancy record were not seen by staff that day.

Later that evening the mother went into labour and gave birth at home with two midwives present. On delivery the baby was not breathing. Resuscitation was commenced and transfer to hospital arranged. After several days of review and testing, a diagnosis of ischaemic encephalopathy was made with very poor prognosis. The decision was made to palliate him at home and he died ten days later.

The coroner noted that the mother went on to have another child, delivered by elective caesarean section.

### **Inquest findings and comments**

The inquest into the death found that his death occurred as a result of severe hypoxic ischemia encephalopathy due to apparent perinatal asphyxia. The manner of death was by natural causes.

Expert opinions differed as to whether hospital delivery would have resulted in a different outcome. However all agreed that the birth was too high risk to be managed at home and the coroner found that the safest environment for the delivery of the deceased was in a hospital.

The midwives were referred to the Australian Health Practitioner Regulation Agency (AHPRA) in association with the Nursing and Midwifery Board. Two of the midwives had conditions imposed on their registration and one has ceased working as a nurse.

### **WA Health action**

A number of changes to the CMP were proposed, and most have been completed. These are aimed at formalising processes for documenting and communicating information. The coroner commended these changes, and highlighted two particular areas of change

1. Updating inclusion/exclusion criteria to include a significant neonatal history, not previously part of the criteria which focussed on the mother's medical and obstetric history.
2. Establishing a formal process of handover between the MFAU and the CMP.

The coroner noted that the new MFAU discharge form and related clinical guideline does not cover any confirmation of the birth plan, and felt it prudent to be included this on the form.

### **Coroner's recommendation**

The coroner recommended that the [health service] give consideration to improving the method of recording the result of the mandatory obstetric review required by CMP policy so that it is easily accessible for all health professionals in the pregnancy record. Further, that the

CMP Discharge Form be amended to include a section confirming the birth plan and the obstetrician who has approved it, as well as a section indicating whether the birth plan should be reconsidered due to any issues identified during the MFAU admission.

## Case 2: Neonatal sepsis

The mother's first pregnancy was booked for delivery at the birth centre. However due to a breech position and obstetric cholestasis, the first baby was delivered by caesarean section. The mother experienced subsequent post natal depression and post-traumatic stress disorder and was terrified of hospitals and medical interventions.

When she became pregnant again, she decided on an independent midwife and a home birth and hired a private midwife. A second midwife attended as the back-up midwife during labour. The mother declined ultrasound scans, obstetrician review or Group B streptococcal infection (GBS) screening.

The mother's waters broke at 39 weeks.

The first midwife attended that evening and made notes during the labour but there were no contemporaneous notes available at inquest. Her back-up midwife also attended. Both parents recall being asked if they wanted to go to hospital, which was declined but did not recall being advised of any urgency to go to hospital.

The baby was born the next evening with meconium stained liquor and Apgar's of seven at one minute and nine at five minutes. The placenta was delivered approximately 30 minutes later and was noticed to smell badly. The second midwife went home soon afterward. Approximately one hour post-delivery the baby became floppy. The father drove them to the hospital as they lived close by, and the midwife provided bag mask ventilation to the baby.

When the baby arrived at hospital he was floppy and pale with agonal gasps and a heart rate of 50bpm. The baby could not be resuscitated and was pronounced deceased.

In relation to the antenatal care, the coroner held that the deceased's mother was provided with sufficient information regarding the decision to pursue a vaginal birth after caesarean section (VBAC) at home and to not undergo GBS screening however was critical of documentation in this regard.

The coroner recognised maternal resistance to hospital transfer however held that the midwife's failure to recommend hospital transfer in the circumstances of prolonged rupture of membranes (PROM) was poor midwifery practice and below the standard expected of a registered midwife.

Given the unknown GBS screening, the PROM and the malodorous placenta the expert opinions were that the baby should have been transferred to hospital. The coroner held that the information and advice given to the mother was below the standard reasonably expected of a registered midwife.

At the time of the inquest both midwives had ceased to be registered.

The coroner reviewed international and national practices and opinions on home birth and also alternative pathways for women and midwives in difficult cases. The coroner agreed with the expert evidence that better communication between health professionals and the patient, with the wellbeing of the patient the primary focus, was the key to avoiding similar outcomes.

## Inquest findings and comments

The inquest into this death found that the baby's death occurred as a result of Group B streptococcal infection and meconium aspiration with early bronchopneumonia. The manner of death was by natural causes.

The coroner made no recommendations in this matter.

There was extensive discussion with regard to the following points at inquest:

- The level of information provided to enable the mother to make effective, safe decisions in regard to the birth and other supportive care.
- The lack of documentation in regard to the home birth including a record of advice and decisions.
- The lack of a plan for action in the case of complications noting the high risk nature of the delivery.

## Case 3: Twins

A baby was born at home, the second of twins. There were no signs of life at his birth, and following prolonged resuscitation efforts at home, in the ambulance, and at hospital he was declared deceased. There was some uncertainty as to if his birth came under the coroner's jurisdiction, being possibly regarded as a stillbirth, however after deliberation the coroner determined that a slow, faint heart rate had been detected and proceeded with this inquest.

The mother had previously had a water birth at home with good outcome under the care of the CMP. She had a family history of homebirths and was interested in natural birth and birth choices. She signed up to the CMP when around eight weeks into her second pregnancy. During her second trimester, it became apparent that she was carrying twins. She was aware that she would no longer be accepted as low risk on the CMP, and so stated she was happy to organise an independent midwife to support twin homebirth if necessary.

Community Midwifery Program staff clarified in writing that she was no longer considered as low-risk, and as such the CMP would not be able to support her in a homebirth. An alternative shared care model was proposed allowing the ongoing involvement of the CMP midwife during antenatal care and as a support person on the labour ward in hospital.

