



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

Your safety in our hands in hospital

An Integrated Approach to Patient Safety Surveillance by WA Health Service Providers, Hospitals and the Community: 2018



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Foreword

This seventh report in the WA Patient Safety series provides an integrated review of patient safety across the WA health system. The aim of this report is to give an indication of the types of challenges affecting patient safety, and to support improvement in the quality of health care.

While providing the safest and highest quality care to our patients is the primary objective of the WA health system, the reality is that clinical incidents and preventable harm can occur. In these cases, the initial focus of the health care team is on the immediate action necessary to reduce the risk to the patient, followed by an appropriate investigation or review to identify the systemic factors that led to the incident occurring.

As well as affecting patients, incidents associated with clinical errors can have a negative emotional impact on the health professionals involved in them. The term ‘second victim’ is used to describe the experience of the health professional who becomes emotionally overwhelmed as a result of being involved in an incident affecting patient safety.¹

The emotional response felt by health professionals involved in clinical incidents can be driven by many factors, including concern for the patient’s wellbeing, feelings of guilt, fear of legal or professional consequences, and an expectation of lack of support from their organisation and colleagues. While supporting the patient, family and carers affected by an adverse event in health care is vitally important, it is also necessary for the clinicians involved to be supported by their colleagues, and the health system more broadly.

There has been much publicity surrounding the case of Dr Bawa-Garba, whose name was erased from the United Kingdom’s medical register in relation to her treatment and the death of six-year-old Jack Adcock in 2011. This case has led to much concern within health communities in its focus on individual human error, despite the identification of several significant failures of the system in which Dr Bawa-Garba worked. While Dr Bawa-Garba was eventually successful in appealing the decision to remove her from the medical register, her case can be regarded as an extreme example of the second victim phenomenon, and serves as a timely reminder that safety and quality in health care systems includes looking after staff as well as patients.

In June 2017, the Government of Western Australia announced the Sustainable Health Review (SHR) to prioritise the delivery of patient-centred, high quality and financially sustainable healthcare across the State. The SHR is considering a range of areas, including:

- Ways to improve patient journey and movement through the health system
- The mix of services across the health system and ‘doing more with current resources’
- Ways to promote safer and more efficient services.

The SHR Panel’s Interim Report², released in February 2018, identified that resources are not simply financial – they include people and the environment, and that staff within the WA health system do not always feel valued and respected. While the SHR is necessarily broad, its interim report has highlighted the need for the WA health system to better support its staff.

¹ Mira JJ, Carrillo I, Guilabert M, Lorenzo S, Pérez-Pérez P, Silvestre C, Ferrús L, Spanish Second Victim Research Team. The Second Victim Phenomenon After a Clinical Error: The Design and Evaluation of a Website to Reduce Caregivers’ Emotional Responses After a Clinical Error. *J Med Internet Res* 2017;19(6):e203. Accessed August 2018 at: <https://www.jmir.org/2017/6/e203/>

² Interim Sustainable Health Review Report available at: <http://ww2.health.wa.gov.au/Improving-WA-Health/Sustainable-health-review/Interim-report>

One way in which this can occur, and key to effective clinical incident management, is the adoption an organisation-wide approach that fosters a 'no blame' reporting culture and embraces the principles of clinical governance set out in the Clinical Incident Management (CIM) Policy:³

- Transparency
- Accountability
- Fairness
- Patient centred care
- Open 'just' culture
- Obligation to act
- Prioritisation.

It is recognised that the safety and well-being of patients in the WA health system is the responsibility of all staff in partnership with the people we care for. What is less well recognised, and a key attribute of a truly sustainable health system, is the need for the system to support its staff, and for staff to support each other at all times.

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³ Clinical Incident Management Policy (2015, revised April 2018) available at:
http://ww2.health.wa.gov.au/Corporate/Articles/A_E/Clinical-incident-management-system

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Common Acronyms

| | |
|--------|--|
| ACSQHC | Australian Commission on Safety and Quality in Health Care |
| ANZASM | Australian and New Zealand Audit of Surgical Mortality |
| CFM | Consumer Feedback Module |
| CHE | Contracted Health Entity |
| CIM | Clinical Incident Management |
| CIMS | Clinical Incident Management System |
| CLU | Coronial Liaison Unit |
| COAG | Council of Australian Governments |
| CVC | Central Venous Catheter |
| CVVHD | Continuous veno-venous haemodialysis |
| DOH | Department of Health, Western Australia |
| DVT | Deep Vein Thrombosis |
| GP | General Practitioner |
| HAC | Hospital-Acquired Complication |
| HAI | Healthcare-Associated Infection |
| HMDC | Hospital Morbidity Data Collection |
| HSP | Health Service Provider |
| ICU | Intensive Care Unit |
| IHPA | Independent Hospital Pricing Authority |
| NGO | Non-government organisation |
| NSQHS | National Safety and Quality Health Service (Standards) |
| NSTEMI | Non-ST-Elevation Myocardial Infarction |
| PSSU | Patient Safety Surveillance Unit |
| QI | Quality Improvement |
| RACS | Royal Australasian College of Surgeons |
| ROD | Review of Death |
| ROGS | Report on Government Services |
| SAC | Severity Assessment Code |
| SHR | Sustainable Health Review |
| STEMI | ST-Elevation Myocardial Infarction |
| TGA | Therapeutic Goods Administration |
| WAASM | Western Australian Audit of Surgical Mortality |
| VTE | Venous thromboembolus |



Executive Summary

This report provides to the WA public, information and data on how the WA health system manages and resolves clinical incidents, consumer feedback and coronial recommendations resulting from health care delivery. During 2017/18 there were 31,894 clinical incidents notified and 29,671 clinical incidents were confirmed. Most clinical incidents (n=26,050; 81.7%) reported in 2017/18 were classified as Severity Assessment Code (SAC) 3, and the vast majority (n=27,614; 93.0%) of confirmed incidents resulted in no harm or minor harm to the patient.

There were 759 SAC 1 clinical incidents notified and investigated during 2017/18, of which 167 were declassified by 30 June 2018, resulting in 592 confirmed SAC 1 clinical incidents reported by public hospitals, private licensed healthcare facilities, and other contracted non-government organisations at the time of this report. While there has been an increase in the number of confirmed SAC 1 clinical incidents compared to previous reporting periods (422 confirmed SAC 1 incidents in 2015/16 and 482 in 2016/17), this should not be taken as a direct indication that safety in the WA health system is compromised. It is internationally recognised that health care systems that are proactive in notifying clinical incidents and undertaking in-depth investigations to identify contributory factors and implement improvement strategies are more likely to reduce avoidable harm to patients. The WA health system's Clinical Incident Management (CIM) Policy encourages the notification and investigation of near miss events (those that did not result in actual harm to the patient), and in 2017/18, 13.2% (n=78) of confirmed SAC 1 clinical incidents resulted in no harm.

In 2017/18, 1.9% (n=11) of 592 confirmed SAC 1 clinical incidents comprised one of the eight national sentinel event categories, with medication error resulting in death of the patient the most frequently reported sentinel event (n=4; 0.7%). Of the 'Other SAC 1' clinical incidents, the most frequently reported categories included hospital process issues (n=81; 13.9%), complications of an inpatient fall (n=77; 13.3%) and infection control breaches (n=74; 12.7%).

The rate of SAC 1 inpatient clinical incidents in WA hospitals continues to remain low and was calculated at two clinical incidents per 10,000 bed days or six clinical incidents per 10,000 separations.⁴ Other than patient factors, issues relating to communication and policies, procedures and guidelines continue to be the major contributory factors identified in the investigation of SAC 1 clinical incidents, and warrant continued focus if improvements in patient safety are to be achieved. Of the Australian Commission on Safety and Quality in Health Care's (ACSQHC) National Safety and Quality Health Service (NSQHS) Standards, medication (n=7,172; 24.2%) and falls (n=5,276; 17.8%) clinical incidents remain the most frequent categories reported in 2017/18.

The WA health system uses many different methods to identify, investigate and improve clinical and service outcomes. This annual report also presents data captured from administrative data sources to provide insight into appropriate care delivery and hospital-acquired complications. In 2017/18, the WA health system provided 600,735 episodes of care to inpatients amounting to 1,794,396 bed days. Inpatient clinical incidents accounted for 1.6% of public hospital bed days and were associated with 4.9% (n=23,750) of public hospital separations. Confirmed inpatient SAC 1 clinical incidents accounted for 1.4% (n=331) of all public inpatient incidents.

⁴ The numerator for the SAC 1 clinical incident rate includes inpatient incidents at HSPs and public patients treated at CHEs, and excludes SAC 1 incidents that have not been confirmed, or were notified by community health care providers, private licensed health care facilities and contracted non-government organisations. The denominator includes either separation or bed day data from WA public hospitals' inpatient activity, including public patients treated at CHEs. Bed day data have been introduced as it is more sensitive than separation data.

Implementation of the Independent Hospital Pricing Authority's (IHPA) national approach to pricing and funding for safety and quality in Australian public hospitals commenced during 2017/18, with the introduction of penalties for episodes of care that include a sentinel event. The ACSQHC's review of the national sentinel event list has progressed during 2017/18, and a more robust list of preventable sentinel events has been developed and is now awaiting approval by the Council of Australian Governments (COAG) Health Council. Once approved, the updated list of sentinel events will be used by the IHPA in place of the current list.

A second component of the national approach to pricing and funding for safety and quality took effect from 1 July 2018, whereby episodes of care that include one of 13 defined Hospital-Acquired Complications (HACs) will be subject to a reduction in funding using a risk-adjusted model. The HACs represent an additional avenue by which hospitals and Health Service Providers (HSPs) may be able to monitor the quality of health care being delivered. From July 2015 to June 2018, the frequency of most HACs identified in administrative data in WA has remained relatively stable, however there has been an increase in the number of cases of deep vein thrombosis in WA's public hospitals during 2017/18, and this may warrant local review by hospitals and HSPs. The ACSQHC has released a comprehensive HACs Information Kit⁵, to support health service organisations implement the second edition of the NSQHS Standards.

Consumer feedback provides the WA health system with opportunities for service improvement that would increase consumer satisfaction as well as the safety and quality of services provided. A total of 18,889 consumer feedback items⁶ were reported across the WA health system throughout 2017/18, of which 51.8% were compliments (n=9,792) followed by 27.0% contacts (n=5,093) and 21.2% complaints (n=4,004). Issues reported across the top four complaint categories of 'Quality of clinical care', 'Communication', 'Access' and 'Rights, respect and dignity' constituted 83.8% of the 7,118 complaint issues reported across the WA health system. Data from the annual Patient Evaluation of Health Services survey, administered by the Health Survey Unit, is again included in this report to supplement the data available from Datix CFM.

The Coronial Liaison Unit (CLU) continues to work effectively with the Office of the State Coroner to share lessons learned from inquested cases to improve future patient care. Twenty-one inquest findings released over 2017/18 resulted in seven health related recommendations. While the coroners have made fewer health related recommendations over recent years, each inquest finding has been reviewed by the Coronial Review Committee, and in several cases opportunities for improvement in the WA health system have been identified and action taken.

All deaths that occur while the patient is under the care of a surgeon are notified to the WA Audit of Surgical Mortality (WAASM) office during each calendar year, with 567 deaths notified in 2017. The WAASM identified seven adverse events that caused death in 2016 (two were considered definitely preventable) and six adverse events that caused death in 2017⁷ (two of these were considered definitely preventable).

While the data and information contained in this report may assist hospitals and HSPs in identifying where opportunities for improvement in the delivery of health care may lie, the unique circumstances that exist for each organisation mean that only they can develop local actions in response that are likely to lead to changed practice and increased quality and safety.

⁵ ACSQHC Hospital-Acquired Complications Information Kit available at:

<https://www.safetyandquality.gov.au/our-work/indicators/hospital-acquired-complications/>

⁶ It is mandatory for all complaints received by WA HSPs to be entered in Datix CFM, and all complaints relating to public patients at public-private partnership hospitals (Joondalup Health Campus, Peel Health Campus and St John of God Midland) to be reported to PSSU. Recording of compliments and contacts in Datix CFM is optional.

⁷ 2017 findings include data in which the audit process was complete at 29 March 2018.

About this Report

This comprehensive patient safety report for 2017/18 is the seventh WA health system report of this kind, and integrates data from the following sources:

- Datix Clinical Incident Management System (CIMS) (online)
- Hospital Morbidity Data Collection (HMDC)
- Review of Death (ROD)
- Western Australian Audit of Surgical Mortality (WAASM)
- Coronial review process
- Datix Consumer Feedback Module (CFM) (online) database and other complaints management systems (used by public private partners)
- PathWest Laboratory Information System (ULTRA)
- Patient Evaluation of Health Services (PEHS) survey.

Data for 2017/18 are presented with the following caveats:

- Datix CIMS is a dynamic online electronic clinical incident management system and contains a full 12 months of financial year data.
- There is a time lag in Datix CIMS for the confirmation of SAC which will cause figures to change over time.
- Datix CFM is a dynamic online electronic complaint management system and contains a full 12 months of financial year data.
- The Coronial data includes a full 12 months of financial year data.
- The ROD data reflects the calendar year 1 January – 31 December 2017.
- The WAASM data are captured by calendar year 1 January – 31 December 2017.
- Hospital-Acquired Complications includes data for the financial years 2015/16, 2016/17 and 2017/18.
- Patient Evaluation of Health Services includes a full 12 months of financial year data.⁸

Care should be taken when comparing data from previous reports as the data summarised here are taken from dynamic systems and numbers will vary over time. Clinical incident rates only include inpatient data as the numerator over inpatient separation or bed day data as the denominator, where meaningful comparison exists, as this provides a more accurate rate of clinical incidents.

This report presents data which focuses on eight clinical National Safety and Quality Health Service Standards. Sections include; preventing and controlling healthcare-associated infections clinical incidents, medication clinical incidents, patient identification clinical incidents, clinical handover clinical incidents, blood and blood product clinical incidents, pressure injury clinical incidents, clinical deterioration clinical incidents and falls clinical incidents. Patient demographic data regarding these NSQHS Standards has been expanded in this report in response to stakeholder feedback.

Information regarding the context and processes for ensuring safety and quality in the WA health system is presented in the governance for safety and quality section relating to Standard 1 of the NSQHS Standards. Consumer feedback is a key component of Standard 2 of the NSQHS standards, and data regarding consumer feedback and complaints received by the WA health system during 2017/18 can be found in the consumer feedback review section.

⁸ The PEHS survey cohort includes acute admitted patients aged 16-74 years who had an inpatient stay of 0-34 days, with no psychiatric care days, no interpreter service required, and who were discharged home.

Declassification of a SAC 1 clinical incident that has been reported to the Patient Safety Surveillance Unit (PSSU) may occur following a thorough investigation, if it is identified that no health care causative factors contributed to the incident. Declassification requests are reviewed by two PSSU senior clinicians with extensive experience in safety and quality in health care. Declassification means that the event is no longer considered to be a clinical incident.

Consumer feedback provides health care providers with an indication of current areas of concern to consumers and thereby highlights potential areas for service improvements. Although not all consumer feedback items and resultant improvements will directly relate to the quality of clinical care provided, any improvement which leads to increased consumer satisfaction are equally valuable. Data related to the top four complaint categories in 2017/18 are included in this report.

This report is further strengthened by the inclusion of administrative data from the Hospital Morbidity Data Collection, which captures inpatient activity and discharge data. Data in the HMDC is entered by clinical coders, based on the information recorded by clinicians in each patient's medical record. The Hospital-Acquired Complications clinical codes provided by the ACSQHC, which describe 16 complications that have been deemed to possibly respond to clinical risk mitigation strategies, are used as the basis to identify HACs within the HMDC.



Clinical Incident Management: Overall Notifications

The WA health system uses the Datix CIMS for the notification, investigation, analysis and evaluation of practice improvements of clinical incidents that occur within all public hospitals in Western Australia. Severity Assessment Code 1 is used to identify clinical incidents that result in serious harm/death or near miss. It is a mandatory requirement for all hospitals/HSPs as well as all private licensed health care facilities and contracted non-government organisations to notify and investigate SAC 1 clinical incidents.⁹ Severity Assessment Code 2 and 3 clinical incidents occurring at private licensed health care facilities and contracted non-government organisations are managed locally and not reported into the Datix CIMS, and are not included in this report.

Between 1 July 2017 and 30 June 2018 there were 600,735 separations, with inpatients accumulating a total of 1,794,396 bed days, from public hospitals and public patients attending a Contracted Health Entity (CHE). During 2017/18, the CHEs were Peel Health Campus, Joondalup Health Campus and St John of God Midland.

During 2017/18 there were 31,894 clinical incidents notified of which 29,671 clinical incidents were confirmed clinical incidents. Of these confirmed incidents 23,750 occurred during a public hospital stay, with the remainder of clinical incidents reported by emergency departments, outpatient departments, community health care providers, private licensed healthcare facilities (including CHEs) and other contracted non-government organisations.

Reported inpatient clinical incidents were associated with 4.9% (n=23,750) of public hospital separations from HSPs. The rate¹⁰ of inpatient clinical incidents observed between July 2017 and June 2018 was calculated at:

- 6 SAC 1 clinical incidents per 10,000 separations¹¹
- 50 SAC 2 clinical incidents per 10,000 separations
- 430 SAC 3 clinical incidents per 10,000 separations.

