



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

# From death we learn 2018

2019 Edition

## Acknowledgements

The patients and their families

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

Dr Michael Levitt, Chief Medical Officer, Department of Health, Western Australia

Aboriginal Health Policy Directorate, Department of Health, Western Australia

The Office of the State Coroner, Western Australia

The Office of the Chief Psychiatrist, Western Australia

The Health Services' Safety, Quality and Performance Units

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

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 Assistant Director, Patient Safety Surveillance Unit.

From Death We Learn editions 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

Background	3
Office of the State Coroner	3
Lessons from inquests	3
Abbreviations	4
Introduction to the Coronial Liaison Unit	5
Introduction to inquested cases	6
Fetal Alcohol Spectrum Disorder	7
Case 1: Death of a vulnerable youth	7
Case 2: Non-accidental injury	8
Complex surgery	11
Medication misuse	14
Medication reconciliation	16
Rare side-effect of a common medication	18
Off-label prescribing	20
Co-sleeping	23
Cardiac arrest in the country	25
Missed opportunity for communication	27
Case 1	27
Case 2	28
Discharge planning	30
Inpatient suicide	32

## Background

### Office of the State Coroner

The office of the Coroner is one of the oldest known to law, with the responsibility to investigate sudden or unexpected deaths continuing to this day. The current system reflects the original commitment to the deceased and the community but also extends to the deceased's family and friends. The *Coroners Act 1996* (the Act) recognises the stress and trauma experienced by family and friends of a loved one who died suddenly or unexpectedly and requires the Coroner to ensure that a counselling service is offered by the court.

Under the Act the Coroner seeks to determine the cause and manner of death and any contributing factors - a comprehensive fact-finding exercise, that as such, can be a lengthy process. The investigative process is held in accordance with the principles of open justice and is not aimed at apportioning blame.

An ancillary function of the coroner, but a nonetheless important component of the investigative process is the identification of strategies to improve public health and/or safety; ultimately to prevent the reoccurrence of similar situations when possible. To this end the coroner may make recommendations aimed at preventing deaths in similar circumstances.

It should be noted that by the time many cases reach inquest, appropriate measures have already been implemented by Health Service Providers to improve patient safety. This information is of significant assistance to the coroner and, properly undertaken, demonstrates the on-going commitment of health services to continually improve and adapt to better meet the needs of the public and provide safe, high-quality services.

### Lessons from inquests

High quality organisations and systems routinely utilise both internal and external processes to review and improve their services, with coronial inquests being one important external mechanism from which to learn. This is the thirteenth edition of *From Death We Learn*, produced by the Coronial Liaison Unit at the Department of Health, which covers health-related coronial inquest findings from the 2018 calendar year.

The cases are provided to assist in stimulating patient safety discussions across health disciplines. Organisations and individual health care providers are encouraged to consider these cases in the context of their service, with a quality improvement lens, seeking to identify opportunities for improvement, using a no-blame culture. Whilst each inquest summary only provides a glimpse of some of the issues, if readers are interested, the full inquest findings can be accessed on the website of the Coroner's Court of Western Australia.

As per previous years' editions, this edition includes key messages and discussion points, extracting what the Coronial Liaison Unit believes to be the significant health-related learnings from a coronial inquest. Also provided in this edition are suggested further reading and resources, to further enhance individual and organisational learnings.

Acknowledgements to the friends and families of loved ones whose deaths have been investigated by the Coroner. It is with the utmost respect to them that this publication is collated in the hope that it will complement the death prevention and public safety role of the Coroner, and ultimately improve the safety and quality of care delivered to patients.

## Abbreviations

AED	Automatic external defibrillator
AHPRA	Australian Health Practitioner Regulation Agency
BMI	Body Mass Index
CLU	Coronial Liaison Unit
CFMHS	community forensic mental health service
CMHS	community mental health service
CPR	cardiopulmonary resuscitation
CRC	Coronial Review Committee
CT	Computed Tomography
CTO	community treatment order
DCP	Department of Child Protection
ECG	electrocardiogram
ED	emergency department
ERCP	endoscopic retrograde cholangio-pancreatography
FASD	Fetal Alcohol Spectrum Disorder
GP	General Practitioner
GTN	glyceryl trinitrate
HSP	Health Service Provider
ICC	intercostal catheter
ICU	Intensive Care Unit
MHC	Mental Health Commission
MHCR	Mental Health Co-Response
MHERL	Mental Health Emergency Response Line
NGO	Non-government organisation
OSC	Office of the State Coroner
PSSU	Patient Safety Surveillance Unit
RFDS	Royal Flying Doctor Service
TGA	Therapeutic Goods Administration
USS	ultrasound scan
WACHS	WA Country Health Service

## **Introduction to the Coronial Liaison Unit**

The Coronial Liaison Unit (CLU) sits within the WA Department of Health and consists of the Chief Medical Officer, Patient Safety Surveillance Unit (PSSU) Manager as well as PSSU Senior Clinical Advisor(s) and Senior Policy Officer(s). The CLU was established in 2005 as a health initiative to improve communication between the WA health system and the Office of the State Coroner. The CLU facilitates the allocation of health-related findings from coronial inquests for implementation by Health Service Providers.

The CLU, in conjunction with the Coronial Review Committee (CRC), reviews all public inquests that have a health care aspect to them and communicates the recommendations via the Chief Medical Officer to the appropriate area within the WA health system.

The CRC operates in connection with the CLU by providing executive strategic support. The Committee was formed in January 2014 with its main purpose being to improve the governance and decision making in relation to state-wide implementation and response to coronial recommendations. The CRC evaluates coronial recommendations and makes decisions about the level of response required. Members also review stakeholder responses to the CLU, to assess the progress or completeness of strategies implemented in response to coronial recommendations.

Expert advice and stakeholder responses on the recommendations and actions taken to improve patient safety are fed back to the State Coroner in a biannual report.

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

## 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 2018 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 2,291 deaths reported to the Office of the State Coroner for full investigation in the 2017-18 financial year, a decrease from 2016-17 (n=2422).<sup>1</sup> There were 1280 deaths in 2017-2018 that were dealt with by review of the treating doctor's death certificate recording a cause of death, and were accepted by the coroner. This was similar to the previous year (1174 in 2016-17). In 2017-18, 63 investigations were finalised by public inquest, with 39 of these being 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; and
- 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 health care 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 health care 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 to increase transparency and accountability, as of August 2019, the executive summary of the biannual 'Progress Report for Health Related Coronial Recommendations' (WA Health's report to the State Coroner) has been made available publicly online<sup>2</sup>.

---

<sup>1</sup> Office of the State Coroner. Annual Report: 2016-2017 [internet]. 2018. Government of Western Australia. Accessible at [https://www.coronerscourt.wa.gov.au/files/Annual\\_report\\_2017\\_2018.pdf](https://www.coronerscourt.wa.gov.au/files/Annual_report_2017_2018.pdf)

<sup>2</sup> [https://ww2.health.wa.gov.au/Articles/A\\_E/Coronial-Liaison-Unit](https://ww2.health.wa.gov.au/Articles/A_E/Coronial-Liaison-Unit)

# Fetal Alcohol Spectrum Disorder

## Key Message

- Fetal Alcohol Spectrum Disorder can have profound effects on individuals, their families and care-givers, and their whole communities.

## Case 1: Death of a vulnerable youth

A 15-year-old boy died in circumstances consistent with immersion with traumatic amputation of the left foot and multiple soft tissue injuries in mangroves in the Kimberley region.

The deceased was diagnosed with severe Fetal Alcohol Spectrum Disorder (FASD) shortly after his birth on the Dampier Peninsula in the Kimberley. By age 13, despite regular review and support from a paediatrician, the Department of Child Protection (DCP) (now the Department of Communities, Child Protection and Family Support), and other health workers, he had developed behavioural problems, was using alcohol, cannabis and solvents, was struggling academically and was often absent from school, and had been increasingly violent towards family members. An assessment at a tertiary hospital confirmed intellectual developmental delay, extremely low global functioning, and significant risk to personal safety on a social vulnerability rating instrument.