During her first meeting with an obstetrician, the mother was informed that if the first twin was in transverse lie at the time of delivery, then caesarean section would be the only option for delivery. However she was around 31 weeks pregnant at the time, and it was expected that the babies might change their positions over the weeks to come. She continued to have regular ultrasound scans and attended antenatal care with both midwife and obstetrician.

At approximately 34 weeks pregnant, the mother met with a second obstetrician at the same hospital. The first twin was now in breech position, and delivery options were discussed again. The obstetrician indicated that she would be happy to support an attempt at vaginal delivery in hospital under certain conditions, though most obstetricians would not. The hospital's Non-Standard Management Plan form was filled out. This form provides a record of interactions between the woman and the clinician in circumstances where the clinician does not recommend the proposed birth plan, confirming that she understands that her plan is not recommended by the clinician and not supported by hospital guidelines, but consents to pursue her plans regardless. This is in keeping with the approach that hospital staff cannot compel women to do something they do not wish to do or to accept care.

Two weeks later, the obstetrician undertook a further extensive discussion regarding the risks around vaginal delivery and elective caesarean section at 38 weeks of pregnancy. The obstetrician announced that she would be on leave over the next few weeks, and the first obstetrician involved would be taking over her care. The mother was concerned that she would be forced into undergoing caesarean section with no trial of labour and did not attend any further appointments made for her at the hospital or with the CMP. She informed concerned staff that she had found new caregivers and allowed them to believe she was booked to deliver at another hospital.

The new caregivers were a local independent midwife, and a previously registered midwife who was still providing midwifery services. At the time of this delivery the former midwife was under scrutiny in coronial investigations into homebirths in South Australia. Other independent midwives and obstetricians had been approached but none had been willing to be involved.

The mother went into labour and was attended by the independent midwife and former midwife. No records of the delivery or subsequent resuscitation were kept, contrary to national competency standards for midwives.

The first twin was born healthy, but the second twin was delivered 38 minutes later, after the placenta, not breathing and unresponsive. Conflicting evidence was given by those present regarding the resuscitation efforts but they appear to have been substandard and delayed in onset. Good resuscitation efforts were subsequently undertaken at hospital, but were unsuccessful.

## **Inquest findings and comments**

The cause of death was found to be intrapartum hypoxia due to placental abruption. The manner of death was natural causes.

The coroner found that the evidence supports the finding that the decision to homebirth was made on the background of a strong preference on the parents' part for a home birth and a perception that the hospital would not accommodate their birth preferences, whilst accepting expert opinion that hospital staff had attempted to offer them the best possible scenario for the birth.

The coroner made no recommendations in this matter.

Expert opinion was that the standard recommended management for vaginal delivery of twins; namely continuous monitoring, and an epidural in advance to expedite emergency caesarean-section, or elective caesarean-section, would have led to the deceased being born healthy and well, with minimal maternal risks. Comment was made that whilst twin pregnancies remain high risk, the reduction in risk for the death of the second twin in the twenty-first century is solely due to the availability of methods to effect the immediate delivery of the baby with skilled staff present to resuscitate the newborn baby, and that home birth is never a safe option for the delivery of twins.

There was extensive discussion around the following points at inquest:

- There is a move in Western Australia to introduce the *Restricted Birthing Practices Bill* to prevent unqualified and unregistered people from providing planned homebirth services, similar to legislation enacted in South Australia.
- The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) maintains that the outcome of a healthy baby and healthy mother are paramount, and thus does not endorse planned homebirth as a model of care.
- The conflicting philosophy is that the process is just as important as the outcome, and there is concern that if women's choices regarding birth are not fully supported, some women may elect to have unassisted births instead.
- WA Health's position is to provide support for low-risk women to have homebirths, and to acknowledge that women have the right to have their informed choices respected, as demonstrated by the Non-Standard Management Plan.

The Health Practitioners Tribunal of South Australia determined that the former midwife's conduct was professional misconduct and she was prohibited from providing any further services associated with midwifery, though sadly after assisting with another homebirth of twins with a similar tragic outcome.

The local independent midwife was reprimanded by AHPRA and restricted from assisting with homebirths and later surrendered her registration.

## **WA Health actions**

Effective 1 July 2015, the CMP was realigned and now comes under the governance of the Obstetrics and Gynaecology Clinical Care Unit of King Edward Memorial Hospital. The mandatory obstetric review is documented in the patient record and is signed by the obstetrician reviewing the mother.

A new Non-Standard Management Plan sticker alerts staff when a woman has declined to accept the management plan recommended by the obstetrician – this is signed by both the woman and the obstetrician.

Further strategies to improve practices, governance and evaluation of services have also been implemented, including: a review of the CMP inclusion criteria; review of the home to hospital transfer guidelines; the role of the support midwife has been clarified; introduction of formal policy about recording and handling of correspondence; scope of practice included in orientation, education and performance appraisal program; improvements to the CMP orientation program; neonatal resuscitation education requirements; and, improvements to ongoing audits and monitoring of CMP inclusion against the criteria, referral forms and the clinical handover process.

## References

- [Baby B inquest findings](#)<sup>18</sup>
- [Baby C inquest findings](#)<sup>19</sup>
- [Baby P inquest findings](#)<sup>20</sup>
- [WA Health Policy for publicly funded Home Births including guidance for consumers, health professionals and health services](#)<sup>21</sup>
- [Review of homebirths in Western Australian 2008](#)<sup>22</sup>

## Discussion points

- How do you approach discrepancies between patient choice and best clinical practice?
- How do you engage with midwives in private practice to ensure care is escalated when complications develop?
- How effective are collaborative arrangements?
- Should there be more education about consultation and referral and what that means?