Reported inpatient clinical incidents were associated with 1.6% (n=23,750) of public hospital bed days at HSPs. Findings showed that there were:

- 2 SAC 1 clinical incidents per 10,000 bed days¹²
- 16 SAC 2 clinical incidents per 10,000 bed days
- 139 SAC 3 clinical incidents per 10,000 bed days.

Findings revealed that 603 mental health clinical incidents were notified that occurred in the community, with 937,150 occasions of service provided to community mental health patients. A rate of six clinical incidents per 10,000 occasions of community mental health service (across all SAC ratings) was calculated for the 2017/18 period.

⁹ Further information on the licensing of private healthcare facilities can be found at:

http://ww2.health.wa.gov.au/Articles/A_E/About-licensing-of-private-healthcare-facilities

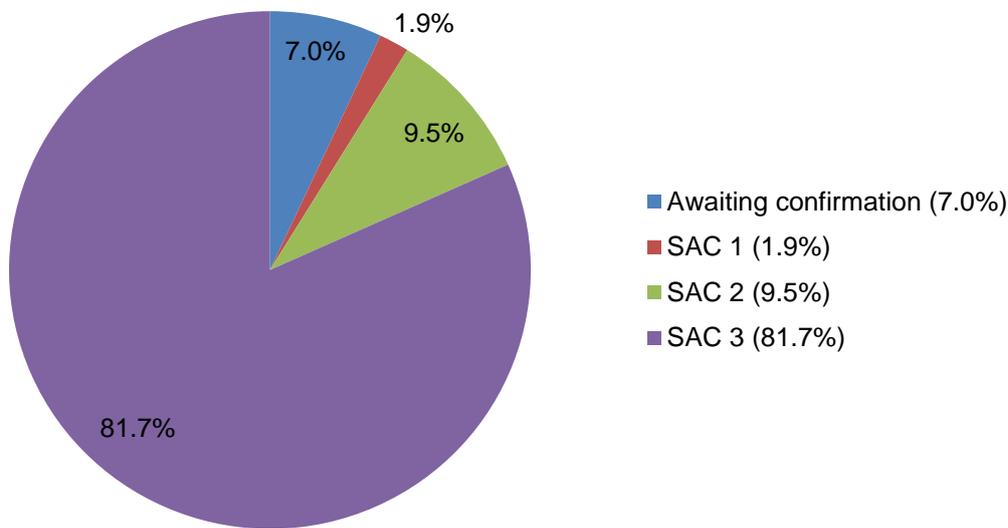
¹⁰ The numerator for the SAC clinical incident rate excludes incidents where the SAC has not been confirmed, or that were notified by emergency or outpatient departments, community health care providers or private licensed health care facilities (including CHEs) and contracted non-government organisations, while the denominator only includes either separation or bed day data from WA public hospitals' inpatient activity.

¹¹ The numerator for the SAC 1 incident rate includes incidents involving public patients treated at CHEs, and the denominator includes public patient separations from CHEs.

¹² The numerator for the SAC 1 incident rate includes incidents involving public patients treated at CHEs, and the denominator includes public bed days data at CHEs.

Clinical incidents categorised as SAC 3 (n=26,050; 81.7%), were the most frequently reported category of clinical incidents (see Figure 1). The next most frequently reported category was SAC 2 clinical incidents (n=3,029; 9.5%), followed by SAC 1 clinical incidents (n=592; 1.9%).

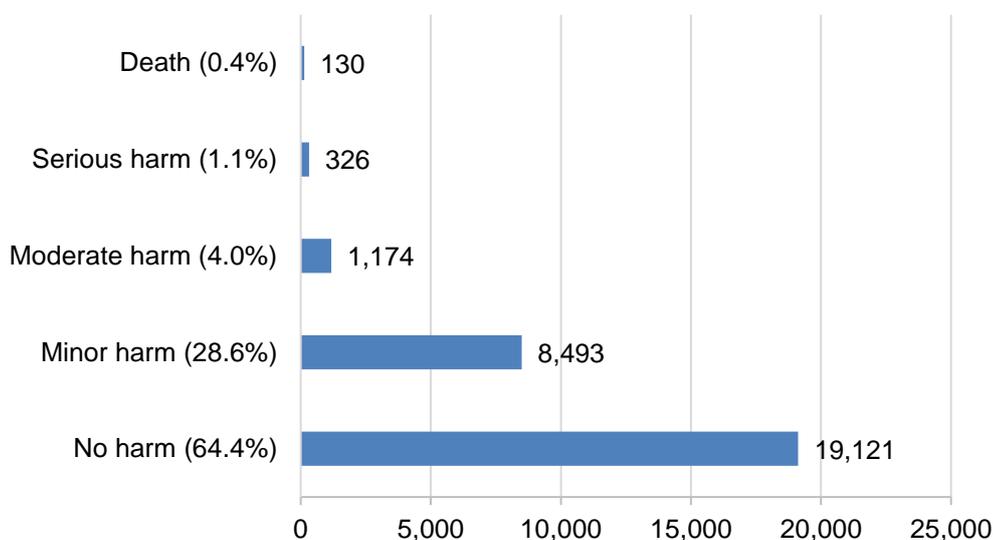
Figure 1: Percentage of Clinical Incidents by SAC Category for 2017/18



Note: SAC 1 clinical incidents include clinical incidents from public and private hospitals (including CHEs) and contracted non-government organisations in accordance with their license or contract with the WA health system. At the time of data extract there were 2,223 clinical incidents that had yet to have a SAC rating confirmed.

Figure 2 shows the patient outcome recorded for confirmed clinical incidents during 2017/18. Confirmed incidents were most often reported to have resulted in no harm to the patient (n=19,121; 64.4%), followed by minor harm (n=8,493; 28.6%). Incidents resulting in serious harm or the death of a patient accounted for 1.5% (n=456) of confirmed clinical incidents during this period.

Figure 2: Frequency and Percentage of Confirmed Clinical Incidents by Patient Outcome for 2017/18



Note: Patient outcome missing data n=427; 1.4%

The five most frequently reported SAC 1 clinical incident categories, representing 58.1% (n=344) of all confirmed SAC 1 incidents, are presented in Table 1. Hospital process issues was the most frequently reported of all confirmed SAC 1 clinical incidents (n=81; 13.7%) followed by complications of an inpatient fall (n=77; 13.0%). Examples of hospital process issues include; delays in transfer, treatment or monitoring, and follow-up planning processes that were insufficient/incomplete.

Table 1: Frequency and Percentage of the Top Five Confirmed SAC 1 Clinical Incident Categories for 2017/18

| SAC 1 Category | (n) | (%) |
|---|------------|-------------|
| Hospital process issues | 81 | 13.7 |
| Complications of an inpatient fall | 77 | 13.0 |
| Infection control breach | 74 | 12.5 |
| Any other incident resulting in serious harm or death | 66 | 11.1 |
| The unexpected death of a mental health client | 46 | 7.8 |
| Total | 344 | 58.1 |

The most frequent SAC 1 clinical incident category involving mental health patients was the unexpected death of a mental health client, which accounted for 7.8% (n=46) of all confirmed SAC 1 clinical incidents (see Table 2). This was followed by incidents involving missing or absent without leave high risk mental health patients/consumers (n=44; 7.4%) however it should be noted that of these incidents, 29 resulted in no harm to the patient and a further seven incidents resulted in minor harm.

Table 2: Frequency and Percentage of Confirmed SAC 1 Clinical Incident Categories Related to Mental Health Care for 2017/18

| SAC 1 Category | (n) | % |
|---|------------|-------------|
| The unexpected death of a mental health client | 46 | 7.8 |
| Missing or absent without leave of any high risk mental health patient/consumer | 44 | 7.4 |
| Mental health clinical deterioration resulting in serious harm | 28 | 4.7 |
| Patient missing or absent without leave with adverse outcome* | 3 | 0.5 |
| Suicide of a patient in an inpatient unit (or whilst on leave) | - | - |
| Total | 118 | 19.9 |

*Data for this category only includes incidents for patients notified as Involuntary, Voluntary, or Referred Mental Health Patients.

In total, there were 47 clinical incidents where the outcome was the death of a mental health patient, comprising the 46 incidents categorised as the unexpected death of a mental health client, and one incident relating to mental health clinical deterioration.

The five most frequently reported Datix CIMS Tier One incident types represented 71.4% (n=20,748) of all confirmed SAC 2 and SAC 3 clinical incidents reported during 2017/18 (see Table 3). Medication incidents (n=7,139; 24.6%) and falls (n=5,197; 17.9%) were the most frequently confirmed SAC 2/3 clinical incidents in 2017/18.

Table 3: Frequency and Percentage of the Top Five Tier One Incident Types for Confirmed SAC 2 and 3 Clinical Incidents for 2017/18

| Tier One Incident Categories SAC 2/3 | (n) | (%) |
|---|---------------|-------------|
| Medication | 7,139 | 24.6 |
| Falls* | 5,197 | 17.9 |
| Behaviour | 3,848 | 13.2 |
| Documentation | 2,580 | 8.9 |
| Therapeutic Processes/Procedures | 1,984 | 6.8 |
| Total | 20,748 | 71.4 |

Remaining incident types included: administrative processes; blood/plasma products; diagnostic processes/procedures; exposure to environmental hazards; health care associated infections; medical devices/equipment; medical gases/oxygen; nutrition; personal property/data/information; and pressure injuries.

*Tier One category is titled patient accidents/falls, with patient accidents excluded from this figure.

Data presented in Table 4 are based on the top five Tier One categories, of which the top five Tier Three incident types accounted for 17.2% (n=5,000) of all confirmed SAC 2 and SAC 3 clinical incidents. Findings revealed that ambiguous, incorrect or incomplete documentation had the highest frequency, with 1,362 incidents (representing more than half of all incidents in the documentation Tier One category) citing this type. In 1,224 clinical incidents during 2017/18 there was a failure administer medication as planned.

Table 4: Frequency and Percentage of the Top Five Tier Three Incident Types for Confirmed SAC 2 and 3 Clinical Incidents for 2017/18

| Tier Three Incident Type SAC 2/3 | (n) | (%) |
|---|--------------|-------------|
| Documentation: Ambiguous, incorrect or incomplete | 1,362 | 4.7 |
| Medication: Failure to administer medication | 1,224 | 4.2 |
| Behaviour: Physical aggression | 1,196 | 4.1 |
| Falls: Activity at time of fall unknown or patient found on floor/ elsewhere | 866 | 3.0 |
| Therapeutic Processes/Procedures: Treatment/procedure was incomplete or incorrectly performed | 352 | 1.2 |
| Total | 5,000 | 17.2 |

Data on eight of the ACSQHC's NSQHS Standard categories accounted for 65.8% (n=19,531) of all confirmed clinical incidents (see Table 5). Results show that medication (n=7,172) and falls (n=5,276) clinical incidents were the most frequently captured of the eight NSQHS Standards.

Table 5: Frequency and Percentage of Confirmed Clinical Incidents for Eight NSQHS Standard Indicators for 2017/18

| Eight NSQHS Standards | | (n) | (%) |
|------------------------------|---|---------------|-------------|
| Standard 3: | Preventing and Controlling Healthcare-Associated Infections | 1,009 | 3.4 |
| Standard 4: | Medication Safety | 7,172 | 24.2 |
| Standard 5: | Patient Identification and Procedure Matching | 1,471 | 5.0 |
| Standard 6: | Clinical Handover | 1,932 | 6.5 |
| Standard 7: | Blood and Blood Products | 159 | 0.5 |
| Standard 8: | Preventing and Managing Pressure Injuries | 1,716 | 5.8 |
| Standard 9: | Recognising/Responding to Clinical Deterioration | 796 | 2.7 |
| Standard 10: | Preventing Falls and Harm from Falls | 5,276 | 17.8 |
| Total | | 19,531 | 65.8 |



SAC 1 Clinical Incidents

The reporting of SAC 1 clinical incidents is mandatory for WA public hospitals, all private licensed health care facilities and contracted non-government organisations (in accordance with their license or contract with the WA health system). The 2017/18 reporting period is the fourth complete period Health Service Providers have reported SAC 1 clinical incidents via the web-based Datix CIMS.

In 2017/18, 592 SAC 1 clinical incidents were confirmed by WA public hospitals, private licensed health care facilities, and contracted non-government organisations. There were a further 167 events that were approved for declassification. The investigation of 94 SAC 1 clinical incidents notified during 2017/18 remained ongoing at 30 June 2018. Of the confirmed SAC 1 clinical incidents, 11 (1.9%) were identified as sentinel events with the remainder of SAC 1 clinical incidents captured as Other SAC 1 Incidents (n= 581; 98.1%; see Figure 3).

Figure 3: Percentage of Confirmed SAC 1 Clinical Incidents by Type for 2017/18

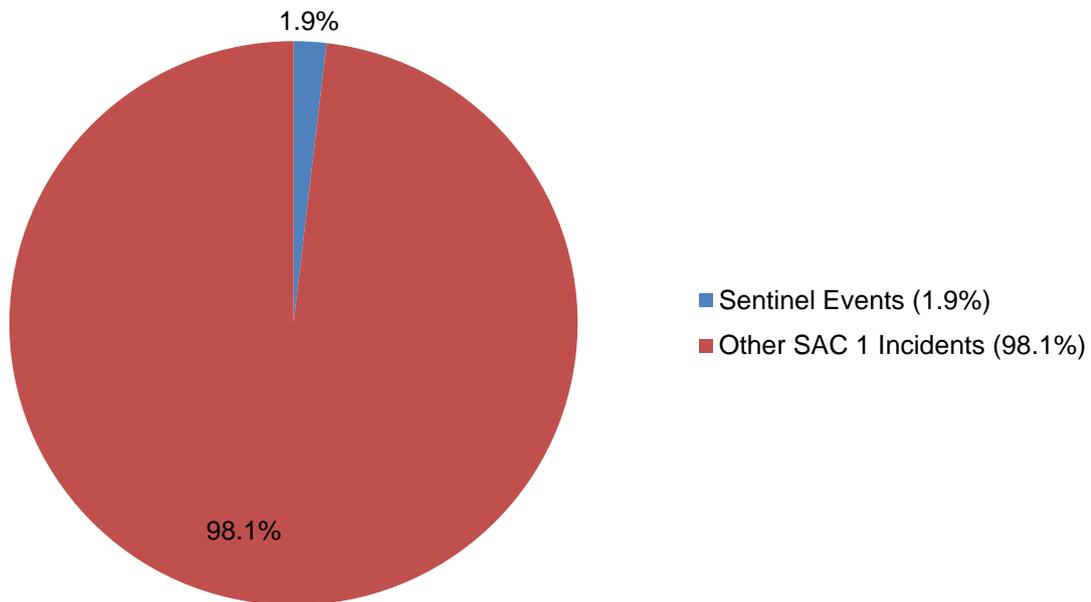


Table 6 illustrates the frequency of confirmed SAC 1 clinical incidents over a five-year period. Findings show that there has been a relatively consistent increase in the reporting of confirmed SAC 1 clinical incidents over time.