Following a near fatal episode of solvent abuse his family asked DCP to take over his care. He was considered to be an extremely vulnerable child requiring specialist carers and a high level of supervision. A secular not-for-profit organisation was engaged to provide placement and supervision. Following unsuccessful placements in a regional town and another local community in the region, where he went missing regularly and was using solvents, he was placed with a distant relative in a safe community setting on the peninsula that was more remote from the larger communities. Keeping the deceased away from solvents was regarded as a higher priority than mainstream schooling, and support was provided by the not-for-profit organisation.

This placement appeared to be mostly successful, with a focus on cultural and recreational activities, music and metalworking. After a few months another teenager was placed in the same remote community. Following a conversation with the other teenager about walking 80km along the coast to another regional community, the deceased went missing. Concern was raised immediately given the extreme tides of around 10m in the area and the presence of crocodiles. An extensive search was mounted, and his body was found the next day in the nearby mangroves, with one foot amputated and various other soft tissue injuries, consistent with crocodile and shark attacks.

## Inquest findings and comments

The Coroner found that death occurred by misadventure as there was no evidence of suicidal ideation, but the deceased probably did not comprehend the risks involved in walking along that stretch of coast.

The Coroner led an extensive discussion around the placement at the remote community, and the dilemma of balancing the deceased's physical safety with his social isolation and reduced access to school. The complexity of the issues that impacted upon the deceased's care was acknowledged, including the high priority placed on keeping the deceased alive by keeping him away from solvents, and the opportunity for him to remain on country with his extended family. The implications of the diagnosis of FASD and the nature of the deceased's impairment was not



necessarily well-understood by those involved with his care, and little to no training had been provided to some.

Expert opinion regarding diagnosis and management of FASD was sought from specialist paediatricians, including a discussion of the importance of early interventions to maximise the quality of life. Universal screening and support of pregnant women for alcohol use is widespread. FASD diagnostic and therapy service provision in regional and remote WA has been increasing, although there is no specific FASD diagnosis clinic in the public health system in WA, and much of the current diagnostic work is done by two private organisations.

Assessments are conducted when children are referred; there is no general FASD screening process. It was recommended that each child should be reviewed by a multidisciplinary team to provide a detailed individualised assessment to allow for tailored intervention; however there are not many specialised professionals in rural and remote Western Australia.

### **Coroner's recommendations**

I recommend that the WA Country Health Service (WACHS) continues to provide universal screening of, and support for, pregnant women for alcohol use and all children identified as being at risk of neurodevelopmental impairment on the basis of antenatal exposure to alcohol and/or early life trauma be assessed by a paediatrician for developmental and behavioural impairments at age 12 months and in the year prior to school entry.

### **WA health system action**

WACHS has a FASD service model, consistent with the World Health Organisation Sustainable Development Goals.

The National Fetal Alcohol Spectrum Disorder Strategic Action Plan 2018-2028 has been developed by the Commonwealth Government in consultation with a range of groups including the WA Department of Health. The Plan seeks to improve the prevention, diagnosis, support and management of FASD in Australia. A WA Senior Officers' Working Group is to be established in 2019 to consider how to best coordinate existing FASD resources across Government.

### **Case 2: Non-accidental injury**

A four-week-old premature baby died as a result of head injuries sustained when alone in a room in hospital with his teenaged father for the first time.

The baby had been born six weeks premature in a regional hospital. Both of his parents were in their teens, and the deceased's father was in the care of the Department of Child Protection (DCP). He had not engaged well with the Department whilst he was in Perth with contact made only when he was incarcerated or when he approached his case manager for financial assistance. He had yet to have a case manager assigned after moving to the country to live with his partner and her family. He had a history of substance abuse, violence and crime, and there was a strong suspicion of domestic violence in his relationship with the deceased's mother with witnessed episodes of aggressive behaviour and assault.

Antenatal care was provided through a High Risk Clinic at the regional hospital, but it appears that no referrals to the social work department or Aboriginal Liaison Officers were made. DCP staff had intended to commence pre-birth planning, but did not proceed with this as the deceased was born six weeks prematurely. Shortly after the baby's birth a hospital social worker and Aboriginal Liaison Officer became involved with the young family. Two Signs of

Safety meetings were held by DCP with input from hospital staff, who gave positive feedback about the parents. The Aboriginal Liaison Officer knew the baby's mother and her family well, and had no concerns about the baby going home to that household when ready. Concern was raised regarding the potential for family violence between the parents and the potential impact on the deceased, and that the father did not yet have a local case manager. Plans were however being made for the eventual discharge of the deceased to his parents and the mother's family when the baby was old enough.

Prior to the planned discharge the deceased's father was seen to have been involved in a fight in the hospital with family members, including his partner. Hospital security became involved, and the police and DCP's after-hour's Crisis Care Unit were contacted. The deceased's father was not allowed back into the hospital for several days following this incident.

The Crisis Care report indicated that the baby was not at risk of harm as he was not due to be discharged yet. DCP did not suggest any special supervision of the father would be required once visits resumed. DCP staff also determined that there were insufficient grounds to remove the baby from the care of his parents despite concerns that he might be exposed to incidental harm due to parental fights. No concern for the potential of violence directed towards the deceased was raised by any staff member at the hospital or DCP.

A plan for supported discharge was developed. The deceased and his mother would stay on the ward for two nights following from the nursery to demonstrate mother crafting, and the father could visit during visiting hours. Prior to this, the baby sustained a small cut to his gum whilst being bottle fed by his father. The midwife who saw this mentioned it to the shift coordinator but did not document the incident nor disclose it to DCP or the hospital social worker.

Two days later the young couple took the deceased from the nursery to their room in the hospital. His mother left the room to prepare food in the kitchen leaving the father alone with him for the first time. Within 10 minutes he assaulted the baby causing skull fractures and severe brain injuries and did not go to seek help. When his partner returned she found the baby not breathing and rushed him to the nursery to seek help. He was subsequently transferred to a tertiary hospital and taken into the care of DCP. He died of his injuries eight days later.

### **Inquest findings and comments**

The cause of death was found to be complications of head injury with injuries sustained by severe blunt force trauma rather than shaking. The manner of death was unlawful homicide.

The deceased's father was convicted of manslaughter prior to the inquest, and successfully appealed his sentence after he was diagnosed with Fetal Alcohol Spectrum Disorder whilst incarcerated after the conviction. This had not been previously diagnosed, though it was known that he had been exposed to alcohol whilst in utero. The regional DCP staff had been falsely reassured that the deceased's father was a child in care of the metropolitan DCP and assumed that he would have undergone full assessments in Perth prior to moving to the country. They were unaware of his previous poor engagement and insufficient assessment with DCP.

### **Coroner's recommendations**

The Community Development and Justice Standing Committee had conducted an inquiry and made two recommendations for DCP, with subsequent changes made by the Department. As such the Coroner did not feel further recommendations were to be made but emphasised the need for early pre-birth planning where it can be clearly identified that an unborn baby may be at risk.

## WA health system action

The regional health service has implemented a number of changes to how children and pregnant women at risk are identified and managed, with collaborative meetings held with DCP for babies and children at risk, the maintenance of a 'Neglect Concern Register', and the involvement of child health nurses in pre-birth planning meetings.

The mandatory policy *Bilateral Schedule: Interagency Collaborative Processes When An Unborn Or Newborn Baby Is Identified As At Risk Of Abuse and/or Neglect* is in the process of being updated.

## References

- [HLS inquest findings](#)<sup>3</sup>
- [LCTM findings](#)<sup>4</sup>
- [National Fetal Alcohol Spectrum Disorder Strategic Action Plan 2018-2028](#)<sup>5</sup>
- [Bilateral Schedule: Interagency Collaborative Processes When An Unborn Or Newborn Baby Is Identified As At Risk Of Abuse and/or Neglect](#)<sup>6</sup>

## Further reading and resources

- [Audit C eLearning Package: FASD Education Package for health professionals](#)<sup>7</sup>
- [No FASD Australia organisation](#)<sup>8</sup>
- [Language Guide – Promoting dignity for those impacted by FASD](#)<sup>9</sup>

## Discussion points

- What FASD prevention strategies exist in your area? Do you know of any other strategies that have been successful elsewhere?
- What is the difference between making a diagnosis, and conducting a functional assessment? What might be the pros and cons of each approach?