<sup>18</sup> [http://www.coronerscourt.wa.gov.au/Inquest\\_into\\_the\\_death\\_of\\_baby\\_b.aspx?uid=9615-9651-9239-2455](http://www.coronerscourt.wa.gov.au/Inquest_into_the_death_of_baby_b.aspx?uid=9615-9651-9239-2455)

<sup>19</sup> [http://www.coronerscourt.wa.gov.au/Inquest\\_into\\_the\\_death\\_of\\_baby\\_c.aspx?uid=4158-1005-8949-1057](http://www.coronerscourt.wa.gov.au/Inquest_into_the_death_of_baby_c.aspx?uid=4158-1005-8949-1057)

<sup>20</sup> [http://www.coronerscourt.wa.gov.au/Inquest\\_into\\_the\\_death\\_of\\_baby\\_p.aspx?uid=4307-4293-6344-3452](http://www.coronerscourt.wa.gov.au/Inquest_into_the_death_of_baby_p.aspx?uid=4307-4293-6344-3452)

<sup>21</sup> [http://www.health.wa.gov.au/CircularsNew/circular.cfm?Circ\\_ID=13045](http://www.health.wa.gov.au/CircularsNew/circular.cfm?Circ_ID=13045)

<sup>22</sup> [http://www.healthnetworks.health.wa.gov.au/publications/docs/11284\\_HOMEBIRTH.pdf](http://www.healthnetworks.health.wa.gov.au/publications/docs/11284_HOMEBIRTH.pdf)

## Carbon monoxide fatality

### Key Messages

- The carer's concerns and information must be given the appropriate weighting.
- Suicide may be preventable but not always predictable.

A 49-year-old man died of carbon monoxide toxicity a few days after undergoing psychiatric assessment at a metropolitan emergency department.

The deceased was experiencing work-related stress resulting in deterioration in his mental health in the month before his death. His wife recognised these changes as similar to those leading to a suicide attempt 10 years previously. She took her husband to the GP three times over three days. He was given medication for sleeping problems, commenced on an antidepressant and booked to be reviewed for a Mental Health Care Plan, but when he disclosed thoughts of suicide to his wife, and subsequently to his GP, he was referred to an emergency department for psychiatric review. He underwent comprehensive assessment that evening by the psychiatry liaison nurse and registrar, and was discharged home the following morning after further review by the day team, with follow-up arranged through Transitions Care and a community mental health program.

Voluntary admission was discussed, but felt not to be clinically necessary. At the time there was a shortage of public and private mental health beds across Perth, compounded by the closure of one ward due to damage from a severe hailstorm.

The wife was not comfortable with the plan to discharge him into her care. The deceased was willing to go to his brother's home instead to give his wife a rest, and so he was discharged into the care of his brother with appropriate advice and contact numbers if there were any concerns.

Two days after discharge the deceased was visited by staff from the Transitions Program. He told them much of the stress had resolved, his thoughts of suicide were only fleeting, and he had no planning or intent to self-harm. The deceased returned to work that day, but was later sent home as he did not have medical clearance to return to work.

Staff from the Transitions Program made phone-calls to the deceased over the following days, but they were unanswered. On the third day after discharge from the emergency department, the deceased was found dead in his car at the family home, with the engine running and fumes in and around the car.

### Inquest findings and comments

The coroner found that the death occurred as a result of carbon monoxide toxicity, and the manner of death was suicide.

Expert opinion of the nature and quality of the mental health assessments at the emergency department and by the Transition Program team was sought and it was concluded that timely, suitable and thorough assessments had been made, and that the plans made were appropriate and safe.

The issue of bed availability was discussed at length. Damage to a metropolitan hospital from a severe hailstorm had caused the temporary closure of one mental health unit, leading to reduced availability of beds in both the public and private mental health systems. This was mentioned to the deceased and his wife, however the coroner was satisfied that this did not influence the decision to discharge the deceased, a voluntary patient, from hospital, as he would not have been denied a bed if he was assessed as requiring one.

The coroner concluded that it is not always possible to predict suicide, and that this death was unexpected and tragic. No recommendations were made.

## WA Health actions

Since April 2014 all public adult Mental Health Services have been required to implement the Statewide Standardised Clinical Documentation suite, which includes a written Treatment, Support and Discharge Plan Form and a Case Transfer Summary Form, in response to the Stokes Report.

The Clinical Documentation suite also provides a process for recording the identification of the primary carer and liaison details, information about family relationships and other supports, and support person signature to the Treatment Support and Discharge Plan. This more structured approach assists in bringing into sharper focus the importance of the role of carers and support persons.

## References

- [Kearney inquest findings](#)<sup>23</sup>
- [Mental Health Act 2014](#)<sup>24</sup>

### Discussion points

- How do you incorporate carers' significant concerns into the assessment of the patient?
- How can you use clinical strategies to mitigate bed pressure/availability issues?

<sup>23</sup> [http://www.coronerscourt.wa.gov.au/l/inquest\\_into\\_the\\_death\\_of\\_john\\_vincent\\_kearney.aspx?uid=4496-2323-8033-3165](http://www.coronerscourt.wa.gov.au/l/inquest_into_the_death_of_john_vincent_kearney.aspx?uid=4496-2323-8033-3165)

<sup>24</sup> [https://www.slp.wa.gov.au/legislation/statutes.nsf/main\\_mrtitle\\_13537\\_homepage.html](https://www.slp.wa.gov.au/legislation/statutes.nsf/main_mrtitle_13537_homepage.html)

## Prolonged Emergency Department stay

### Key messages

- In an Emergency Department it needs to be clear which clinician is responsible for assessing and managing risk.
- A companion (e.g. guard or special nurse) alone may not be sufficient for managing absconding risk.
- There is an increased risk of harm for suicidal patients with prolonged stays in the Emergency Department, regardless of diagnosis.