Table 6: Frequency of Confirmed SAC 1 Clinical Incidents by National Sentinel Event and Other SAC 1 Clinical Incident Types for 2013/14 to 2017/18

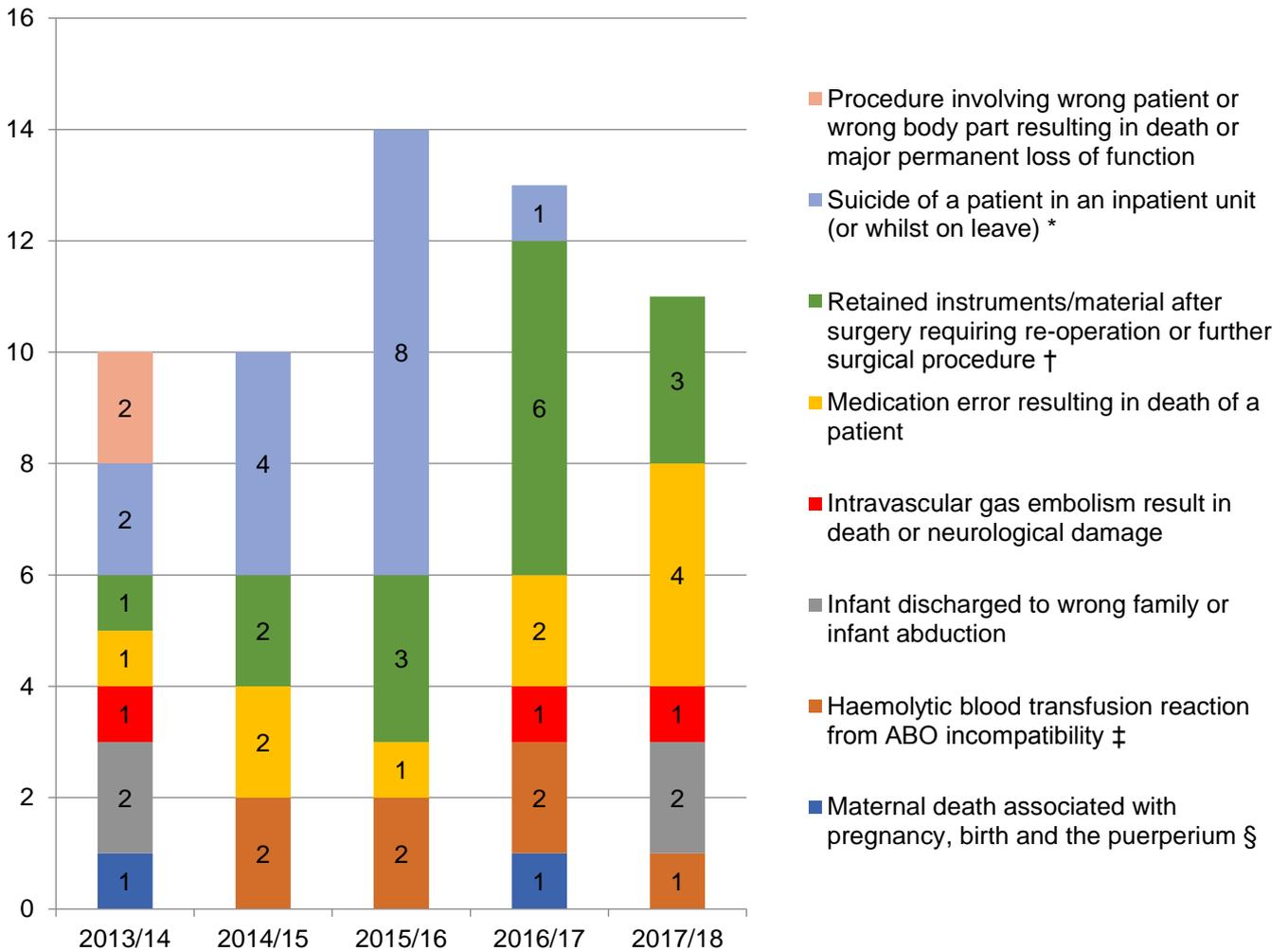
| SAC 1 Categories | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 |
|-----------------------|------------|------------|------------|------------|------------|
| Sentinel Events | 10 | 10 | 14 | 13 | 11 |
| Other SAC 1 Incidents | 305 | 328 | 408 | 469 | 581 |
| Total | 315 | 338 | 422 | 482 | 592 |

Sentinel Event Notifications

Sentinel events are unexpected occurrences involving death or serious physical or psychological injury, or risk thereof. Australian Health Ministers endorsed a set of eight¹³ sentinel event categories (see Appendix One) in 2004.

Figure 4 identifies sentinel events notified each financial year from 2013/14 to 2017/18 by category. The most frequently reported sentinel event category in 2017/18 was medication error resulting in death of a patient (n=4). There were three notifications relating to retained instruments or material after surgery requiring re-operation or further surgical procedure.

Figure 4: Frequency of Sentinel Events by Category for 2013/14 to 2017/18



* In 2015/16 one sentinel event notified in the category suicide of a patient in an inpatient unit (or whilst on leave) was a near miss with the patient outcome reported as no harm.

† In 2017/18 two sentinel events notified in the category retained instruments/material after surgery requiring re-operation or further surgical procedure were near misses that resulted in no harm to the patients.

‡ In both 2014/15 and 2015/16 all sentinel events notified in the category haemolytic blood transfusion reaction resulting from ABO incompatibility were near misses that resulted in no harm to the patients. One incident from 2017/18 resulted in no harm.

§ The national sentinel event definition regarding maternal death was changed in 2014 and applied in WA from 1 July 2015. Data from July 2015 reflects the updated definition however data for prior periods has not been revised and therefore reflects the previous definition of this sentinel event category (i.e. maternal death or serious morbidity associated with labour or delivery).

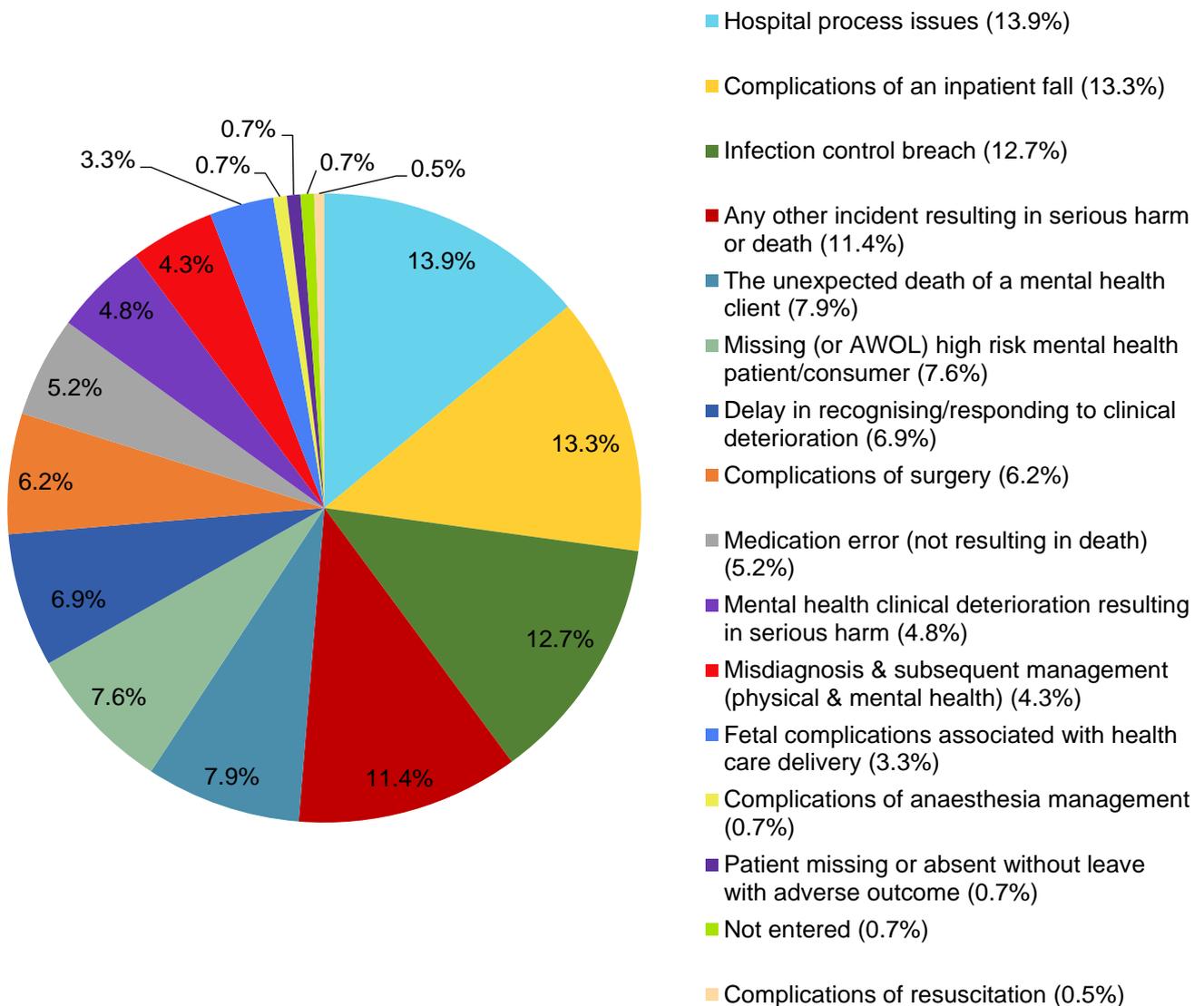
¹³ On 1 July 2018, the PSSU implemented changes to the Clinical Incident Management Policy to include a revised list of ten sentinel event categories aligned with those supported by the Australian Health Ministers Advisory Council in December 2017.

In addition to the annual reporting of sentinel events within this report, sentinel event notifications by WA Public Hospitals are included in the Australian Government Productivity Commission Report on Government Services (ROGS) annual report.¹⁴ Commencing 1 July 2017, sentinel events are also reported to the IHPA in accordance with the Addendum to the National Health Reform Agreement (NHRA).

Other Confirmed SAC 1 Clinical Incidents

In 2017/18, there were 581 SAC 1 clinical incidents other than sentinel events confirmed (see Figure 5). Hospital process issues (n=81; 13.9%) was the most frequently reported category of other SAC 1 clinical incident, followed by complications of in an inpatient fall (n=77; 13.3%).

Figure 5: Percentage of Other Confirmed SAC 1 Clinical Incidents by Category for 2017/18



¹⁴ Productivity Commission Report on Government Services Reports can be accessed at: <http://www.pc.gov.au/gsp/rogs>

Of the 81 SAC 1 clinical incidents categorised as hospital process issues in 2017/18, 56.8% (n=46) identified communication issues between staff as a contributing factor; 27.2% (n=22) identified staff training/skills as a contributing factor; and 24.7% (n=20) identified issues in the application of policies/procedures/guidelines as contributing to the incident.

Other SAC 1 clinical incidents have increased from 305 clinical incidents in 2013/14 to 581 clinical incidents in 2017/18 (see Table 7). Hospital process issues, complications of an inpatient fall and infection control breaches continue to be frequently reported in 2017/18.

Table 7: Frequency of Confirmed SAC 1 Clinical Incidents Other than Sentinel Events for 2013/14 to 2017/18

| SAC 1 Categories | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 |
|--|------------|------------|------------|------------|-----------------|
| Hospital process issues ^a | 29 | 34 | 57 | 59 | 81 |
| Complications of an inpatient fall | 55 | 69 | 53 | 68 | 77 |
| Infection control breach | 7 | 5 | 37 | 55 | 74 |
| Any other incident resulting in serious harm or death | 36 | 49 | 32 | 46 | 70 ^f |
| The unexpected death of a mental health client | 36 | 40 | 38 | 24 | 46 |
| Missing or absent without leave of any high risk mental health patient/consumer ^b | 64 | 34 | 60 | 58 | 44 |
| Delay in recognising/responding to clinical deterioration | 27 | 26 | 34 | 38 | 40 |
| Complications of surgery | 17 | 13 | 25 | 16 | 36 |
| Medication error (not resulting in death) | 14 | 20 | 14 | 29 | 30 |
| Mental health clinical deterioration resulting in serious harm ^c | - | - | 11 | 19 | 28 |
| Misdiagnosis and subsequent management | 8 | 14 | 18 | 31 | 25 |
| Fetal complications associated with health care delivery | 9 | 18 | 16 | 17 | 19 |
| Complications of anaesthesia management | 1 | 2 | 3 | 4 | 4 |
| Patient missing or absent without leave with adverse outcome ^d | 1 | 1 | 2 | 3 | 4 |
| Complications of resuscitation | 1 | 2 | 8 | 2 | 3 |
| Wrong route administration of oral/enteral treatment ^e | - | 1 | - | - | - |
| Total | 305 | 328 | 408 | 469 | 581 |

Note: Data reflects confirmed SAC 1 clinical incidents and excludes declassified SAC 1 clinical incidents. The Datix CIMS and SAC 1 databases are dynamic, with data changing over time as events are investigated retrospectively. The addition of new incident categories to these databases may have resulted in reclassification of events to different incident categories.

^a Hospital process issues refers to hospital/health service processes such as referral, transport and transfer, triage, admission, assessment, planning (including discharge planning) or the delivery of care that contributed to a poorer than expected outcome.

^b Category redefined 1 July 2015. Data from 2015/16 onwards reflects the stated definition. Data for prior periods reflects the previous definition 'Absconding of any mental health patient'.

^c Category first included 2015/16 with data for 2015/16 representing incidents notified from Sept 2015 to June 2016.

^d Category redefined 1 July 2015. Data from 2015/16 onwards reflects the stated definition. Data for prior periods reflects the previous definition 'Patient absconding with adverse outcome'.

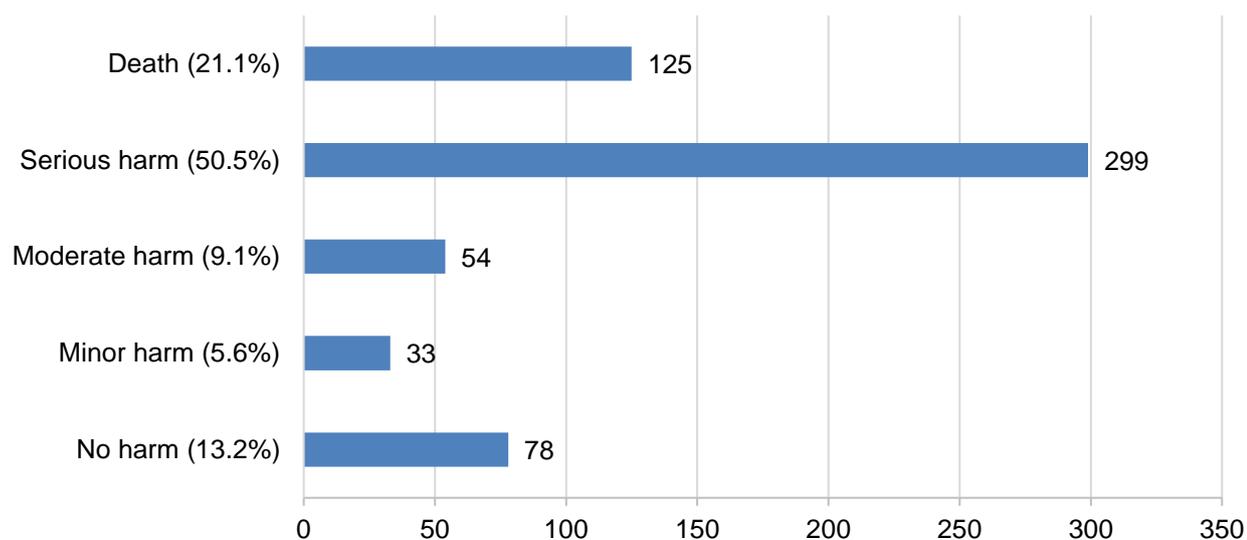
^e Category first included 2014-15.

^f Includes four confirmed SAC 1 incidents where the SAC 1 category had not been entered at 30 June 2018.

Harm Associated with SAC 1 Clinical Incidents

Of the 592 confirmed SAC 1 clinical incidents for 2017/18, 125 (21.1%) were associated with a patient outcome of death and 299 (50.5%) incidents were associated with a patient outcome of serious harm. Of the 125 deaths, 49 (39.2%) were mental health patients. Of the 299 incidents with a patient outcome of serious harm, 44 (14.8%) were mental health patients. Figure 6 provides summary of the patient outcome recorded for confirmed SAC 1 clinical incidents for 2017/18. It is important to note that the patient outcome may not be a direct result of the clinical incident itself.

Figure 6: Frequency and Percentage of Confirmed SAC 1 Clinical Incidents by Patient Outcome for 2017/18



Note: Patient outcome missing data n=3; 0.5%

Table 8 provides the frequency by patient outcome for the five SAC 1 categories most frequently associated with a patient outcome of death or serious harm.

Table 8: Frequency of the Top Five Confirmed SAC 1 Clinical Incident Categories by Patient Outcome of Serious Harm or Death for 2017/18

| SAC 1 Category | Death | Serious harm |
|---|-----------|--------------|
| Complications of an inpatient fall | 9 | 57 |
| Infection control breach | 1 | 56 |
| Hospital process issues | 14 | 36 |
| Any other incident resulting in serious harm or death | 13 | 34 |
| The unexpected death of a mental health client | 46 | - |
| Total | 83 | 183 |

In 2017/18, there was also 11 confirmed SAC 1 clinical incidents categorised as 'delay in recognising or responding to clinical deterioration'; nine incidents categorised as 'complications of surgery'; and seven incidents categorised as 'misdiagnosis and subsequent management' that described a patient outcome of death.

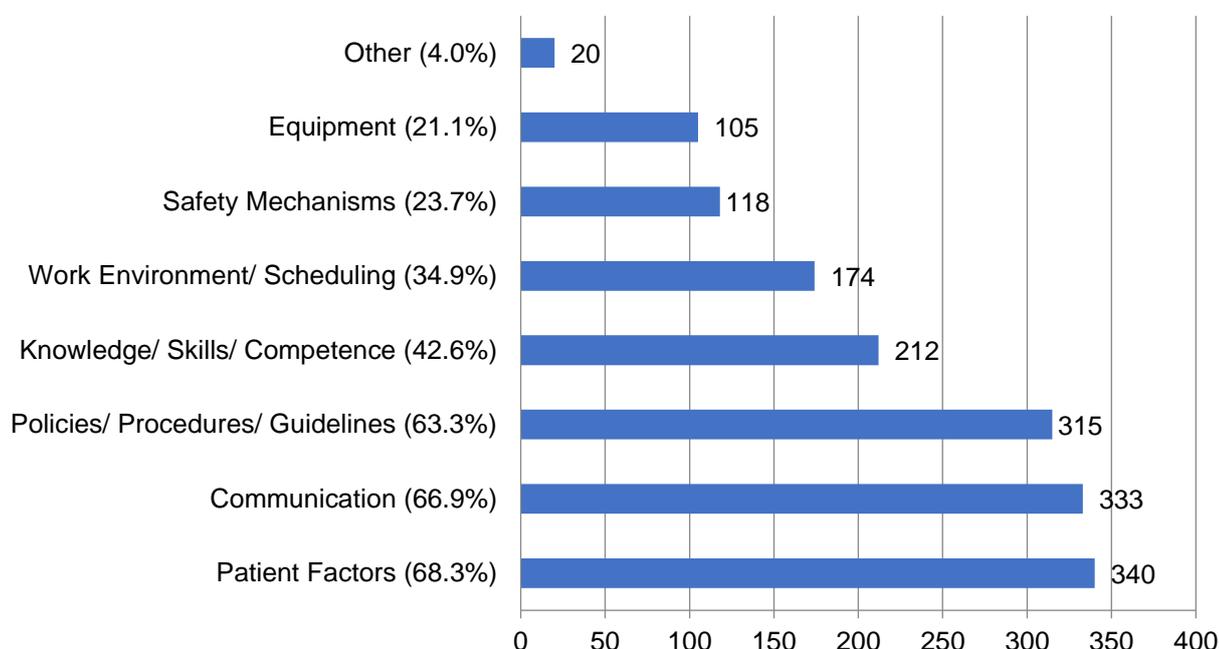
The majority of high risk mental health patients who absconded sustained either no harm (n=29) or minor harm (n=7), with three patients sustaining moderate harm and five patients sustaining serious harm.