<sup>3</sup> [https://www.coronerscourt.wa.gov.au/Inquest into the death of hls subject to suppression order.aspx](https://www.coronerscourt.wa.gov.au/Inquest%20into%20the%20death%20of%20hls%20subject%20to%20suppression%20order.aspx)

<sup>4</sup> [https://www.coronerscourt.wa.gov.au/Inquest into the death of lctm.aspx](https://www.coronerscourt.wa.gov.au/Inquest%20into%20the%20death%20of%20lctm.aspx)

<sup>5</sup> <https://beta.health.gov.au/resources/publications/national-fetal-alcohol-spectrum-disorder-fasd-strategic-action-plan-2018-2028>

<sup>6</sup> <https://ww2.health.wa.gov.au/About-us/Policy-frameworks/Clinical-Services-Planning-and-Programs/Mandatory-requirements/Child-Health/Bilateral-Schedule-Interagency-Collaborative-Processes>

<sup>7</sup> <http://www.nmhs.health.wa.gov.au/SOSU/EducationHub.html>

<sup>8</sup> [www.nofasd.org.au](http://www.nofasd.org.au)

<sup>9</sup> <https://www.fasdwaterlooregion.ca/assets/documents/laeo-language-guide-r4.pdf>

## Complex surgery

### Key Message

- A considered approach is needed for low-volume, high-complexity surgery to ensure optimal outcomes for patients

A 59-year-old woman died in hospital from complications of intra-abdominal sepsis, including multi-organ failure and bowel perforation, following a median hepatectomy for cholangiocarcinoma.

She had undergone endoscopic retrograde cholangio-pancreatography (ERCP) and biliary duct stent placement after an ultrasound scan revealed a likely tumour causing bile duct obstruction. Further scans showed no metastatic disease, and surgery to remove the tumour and reconstruct the bile ducts was booked for 10 days later. The operation was postponed twice due to other more pressing cases, and the deceased developed probable cholangitis with fever and jaundice, requiring treatment with intravenous antibiotics before the operation went ahead 20 days after the ERCP.

The procedure, a median hepatectomy with bile duct reconstruction was described as being exceptionally complex and rarely attempted high risk surgery that can take up to 11 hours to perform. It went as planned, although suturing the small bile ducts was described as having been very difficult and the anastomosis was thought to be at high risk of developing a leak. Tissue samples showed the tumour had been completely removed. The deceased was admitted to ICU and commenced on total parenteral nutrition. The following day bleeding at the site of surgery was identified and the deceased underwent another operation to control this. Her surgeon then went on planned leave for two weeks, leaving her in the care of his senior registrar and a general surgeon.

Initially she had pain, low urine output, fluid overload and pleural effusions, but recovered enough to be transferred to the ward. She then became unwell for several days, with evidence of intraabdominal fluid collection, worsening pleural effusions, and subclinical sepsis with bacteria cultured from the abdominal drains. Antibiotics were commenced, and an intra-abdominal bile collection was confirmed on ultrasound scan. The pleural effusions were deemed to be related to abdominal sepsis, and thus were not drained. The surgeon covering the unit considered taking the deceased back to theatre for another laparotomy and washout, or inserting more drains, but chose a conservative course. She improved over the next few days and after a few weeks was able to sit out of bed, mobilise with a frame, and start to take nourishing fluids although her multiple food intolerances limited her oral intake.

Unfortunately, at about three weeks after the initial operation the deceased started to deteriorate again. One drain had “faecal looking fluid” in it. A cholangiogram showed anastamotic leakage, and CT scan confirmed infection in the abdominal collection. Another pigtail drain was inserted, fluid from which grew *E. coli* and *Enterococcus*. She developed respiratory failure relating to the increasing pleural effusions and fluid overload and spent a few days back in the HDU. One week later she developed some wound breakdown. An intercostal catheter (ICC) was placed into the larger right sided pleural effusion and drained over a litre of fluid. She remained confused with severe fluid overload and nutritional deficiency. Infectious Disease specialist opinion was sought and was to the effect that she had complex intra-

abdominal poly-microbial sepsis reflecting undrained collections. No change to antibiotics was needed, but drainage of the collections was recommended.

Four days later a new pigtail drain was inserted into her distended abdomen to drain ascites. She continued to deteriorate, developing kidney failure, rising inflammatory markers and fever, eventually requiring inotropes.

She was taken back to theatre when faecal material was noted at an old drain site. She underwent colectomy and colostomy for bowel perforation and returned to ICU. Two further operations took place over the next few days, however she then deteriorated rapidly, and died a few days later after life support was discontinued.

### **Inquest findings and comments**

The cause of death was determined to be complications of intra-abdominal sepsis, including multi-organ failure and bowel perforation, following a median hepatectomy for cholangiocarcinoma. The manner of death was natural causes.

Multiple expert opinions were sought from specialist surgeons and ranged from highly critical to highly supportive of the care provided.

The lack of a specialist liver surgeon to oversee the post-operative care was seen as not ideal, however the decisions made in the treating surgeon's absence were shown to be reasonable at the time. Since the time of the death, more specialist liver surgeons have been employed at the hospital.

The postponement of the first operation following the initial ERCP and stent insertion was described as 'a difficult issue to address'. Two eminent liver surgeons gave diametrically opposed views on the desirability or otherwise of delaying a median hepatectomy and bile duct reconstruction following the insertion of a biliary stent, leading to the Coroner making two suggestions.

### **Coroner's recommendations**

No recommendations were made however the Coroner made the following suggestions:

1. That the Royal Australasian College of Surgeons and the Australian and New Zealand Hepatic, Pancreatic and Biliary Association to consider providing guidelines to their members on this issue if they have not done so already.
2. If the Royal Australasian College of Surgeons considers that similar surgeries should occur within a very limited time, the Health Department and the National Ministers' Advisory Council should consider reflecting that view in their respective elective surgery urgency categorisation policies.

### **WA health system action**

Expert advice regarding the Coroner's suggestions advised that the time between the insertion of a stent and the subsequent operation is not always necessarily critical and reinforced the importance of multi-disciplinary management of such liver cancer cases and of clinical judgement based on the individual situation. Expert advice was that it would not always be appropriate to develop set guidelines on this issue.

The Coronial Review Committee members considered the Hugo-Mascie Taylor recommendation in the *Review of Safety and Quality in the WA health system report* regarding low volume, complex cases. It was noted that Victoria is currently undertaking work regarding low volume cases and the WA work will feed into it.

## References

- [RZEPCZYNSKI findings](#)<sup>10</sup>

## Further resources

- [Review of Safety and Quality in the WA health system – A strategy for continuous improvement](#)<sup>11</sup>

### Discussion points

- Are there any complex or highly specialised procedures or treatments are provided infrequently at your workplace?
  - How can safe, high quality care be assured in these circumstances?
- How would you address the tension between the improved outcomes available when complex specialised or resource-intensive care is provided in a small number of locations and the inequity of access to people living across WA's large but sparsely populated area?

---

<sup>10</sup> [https://www.coronerscourt.wa.gov.au//inquest\\_into\\_the\\_death\\_of\\_anne\\_rzepczynski.aspx](https://www.coronerscourt.wa.gov.au//inquest_into_the_death_of_anne_rzepczynski.aspx)

<sup>11</sup>

<https://ww2.health.wa.gov.au/~//media/Files/Corporate/general%20documents/Review%20of%20Safety%20and%20Quality/Review-of-safety-and-quality.pdf>

## Medication misuse

### Key Messages

- Access to real time pharmaceutical dispensing information for Western Australia is still under development
- Fragmentation of care may be an impediment to the provision of best quality health-care.

A 36-year-old man died as the result of the effects of benzhexol<sup>12</sup> and amphetamine type stimulants and dehydration with renal impairment on a background of cardiomyopathy and morbid obesity. He was on a community treatment order under the *Mental Health Act 2014* at the time.