The deceased had a history of using drugs since his teenage years, though never intravenously. His parents were reportedly alcoholic and abusive, and he had self-harm and suicide attempts dating back to his teenage years. He had completed one year of university studies before becoming self-employed in landscaping.

When the long-term relationship he was in broke down, he became depressed and attempted suicide, so his GP referred him for admission to hospital for treatment. During admission, it was revealed that not only had his ex-partner been diagnosed as having HIV, but the deceased also tested positive. Appropriate counselling and follow-up was promptly arranged. He was discharged with a diagnosis of adjustment disorder in the context of HIV diagnosis and relationship breakdown, with cluster B personality traits.

Later that year, he was found in bushland trying to gas himself in his vehicle having taken a diazepam overdose. He was taken to a nearby hospital and assessed in the emergency department where he was treated and assessed. Staff were concerned that he was at high risk of absconding and repeat suicide attempt, and so requested a staff member to watch over him as he waited for a bed in an appropriate psychiatric ward to become available. Due to a series of misunderstandings, he was watched over by a staff member who was also watching over another patient in the next cubicle. The other patient had been waiting in ED for a bed in a psychiatric unit for over three days, and eventually became agitated and aggressive and assaulted the staff member. During the fracas, the deceased was able to walk out of the department unnoticed. He returned to his house and hanged himself.

### Inquest findings and comments

The coroner found that death occurred as a result of ligature compression of the neck (hanging) and by manner of suicide.

The coroner remarked that whilst the professionalism and commitment of the staff who cared for him was of a uniformly high standard, due to a number of systemic communication issues, he was allowed to leave the ED while he was known to be at a high risk of suicide, thus the quality of care provided was inadequate.

No recommendations were made.

## WA Health actions

As noted in the inquest findings, a Code Black response team has been established at the emergency department where the deceased was treated, and internal security staff are now employed to respond to Code Black calls. The mental health nursing observation form has been updated to aid clearer patient care plans, and the patient special care policy has been updated.

The coroner noted that at the time, a submission for funding of a mental health observation area had been made, to provide a safer and more secure area within the emergency department for at-risk patients.

## References

- [Stanczyk inquest findings](#)<sup>25</sup>
- [The Chief Psychiatrist's Clinical Review of the Standards of Psychiatric Care Provided in Emergency Departments](#)<sup>26</sup>

### Discussion points

- What factors increase the risk of harm for mental health patients in the Emergency Department? How can these risks be mitigated?

<sup>25</sup> [http://www.coronerscourt.wa.gov.au/Inquest\\_into\\_the\\_death\\_of\\_james\\_anthony\\_stanczyk.aspx?uid=1845-2895-1236-1113](http://www.coronerscourt.wa.gov.au/Inquest_into_the_death_of_james_anthony_stanczyk.aspx?uid=1845-2895-1236-1113)

<sup>26</sup> <http://www.chiefpsychiatrist.wa.gov.au/clinical-review-of-the-standards-of-psychiatric-care-provided-in-emergency-departments/>

## On leave from hospital

### Key messages

- Risk is dynamic – staff must consider potential shift-by-shift changes in risk.
- Patient leave permissions and arrangements are a critical part of each handover.
- While carers and families may not necessarily describe risk in clinical terms, their degree of concern must be given due consideration.

### Case 1: Unescorted leave and smoking

A 48-year-old woman died from head injuries after being struck by a train in a rural town. She was an involuntary patient under the *Mental Health Act 1996* in the Mental Health Unit (MHU) of a regional hospital at the time.

She was previously diagnosed with a psychotic disorder following the attempted murder of one of her daughters. She received treatment for this on an erratic basis until her death. She moved between two rural towns, often missed her appointments and scheduled depot medication, often was not at home for staff visits and did not have a case manager. She continued to smoke cannabis on a daily basis.

The deceased was briefly admitted to the MHU of the regional hospital with a diagnosis of paranoid schizophrenia with delusions and hallucinations which was complicated by alcohol and cannabis use. One month later, the deceased was admitted via the ED on Form 4 as a moderate risk to self. She was allowed off ward to smoke, often unsupervised, but was made involuntary on the third day of her admission following an extended leave of absence from the ward. She was then denied unescorted leave due to concerns about risk of absconding. Her family visited the next day, her birthday, and expressed concerns about her risk of absconding and of harming herself.

Two days later, the deceased was allowed unescorted leave for a smoke. It is not clear who granted this leave. Staff risk assessment that day was that she was at low risk for self-harm. She was seen standing on the railway embankment half-an-hour later as a freight train came through. She was found deceased at the bottom of the embankment 45 minutes later as another train passed through.

### Inquest findings and comments

The coroner found the cause of death was head injury. The coroner was unable to determine whether the deceased intended to be struck by the train or whether she was struck by accident and so made an open finding as to how the death occurred.

The decision to allow unescorted leave was seen as ultimately mistaken, but it was acknowledged that staff were attempting to balance risks and therapeutic benefits to the deceased. The coroner felt that it was not possible to conclude that the decision was inherently

wrong at the time, and was satisfied that staff acted in what they considered to be the best interests of the deceased.

The coroner stated that the standard of supervision, treatment and care whilst an involuntary patient at the MHU was unsatisfactory, especially around the lack of consistent care, the lack of formal risk assessments, the lack of collaboration with the patient's family, and the lack of a secure place to smoke on hospital grounds. A designated smoking area has since been constructed in the MHU courtyard.

The coroner was satisfied that the health service had implemented steps to address these failures based on recommendations arising from the site's clinical incident investigation, including the following:

- development of a process to transfer case management within the health service, between the health service and the community mental health service
- processes to ensure case management of patients including follow-up of overdue medication
- ensuring information from family and carers is documented and included in care planning and a standard process for risk assessment and documentation.