SAC 1 Contributory Factors

Figure 7 shows the contributory factors identified following the investigation of 498 SAC 1 clinical incidents (including sentinel events) by public hospitals, private licensed health care facilities and contracted non-government organisations (representing 84.1% of all confirmed SAC 1 incidents in 2017/18). At the time of reporting, 94 SAC 1 clinical incident investigations were still being progressed by HSPs.

Aside from patient factors (n=340; 68.3%), the most frequently identified contributory factors were related to communication issues (n=333; 66.9%) followed by issues concerning policies, procedures and guidelines (n=315; 63.3%).

Figure 7: Frequency and Percentage of Closed SAC 1 Clinical Incidents with Identified Contributory Factors for 2017/18

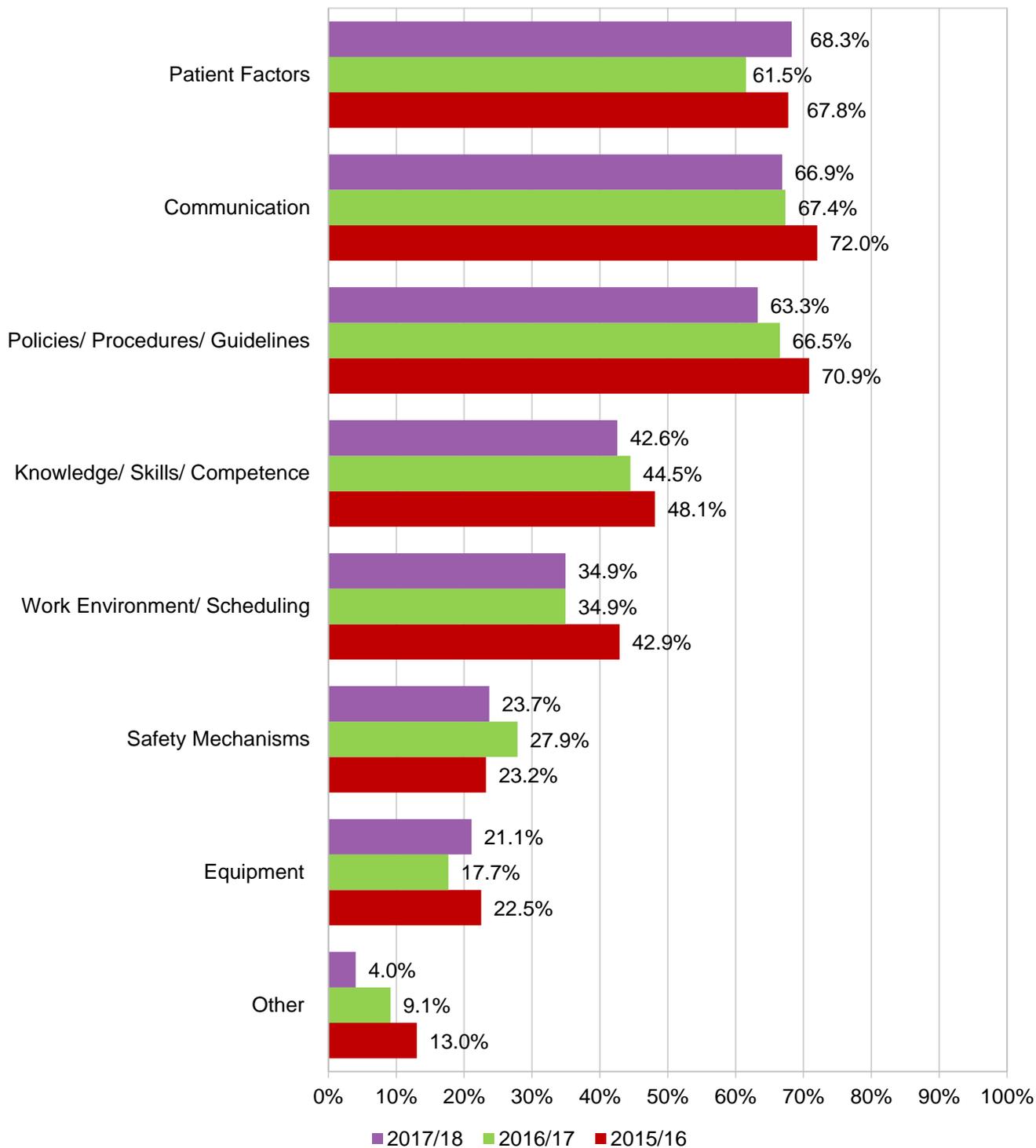


Note: More than one contributory factor can be assigned to each clinical incident. Prior to 2017/18 contributory factor data was reported using confirmed incidents rather than closed incidents. As such the data presented in this report may not be comparable with previous year's reports.

A significant number of confirmed SAC 1 clinical incidents with reported communications issues included communication issues between staff (n=206; 61.9%); and issues relating to documentation (n=80; 24.0%). Of the 315 confirmed SAC 1 clinical incidents identifying contributory factors relating to policies, procedures and guidelines, 107 (34.0%) were in relation to the application of policies, procedures or guidelines; and 85 (27.0%) related to the absence of them.

Contributory factors identified in 2017/18 were compared with those identified in the two previous reporting periods (see Figure 8). The most frequently reported contributory factors recorded each year over the last three years were those related to patient factors, communication issues and issues pertaining to policies, procedures or guidelines.

Figure 8: Percentage of Contributory Factors Identified for Closed SAC 1 Clinical Incidents for 2015/16 to 2017/18



Note: More than one contributory factor can be assigned to each clinical incident.

Sentinel Events Recommendations

Of the 11 sentinel events notified in this period, 10 investigation reports had been received at the time of writing this report, with one investigation report pending. The 10 investigation reports submitted all provided recommendations. Contributory factors identified through the investigation of selected sentinel events in 2017/18 are described in Table 9. The main themes revolved around enhancing communication between staff, refreshing staff training/education, and strengthening or establishing policies and procedures to assist in improving patient safety.

Table 9: **Sentinel Events Identified Contributory Factors and Actions for 2017/18**

| Identified Issues | Health Service Providers Improvement Initiatives |
|---|---|
| Haemolytic blood transfusion reaction resulting from ABO incompatibility | |
| The request for blood was verbal rather than written and the incorrect blood was collected from the blood fridge, checked and transfused. | Medical Officers to be advised that orders for blood products must be in written format on the prescribed form prior to collection of products from the blood fridge. Nursing personnel to complete the mandatory Clinical Transfusion Practice online course within specified timeframe. |
| Prescribed Blood and Blood Product Order form requires review. | Prescribed Blood and Blood Product Order form to be reviewed with consideration be given to including requirements to record the patient's blood group, time of order, Rhesus status of each ordered unit of blood. |
| Infant discharged to wrong family or infant abduction | |
| Communication lapses and scheduling conflicts resulted in reduced awareness of patient assessment and pre-birth planning. | Business case to be developed for maternity ward to have dedicated social worker, with other communication strategies to be put in place to strengthen their engagement (designated pager, patient alerts and information regarding birth plans). |
| Staff not clear about authority to act under section 37 of <i>Children and Community Services Act 2004</i> . | Health service to escalate issues to Department of Communities (Child Protection and Family Support) to suggest revision of templated correspondence issued under section 37 to include clear directions to hospital staff and other officers. Process to be communicated to staff regarding at risk newborns in the locked nursery. |
| Staff unfamiliar with application of, and processes associated with, code black alpha. | Emergency manual changes and related processes associated with code black alpha (e.g. drills) are being reviewed, implemented and evaluated to ensure staff awareness. Staff education to be undertaken regarding communication about code black alpha and policy requirements. |
| Intravascular gas embolism resulting in death or neurological damage | |
| Absence of team time out procedure specific to line checks before procedure commenced. | A procedure is being documented regarding the set-up of angiography procedures, including the roles of key team members and expectations for communication around critical elements of the procedure. Regular audits will be undertaken to measure compliance with the documented process. |

| Identified Issues | Health Service Providers Improvement Initiatives |
|--|--|
| Medication errors resulting in death of a patient | |
| Instructions regarding anticoagulation therapy were communicated verbally and not documented. | Specific guidelines have been developed that include an anticoagulation protocol, and a requirement for a documented and agreed plan. The hospital department's Medical Officers Orientation manual and procedure specific nursing practice standard was updated to include a requirement that medication prescriptions and patient management plans are completed prior to the patient leaving the Cath Lab. |
| Communication issues relating to the method of monitoring anticoagulation therapy resulted in a failure to escalate anticoagulation outside the therapeutic range. | The hospital department's Medical Officers Orientation manual has been updated to include thrombosis prophylaxis for the procedure and monitoring methodology. Staff to be informed of key messages relating to procedure specific thrombosis prophylaxis. |
| No nursing practice standard existed which would have allowed staff to cross reference the anticoagulation protocols required. | The hospital's existing procedure specific nursing practice standard was amended to include thrombosis prophylaxis for the procedure and monitoring methodology, with all relevant nursing staff acknowledging knowledge of the updated standard. |
| No hospital policy or protocol existed for the requested anticoagulation monitoring test and it was not routinely used to monitor anticoagulation. | Specific guidelines have been developed regarding the use of the requested test which restricts its use to its common use, and provides guidance about escalation of non-standard anticoagulation treatment and therapeutic targets to the consultant. |
| Repeated attempts by medical and nursing staff to escalate concerns had a critical point of failure confirming the error. | Standard operating procedure regarding nursing escalation has been reviewed and implemented as a hospital-wide policy/procedure. Informal communication to staff to raise awareness for interim escalation procedures regarding script-heparin infusion and maintenance parameters. |
| Therapeutic Guidelines for Palliative Care were not followed in prescribing the drug and monitoring for effect following first dose was not done. | Increased checking requirements were implemented for all schedule 4 recordable drugs in liquid form. Posters were developed and displayed to raise staff awareness of medication ordering practice in relation to unit of measurement with safe dosage and administration points. |
| Team time out procedure did not include procedure specific checks resulting in failure to address antiplatelet therapy requirements. | Team time out process was reviewed to capture elements unique to interventional cardiology, including prescription and administration of antiplatelet therapy. |
| No medical management plan was documented which may have noted the contraindications for the immunocompromised patient. | Annual random audits will measure the presence of treatment plans by treating consultants. |

| Identified Issues | Health Service Providers Improvement Initiatives |
|--|--|
| Reference tools did not address precautions regarding infection control. | Medication guidelines have been updated to include precautions when prescribing live vaccines and were disseminated across the hospital. |
| Staff unfamiliar with contraindications for specified medication for immunocompromised patients. | Prescription practices were revised to restrict to consultants. An audit was undertaken to verify storage of medication is restricted to pharmacy or appropriate department. Hospital department orientation includes information regarding the use of immunosuppressants. |
| Retained instruments/material after surgery requiring re-operation or further surgical procedure | |
| Post-surgical x-ray not undertaken to determine retention of material and rationale not documented. | Lessons learned poster developed to demonstrate importance of documentation of clinical decision-making. |
| Policy not followed by staff with regard to actions required after concerns have been raised about the surgical count. | Case discussed at specialty mortality and morbidity meeting to ensure familiarisation with the policy requirements. |
| Communication regarding the correct preparation of the device prior to the procedure was inadequate. | Written procedure specific protocol will be amended to include a requirement for verbal confirmation that device has been prepared. |
| Written procedure specific protocol did not provide complete directions for preparation of the device. | Written procedure specific protocol will be updated to provide more guidance regarding preparation of the device. This will include education to staff regarding the revised process, process sign-off sheets and observational audit. |
| Procedure end-to-end staffing flow left inadequate nursing staff levels preparing for next procedure. | Staffing requirements were reviewed and changes were implemented as necessary. |
| Similarity in colour of device cover and device itself, which is unlike the practice for other devices. | Concerns have been raised with both the device manufacturer and the Therapeutic Goods Administration (TGA). |

Fetal Harm Focus

Through its oversight function of SAC 1 clinical incident management, the PSSU became aware of a number of incidents resulting in fetal harm during 2014 where issues relating to the interpretation and/or escalation of non-reassuring cardiotocograph (CTG) traces were identified as contributory factors. This concern was escalated to the State-wide Obstetric Support Unit (SOSU) and the Cardiotocography Monitoring Policy was subsequently developed and released in January 2018.

In October 2017, members of the State Datix Committee (SDC) agreed to update the configuration of Datix CIMS to allow the collection of information relating to fetal harm. Prior to these changes, clinical incident reporters were unable to differentiate between maternal and fetal outcomes. Members of the SDC representing HSPs agreed to retrospectively complete these fetal harm fields where applicable for incidents reported in the 2017/18 financial year. To support these changes the PSSU developed the 'Datix CIMS Business rules for incidents that involve fetal harm'¹⁵ and directions were written into the existing Datix CIMS user guides.¹⁶

Table 10 provides the frequency of confirmed SAC 1 clinical incidents where fetal harm was indicated. Twenty-nine (4.9%) confirmed SAC 1 incidents in 2017/18 involved fetal harm. It is important to note that retrospective completion of the fetal harm fields was discretionary for incidents notified prior to 1 July 2017. It is therefore reasonable to suggest that the increase in incidents indicating fetal harm from 18 in 2016/17, to 29 in 2017/18, is primarily due to the fetal harm fields being configured in this reporting period.

Table 10: Frequency of Confirmed SAC 1 Clinical Incidents Where Fetal Harm was Indicated for 2015/16 to 2017/18

| SAC 1 Category | 2015/16 ^a | 2016/17 ^a | 2017/18 |
|---|----------------------|----------------------|-----------|
| Fetal complications associated with health care delivery | 11 | 12 | 18 |
| Hospital process issues | 1 | 3 | 4 |
| Any other incident resulting in serious harm or death | 1 | - | 3 |
| Delay in recognising/responding to clinical deterioration | 1 | 2 | 2 |
| Misdiagnosis and subsequent management (physical and mental health) | 1 | - | 2 |
| Infection control breach | 1 | 1 | - |
| Complications of surgery | 2 | - | - |
| Total | 18 | 18 | 29 |

^a Fetal harm fields in Datix CIMS were implemented in October 2017. Retrospective data entry prior to 1 July 2017 was discretionary and data for 2015/16 and 2016/17 years may not be complete.

Of the 29 incidents identifying fetal harm in 2017/18, 18 resulted in fetal death and seven resulted in serious harm to the fetus. Two incidents resulted in moderate (n=1) or minor harm (n=1) to the fetus. Three of the incidents with a fetal outcome of death were multiple

¹⁵ Datix CIMS Business Rules for Fetal Harm are available at: https://ww2.health.wa.gov.au/Articles/A_E/Clinical-incident-management-system

¹⁶ Datix CIMS User Guides are available at: <https://hss-healthpoint.hdwa.health.wa.gov.au/business-at-health/ICT-servicedelivery-and-operations/cims/Pages/default.aspx>

pregnancies (all twins). The majority of incidents in 2017/18 involved pregnancies with a gestational age of 35-39 weeks (n=11; 37.9%), or 40 or more weeks (n=6; 20.7%).

Key Messages and Information: SAC 1 Clinical Incidents

The reasons for undertaking a thorough investigation and implementing changes following a serious clinical incident have long been acknowledged. At the heart of it is the prevention of harm to patients and this is, and should be, the primary motive. Preventable clinical incidents have other far-reaching consequences which impact the sustainability of the health system. For example, when clinical incidents result in increased length of stay or readmissions, they carry a financial burden and increase the demand for services. They also have the potential to undermine public confidence in the health system.

In 2017/18, there were 592 confirmed SAC 1 clinical incidents, of which 11 were reported as sentinel events. Four of these sentinel events related to the death of a patient following a medication error. Review of these four incidents indicated a range of issues including delay in prescribing; incorrect dose; incorrect rate of administration; and contraindication. Three sentinel events were reported following the retention of instruments or other material after surgery which required re-operation or further surgical procedure. One of these incidents was reported as a near miss incident.