The deceased had an extensive history of polysubstance abuse since his teenage years. He had his first diagnosed episode of psychosis in his early 20s, and subsequently was managed under the *Mental Health Act* for many years, both in the community by various Community Forensic Mental Health Services (CFMHS) and as an inpatient in hospitals.

His medical history included recurrent skin abscesses and Hepatitis C related to IV drug use, high blood pressure, gastric reflux, raised cholesterol, morbid obesity with a BMI of 51, and left atrial enlargement.

He had a regular GP for the last eight years of his life, but unbeknownst to that GP, also visited other GPs and the Street Doctor service. The CFMHS team believed he frequently obtained medications for physical conditions that he did not have, and at the time of his death the CFMHS team were applying for a guardianship order as a means of limiting this detrimental behaviour. Whilst the deceased had a tendency to concentrate on his physical health, he often refused diagnostic investigations. His adherence to medications for his mental health was poor, and he was managed with oral olanzapine and depot fluphenazine<sup>13</sup>. It is likely that he may have been diverting prescription medication and selling illicit drugs, as well as misusing them.

During hospital admissions, the team caring for the deceased would attempt to rationalise his regular medications and include that information in the discharge letter sent to the GP, but on discharge his GP would usually recommence drugs that had been ceased. Of special concern was the benzhexol prescribed by the GP to prevent tardive dyskinesia – this was prescribed at an unusually high dose. The GP had noted tongue flickering at one point and was concerned about extrapyramidal effects from the fluphenazine. There were other concerns about medications prescribed by the GP for conditions that he probably did not have, some of which are contraindicated for people with psychiatric illness or history of drug misuse, and others contraindicated when prescribed together, such as sildenafil (Viagra) and glyceryl trinitrate (GTN), phentermine (Duromine) and clonidine.

---

<sup>12</sup> Benzhexol is an anticholinergic, similar to benztropine, and can be used to manage drug-induced parkinsonism and acute dystonic reactions. It is not recommended for the treatment of tardive dyskinesia caused by neuroleptics, and there may be an increased risk of the development of tardive dyskinesia during concomitant administration of anticholinergic agents and neuroleptics. It may be deliberately misused for its stimulating and euphoriant effects including vivid hallucinations.

<sup>13</sup> Fluphenazine, a phenothiazine, is no longer available in Australia due to supply chain issues. There were no safety concerns with its use.

Communication between inpatient and outpatient mental health services and the GP tended to be one-sided, and usually in the form of letters. Concern over the likelihood that deceased was misusing prescription medication was raised by the mental health teams. Phone contact with the GP was attempted a few weeks before the deceased's death but was unsuccessful. The GP was not involved in the case conference in hospital where guardianship was discussed. During the deceased's final hospital admission, the dose of benzhexol was slowly reduced to avoid withdrawal, with the plan for it to be ceased altogether a week after discharge, however the deceased visited his GP shortly after discharge and was prescribed more benzhexol at the previous high dosage. He was managed in the community by the mental health team, with frequent contact between the deceased and the mental health team. He appeared relatively stable, but the team had ongoing concerns about the medications being prescribed by the GP.

A few months after discharge, the deceased caused a disturbance at a restaurant, was thrown out, and police attended to him on a park bench nearby. He appeared very dehydrated and had soiled himself. He had multiple pills in his possession, including a bag of Viagra tablets, one of which he took in the presence of the police. Initially he was able to walk a short distance, and had slurred speech, but he deteriorated rapidly after the ambulance the police had called for arrived. Resuscitation attempts on the scene and at hospital were unsuccessful.

### **Inquest findings and comments**

Post-mortem toxicology reports revealed a very high level of benzhexol, 20 times higher than would be expected. Phentermine and methamphetamines were also present.

The cause of death was the combined effects of benzhexol, amphetamine-type stimulants and dehydration with renal impairment in a man with cardiomyopathy and morbid obesity. Death occurred by way of accident.

Expert psychiatric opinion was sought. The Coroner was satisfied that the supervision, treatment and care provided by the CFMHS was of a high standard, though noted that more could have been done to engage with other medical practitioners in the community.

During the inquest, counsel submitted that the GP be referred to AHPRA, but the Coroner declined to do so, as the GP believed the dose of benzhexol prescribed was necessary to manage the deceased's drug-induced dystonia.

### **Coroner's recommendations**

No recommendations were made.

### **References**

- [FRANKER inquest findings](#)<sup>14</sup>
- [Western Australian Legislation. \*Mental Health Act 2014\*](#)<sup>15</sup>

### **Discussion points**

- What information do you need in order to safely prescribe medications?
- When should you seek expert advice?

<sup>14</sup> [https://www.coronerscourt.wa.gov.au/Inquest into the death of kim martin franker.aspx](https://www.coronerscourt.wa.gov.au/Inquest%20into%20the%20death%20of%20Kim%20Martin%20Franker.aspx)

<sup>15</sup> [https://www.legislation.wa.gov.au/legislation/statutes.nsf/main\\_mrtitle\\_13534\\_homepage.html](https://www.legislation.wa.gov.au/legislation/statutes.nsf/main_mrtitle_13534_homepage.html)



## Medication reconciliation

### Key Message

- Serious mental illness is associated with reduced life expectancy.

A 45-year-old man died of coronary atherosclerosis whilst he was an involuntary patient in a mental health unit.

The deceased had a history of treatment-resistant schizoaffective disorder since his teens. He was reasonably stable whilst taking clozapine but deteriorated a few years before his death when he stopped taking it for a period of time. He was commenced on depot medication in order to improve his condition, and later restarted on clozapine. The deceased also had Type II diabetes mellitus, hypertension, raised cholesterol, obesity and left ventricular hypertrophy with ECG changes. His medical conditions were managed by his GP, and in the week before his death his diabetes and blood pressure management were reported to be satisfactory. An angiogram performed in the year before his death to investigate exertional chest pain and shortness of breath showed non-occlusive coronary artery disease, and an echocardiogram a few months later was described as generally reassuring though technically difficult.

His mental health deteriorated when he discontinued clozapine again and he was admitted to hospital as an involuntary patient. He was initially aggressive and combative and was restrained and chemically sedated for the first few hours of the admission. His usual medications were not prescribed or administered.

The following evening the deceased was found unresponsive in a chair, many hours after the last dose of any sedative, and resuscitation attempts were not successful.

### Inquest findings and comments

The cause of death was posited to be a cardiac event on the background of a significantly enlarged heart and coronary atherosclerosis. There was no evidence of clozapine-induced cardiomyopathy, and the drugs used for sedation were not implicated in the death. The manner of death was natural causes.

During the inquest concern was raised about the omission of the regular medications on admission to hospital. It was suggested that the deceased may have stopped taking all his medications prior to admission. Expert opinion was that the medications for blood pressure and diabetes modify long term risk, and there would be no harm from omitting them in the short term. Barriers to medication reconciliation were discussed as well as improvements made by the admitting hospital since the death.

### Coroner's recommendations

No recommendations were made, and there was no adverse finding made regarding the omission of regular medications.

### WA health system action

Gaps in medication reconciliation at the admitting hospital were identified and addressed.

## References

- [GRIEVE inquest findings](#)<sup>16</sup>

## Further resources

- [Medication reconciliation](#)<sup>17</sup>

### Discussion points

- What is medication reconciliation, and how can it be best achieved?
- Recognising that serious mental illness is associated with reduced life expectancy, what factors contribute to this and what might be done to address this?

---

<sup>16</sup> [https://www.coronerscourt.wa.gov.au/Inquest into the death of david griev.aspx](https://www.coronerscourt.wa.gov.au/Inquest%20into%20the%20death%20of%20David%20Grieve.aspx)

<sup>17</sup> [https://ww2.health.wa.gov.au/Articles/J\\_M/Medication-reconciliation](https://ww2.health.wa.gov.au/Articles/J_M/Medication-reconciliation)

## Rare side-effect of a common medication

### Key Message

- Laryngeal dystonia is a rare but potentially lethal extrapyramidal side effect of some medications.