No recommendations were made.

## **Case 2: Motor vehicle collision**

A middle-aged woman died as result of injuries sustained in a head on collision whilst an involuntary patient under the *Mental Health Act 1996* at the time.

She was first diagnosed with a chronic psychotic illness in 2003 with paranoid and persecutory delusions, often featuring medical staff and police officers as a person trying to harm her.

The deceased was admitted on forms to a regional hospital, initially under the care of a senior medical practitioner on the general ward, due to lack of space on the mental health ward. She was not reviewed by a psychiatrist until three days later, after she had been transferred to the psychiatric ward.

She was granted leave at times as part of the strategy to help develop a therapeutic alliance, and was known to drive her van to the beach at times during leave. Use of a vehicle is not prohibited by the *Mental Health Act 1996*. The Act allows involuntary patients some freedom of movement within the community.

When informed she would not be discharged that day, the deceased became angry and asked for a second opinion. She appeared to calm down by the end of the interview, and was granted her request for leave, as it was felt she was not at risk of harm to herself or others.

The deceased attended the police station wanting to make a report regarding her beliefs about her son's wellbeing. She became agitated and frustrated, and left.

Subsequently, whilst driving over a bridge, her van veered into the path of an oncoming truck, and she died of injuries sustained in a head-on collision.

## Inquest findings and comments

The coroner found the cause of death was multiple injuries after a head-on motor vehicle collision. The coroner found the manner of death found to be accident as there were no signs of suicidal ideation and, based on the evidence provided, the collision was more likely due to a failure to pay due care and attention while driving.

The coroner identified clear failings in the documentation of the decision-making process surrounding the deceased's leave of absence and her ability to access her vehicle.

The coroner felt that appropriate actions had been taken by the regional hospital since this incident and did not make any recommendations in this matter. The changes made at the regional hospital include doubling the number of mental health beds, all patients admitted with mental health issues are now admitted under the psychiatric team even if an outlier on the general ward, introduction of the Risk Assessment and Management Plan forms to improve documentation of risk assessments, new specific leave procedures for all mental health patients and a change in policy regarding access to vehicles for involuntary hospital inpatients.

## WA Health actions

Since the death, the following changes have been made at the site. These were noted in the inquest findings:

- number of mental health beds has more than doubled
- patients admitted with mental health issues are now admitted under the psychiatric team even if an outlier on the general ward, rather than under the care of a GP
- introduction of the Risk Assessment and Management Plan forms to improve documentation of risk assessments
- new specific leave procedures for all mental health patients
- change in policy regarding access to vehicles for involuntary hospital inpatients.

## References

- [Henderson inquest findings](#)<sup>27</sup>
- [Cooper inquest findings](#)<sup>28</sup>
- [Chief Psychiatrist's Standards for Clinical Care](#)<sup>29</sup>

### Discussion points

- What practical factors would improve continuity of care when transitioning between services?
- Voluntary and involuntary patients may be granted leave from the ward.
  - What types of leave arrangements are available?
  - How do you decide when and what sort of leave is appropriate and safe?

<sup>27</sup> [http://www.coronerscourt.wa.gov.au/linquest\\_into\\_the\\_death\\_of\\_yvonne\\_henderson.aspx?uid=4450-1257-7245-1094](http://www.coronerscourt.wa.gov.au/linquest_into_the_death_of_yvonne_henderson.aspx?uid=4450-1257-7245-1094)

<sup>28</sup> [http://www.coronerscourt.wa.gov.au/linquest\\_into\\_the\\_death\\_of\\_frances\\_may\\_cooper.aspx?uid=2543-4702-9165-3305](http://www.coronerscourt.wa.gov.au/linquest_into_the_death_of_frances_may_cooper.aspx?uid=2543-4702-9165-3305)

<sup>29</sup> [http://www.chiefpsychiatrist.wa.gov.au/wp-content/uploads/2015/12/CP\\_Standards\\_2015.pdf](http://www.chiefpsychiatrist.wa.gov.au/wp-content/uploads/2015/12/CP_Standards_2015.pdf)

## Cluster of suicides from one health service

### Key messages

- Suicide is preventable but difficult to predict.
- Patient assurances regarding suicidal intent must routinely be evaluated in the context of collateral information.
- Liaison with carers should occur regarding discharge planning, possible signs of deterioration and follow-up arrangements.
- Transition between services is a high-risk period – timing for follow-up must reflect the urgency of an individual's needs.

The deaths of five former patients of a mental health service were investigated at one inquest.

The coroner established a number of assertions at the outset of the inquest:

- suicide is preventable
- suicide is difficult to predict
- the treatment and care of each of the deceased is to be assessed by reference to the requirements of the *Mental Health Act 1996* that was applicable at the material time
- it became clear from the evidence that clinicians placed a degree of reliance on patient's assurances that they would not act on suicidal thoughts
- mental health clinicians are often required to make very finely balanced judgements (complicated by resource constraints).

The Stokes Review, released in November 2012, assessed the admission and discharge practices within the WA public mental health services and made 117 recommendations across nine broad themes.

The coroner identified three issues common to several of the deaths:

- communication was of a standard below that expected of a professional mental health service
- no adequate policies or procedures to support staff members in their contact with carers
- no adequate procedures for taking into account a patient's longitudinal risk factors.

### Case 1: Adolescent suicide

An 18-year-old woman committed suicide a day after leaving a mental health unit where she had been a voluntary patient.

The deceased had a long history of emotional and behavioural problems throughout her childhood and adolescence. Her transition to adult mental health services came at the same time that her father had to relocate for work, leaving the deceased living on her own for the first time. For the first few months, it appeared that the transition was going smoothly, until she presented to hospital requesting voluntary admission to help with an increase in suicidal thoughts. She was reviewed by her treating psychiatrist and his team; however no clear management plan was formulated or documented. The extensive handover notes from her

previous treating psychiatrist that had been provided to the hospital when the deceased turned 18 were not reviewed.