While the number of sentinel events remains relatively low and stable, the number of other SAC 1 clinical incidents continues to increase, with 581 confirmed in 2017/18 compared to 469 in 2016/17 and 408 in 2015/16. The three most commonly reported SAC 1 categories for 2017/18 were hospital process issues, complications of an inpatient fall, and infection control breaches. The types of incidents reported under the category 'hospital process issues' varies across a broad scope which makes it difficult to identify a common theme; though there is significant patient harm associated with these incidents. Fifty incidents identifying 'hospital process issues' were notified with a patient outcome of serious harm or death. 'Complications relating to an inpatient fall' was the most frequently reported SAC 1 category in 2016/17 and continues to be a concern in 2017/18. Nine incidents were associated with a patient outcome of death in this reporting period and 57 incidents were associated with a patient outcome of serious harm.

Once again, it is clear that communication issues are a major contributory factor to SAC 1 clinical incidents, with two-thirds of clinical incidents identifying communication issues, with the majority of those relating to communication issues between staff. Effective communication is recognised as a critical component in the coordination and provision of safe care to patients in the second edition of the NSQHS Standards. The 'Communicating for Safety' Standard outlines requirements for health service organisations to have systems and processes in place to manage patients in high risk situations. As well as combining actions from the first edition of the NSQHS Standards relating to clinical handover and patient identification, this Standard has new requirements including those to ensure that organisational processes are in place to support effective communication throughout the patient's journey and to ensure timely documentation in healthcare records.

In October 2017, fetal harm fields were configured into Datix CIMS which now allows the differentiation of maternal and fetal outcomes. The PSSU anticipates that, as the use of these fields increases over the coming years, this information will inform the implementation of strategies to improve fetal outcomes in WA. The release of the Cardiotocography Monitoring Policy in January 2018 is one such strategy that was prompted by a review of clinical incidents at an aggregate level, and is testament to the effective coordination of improvement activity between the DOH, HSPs and specialist stakeholders. The PSSU continues to monitor SAC 1

clinical incidents where issues around the interpretation and/or escalation of CTG traces may have contributed to poor neonatal outcomes.

In March 2018, the PSSU commenced reporting sentinel event data to the IHPA (for the July to December 2017 period). As part of the National Efficient Price (NEP) development associated with hospital safety and quality outcomes, the IHPA recommended to the COAG Health Council that from 1 July 2017, any episode of care (admitted or otherwise) with a sentinel event should not be funded in its entirety. A Ministerial Direction was issued to the IHPA on 16 February 2017 under section 226 of the *National Health Reform Act 2011* that stated that any public hospital episodes occurring on or after 1 July 2017 that include a sentinel event will not be funded.

To facilitate the provision of sentinel event data to IHPA, the PSSU developed business rules for the process. Three sentinel events were reported to the IHPA for the 2017/18 reporting period. The variation between this data and the sentinel event numbers described in this report is due to a number of factors including the broader scope of WA sentinel event categories, a narrower national focus on patient outcomes of serious harm or death, and the different data extraction methodology used (i.e. notification date as opposed to date of clinical incident). In the interest of transparency, the DOH has communicated with each HSP about the sentinel events reported under their organisation, and has provided a copy of the business rules. The PSSU is confident that financial penalties will not compromise the WA health system's transparency in notifying sentinel events.

Working in collaboration with the IHPA in this space, the ACSQHC has also been coordinating a review of the eight national sentinel event categories. A Sentinel Events Review Steering Committee (SERSC) was convened to guide the review. This group comprised a consumer representative and state, territory and Commonwealth patient safety experts, including members from WA. The revised categories were endorsed by the Australian Health Ministers' Advisory Council in December 2017, however at the time of writing this report, are yet to be endorsed by the COAG Health Council.

In anticipation of the revised sentinel event categories being endorsed nationally, the PSSU proactively implemented local changes to ensure that updates were embedded in policy prior to any changes to national reporting requirements taking effect. Effective 1 July 2018, amendments were made to the CIM Policy to incorporate the revised sentinel event categories. The revised categories put more focus on incidents that were determined to be wholly preventable with a patient outcome of serious harm or death. The PSSU anticipates that information resources will be released at a national level to support the revision of national sentinel event categories and to provide guidance regarding the definition of serious harm. Any reference to these resources must be considered as secondary to the definitions and requirements set out in the WA CIM Policy.

Of the 592 confirmed SAC 1 clinical incidents notified in 2017/18, 78 were identified as resulting in no harm to the patient. In addition to the 592 confirmed SAC 1 incidents, 167 events were approved for declassification following investigation as no health care factors were found to have contributed to the event. The PSSU advocates for a risk mitigation approach to clinical incident investigation and recognises the value in the investigation of these incidents to identify areas for improvement.

Some may question whether clinical incident management improves patient outcomes; whether it actually makes a difference. This is a fair question, particularly when similar incidents are seen again and again. Health care is complex with many moving parts, and the path to prevention is often not a linear one. What resources we do invest in quality improvement

initiatives need to be directed appropriately to be effective and to maximise any gains. It is therefore critically important that investigation accurately identifies the root causes of each incident, and that recommendations target the source of errors rather than the flow-on effect.

Poorly conceived recommendations not only undermine quality improvement activities, but have the potential to do more harm. A considerable number of recommendations are made each year which target staff performance in an effort to address system-based deficiencies (for example, reminders to staff to follow procedures). This approach not only perpetuates a blame culture, but contributes to a workforce being disengaged with clinical incident management. In isolation, weaker recommendations are unlikely to be effective risk treatment strategies for all types of errors. They must be evaluated for their effectiveness in addressing not just specific contributing factors, but also their effectiveness as an improvement strategy more broadly.

To strengthen SAC 1 clinical incident management, the PSSU introduced the 'Closing the Loop' Program (CLP)¹⁷ in 2016 which focused on the development, implementation and evaluation of effective recommendations. Following the reconfiguration of the recommendations module within Datix CIMS in March 2017, the PSSU undertook a third 'Closing the Loop' audit, covering the period from September to November 2017.

In its review of a sample of evaluation reports, the PSSU determined that no recommendations were rated as 'excellent' against the SMARTA¹⁷ classification rating. Further, many recommendations rated as 'stronger' by the site were found to have no, or limited, evidence to support the assessment. Approximately two-thirds of the reports had summarised actions taken to implement the recommendation and 72% had evaluation actions. When reviewing if evidence had been sent to support the recommendation, only 23% had provided complete evaluation evidence. The review suggested to HSPs that they continue to support CLP requirements through the reinforcement of the use of SMARTA and evaluation tools to create strong, effective recommendations and the use of stronger types of measures with less dependence on action/process outcome measures. The PSSU will consider undertaking another audit over the coming months to evaluate the use of the recommendations module.

Quality improvement requires both courage and commitment; courage to confront the hard-to-change factors; and, commitment to the ongoing process of implementing targeted improvement initiatives and the evaluation of their effectiveness.

¹⁷ Refer to the PSSU's 'Closing the Loop' web page for resources and for further information regarding the SMARTA classification: http://ww2.health.wa.gov.au/Articles/A_E/Closing-the-Loop-Program

Standard 1: Governance for Safety and Quality

Good clinical governance is imperative in maintaining and improving the safety and quality of health care for patients. Clinical governance is “a system through which organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish”.¹⁸

The importance of strong clinical governance in health service organisations is highlighted in Standard 1 of the NSQHS Standards (first edition). The Clinical Governance Standard in the second edition of the NSQHS Standards, against which HSPs will be assessed from January 2019, builds on the existing Standards, and continues its focus on risk, monitoring, quality improvement, training and performance management.¹⁹

Such a system requires clear directions from leadership, strong policy and strategic decisions, robust oversight and monitoring of organisational performance and transparent accountability for HSPs. The new Clinical Governance Standard is explicit in recognising the importance of leadership and culture in establishing effective clinical governance systems, and includes new actions relating to the role of leaders in safety and quality, Aboriginal health, e-health (including the My Health Record system), credentialing of clinicians, variation in clinical practice and health outcomes, and the safety of the environment in which health services are provided.

The second edition of the NSQHS Standards recognises the importance of risk management as an essential component of good clinical governance, and requires health service organisations to have systems and processes in place to identify, document, and manage risks to the organisation, including those identified via the analysis of clinical incidents and complaints. The WA Health Clinical Risk Management Guidelines²⁰ provide information regarding processes for judging risks, understanding the factors that lead to them, learning lessons from incidents and putting systems in place to prevent recurrence. In 2017/18 the WA health system implemented its new Enterprise Risk Management (ERM) system, providing a contemporary platform via which the DOH and HSPs can record and manage both clinical and corporate risks.

The enactment of the *Health Services Act 2016* on 1 July 2016 introduced a new governance model for the WA health system, with the Director General established as the System Manager and HSPs established as independent governing bodies for their sections of the health system. The NSQHS Standards recognise the importance of the responsibilities and relationships established between the health service organisations that deliver health care and their governing body, the DOH, executive, clinicians, patients, consumers and other stakeholders in ensuring good clinical outcomes.

In support of the delivery of safe and high-quality care for patients and consumers the ACSQHC has developed a National Model Clinical Governance Framework based on the NSQHS Standards (second edition), including the Clinical Governance Standard.²¹ This framework

¹⁸ Scally G, Donaldson LJ. Clinical governance and the drive for quality improvement in the new NHS in England *BMJ* 1998; 317 61

¹⁹ ACSQHC NSQHS Standards (second edition) fact sheet – Clinical Governance available at:

<https://www.safetyandquality.gov.au/publications/national-safety-and-quality-health-service-standards-second-edition-fact-sheets/>

²⁰ WA Health Clinical Risk Management Guidelines available at: https://ww2.health.wa.gov.au/Articles/A_E/Clinical-risk-management

²¹ ACSQHC National Model Clinical Governance Framework and fact sheets available at:

<http://nationalstandards.safetyandquality.gov.au/resources>

recognises that clinical governance is an integrated component of corporate governance, and is supported by fact sheets designed for doctors, nurses and midwives, and managers.

The WA health system remains committed to delivering safe and high quality care which is achieved through the provision of health care that is:

- evidence based
- governed by sound clinical practice
- efficient and focussed on preventing and reducing the impact of clinical incidents.

While prevention via effective risk management is always the best strategy, it is important to investigate and address clinical incidents when they occur. The reporting and investigation of clinical incidents enables strategies to be put into place and evaluated to improve the safety of health care delivery and prevent other patients being harmed. To enhance the clinical incident management process, Severity Assessment Codes (SAC; see Figure 9) are used in WA to guide incident analysis, action and escalation. Clinical incidents are categorised according to the harm caused to the patient by the delivery of health care rather than the patient's underlying condition/illness.

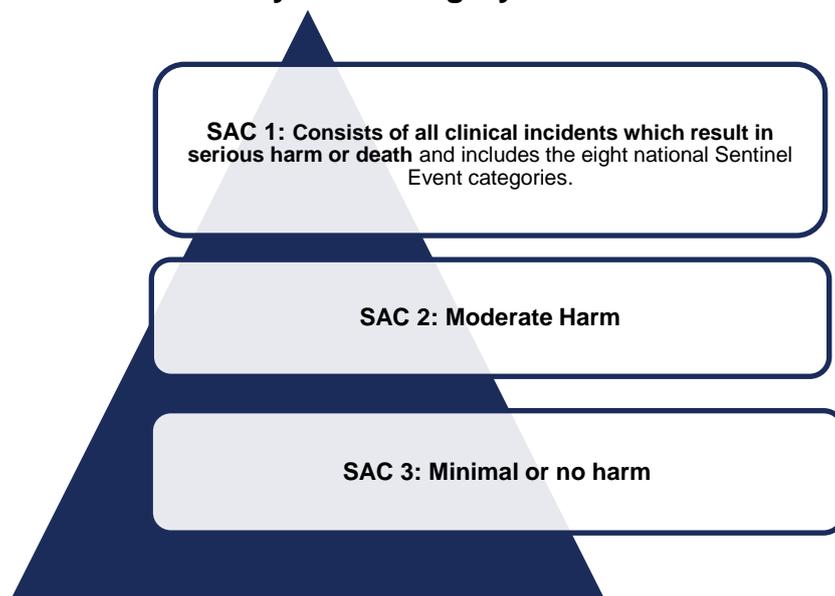
SAC 1 rating refers to clinical incidents resulting in serious harm/death/near miss, and includes the eight nationally reported clinical incidents known as sentinel events:

1. Procedure involving wrong patient or body part resulting in death or major permanent loss of function.
2. Suicide of a patient in an inpatient unit (or whilst on leave).
3. Retained instruments or other material after surgery requiring return to theatre.
4. Intravascular gas embolism resulting in death or neurological damage.
5. Haemolytic blood transfusion reaction resulting from ABO incompatibility.
6. Medication error resulting in death of a patient.
7. Maternal death associated with pregnancy, birth and the puerperium (occurring within 42 days post-delivery).
8. Infant discharged to wrong family or infant abduction.

SAC 2 rating refers to clinical incidents resulting in moderate harm/near miss.

SAC 3 rating refers to clinical incidents resulting in minimal/no harm/near miss.

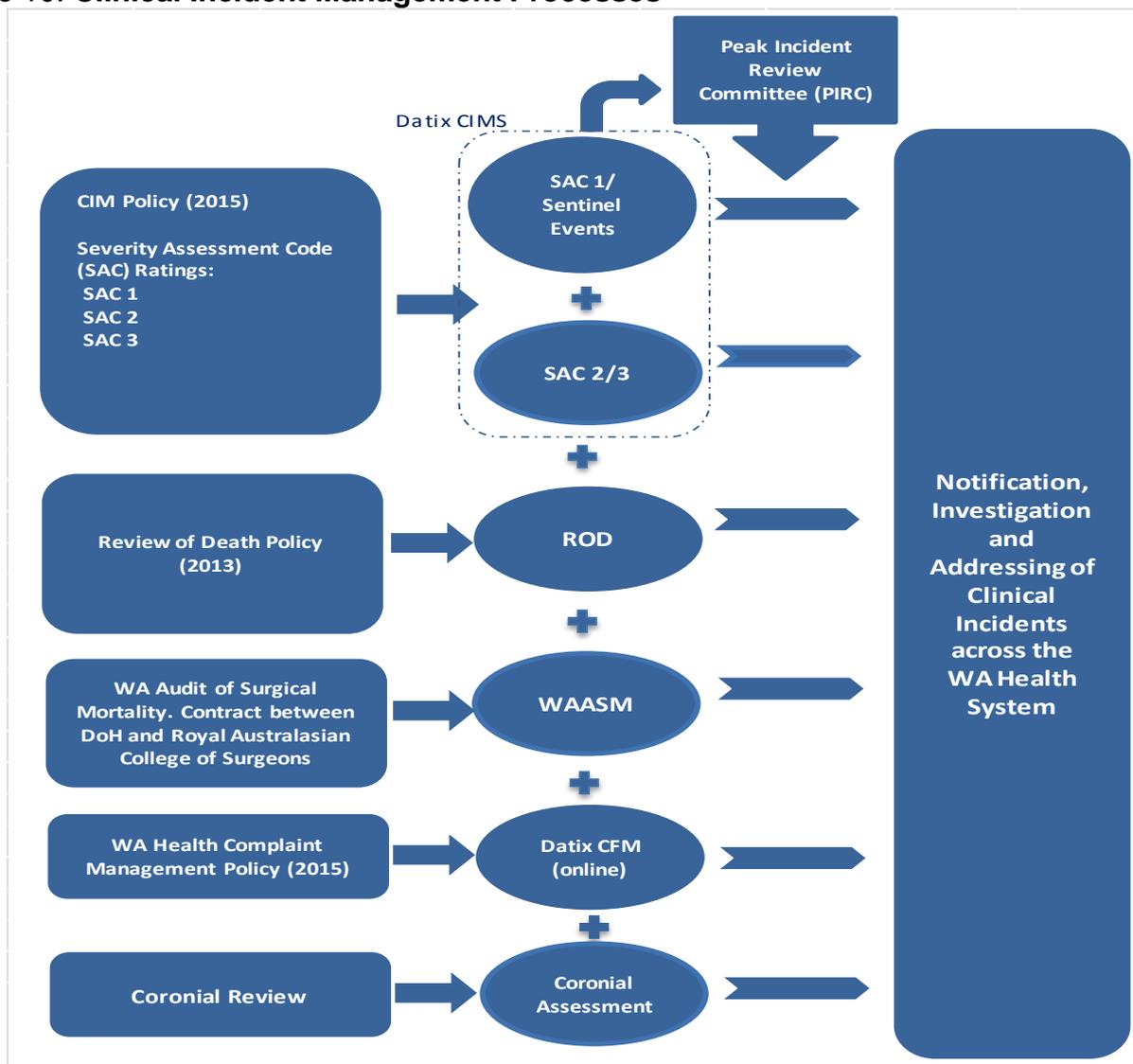
Figure 9: **Clinical Incidents by SAC Category**



When a clinical incident is identified, immediate action is taken to provide care to the patient involved. Once this has occurred, an online clinical incident form is completed to notify senior staff and enable an appropriate investigation to take place. The clinical incident is then assigned a SAC rating that guides the type of investigation method used (see Figure 10). Clinical incidents resulting in serious harm or death (SAC 1) require a detailed and rigorous investigation to be undertaken.

Analysis of the clinical incident is then undertaken which leads in the implementation of recommendations to prevent the clinical incident from recurring and/or reducing the harm that may result. Furthermore, all recommendations must be evaluated to ensure that the quality improvement strategies are effective in making health care delivery safer.