A 45-year-old man died following an apparent respiratory arrest related to laryngeal dystonia, a complication of the antipsychotic medication he was taking to manage his severe psychotic illness.

The deceased had been commenced on depot zuclopenthixol in the year before his death, and experienced extrapyramidal side effects including altered voice quality. These side effects were treated with benztropine.

Following a period of increased stress and nonadherence to medication he was admitted to a mental health unit of a general hospital as an involuntary patient. Throughout his admission he was noted to have noisy breathing, and this was thought at various times to possibly be due to asthma, anaphylaxis, or laryngeal dystonia, a rare and potentially lethal extrapyramidal side effect of antipsychotic medication. As the deceased's mental state was improving, the zuclopenthixol was continued, and benztropine given regularly.

Late one night he became distressed with breathing difficulties. A psychiatry registrar reviewed him and suspected this was due to laryngeal dystonia. Benztropine was administered, and initially the deceased improved, but a medical emergency call had to be put out a few hours later when he deteriorated. Other medical officers present were concerned that the dyspnoea might be the result of anaphylaxis or asthma rather than laryngeal dystonia, and he was treated with adrenaline and hydrocortisone with little effect. Tests for anaphylaxis were inconclusive. He was moved to the intensive care unit for observation for the rest of the night and returned to the mental health unit the following afternoon when he had recovered.

After evening handover, he was reviewed by the night medical and psychiatric registrars. It was noted that he had a hoarse voice, though clear chest and normal vital signs. He had difficulty sleeping and was very anxious. He collapsed suddenly in the middle of the night after appearing pale and breathless. Resuscitation was commenced immediately but was unsuccessful.

### Inquest findings and comments

At post mortem no definitive conclusion regarding cause of death could be ascertained, with the pathologist suggesting upper airway obstruction leading to respiratory arrest initiating the final collapse as a possible explanation. There was evidence of severe coronary artery atherosclerosis, but no sign of acute infarct, and no evidence of asthma.

The opinion of a respiratory physician was sought, and he agreed that the collapse was likely related to lingual and laryngeal dystonia. A distinction between inspiratory and expiratory breath sounds was highlighted in relation to recognising inspiratory stridor in upper airway obstruction as distinct from expiratory sounds of lower respiratory tract airway disease.

The manner of death was deemed to be cardiorespiratory arrest as a result of ongoing laryngeal dystonia. While use of antipsychotics induced the extrapyramidal effects of lingual laryngeal dystonia, his psychosis was severe, and it was necessary he be treated. His co-morbidities were naturally occurring.

Death occurred by way of natural causes. The Coroner was unable to determine whether earlier appreciation of the erratic and severe nature of the deceased's laryngeal dystonic reaction by the provision of life support before his final collapse could have prevented his death. The Coroner was satisfied that the supervision, treatment and care was reasonable in all the circumstances, but stated that the case needs to be used as a learning exercise as to the potential for a fatal outcome with lingual laryngeal dystonic reactions.

### Coroner's recommendations

I recommend those caring for patients treated with antipsychotic medication be trained to record in the notes whether any noted breathing difficulty relates to inspiration or expiration. This may provide a diagnostic tool in recognising the potential for laryngeal dystonia and prompt medication and intensive breathing support prior to arrest.

### WA health system action

Laryngeal dystonia awareness and escalation of a deteriorating patient were raised with relevant stakeholders including the Mental Health Clinical Reference Group. A range of policies and protocols are in place to ensure the timely identification and response to the deteriorating physical health of a mental health patient. The Chief Psychiatrist's Standards for Clinical Care monitoring program includes in its audit whether mental health patients have a physical examination within 12 hours of admission and that mechanisms to recognise and respond to respiratory issues exist across the WA health system to escalate care when necessary.

### References

- [KING findings](#)<sup>18</sup>

### Further reading and resources

- [Chief Psychiatrist's Standards for Clinical Care](#)<sup>19</sup>
- [Recognising and responding to acute deterioration](#)<sup>20</sup>

### Discussion points

- What are the relevant policies and protocols in your service to aid in the management of physical deterioration in mental health patients?
- What is your local process to escalate physical health concerns for mental health patients?
- What processes are in place where you work to ensure awareness of adverse drug reactions that may arise from the medications commonly used in your area?

<sup>18</sup> [https://www.coronerscourt.wa.gov.au//inquest into the death of stanley king.aspx](https://www.coronerscourt.wa.gov.au//inquest%20into%20the%20death%20of%20stanley%20king.aspx)

<sup>19</sup> <https://www.chiefpsychiatrist.wa.gov.au/chief-psychiatrists-standards-for-clinical-care/>

<sup>20</sup> [https://ww2.health.wa.gov.au/Articles/N\\_R/Recognising-and-responding-to-acute-deterioration](https://ww2.health.wa.gov.au/Articles/N_R/Recognising-and-responding-to-acute-deterioration)

## Off-label prescribing

### Key Message

- Prescribers should be aware of the risks of off-label prescribing and ensure they have been considered as well as the potential benefits

A 41-year-old man died of atropine toxicity resulting from approved off-label use of atropine to treat medication side effects.

The deceased had been born three months prematurely into a large family, had significant intellectual impairment and had severe hearing impairment from childhood. He had poor impulse control and a history of psychotic symptoms starting in his teenage years and had multiple prolonged hospital admissions for his mental health problems. His forensic history included sexual assault and indecent behaviour, and he had spent some time in prison and at the State Forensic Mental Health Service inpatient unit. He was considered to be at high risk of reoffending.

The deceased's last hospital admission lasted more than two years. Discharge planning was prolonged and complicated, with multiple agencies involved in long-term care planning. A guardian from the Office of the Public Advocate was appointed. It was agreed that the deceased would need 24-hour support in the community to manage his mental health and risk of reoffending, and that this would be best in an independent home with round-the-clock carer support from an NGO specialising in provision of care for people with intellectual disability.

Funding for a house and a carer for 17 hours per day was obtained. Discharge was staged with alternating overnight leave with a carer present, then a one-week trial, prior to formal discharge. A discharge letter containing details of his medication regime was sent to his GP, but the NGO and carers were not provided with a written care plan regarding any responsibility of the carers in relation to the supervision of medication. There appeared to have been an assumption that the deceased would have administered his own medication with observation from the carers. Discussion about medications prior to discharge focussed only on the management of his Type II diabetes mellitus.

Medications at discharge were insulin and metformin, cyproterone as an anti-libidinal agent, chlorpromazine, depot zuclopenthixol, clonazepam, and off-label sublingual atropine eye-drops to treat hyper-salivation, a side-effect of some of the other medications. During the last six months of his hospital admission the deceased had been able to safely self-administer the atropine drops each night and would take the other medications as dispensed to him.

Three days after discharge the deceased was more aggressive than usual in the evening, refusing to take his evening medications, and he smashed a bowl and then a window. He sustained a small laceration to his right index finger, which was bandaged at a local medical centre that the carer took him to. He was last seen going to his room at around 2:15 am, after having eaten food prepared for him by the carer. At 6:40 am the carer found the deceased cold and pulseless on the floor next to his bed. An ambulance was called, and an ambulance officer certified life extinct at the scene. Police investigation of the scene found no evidence of criminality.

## **Inquest findings and comments**

During post-mortem examination and toxicological investigation, 15mg of atropine was found in the stomach, a dose of around 6 - 8ml, or around 50 – 100 times conventional therapeutic administration. The cause of death was atropine toxicity. As there was no evidence to suggest that the deceased was suicidal, or knew that the atropine solution was potentially toxic, the manner of death was found to be accidental. The plastic dispenser bottle for atropine was found to be very easy to empty with a gentle squeeze.

In the Coroner's view the supervision and care was deficient to the extent that the deceased was provided with toxic quantities of atropine to self-administer from a container that facilitated an overdose. An underlying cause was a lack of awareness that atropine was potentially lethal and that inadvertent overdose was so easy, as well as the lack of communication from the multi-agency group to the NGO carers to ensure that they supervised the safe administration of the deceased's medications.