Following an unsuccessful attempt to hang herself in her hospital room, she was reviewed again by staff. She asked to be allowed to stay in hospital for one week, but was advised she would be allowed only two more days and then would be discharged. The deceased called her father expressing her frustrations, stating that “either they don’t believe me or they don’t care”. The next day, the deceased announced that she would leave hospital that day. Her treating psychiatrist was only able to spend 15 minutes with her at this point, as he was busy in the outpatient clinic at the time. He tried unsuccessfully to encourage her to remain in hospital for one more night and, as there were no grounds to make her involuntary, allowed her to leave with follow-up planned for a few days later. He did not attempt to have her father contacted. Her case-worker called her after she left hospital, but the deceased cut the call short.

The father called the hospital to ask staff to keep her in hospital until he could return to Perth, but this call was neither recorded nor acted upon. He also called his daughter asking her to go back to hospital, but was unsuccessful. The deceased hanged herself less than a day after she left hospital.

### **Inquest findings and comments**

The coroner found that the death occurred as a result of ligature compression of the neck (hanging) and that the manner of death was by suicide.

The coroner found that the treating psychiatrist had not exercised sound clinical judgment when he approved the deceased’s discharge, and that there was poor planning, documentation, and risk assessment during her admission. The failure to communicate with family during the admission was highlighted as a failing.

### **Case 2: Poor engagement**

A 20-year-old woman hanged herself following seven months of intermittent contact and poor engagement with medical and psychiatric services.

During a gap year from her university studies, she became anxious and withdrawn with intermittent suicidal ideation. She sought assistance when in crisis, but then would decline to attend follow-up appointments. She was referred to a mental health service and a private psychologist by her GP, but missed many appointments, would downplay her suicidal ideation when reviewed, and asked to be discharged from the mental health service five months later, stating she preferred to be managed by her GP. The mental health service did not inform her parents of the discharge.

A couple of months later her relationship with her partner had broken down and she was in crisis again. Her parents arranged a home visit from an emergency response team, but the deceased did not engage with the team, denied any problems, was hostile, and insisted they leave after 15 minutes. The team felt there was no grounds to put her on forms so spent a further 40 minutes talking with her parents, providing them with emergency phone numbers prior to leaving. The team sent their report to the mental health service and to the deceased’s GP.

Over the next couple of days the deceased had contact with the mental health service, and declined their offer of further assistance, stating she would make her own plans.

A few weeks later her parents called the police to the house, concerned about her demeanour, but she fled, and a search for her was unsuccessful. Tragically she was found the next day in her room, having hanged herself.

### **Inquest findings and comments**

The coroner found that the death occurred as a result of ligature compression of the neck (hanging) and that the manner of death was by suicide.

The coroner found that the care provided by the mental health service lacked cohesion and continuity, such as to leave the deceased responsible for following up on her own care.

### **Case 3: Suicide by uncertain means**

A 57-year-old man died of uncertain causes after going missing whilst suicidal.

The man had developed depression and anxiety after being made redundant in his mid-fifties. He was admitted to hospital following a suicide attempt, and after three weeks as a voluntary patient was transferred to community based supported accommodation for another month. A case manager was appointed to support him, and initially he appeared to be doing well. A few months later he stopped attending his appointments and appeared to deteriorate again.

He was brought to the emergency department after injecting himself with his wife's insulin in an apparent suicide attempt. He was admitted under the care of the medical team with input from his treating psychiatric team requested.

The deceased's case manager visited him on the medical ward as staff shortages and high workload on the mental health unit meant that none of the psychiatry doctors were available to see him in person. No formal risk assessment was conducted, and whilst the deceased said he felt he was doing well, was receiving counselling and had further appointments in the future, he expressed a fear that he would not be allowed to go home due to his wife's concern for his safety.

The case manager discussed the deceased's situation with the duty psychiatry registrar, who decided that the deceased would be discharged home when medically fit. On hearing this decision, the deceased's wife attended the hospital to discuss her concerns, and so he remained in hospital another night to be reviewed the following day. The psychiatry doctor who reviewed him the next day conducted a brief risk assessment, and felt there would be no benefit from admission as he was not at any acute risk. No contact was made with his wife and he was discharged by the medical team to his son's home.

The following morning the deceased rang the hospital in a distressed state and told his case manager he felt suicidal. He was booked into an appointment with his doctor a few hours later, and his wife was asked to bring him to the appointment. Tragically in the intervening hours he escaped from the house and despite an extensive search operation could not be found.

His body was discovered in scrubland a mile from his house 13 weeks later.

## **Inquest findings and comments**

The coroner found that the cause of death was unascertainable but found the manner of death was by suicide.

Expert witness testimony was sought, and three main concerns were raised. No longitudinal management plan had been developed over the course of the deceased's involvement with the mental health unit. No risk management plan was developed following his second suicide attempt, despite discussion of ongoing stressors. Concern was expressed over the failure to include the deceased's wife in discharge planning, and the decision by the first registrar to discharge the deceased without having seen him in person.

The coroner also found that the case manager and the psychiatry doctor failed to recommend immediate care for the deceased when he rang distressed and suicidal.

## **Case 4: Follow-up after discharge**

A 26-year-old man killed himself shortly after discharge to the community from the locked ward of a mental health unit.

A talented golfer when younger, the deceased developed schizophrenia complicated by amphetamine use in his late teens. Initially managed on clozapine, when his white blood cell count dropped dangerously low this had to be changed to olanzapine. The deceased was reluctant to take the new medication and his mental health deteriorated. He presented to the emergency department a few times in an agitated state, claiming his drinks had been spiked, but declined the voluntary admission that was offered, preferring to return home with his family.