Figure 10: **Clinical Incident Management Processes**



Clinical incident data is then used at a local and state-wide level to review trends and identify areas where practice improvements can be achieved. Complementing this annual report is the internal release of the Datix CIM/CFM Quarterly Report and the quarterly Check-Up Report, which is a one page poster report that focuses on specific state-wide clinical incident trends. These reports are available to WA health system staff via the PSSU’s intranet page: <https://doh-healthpoint.hdwa.health.wa.gov.au/directory/Clinical%20Services%20and%20Research/Patient%20Safety%20Clinical%20Quality/PSSU/Pages/About%20Us.aspx>.

Additional strategies to further strengthen the clinical incident management process include the WA Review of Death (ROD) Policy and the WA Audit of Surgical Mortality (WAASM). The purpose of ROD and WAASM is to systematically review patient deaths to identify those that may have been preventable so that lessons can be learnt. These separate state-wide review processes (SAC 1 clinical incident management, ROD and WAASM) ensure that clinical incidents resulting in a patient's death are captured, notified and investigated. All health-related findings from coronial inquests are reviewed and assessed, with recommendations considered by HSP and implemented where appropriate. Consumer feedback is also an integral component of CIM as it informs the provision of patient centred care.

Considerable initiatives and resources have been invested to improve patient safety within the WA health system, including the recent implementation of the new Enterprise Risk Management system. The overarching goal is to address clinical incidents at the local and system level, analyse contributory factors, and identify, implement and evaluate strategies to prevent the recurrence of clinical incidents. The importance of ensuring that lessons are learnt from clinical incidents, so that improvements in health care delivery and patient care are achieved as part of a comprehensive approach to managing risk, cannot be understated.

Resources to guide clinical incident management in WA include the CIM Policy and CIM Toolkit, which are updated to keep abreast with state and national changes. The PSSU also continues to work collaboratively with HSPs to enhance the Datix CIMS on an ongoing basis to ensure alignment with local and national approaches to clinical incident management.

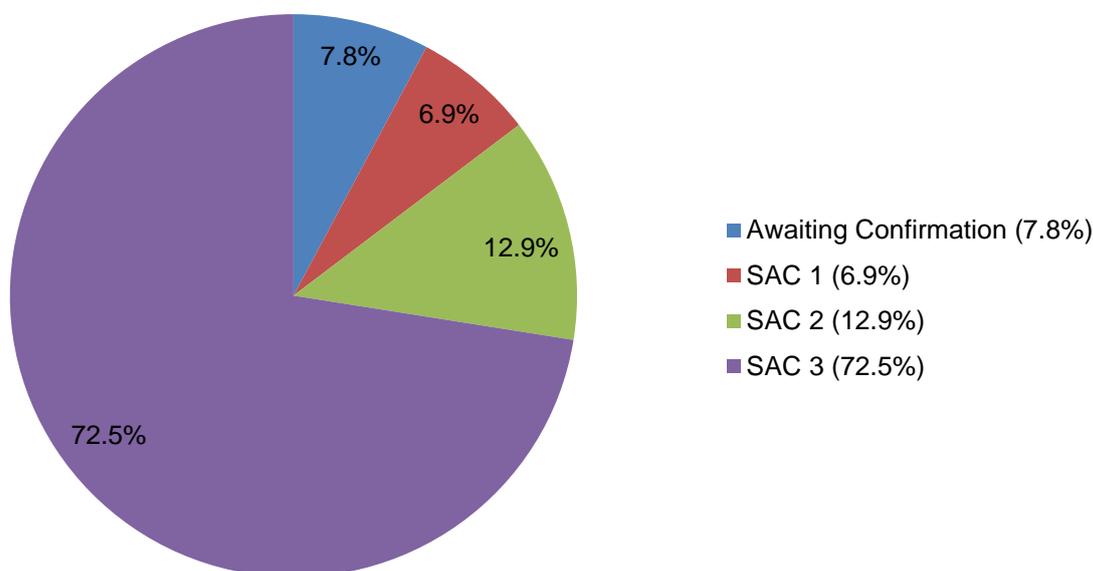


Standard 3: Preventing and Controlling Healthcare-Associated Infections Clinical Incidents

Standard 3 of the NSQHS Standards refers to Preventing and Controlling Healthcare-Associated Infections (HAI). The intention is to stop patients from acquiring preventable Healthcare-Associated Infections and effectively manage infections when they occur using evidence based strategies (ACSQHC, 2013). Strategies which can assist in prevention include ensuring best practice guidelines are followed, such as practicing hand hygiene, barrier precautions, good documentation of when devices such as catheters are used and regular reviews of whether devices in place continue to be required.

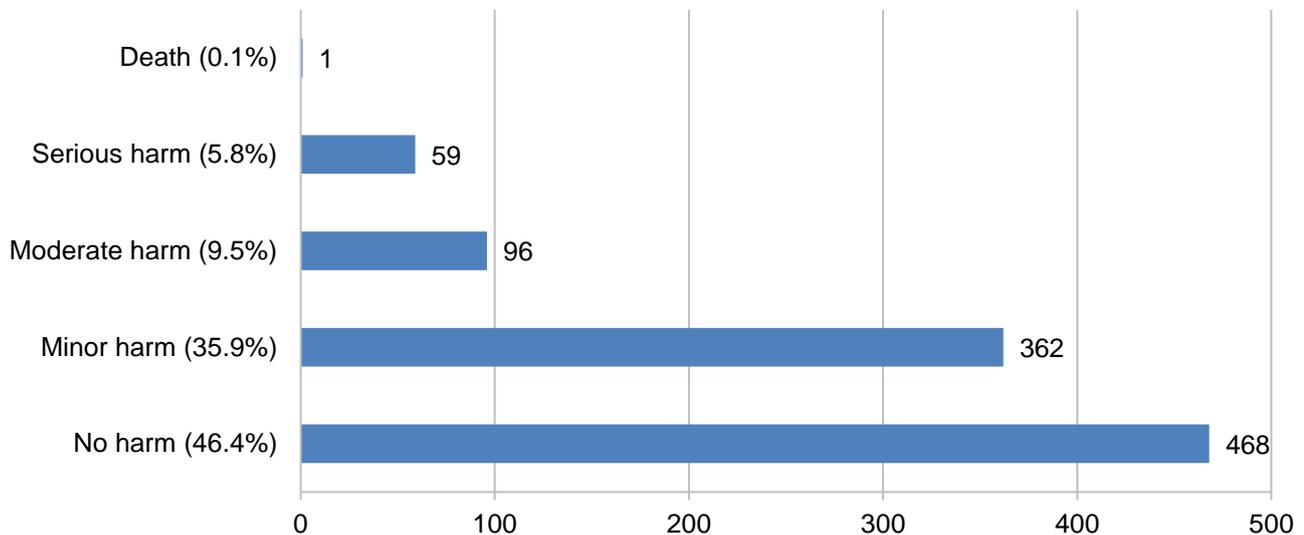
In 2017/18, there were 1,094 clinical incidents relating to preventing and controlling HAI notified, of which 1,009 were confirmed, with a further 85 clinical incidents awaiting confirmation. These accounted for 3.4% of all clinical incidents reported during this period. Findings revealed that the most frequently confirmed incidents were categorised as SAC 3 incidents (72.5%; n=793; see Figure 11). Of the 75 SAC 1 clinical incidents which related to preventing and controlling HAI, 76.0% (n=57) of these related to a breach in sterile techniques or contamination due to hospital processes.

Figure 11: **Percentage of Preventing and Controlling HAI Clinical Incidents by SAC Rating for 2017/18**



The majority of confirmed clinical incidents related to preventing and controlling HAI resulted in no harm to the patient (46.4%; n=468; see Figure 12), with one incident describing a patient outcome of death.

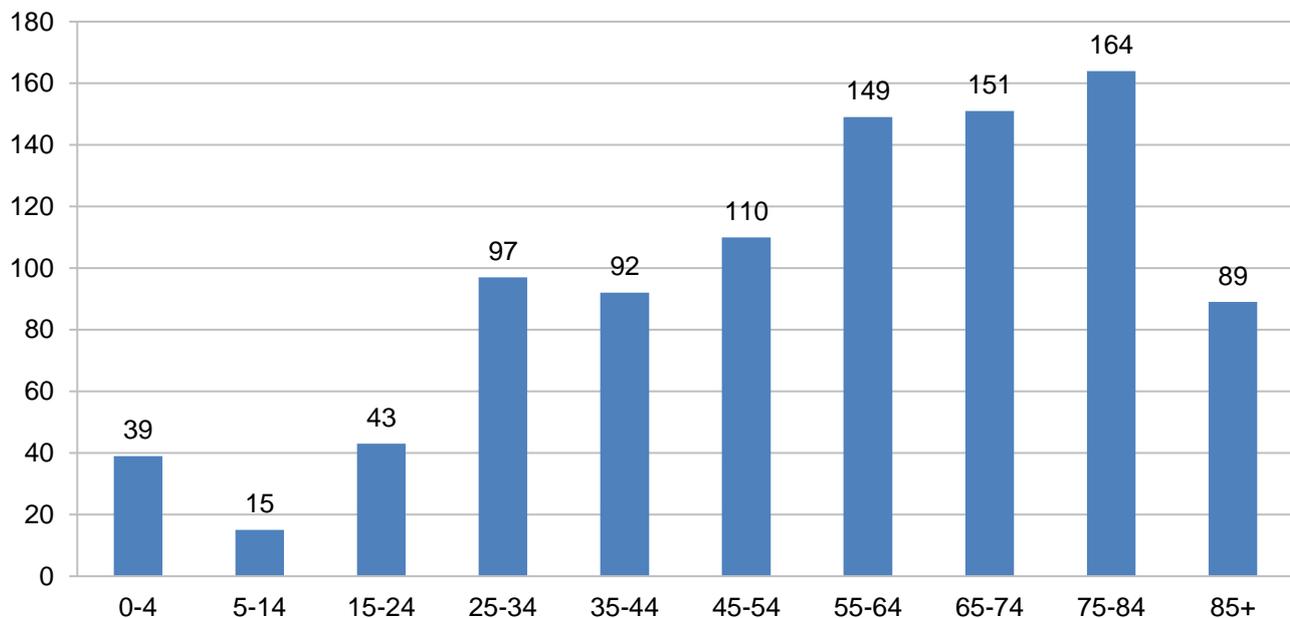
Figure 12: Frequency and Percentage of Confirmed Preventing and Controlling HAI Clinical Incidents by Patient Outcome for 2017/18



Note: Patient outcome missing data n=23; 2.3%

Females accounted for 51.4% (n=490) of patients involved in confirmed clinical incidents, with males making up 48.6% (n=463; missing n=64). Ages ranged from 0-101 years with a median age of 61 years (see Figure 13).

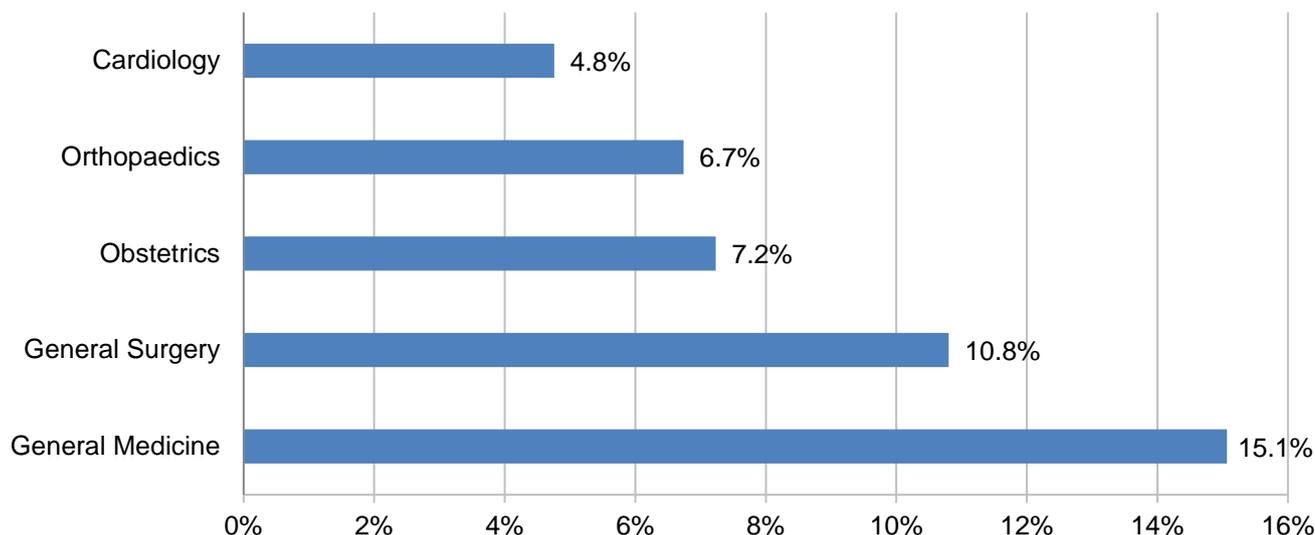
Figure 13: Distribution of Patients Affected by Confirmed Preventing and Controlling HAI Clinical Incidents by Age Group for 2017/18



Note: Patient age missing data n=68; a clinical incident may affect multiple patients

The treating specialties which reported clinical incidents related to this Standard most frequently are listed in Figure 14. These five specialties accounted for 44.6% (n=450) of all confirmed preventing and controlling HAI clinical incidents reported in this 12-month period. The General Medicine specialty reported the most number of incidents (n=152; 15.1%).

Figure 14: Percentage of Confirmed Preventing and Controlling HAI Clinical Incidents by Top Five Treating Specialties for 2017/18



Note: Treating specialty missing data n=246; 24.4%

The top five most frequent clinical incident categories accounted for 93.5% (n=943) of all confirmed preventing and controlling HAI clinical incidents during the 2017/18 period (see Table 11). The majority of confirmed clinical incidents were categorised as processes/protocols not being followed or adhered to which accounted for 40.1% (n=405).

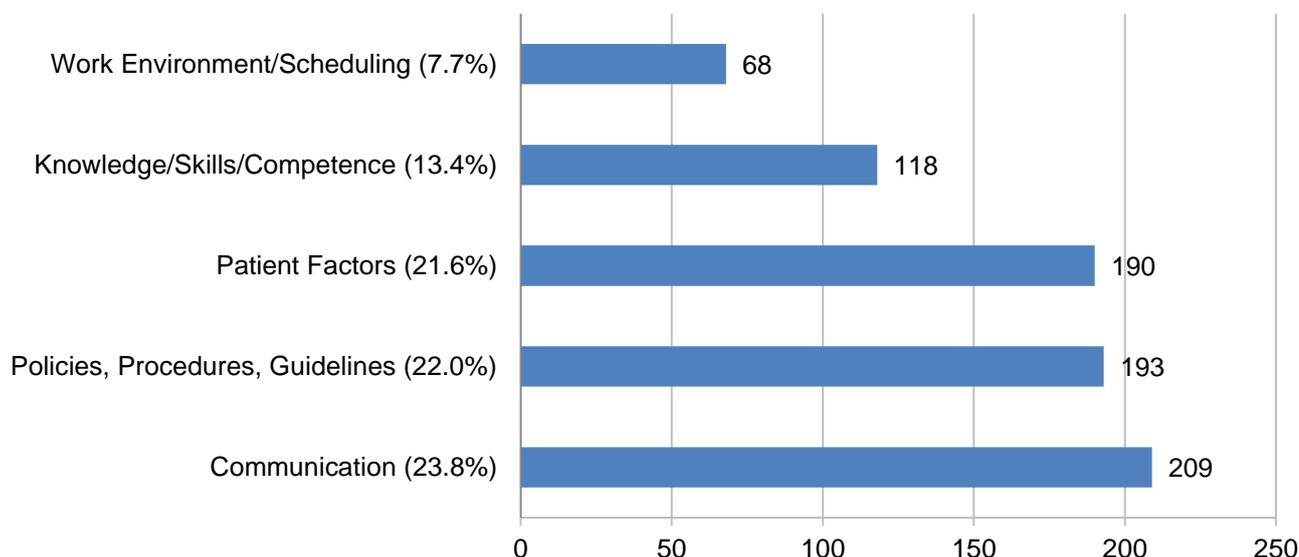
Table 11: Frequency and Percentage of Top Five Tier Three Confirmed Preventing and Controlling HAI Clinical Incidents Categories for 2017/18

| Tier Three HAI Categories | (n) | (%) |
|--|------------|-------------|
| Processes/protocols established not followed/adhered* | 405 | 40.1 |
| Contamination due to hospital processes (other than sterilization) | 328 | 32.5 |
| Breach in sterile techniques | 100 | 9.9 |
| Delayed Diagnosis | 72 | 7.1 |
| Processes/protocols not established* | 38 | 3.8 |
| Total | 943 | 93.5 |

* Incidents for these Tier Three categories relate to processes/procedures for antibiotic prophylaxis, environmental cleaning and hygiene, hand-hygiene, isolation and handling of body fluids/tissues, isolation and handling of infected patients, performance of clinical procedures, safe injection/sharps disposal and sterilisation.

The most common contributory factor was communication factors, which were cited in 23.8% (n=209) of all closed preventing and controlling HAI incidents (see Figure 15). Issues relating to policies, procedures and guidelines were identified in 22.0% (n=193) of these incidents.