## **Coroner's recommendations**

The Coroner did not make any formal recommendation however made the following suggestions:

- a) Health care providers review the oral use of atropine and the provision of atropine to patients to self-administer
- b) Clear warnings of the danger of toxicity from overdosing orally ingested atropine be placed on atropine containers, and similar warnings be conveyed to carers and patients
- c) Atropine for oral use not be provided or stored in soft, squeezable containers

## **WA health system action**

The WA Psychotropic Drug Committee disseminated an advisory email regarding atropine eye drops for hypersalivation and a Medication Safety Alert was disseminated by the Department of Health to all WA HSPs regarding the use of atropine eye drops for hypersalivation.

The Therapeutic Goods Administration (TGA) was notified of the incident and advised that due to limited label space only information related to atropine eye drops intended ophthalmic use can be included on the label. This case was logged in the TGA's Australian Adverse Event Management System.

A minim formulation, with a reduced volume of atropine solution is available; however due to its increased cost is not a viable option for many patients.

## References

- [KANAWATI findings](#)<sup>21</sup>

## Further resources

- [James Reason's: Human error: models and management](#)<sup>22</sup>

### Discussion points

- Review the incident using James Reason's model. Were there any latent system vulnerabilities, error-prone conditions, unsafe actions, and potential barriers?
- Can you identify any omissions, violations, slips and lapses, both knowledge- and action-based?

---

<sup>21</sup> [https://www.coronerscourt.wa.gov.au/Inquest into the death of radwan kanawati.aspx](https://www.coronerscourt.wa.gov.au/Inquest%20into%20the%20death%20of%20Radwan%20Kanawati.aspx)

<sup>22</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1117770/>

## Co-sleeping

### Key Messages

- The topic of co-sleeping can be a controversial area with a range of perspectives, but remains a cause of preventable death in infants

An eight week old premature baby died as a result of mechanical asphyxiation, a consequence of overlaying.

He had been born 12 weeks premature to young parents at a remote community in the State's far north. He was transferred to a tertiary hospital where he received intensive neonatal care for nearly two months. He received immunisations and his parents received education about safe sleeping.

The deceased was discharged from the tertiary hospital when he was nearly eight weeks of age (corrected age 36+3/40) and was transferred with his family to a regional hospital closer to their home. This involved a three-hour flight and a three-hour bus ride, leaving the family exhausted when they arrived late at night. They were admitted to a room with a bed for the mother, a folding bed for the father, and a cot for the baby. The midwife on night shift explained the hospital's policy regarding safe sleeping, though this was not documented. During the night she checked on the family every 30-60 minutes, and at times found the mother and baby to be co-sleeping. The midwife moved the baby back to the cot repeatedly, often having to wake the mother to do so.

The following day the midwife on shift saw the mother and baby co-sleeping early on in her shift but did not wake them or move the baby back to the cot. At 9am and 10am they were sighted awake and breastfeeding with the mother lying down in bed, cradling the baby with one arm. The baby's father asked his partner to place the baby back in the cot, but when the baby cried she picked him up to lay down in bed with him again. A couple of hours later the baby was found to be unresponsive and not breathing, with his face right up against his mother's breast as she lay sleeping. Resuscitation attempts were unsuccessful.

### Inquest findings and comments

The cause of death was determined to be mechanical asphyxiation as a consequence of overlaying, and the manner of death by accident.

The inquest highlighted the difficulties inherent in reconciling WA Health's policies around safe sleeping, and the cultural practices of many Aboriginal communities, where to sleep separately from a baby may be regarded as poor parenting or might not be feasible due to overcrowding and lack of appropriate bedding or cots.

Since the death, staff members at the regional hospital have been exploring more culturally appropriate ways of delivering the safe sleeping message to parents, including looking at the Pepi-Pod Program from New Zealand that is being trialled in Queensland. This has been



accepted and used appropriately by parents from families with identified risk factors for Sudden Unexpected Death in Infancy.

Other changes in the region were highlighted, including work around improving use of interpreters and Aboriginal Liaison Officers, the development of Aboriginal Health Practitioners, cultural awareness training, and education about institutionalised racism.

### Coroner's recommendations

I recommend that WACHS give active consideration to implementing a culturally appropriate safe sleeping space tool, such as the Pepi Pod, in regional WA Hospitals, following the lead set by New Zealand and the Queensland Government.

### WA health system action

The WA Country Health Service (WACHS) has committed to undertake a review of safe sleeping space options, including the Pepi-Pod® product to determine their appropriateness for use with high risk women in a hospital. This is in addition to continuing to provide a Safe Infant Sleeping eLearning package for staff.

### References

- [Baby A inquest findings](#)<sup>23</sup>
- [WA Department of Health \(2019\). \*Safe Infant Sleeping Policy\*](#)<sup>24</sup>

### Further reading and resources

- [New Zealand Pepi-Pod® sleep space programme](#)<sup>25</sup>
- [The Queensland Pepi-Pod® Program](#)<sup>26</sup>

### Discussion points

- What factors influence carer/infant sleeping arrangements?
- What approaches to promote safe sleeping are used in other countries? How can safe sleeping be promoted in a culturally safe way?
- What is the role of sleep deprivation?

<sup>23</sup> [https://www.coronerscourt.wa.gov.au/Inquest\\_into\\_the\\_death\\_of\\_baby\\_a\\_subject\\_to\\_suppression\\_order.aspx](https://www.coronerscourt.wa.gov.au/Inquest_into_the_death_of_baby_a_subject_to_suppression_order.aspx)

<sup>24</sup> <https://ww2.health.wa.gov.au/About-us/Policy-frameworks/Clinical-Services-Planning-and-Programs/Mandatory-requirements/Newborns-and-Infants/Safe-Infant-Sleeping-policy>

<sup>25</sup> [http://www.changeforourchildren.nz/pepi\\_pod\\_programme/home](http://www.changeforourchildren.nz/pepi_pod_programme/home)

<sup>26</sup> <https://www.usc.edu.au/research-and-innovation/medical-and-health-science/nurture/research-projects/the-queensland-pepi-pod-program/introducing-the-p%C4%93pi-pod-sleep-space-program>

## Cardiac arrest in the country

### Key Message

- Maintenance of the skills and expertise required for emergencies requires continuing education and training

A 63-year-old man died in a small country hospital as the result of acute myocardial infarction. The deceased presented to the emergency department (ED) of a small country hospital late at night, having experienced chest pain and shivering for several hours. The 20 bed hospital was staffed overnight by two nurses. There was no GP on-call locally, with overnight medical support being available over the phone from either the regional hospital or from Royal Flying Doctor Service (RFDS).

He was triaged as Category 2 under the Australasian Triage Scale, requiring medical input within 10 minutes, but it was over an hour before contact with a doctor was made. The initial ECG showed an acute myocardial infarction, and the deceased was given aspirin and glyceryl trinitrate (GTN). The senior nurse believed that she would need to fax the initial ECG and completed paperwork to the regional hospital prior to calling to speak with the doctor on call. The fax machine was in a different room, and she was interrupted every time she tried to go to it as the junior nurse called for help as the deceased's symptoms and condition changed. An hour after arrival, the deceased went into cardiac arrest and CPR was commenced. The nurses took turns to administer chest compressions, and to phone other nurses who lived nearby for assistance.

Around 25 minutes after the deceased went into cardiac arrest; a doctor from RFDS was contacted and was able to guide the resuscitation efforts. Six shocks were delivered using the automatic external defibrillator (AED), CPR continued, adrenaline administered but ultimately the resuscitation was unsuccessful.

Following cessation of resuscitation, it was then discovered that the AED had inadvertently been used in manual mode and had delivered shocks at 30 joules instead of the recommended level of 200 joules. It had been checked earlier that day in manual mode and had defaulted to manual mode when used during the resuscitation.

It was noted that the senior nurse working that night usually worked elsewhere in the region and had been called in at short notice to cover a staffing shortfall. No orientation had been provided, and she had not undergone reskilling recently.

### Inquest findings and comments

The cause of death was acute myocardial infarction, and the manner of death natural causes.

Expert opinion was that the deceased had suffered a large myocardial infarction, and that whilst early thrombolysis might have improved his chance of survival, once he'd arrested the chance of survival was extremely poor, regardless of his location.