On reviewing his case notes, the assessing registrar noted his long history of schizophrenia, previous suicide attempts, changes of medication and recent erratic attendance with outpatient appointments. It was decided that the deceased should be admitted as an involuntary patient, and so was brought back to hospital for admission by his family.

The deceased was commenced on risperidone, and though guarded and difficult to engage, improved during his admission including complying with unescorted grounds access. When assessed as safe for discharge, he was discharged directly from the locked ward to his family's care with follow-up planned for seven days later, as per the national benchmark.

Twenty-four hours later the deceased sent a suicide note by text message and then jumped off a high building, resulting in his death.

## **Inquest findings and comments**

The coroner found that the death occurred as a result of multiple injuries and that the manner of death was by suicide.

The inquest highlighted issues around discharge from mental health units.

Expert opinion was that whilst the national benchmark for follow-up was seven days after discharge, the first 24 hours after discharge pose a time of increased risk, and so much earlier contact after discharge would be appropriate. The mental health unit has made such a change and now requires follow-up within 24 hours of discharge.

The coroner commented that it would have been helpful for family to have been provided with written information about the deceased's condition, medications, expected course, and warning signs of deterioration to watch for.

The coroner found that the unit did not have policies and procedures of a sufficient standard or quality to provide for the assertive follow-up of involuntary patients being discharged directly into the community.

## **Case 5: Smoking and security**

A 47-year-old man died after absconding whilst an involuntary patient at a mental health unit under the *Mental Health Act 1996*. He had an extensive history of mental health problems including personality disorder, depression, anxiety, benzodiazepine dependence and alcohol abuse. He had multiple presentations to the mental health unit and various metropolitan tertiary emergency departments.

He was initially given a voluntary admission after self-presenting to the mental health unit with intents of self-harm. He was determined to be suffering from alcohol induced mood disorder with alcohol dependence and abuse of his prescribed sedatives. Despite a combination of treatment including medication, group therapy and assistance with financial concerns, the deceased showed no signs of improvement and was given electroconvulsive therapy (ECT).

The next day, the deceased denied self-harm or suicidal intent and was granted leave. However, he returned home to consume alcohol and later self-harmed whilst on his balcony. He was returned to the open ward at the mental health unit via the ED. He was not reviewed by a psychiatrist until two days later and formal risk assessment was not done despite the suicide attempt.

The deceased was admitted involuntarily to a locked ward, based on his acute suicidal risk and recent attempt. Escorted ground access was granted at the nurses' discretion, however, the criteria for decision-making was unclear (e.g. nurse availability or patient's condition). This was despite the fact that the mental health unit policies provided guidance for allowing escorted leave, and included a requirement for an appropriate risk management plan.

On his fourth day of admission, the deceased received another session of ECT before being granted escorted ground access to the courtyard. The deceased disappeared from view, while the escorting nurse was momentarily distracted. Surveillance (CCTV) footage later showed that the deceased absconded through the lift to the fifth floor and exited the mental health unit via the entry/exit doors as a medical student entered.

The deceased went to the nearby road and stepped into the path of a prime mover. According to witness statements, his actions were deliberate. He was brought to the ED, unable to be resuscitated and was pronounced deceased.

## **Inquest findings and comments**

The coroner found that the cause of death was as a result of multiple injuries and the manner of death was by suicide.

The coroner found that the mental health unit did not have adequate security measures in place to contain involuntary patients on escorted ground access in the courtyard and did not

have adequate measures in place to ensure an alert could be raised immediately if an involuntary patient went missing from the courtyard.

In this instance, the deceased was given escorted ground access in the courtyard primarily to smoke, although the hospital points out that there are other benefits to this such as autonomy, developing trust between patients and clinicians and as a progression to unescorted ground access, open ward and eventual discharge.

An amendment to the Smoke Free WA Health System Policy was made in January 2013, which makes a partial exemption to involuntary mental health patients aged 18 years and over, where nicotine replacement therapy or other treatment options have first been fully considered. It is expected that there is a smoking area in a locked ward court yard, so that patients will not have to leave the secure area to smoke.

### Coroner's recommendations (all cases)

1. That the Western Australian Department of Health develop policies and procedures for the implementation of Carer's Plans, and that such policies and procedures address matters of patient consent and risk issues, and that the following matters be explored for inclusion in Carer's Plans:
  - information concerning the diagnosed condition and medication regime
  - information relevant to a relapse prevention plan
  - information relevant to guidance as to when to proactively re-engage with the mental health services
  - information relevant to the individual needs and concerns of the carers
  - information relevant to support services available to carers.
2. That for the purposes of implementing improvements in the delivery of mental health services, the Western Australian government continues its efforts to provide the funding and resources required to progress the Stokes Review recommendations and the Chief Psychiatrist's standards from the planning stage to the implementation stage.

### WA Health actions

Since this death the mental health unit has implemented a number of improvements in their security measures including: personal duress alarms are being worn by relevant nursing staff, which can be activated when an involuntary patient absconds; the courtyard triage doors have now been secured; and, there is a designated secure smoking area which does not require escorted ground access.

A number of care management plans exist, including the 'PSOLIS Plan'; the 'Treatment, Support and Discharge Plan'; and 'Our Plan', where carers are able to acknowledge patient care plans. Implementation and ongoing monitoring of the recommendations from the Stokes *Review of the admission or referral to and the discharge and transfer practices of public mental health facilities/services in Western Australia*<sup>30</sup> continues.