Figure 15: Frequency and Percentage of the Top Five Contributory Factors for Closed HAI Clinical Incidents for 2017/18



Note: More than one contributory factor can be assigned to each clinical incident. Prior to 2017/18 contributory factor data was reported using confirmed incidents rather than closed incidents. As such the data presented in this report may not be comparable with previous year's reports.

Key Messages and Information: Preventing and Controlling Healthcare-Associated Infections Clinical Incidents

Healthcare-associated infections are a major concern to patient safety with many of the infections acquired preventable. The second edition of the NSQHS Standards has a continued focus on clinical governance and infection prevention and control systems as part of the key criteria to meet this Standard. Although the majority of confirmed incidents resulted in no harm (n=468; 46.4%), the SAC 1 incident which resulted in death was investigated as a potential infection control breach, which continues to be a highly-reported SAC 1 category.

Communication factors and information provision between hospital staff and the patient's General Practitioner was a significant factor in this incident that involved a person with a chronic disease. This aligns with communication factors being the most common contributory factor seen in incidents relating to this NSQHS Standard, and serves as a reminder that communication with the patient, carers and their GP is an integral point of care to prevent infections.

While the General Medicine specialty reported the greatest overall number of preventing and controlling HAI clinical incidents, the top Tier Three category for these incidents related to processes and protocols that were established but not followed (n= 405; 40.1%), with the majority of these incidents occurring during the performance of clinical procedures (n=125; 30.9%). General Surgery and Orthopaedics were the two surgical specialties with the most incidents in this Tier Three category (n=70; 17.3%). To assist in preventing HAI, practices which are in place for surgical infections need to continue to be reviewed and strengthened.

The WA health system continues to build on systems for effective infection prevention, particularly targeting approaches to reduce Healthcare-associated *Staphylococcus aureus*

blood stream infections (HA-SABSI), which are a common cause of HAI with serious patient complications. This has included guidelines to improve the consistency of clinical incident reporting by identifying sources of largely preventable HA-SABSI. Reporting these as clinical incidents ensures investigation and evaluation processes are completed for these incidents. Other areas of focus to prevent HAI have also included hand hygiene practices and antimicrobial stewardship, particularly in emergency departments.



Standard 4: Medication Clinical Incidents

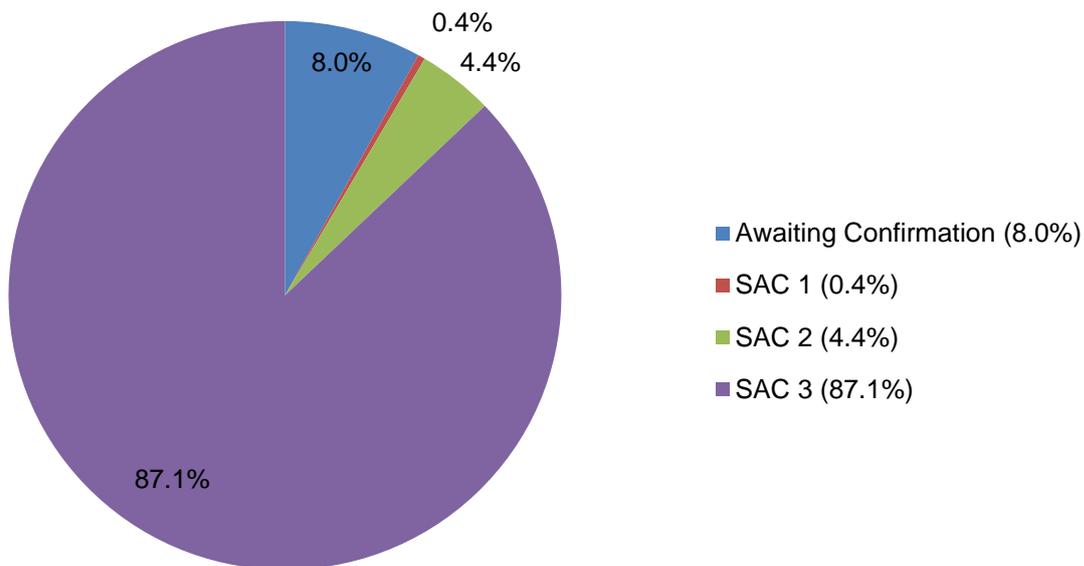
Standard 4 of the NSQHS Standards refers to medication safety and “describes systems and strategies to ensure clinicians safely prescribe, dispense and administer appropriate medicines to informed patients” (ACSQHC, 2013). Medicines are the most frequent form of treatment used in health care and as such tend to be more frequently involved in clinical incidents than other forms of treatment.

Reasons for medication incidents are varied but include prescribing and dispensing issues, timing of medication administration (including omission of medication doses) and incorrect medications and doses of medications. It is vital that effective system strategies are in place to reduce medication incidents and ensure the delivery of safe care to all our patients.

Medication clinical incidents are captured under the Tier One category within Datix CIMS which includes medications, biologics and fluids. In the 2017/18 reporting period, there were 7,797 medication incidents reported and 7,172 medication clinical incidents were confirmed, with the remainder (n=625) awaiting confirmation. Medication clinical incidents accounted for 24.4% of all clinical incidents reported in this period.

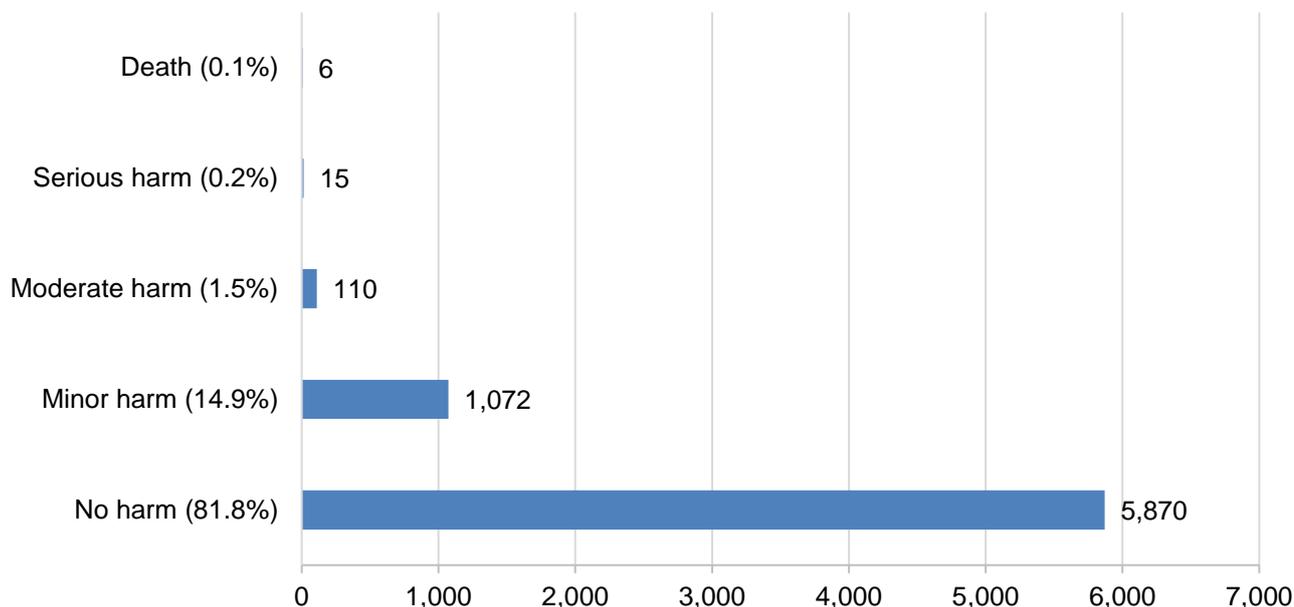
The majority of confirmed medication clinical incidents (n=6,794; 87.1%) were categorised as SAC 3 clinical incidents (see Figure 16).

Figure 16: Percentage of Medication Clinical Incidents by SAC Rating for 2017/18



Findings show that 81.8% (n=5,870; see Figure 17) of confirmed medication clinical incidents resulted in no harm to the patient, and a further 14.9% (n=1,072) resulted in only minor harm. Of the 33 SAC 1 medication clinical incidents, six incidents described a patient outcome of death, and seven incidents were near misses resulting in no harm.

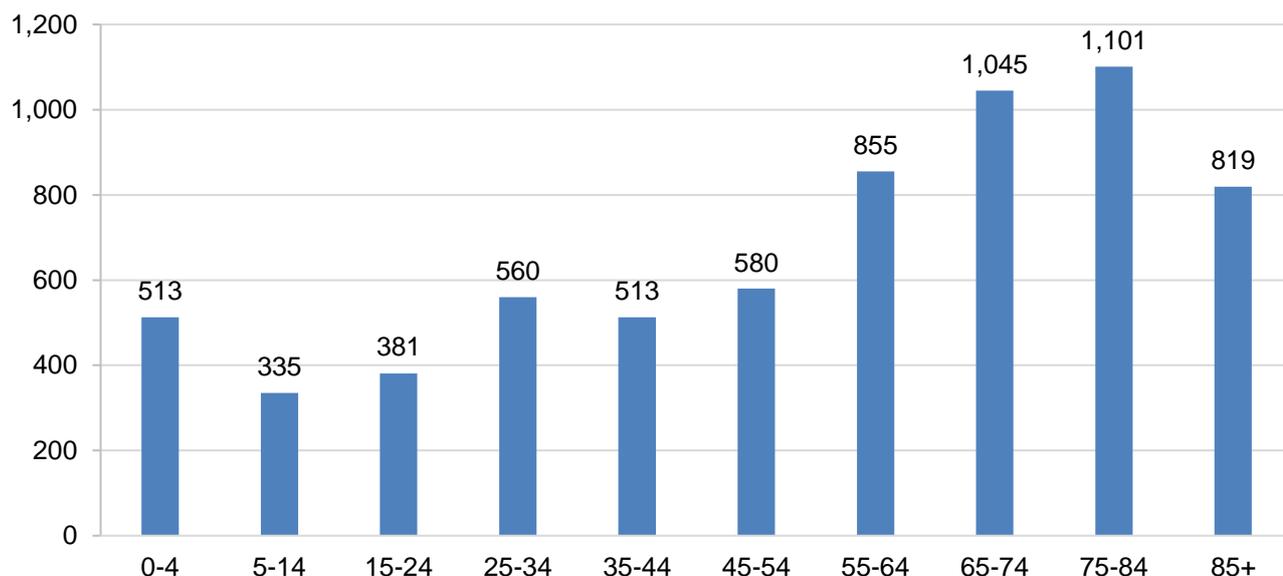
Figure 17: Frequency and Percentage of Confirmed Medication Clinical Incidents by Patient Outcome for 2017/18



Note: Patient outcome missing data n=99; 1.4%

Females accounted for 52.0% (n=3,487) of patients involved in confirmed medication clinical incidents, with males making up 48.0% (n=3,221; missing n=513). Ages ranged from 0-104 years with a median age of 60 years (see Figure 18).

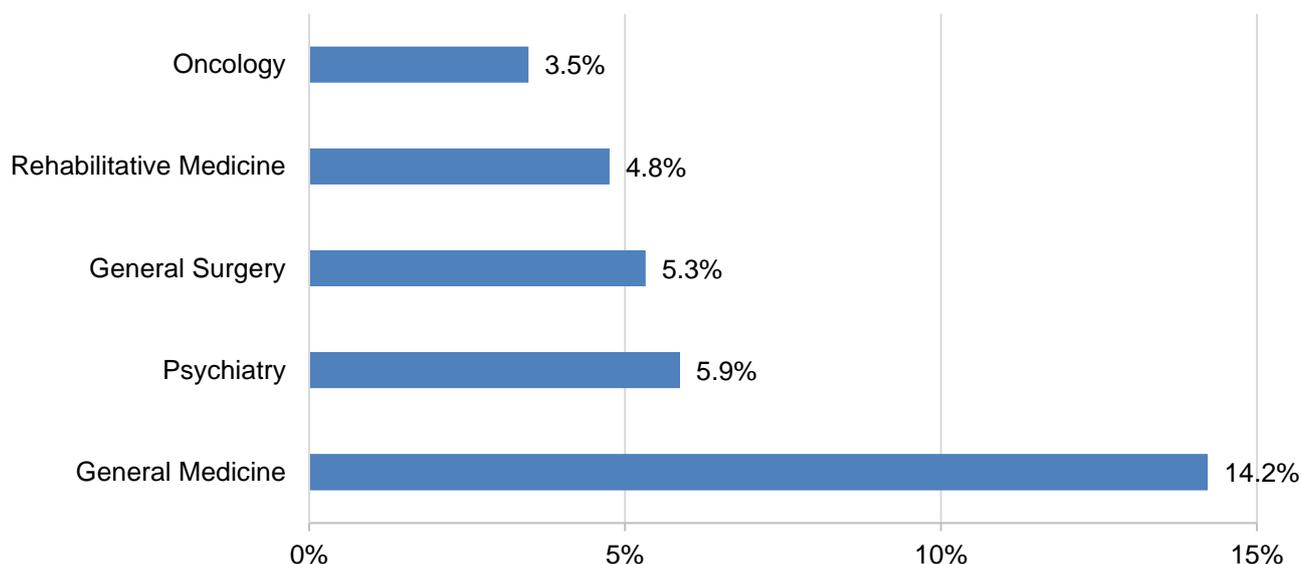
Figure 18: Distribution of Patients Affected by Confirmed Medication Clinical Incidents by Age Group for 2017/18



Note: Patient age missing data n=519; a clinical incident may affect multiple patients

Five specialties accounted for 33.6% (n=2,413) of all confirmed medication clinical incidents reported in this 12-month period. The General Medicine specialty reported the most number of medication clinical incidents (n=1,020; 14.2%; see Figure 19).

Figure 19: Percentage of Confirmed Medication Clinical Incidents by Top Five Treating Specialties for 2017/18



Note: Treating specialty missing data n=2,183; 30.4%

Findings revealed that the most frequent confirmed medication clinical incidents were categorised as a failure to administer medication to a patient (n=1,224; see Table 12). The top five most frequent medication clinical incident categories accounted for 45.0% (n=3,229) of all confirmed medication incidents reported for the 2017/18 period.

Table 12: Frequency and Percentage of Top Five Tier Three Confirmed Medication Clinical Incidents Categories for 2017/18

| Tier Three Medication Categories | (n) | (%) |
|----------------------------------|--------------|-------------|
| Failure to administer medication | 1,224 | 17.1 |
| Incorrect medication dose* | 875 | 12.2 |
| Incorrect medication/fluid* | 505 | 7.0 |
| Extra dose of medication given | 332 | 4.6 |
| Extravasation | 293 | 4.1 |
| Total | 3,229 | 45.0 |

* Incidents for these Tier Three categories relate to prescribing processes, dispensing processes and administration of medication to the patient.

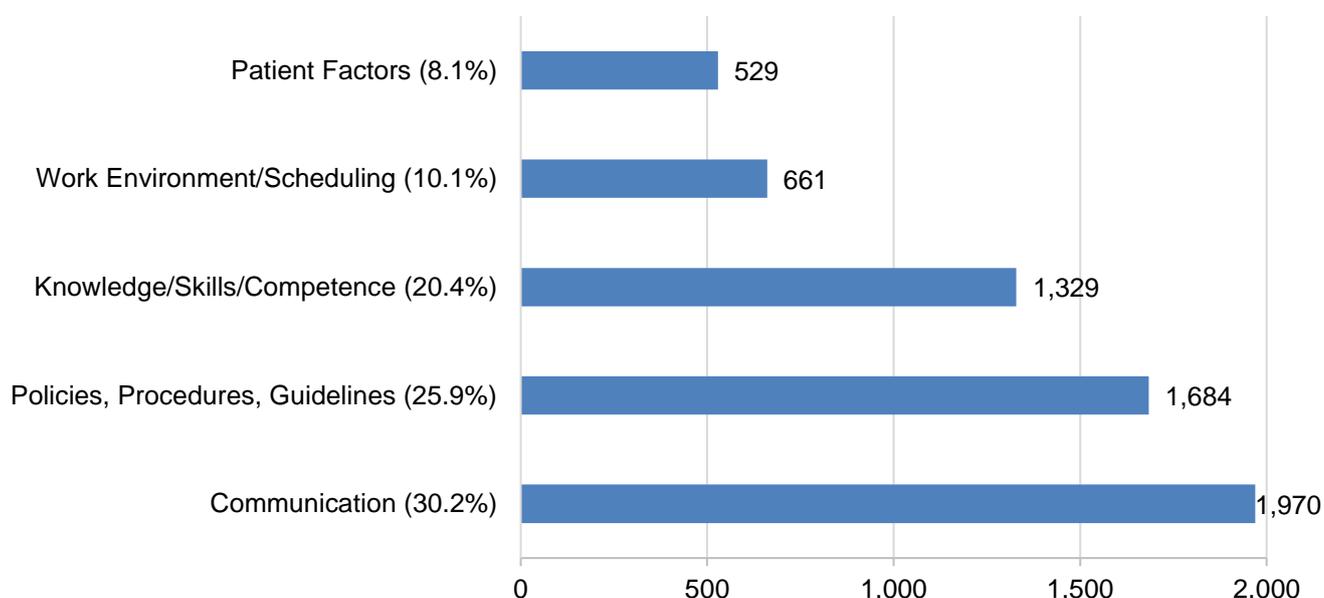
The ten most frequent types of medication involved in clinical incidents accounted for 53.8% (n=3,855) of all confirmed medication incidents. Opioid analgesics (n=853; 11.9%) continue to be the most frequently reported medication type, followed by antibiotics (n=700; 9.8%; see Table 13).