### Coroner's recommendations

No recommendations were made.

## WA health system action

The WA Country Health Service implemented an Emergency Care Capability Framework in 2016, with each health site being allocated an emergency care category and a standard set of minimum criteria for the planning and delivery of clinical and support services. Telehealth has been made available across the state to enable around the clock medical support.

Changes have been made to the WA Country Health Service chest pain pathway, highlighting the need for early medical input, prior to the completion of paperwork. Resuscitation trolleys have been standardised across the region where this event occurred, and there has been regional education, upskilling and support with improved recruitment and retention of staff. The fax machine at this site has been moved closer to the ED bays.

## References

- [CARTER inquest findings](#)<sup>27</sup>

### Discussion points

- What barriers exist in your work place to asking for assistance? How can these be modified or removed?
- How can “short-handed resuscitation” be optimised?

---

<sup>27</sup> [https://www.coronerscourt.wa.gov.au//inquest\\_into\\_the\\_death\\_of\\_roderick\\_leslie\\_carter.aspx](https://www.coronerscourt.wa.gov.au//inquest_into_the_death_of_roderick_leslie_carter.aspx)

## Missed opportunity for communication

### Key Messages

- Where multiple services are involved, collaboration and information sharing are vital

### Case 1

The deceased died aged 39 years from suicide by hanging in 2014, he was subject to a community treatment order (CTO) and his death was therefore subject to a mandatory inquest. He had a background of schizoaffective disorder with anti-social personality traits; and a history of self-harm and suicide attempts when he was acutely unwell. Difficulties in treating him were compounded by his lack of insight, non-compliance with oral medication and ongoing illicit drug use.

Prior to his death he was arrested after throwing a vase through a window and threatening an acquaintance with a knife. His mother contacted the police requesting that they take him to a hospital for a mental health assessment. The deceased showed no indication that he was at risk of self-harm, so the police took him home after charging him.

The next day his mother could not contact him so rang his case manager, who found the deceased hanging in the rear yard of his unit.

### Inquest findings and comments

Expert review discussed the difficulties in providing care across locations, the deceased delusional belief when unwell in regard to his family hindered sharing of information, the absence of a co-ordinated treatment plan and insufficient communication between agencies. Information was also provided in regard to the improvement in a new health multi-disciplinary team approach to patient care and extended after-hours services.

WA police noted that police officers receive mental health training, that there are Mental Health Co-response teams in Perth and a mental health practitioner at Perth Watch House. The Police Inspector commented that there was a policy for officers to contact Mental Health Emergency Response Line (MHERL) if they suspect they are dealing with a person with a mental illness. He was not critical of the police's decision not to contact MHERL after his arrest but that it would have been prudent to do so.

The Coroner was satisfied that the standard of care provided was acceptable but that improvements could have been made.

The Coroner made a recommendation aimed at improving the ongoing training of police officers when dealing with persons with mental health issues.

### Coroner's recommendations

No recommendations were made.

### WA health system action

The Mental Health Co-Response (MHCR) trial was implemented in January 2016 and is a joint initiative between WA Police, the Mental Health Commission (MHC) and Health Service Providers (HSP). The trial enables police and mental health clinicians to share information and jointly attend crisis situations where mental illness is identified as a likely factor. The two-year

trial was initially implemented in January 2016 and is continuing to be delivered as per its trial form.

WA HSPs have a range of policies and processes that support implementation of the mandatory policy *Community Mental Health Status Assessments Role of Mental Health Clinicians*, including management plans to de-escalate a situation and reduce risk. The mandatory policy was updated in November 2018.

## Case 2

A 60-year-old woman died as a result of the effects of fire.

The deceased was born in WA. She had several children with whom she maintained close relationships, though after a series of troubled personal relationships had preferred to remain single in later life.

The deceased had a history of mental illness dating back approximately 30 years and had been diagnosed with schizophrenia. Her medication compliance was noted to be poor, resulting in several relapses requiring admissions to mental health services including an admission five years prior to her death which was triggered by her threatening to burn her house down. Her final admission occurred three months prior to her death, at which time she presented as psychotic with evidence of poor medication compliance and self-neglect. Her symptoms improved with adjustment of her antipsychotic medication.

Following discharge, the deceased required some prompts to collect her oral medications, but otherwise appeared well initially. Approximately three weeks prior to her death, she appeared paranoid and a smell consistent with drug use was noted at her property, however, on review the following day, she appeared well again.

On the day before her death, the deceased was noted to be behaving in an agitated and disruptive manner at a local supermarket, which was reportedly not unusual for her. Later that day she was visited by her son who found her to be acting strangely. He was concerned and attempted to convince the deceased to go to hospital, but she declined. Her son, believing that an ambulance would not attend the house without police in attendance, contacted a neighbour requesting that they call the police to arrange an ambulance because he and his mother were "not well". When police attended, they found the deceased's son appeared to be intoxicated and aggressive, but they did not have any concerns about his welfare. They did not speak to the deceased.

On the same day, the local mental health service received an anonymous call stating that the deceased was "going off" but no further information was provided. Later that evening the deceased's son contacted the mental health service stating that his mother was "acting up". He was advised to contact the police (and replied that they had been contacted but were not helpful) and then to call an ambulance, at which point he ended the call.

The following morning, neighbours noticed a broken window and an activated smoke alarm at the deceased's property. On investigation, they noted that the interior of the house appeared burnt. They were unable to gain access to the property and called emergency services. On arrival of Department of Fire and Emergency Services staff, there was no active fire but evidence of significant fire damage. The deceased was found sitting on a couch that had been moved to block the door. On investigation it was determined that the fire commenced in a mattress either by a deliberate act or accidental ignition from an unattended cigarette.

## Inquest findings and comments

The Coroner found that the cause of death was effects of fire in a woman with alcohol effect and made an open finding regarding the manner of death.

The Coroner found that while the two phone calls received by the health service regarding the deceased were dealt with according to appropriate procedures, there was inadequate information obtained from the first phone call to make a proper assessment of the situation. The Coroner supported the health service's actions to develop a clear communication process and enact crisis management plans for patients known to decompensate quickly.

The police response to this event was discussed in detail by the Coroner. The Coroner found that the police response to the deceased's son was poor and that further investigation may have prevented the death. However, the coroner was satisfied with the WA Police internal investigation and made no formal recommendations about this.

## Coroner's recommendations

No recommendations were made.

## References

- [CAIN findings](#)<sup>28</sup>
- [QUARTERMAINE findings](#)<sup>29</sup>
- [Community Mental Health Welfare Checks: Role of Mental Health Clinicians Policy](#)<sup>30</sup>

## Further resources

- [Mental Health Emergency Response Line \(MHERL\)](#)<sup>31</sup>
- [Western Australian Legislation. \*Mental Health Act 2014\*](#)<sup>32</sup>

## Discussion points

- What responsibility do health services have to act on information that a member of the public may be unwell?
- How does your health service manage anonymous calls reporting concerning behaviours?
- How can good collaboration between health services and other organisations be ensured?
- How can the right balance be found between patient confidentiality, the family's right for information and the Mental Health Act requirements to disclose notifiable events?

<sup>28</sup> [https://www.coronerscourt.wa.gov.au/Inquest\\_into\\_the\\_death\\_of\\_brook\\_damian\\_cain.aspx](https://www.coronerscourt.wa.gov.au/Inquest_into_the_death_of_brook_damian_cain.aspx)

<sup>29</sup> [https://www.coronerscourt.wa.gov.au/Inquest\\_into\\_the\\_death\\_of\\_aileen\\_helen\\_quartermaine.aspx](https://www.coronerscourt.wa.gov.au/Inquest_into_the_death_of_aileen_helen_quartermaine.aspx)

<sup>30</sup> <https://ww2.health.wa.gov.au/About-us/Policy-frameworks/Mental-Health/Mandatory-requirements/Community-Mental-Health-Status-Assessments-Role-of-Mental-Health-Clinicians>

<sup>31</sup> <https://emhs.health.wa.gov.au/Hospitals-and-Services/Mental-Health/MHERL>

<sup>32</sup> [https://www.legislation.wa.gov.au/legislation/statutes.nsf/main\\_mrtitle\\_13534\\_homepage.html](https://www.legislation.wa.gov.au/legislation/statutes.nsf/main_mrtitle_13534_homepage.html)

## Discharge planning

### Key Messages

- Safe discharge planning should involve carers where possible and consideration of the home environment

A 50-year-old man died as a result of deliberate drowning after being discharged from an emergency department.