---

<sup>30</sup> [http://www.mentalhealth.wa.gov.au/mentalhealth\\_changes/Stokes\\_Review.aspx](http://www.mentalhealth.wa.gov.au/mentalhealth_changes/Stokes_Review.aspx)

## References

- [Alma Street Centre inquest findings](#)<sup>31</sup>
- [Chief Psychiatrist's Clinical Guideline: Communicating with Carers and Families \(March 2012\)](#)<sup>32</sup>

### Discussion points

- Despite uncertainty when assessing suicide risk what practical clinical strategies might assist in identifying prevention factors?
- How can you engage family/carers proactively and constructively when a patient declines to release information?

---

<sup>31</sup> [http://www.coronerscourt.wa.gov.au/l/inquest\\_into\\_the\\_deaths\\_alma\\_street\\_centre.aspx?uid=1678-2817-5411-1593](http://www.coronerscourt.wa.gov.au/l/inquest_into_the_deaths_alma_street_centre.aspx?uid=1678-2817-5411-1593)

<sup>32</sup> [http://www.chiefpsychiatrist.wa.gov.au/wp-content/uploads/2015/11/Communicating\\_with\\_Carers\\_and\\_Families\\_2012.pdf](http://www.chiefpsychiatrist.wa.gov.au/wp-content/uploads/2015/11/Communicating_with_Carers_and_Families_2012.pdf)

## Reporting deaths to the Coroner

All medical practitioners should be familiar with what constitutes a 'reportable death' within the meaning of the *Coroners Act 1996* and what their responsibilities are to report deaths to the coroner.

The term 'reportable death' means a Western Australian death –

- a) that appears to have been unexpected, unnatural or violent or to have resulted, directly or indirectly, from injury or
- b) that occurs during an anaesthetic or
- c) that occurs as a result of an anaesthetic and is not due to natural causes or
- d) that occurs in prescribed circumstances (currently there are none) or
- e) of a person who immediately before death was a person held in care (e.g. a person held as an involuntary patient within the meaning of the *Mental Health Act 2014*) or
- f) that appears to have been caused or contributed to while the person was held in care or
- g) that appears to have been caused or contributed to by any action of a member of the Police Force or
- h) of a person whose identity is unknown or
- i) that occurs in WA where the cause of death has not been certified under the *Births, Deaths and Marriages Registration Act 1998* or
- j) that occurred outside WA where the cause of death is not certified to by a person who, under the law in force in that place, is a legally qualified practitioner.

Under section 17(3) of the *Coroners Act 1996*, a doctor who is present at or soon after the death of a person must report the death immediately to a coroner if –

- a) the death is or may be a reportable death or
- b) the doctor is unable to determine the cause of death or
- c) in the opinion of the doctor, the death has occurred under any suspicious circumstances.

WA Health's Death in Hospital form provides a summary or checklist of the key statutory and mandatory reporting obligations that arise following an inpatient hospital death, including those that may have been on leave from hospital around the time of death. One of the questions posed, "Has the death, or does the death appear to have, resulted, directly or indirectly, from injury?" is particularly relevant to the case studies below.

### Case Study 1

An 89-year-old man tripped and fell, hit his head and lost consciousness briefly. He was still drowsy and confused when taken to the ED. A head CT scan showed a large subdural haemorrhage. Based on his Advanced Care Directive, his family agreed to palliative management only. He was admitted to hospital and died the following evening with his family present.

The evening ward cover doctor was asked to complete the required paperwork. For the Medical Certificate of Cause of Death, she listed subdural haemorrhage as the cause of death. She believed that as the cause of death was known, there was no need to report the death to the

coroner, and on completing the Death in Hospital form she erroneously stated 'no' for the question of if the death appeared to have resulted from injury.

This error was detected by staff at the WA Registry of Births, Deaths and Marriages, and the Office of the State Coroner was informed.

## Case Study 2

A 65-year-old woman was admitted to hospital having sustained a fractured neck of femur. Post-operatively she required a lengthy period of rehabilitation, as she had severe emphysema. During this admission, she developed a severe chest infection and died from respiratory failure. The direct cause of death was listed as pneumonia, with emphysema as an antecedent cause. The fractured neck of femur was listed as a significant condition contributing to the death.

Her death was reported to the coroner, as it was indirectly related to her initial injury; however her family requested that a post-mortem not be held.

## Information from the Office of the State Coroner

The senior next of kin of the deceased may ask a coroner not to direct a post mortem. An external examination is conducted in every case, and the coroner may choose to uphold the family's objection to an internal examination. However the forensic pathologist must still advise the coroner on the cause of death in the absence of full post mortem examination. On average, an objection to post mortem results in a five-day delay in releasing the body for the funeral whereas the usual time period is two to three days from when the death occurred.

## References

- [Death in Hospital form](#)<sup>33</sup>
- [Coroner's Court](#)<sup>34</sup>
- [Advanced Care Planning](#)<sup>35</sup>

### Discussion points

- What paperwork is required after a death in hospital?
- Which deaths are reportable, and to whom?

<sup>33</sup> Death in Hospital Form: [http://www.health.wa.gov.au/CircularsNew/circular.cfm?Circ\\_ID=13097](http://www.health.wa.gov.au/CircularsNew/circular.cfm?Circ_ID=13097)

<sup>34</sup> Coroner's Court website: <http://www.coronerscourt.wa.gov.au>

<sup>35</sup> Advance Care Planning (Department of Health): [http://healthywa.wa.gov.au/Articles/A\\_E/Advance-care-planning](http://healthywa.wa.gov.au/Articles/A_E/Advance-care-planning)

**This document can be made available in alternative formats  
on request for a person with a disability.**

© Department of Health 2016

Copyright to this material is vested in the State of Western Australia unless otherwise indicated. Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the provisions of the *Copyright Act 1968*, no part may be reproduced or re-used for any purposes whatsoever without written permission of the State of Western Australia.