The deceased was in good physical health but had lived with anxiety and depression for many years prior to his death. This had been managed intermittently with medication and counselling. He described himself as a perfectionist who was prone to thinking the worst. Two of his three brothers had died, one by completed suicide. The deceased was living with his partner of more than twenty years and their two sons; however the relationship had broken down and they were making plans to sell their house and live separately. After starting to finalise documents relating to the separation, the deceased started to feel suicidal and browsed the internet for suicide methods. He then took time off work and visited a GP, to whom he disclosed suicidal ideation and plans, including having obtained rope and a cinder block which he intended to use to drown himself in the river behind his property. The GP was concerned that he was at high risk due to his life stressors and planning, and so organised an ambulance to take the deceased to the hospital to ensure his safe arrival as he was alone. A referral letter was sent with him detailing the GP's concerns regarding his home situation and plans for suicide.

At the hospital he was seen by a medical officer at the emergency department. His life stressors, suicidal ideation and planning was discussed, but he then said he no longer felt suicidal, and cited protective factors such as his children and job. Further detailed assessment was carried out by the psychiatry liaison nurse, in a cubicle as there was no private room available. The deceased denied any family history of mental health problems, despite the assessment taking place on the birthday of the brother who had completed suicide. Admission to hospital was offered and declined; there was no basis for involuntary detention. Plans for reducing work hours, searching for new accommodation, counselling and GP follow-up were developed and discussed. He denied permission for any contact with his partner beyond asking her to pick him up and take him home, so further collateral information about his family history and the home situation were not available to the team in ED. The psychiatry liaison nurse discussed the plans for discharge with the psychiatry consultant and the ED medical officer, who had no further concerns with the plan for discharge and follow-up, as the deceased was denying any further suicidal ideation.

The deceased's partner picked him up from the emergency department, but it is likely that nobody spoke with her regarding any diagnosis, management plan, or red flags. She went to bed that night, did not see him in the morning when she arose to ready the children for school, and was concerned when she did not see him later that morning. She found his mobile phone on the jetty at the back of their property and contacted the police who found him submerged in the river, fully clothed, chained to a large limestone slab.

### Inquest findings and comments

The cause of death was drowning, and the manner of death was suicide.

Expert opinion was sought and was to the effect that the deceased had multiple risk factors, which were unresolved at the time of discharge. Admission for short term containment and further assessment would have been preferable, especially as the assessment had been carried out in the open emergency department rather than a private room due to departmental constraints at the time, however there were no grounds for involuntary admission.

### Coroner's recommendations

No recommendations were made.

### WA health system action

At the time of the death, the *Mental Health Act 1996* placed emphasis on patient confidentiality and privacy. The new *Mental Health Act 2014* includes greater emphasis on the involvement of family and carers in assessment and management.

An educational program for mental health clinicians has been developed by the Office of the Chief Psychiatrist on when breaking confidentiality is appropriate

### References

- [JOHANSEN inquest findings](#)<sup>33</sup>
- [Western Australian Legislation. \*Mental Health Act 2014\*](#)<sup>34</sup>
- [Office of the Chief Psychiatrist Education & Training Events – \*Confidentiality: A Clinical and Legal Perspective\*](#)<sup>35</sup>

### Discussion points

- How can rapport with and disclosure by patients be improved in an emergency department environment?
- How can you promote information sharing with family and carers to the patient to enable engagement?

<sup>33</sup> [https://www.coronerscourt.wa.gov.au//inquest into the death of theodore herbert eric johansen.aspx](https://www.coronerscourt.wa.gov.au//inquest%20into%20the%20death%20of%20theodore%20herbert%20eric%20johansen.aspx)

<sup>34</sup> [https://www.legislation.wa.gov.au/legislation/statutes.nsf/main\\_mrtitle\\_13534\\_homepage.html](https://www.legislation.wa.gov.au/legislation/statutes.nsf/main_mrtitle_13534_homepage.html)

<sup>35</sup> <https://www.chiefpsychiatrist.wa.gov.au/education-training/upcoming-training-events/>



## Inpatient suicide

### Key Messages

- Risk minimisation needs to be balanced with promotion of recovery, which emphasises autonomy

A 24-year-old man died as a result of complications of ligature compression of the neck (hanging) sustained whilst in a secure mental health unit.

The deceased had been a healthy and active man until he developed fatigue and vague neurological symptoms in his early 20s. He was initially diagnosed with fibromyalgia, and then generalised anxiety disorder with somatic symptoms. His condition improved after commencing escitalopram.

He had been working in Perth as a trade assistant when a job opportunity in the Pilbara region came up. Knowing he would need to pass a drug screen in order to get the job, he decided to stop smoking marijuana. He subsequently developed insomnia which did not respond to acupuncture, over the counter preparations, or the very brief course of amitriptyline he trialled.

He then presented to hospital several times with thoughts of self-harm. Whilst being assessed on the third visit, he sustained a head laceration jumping off the bed head first to the floor but was unable to explain why he had done this. He was made an involuntary patient with provisional diagnosis of first psychotic episode and kept sedated overnight in the emergency department. On review the next day the psychiatrist considered differential diagnoses including catatonia, serotonergic syndrome and anti NMDA receptor encephalitis, an auto-immune condition that may cause psychosis in young people. Following review by a neurologist, he was transferred to a secure ward in a mental health unit.

On arrival he was assessed to be at high risk of self-harm and medium risk of suicide, with poor insight and judgement. His management plan included 60 minutely observations, lorazepam for catatonia, quetiapine and temazepam.

The following day he appeared much improved. During a two-hour review with a consultant psychiatrist and another doctor, he denied ongoing suicidal or homicidal thoughts, showed no signs of psychosis or depression, and was able to guarantee his safety on the ward. He remained detained in the secure ward for ongoing assessment due to concerns around potential fluctuations in his mental state. He engaged well in group activities that afternoon and appeared calm and settled that evening other than expressing some concerns to his family about other patients on the ward. The ward was busy that night with several disruptive patients; however, the deceased appeared to be asleep on 60 minutely checks through the night, other than one trip to the bathroom, having taken 20mg temazepam.

During the routine shift handover security check after 7am he was found hanging from the shower head in the bathroom, having used a towel and a thin black cord of uncertain origin as a ligature. Resuscitation was commenced promptly, and he was transferred to ICU, where brain death was confirmed the next day.

## Inquest findings and comments

The Coroner considered the decision to hold the deceased as an involuntary patient and the frequency of observations and was satisfied that the medical care was of a reasonable standard and that the death was unexpected and unpredictable.

The black cord used as ligature along with a towel could not be located by mortuary staff and so remained unidentified, and it was unclear as to how the deceased had it in his possession. No property list had been completed on his admission. Information provided by hospital staff about admission procedures, patients' belongings, and the design of the metal health unit with regards to ligature point minimisation were reviewed.

The unit had been constructed with minimisation of ligature points and investigating police and hospital staff were unable to replicate the use of the shower head as a ligature point. Hospital procedures around the removal of potentially dangerous items were reviewed in light of advice from the Chief Psychiatrist around the preservation of dignity of patients. Items would continue to be removed or returned according to individualised ongoing risk assessments.

## Coroner's recommendations

No recommendations were made.

## References

- [SCHWENKE findings](#)<sup>36</sup>

### Discussion points

- How does your site balance patient privacy and dignity with minimising opportunities for self-harm?

---

<sup>36</sup> [https://www.coronerscourt.wa.gov.au//inquest\\_into\\_the\\_death\\_of\\_anne\\_rzepczynski.aspx](https://www.coronerscourt.wa.gov.au//inquest_into_the_death_of_anne_rzepczynski.aspx)

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

© Department of Health 2019

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.