Table 13: The Ten Most Frequent Types of Medications Involved in Confirmed Clinical Incidents 2017/18

| Top 10 Medication Categories | (n) | (%) |
|---|--------------|-------------|
| Opioid analgesics (opioid based pain relievers) | 853 | 11.9 |
| Anti-bacterials (antibiotics) | 700 | 9.8 |
| Anti-coagulants (blood thinning medications) | 454 | 6.3 |
| Anti-psychotics (medications for major psychiatric disorders) | 371 | 5.2 |
| Insulins (medications used for diabetes) | 332 | 4.6 |
| Non-opioid analgesics (non-opioid pain relievers) | 291 | 4.1 |
| Anti-hypertensives (medications for high blood pressure) | 246 | 3.4 |
| Anti-epileptics (medications for epilepsy) | 224 | 3.1 |
| Medications for anxiety and sleep disorders | 215 | 3.0 |
| Medications for heart failure | 169 | 2.4 |
| Total | 3,855 | 53.8 |

For medication-related clinical incidents the most common contributory factor identified was communication factors, which were cited in 30.2% (n=1,970) of all closed medication incidents (see Figure 20). Issues relating to policies, procedures and guidelines was the next most frequently reported contributory factor (n=1,684; 25.9%).

Figure 20: Frequency and Percentage of the Top Five Contributory Factors for Closed Medication Clinical Incidents for 2017/18



Note: More than one contributory factor can be assigned to each clinical incident. Prior to 2017/18 contributory factor data was reported using confirmed incidents rather than closed incidents. As such the data presented in this report may not be comparable with previous year's reports.

Key Messages and Information: Medication Clinical Incidents

Medications continue to be the most common treatment given to patients, and medication safety is therefore a key element of high quality health care services. It is not surprising that medication-related incidents continue to be the most frequent type of incident reported across the WA health system, representing nearly one quarter of all clinical incidents in 2017/18. The fact that more than 95% of these incidents resulted in no harm or minor harm to the patient demonstrates a healthy culture of reporting medication-related clinical incidents. By reporting and investigating incidents resulting in minimal or no harm, HSPs can learn from these to improve systems for safe care before serious harm occurs.

The most common category of medication-related clinical incident occurred when staff failed to administer a dose of medication that had been prescribed for the patient. This can lead to ineffective treatment of the patient's condition and / or symptoms, and unnecessary pain and suffering. This contrasts with previous years' data, where omission of medication doses was more frequently reported than failure to administer.

The differentiation between the failure to administer and dose omission incident types is subtle, and lies in the situation which led to the incident. Failure to administer occurs when the clinician is aware that a medication is due at a certain time, but the medication cannot be administered (e.g. the patient is not present on the ward or there is a problem with an infusion pump). Omission of a medication dose relates to an oversight by staff resulting in the dose not being administered (e.g. the clinician was busy, didn't check the medication chart adequately, forgot to administer the medication or there was inadequate clinical handover of the patient).

Findings also identified that 4.1% of medication-related clinical incidents in 2017/18 related to extravasation of a medication, which occurs when a medication administered directly into a blood vessel leaks out into the surrounding tissue space. Over one-third of these incidents involved extravasation of contrast media (used during diagnostic procedures such as magnetic resonance imaging; MRI), which can result in significant discomfort for the patient.

The types of medications most frequently involved in medication-related clinical incidents continues to follow the pattern seen in previous years, with four of the five most frequent types (opioid analgesics, anti-bacterials, anti-coagulants and insulins) also belonging to globally recognised lists of high risk medications. These four medication types alone accounted for almost one-third of confirmed medication clinical incidents in WA during 2017/18. The WA High Risk Medication Policy²² supports a framework for identifying potential risks relating to high-risk medications and recommended improvement strategies.

The second edition of the NSQHS Standards continues to maintain a focus on high-risk medications, requiring that health service organisations identify high-risk medications used within the organisation, and have systems to store, prescribe, dispense and administer high-risk medications safely. The second edition of the NSQHS Standards will also introduce a new item addressing medication review, with health service organisations required to have processes:

- To perform medication reviews for patients, in line with evidence and best practice
- To prioritise medication reviews, based on the patient's clinical needs and minimising the risk of medication-related problems
- That specify the requirements for documentation of medication reviews, including actions taken as a result.

²² WA High Risk Medication Policy available at: http://www.health.wa.gov.au/circularsnew/circular.cfm?Circ_ID=13149

Standard 5: Patient Identification Clinical Incidents

Standard 5 of the NSQHS Standards refers to patient identification and procedure matching, the intent of which is to “describe the systems and strategies to identify patients and correctly match their identity to the correct treatment” (ACSQHC, 2013).

Patient identification clinical incidents are captured under Tier Three categories within Datix CIMS which include²³:

- Product mislabelled
- Product mislabelled and incorrect patient
- Investigation performed on incorrect patient
- Preparation of patient for investigation insufficient, incorrect or incomplete
- Ambiguous incorrect or incomplete documentation
- Illegibility of documentation
- Incorrect patient
- Documentation temporarily unavailable or delay in accessing
- Incorrect treatment or procedure
- Medication dispensed to incorrect patient
- Treatment or procedure performed on incorrect body part/site.

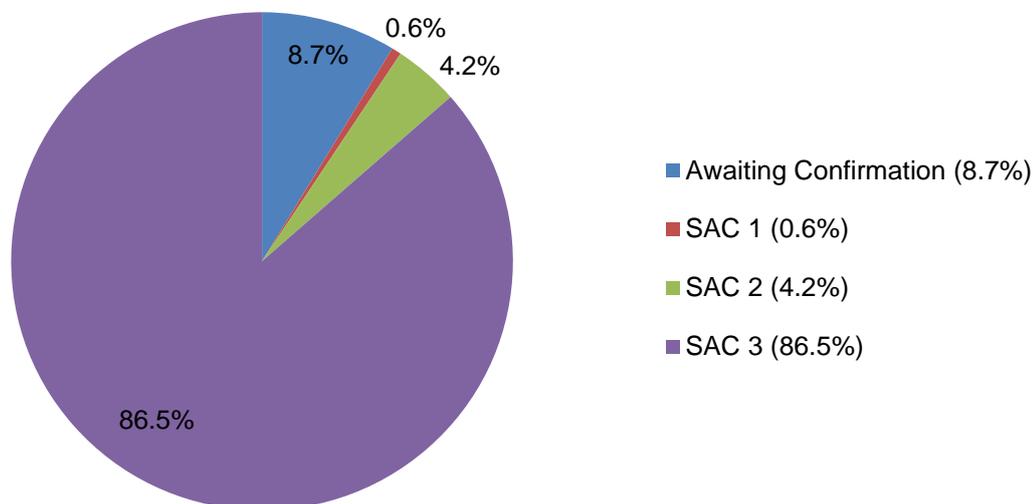
In the 2017/18 reporting period 1,611 patient identification clinical incidents were notified, of which 1,471 clinical incidents were confirmed, and the remainder (n=140) were awaiting confirmation. Patient Identification incidents accounted for 5.1% of all clinical incidents reported in this period.



²³ The three-tiered Datix CIMS clinical incident classification list was reviewed in 2015, with codes relevant to NSQHS Standard 5 agreed. The classification list was updated in April 2017, and codes relating to Standard 5 were updated. The data presented for Standard 5 in this report may not be comparable with previous years' reports.

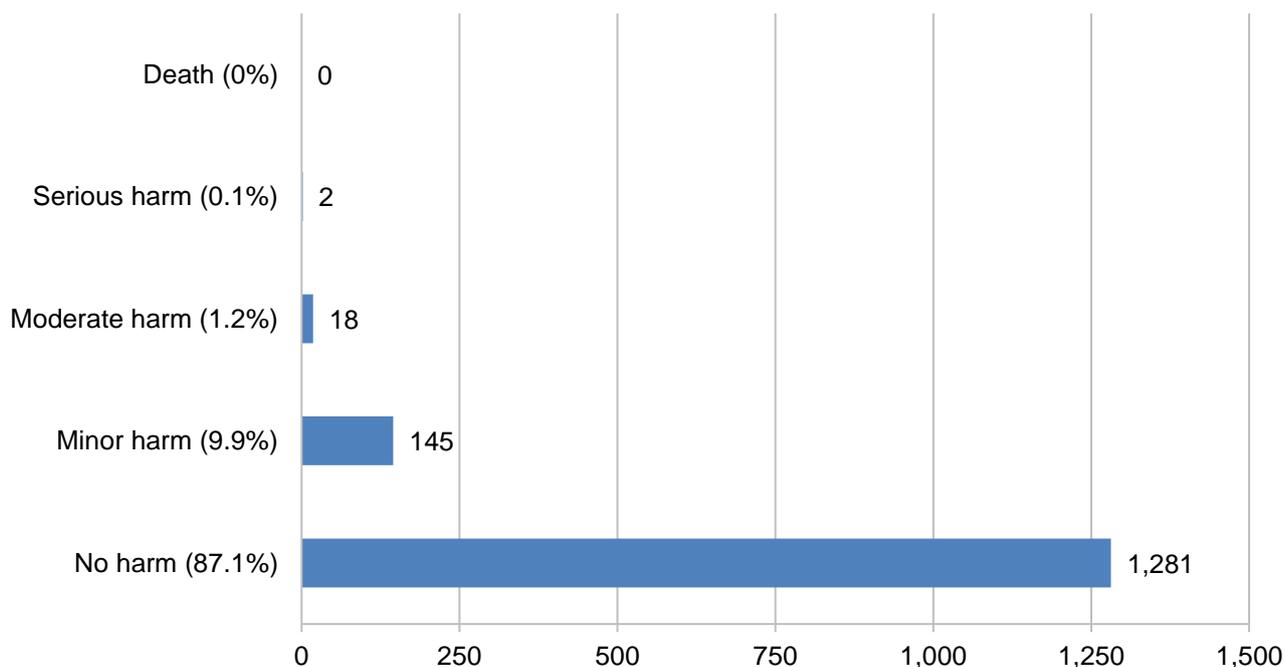
The most frequent patient identification incidents were categorised as SAC 3 clinical incidents (n=1,393; 86.5%; see Figure 21). Ten of these patient identification clinical incidents were classified as a SAC 1 clinical incident, with two identified as near misses involving documentation errors.

Figure 21: Percentage of Patient Identification Clinical Incidents by SAC Rating for 2017/18



The majority of confirmed patient identification clinical incidents resulted in no harm to the patient (87.1%; n=1,281; see Figure 22), with no incidents reported as resulting in the death of a patient.

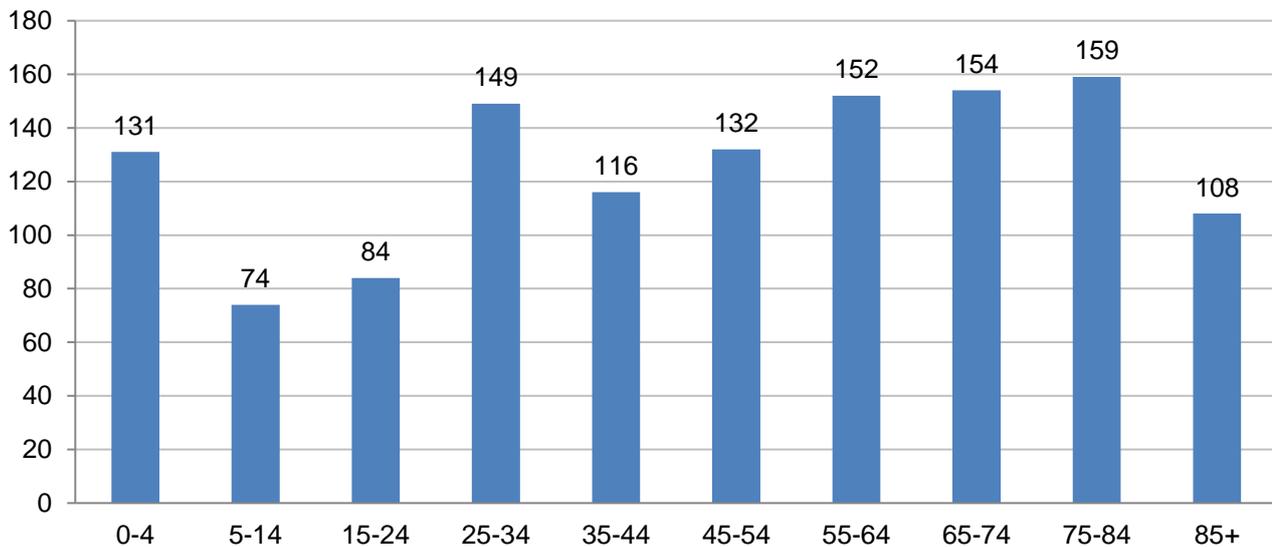
Figure 22: Frequency and Percentage of Confirmed Patient Identification Clinical Incidents by Patient Outcome for 2017/18



Note: Patient outcome missing data n=25; 1.7%

Females accounted for 52.7% (n=665) of patients involved in confirmed patient identification clinical incidents, with males making up 47.3% (n=596; missing n=305). Patient ages ranged from 0-99 years with a median age of 51 years (see Figure 23).

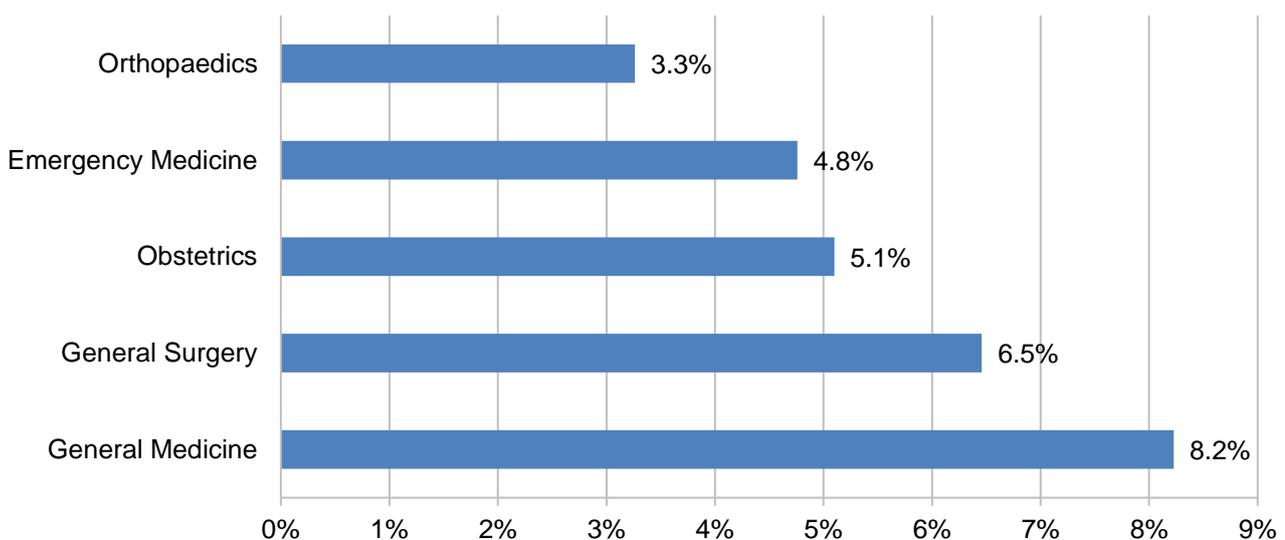
Figure 23: Distribution of Patients Affected by Confirmed Patient Identification Clinical Incidents by Age Group for 2017/18



Note: Patient age missing data n=307; a clinical incident may affect multiple patients

The treating specialties which reported patient identification clinical incidents more frequently are shown in Figure 24. These five specialties accounted for 27.8% (n=409) of all confirmed patient identification incidents reported in this 12-month period. Patient identification clinical incidents were most frequently reported in patients treated by the General Medicine specialty (n=121; 8.2%).

Figure 24: Percentage of Confirmed Patient Identification Clinical Incidents by Top Five Treating Specialties for 2017/18



Note: Treating specialty missing data n=597; 40.6%

Table 14 shows that incorrect patient was the most frequently reported Tier Three category of patient identification clinical incidents, accounting for almost two-thirds (66.1%; n=973) of confirmed incidents.

Table 14: Frequency and Percentage of Top Five Tier Three Confirmed Patient Identification Clinical Incidents Categories for 2017/18

| Patient Identification Categories | (n) | (%) |
|--|--------------|-------------|
| Incorrect patient* | 973 | 66.1 |
| Incorrect treatment/procedure† | 160 | 10.9 |
| Ambiguous/incorrect/incomplete documentation | 133 | 9.0 |
| Illegible documentation§ | 109 | 7.4 |
| Preparation of patient for investigation insufficient/incorrect/incomplete | 67 | 4.6 |
| Total | 1,442 | 98.0 |

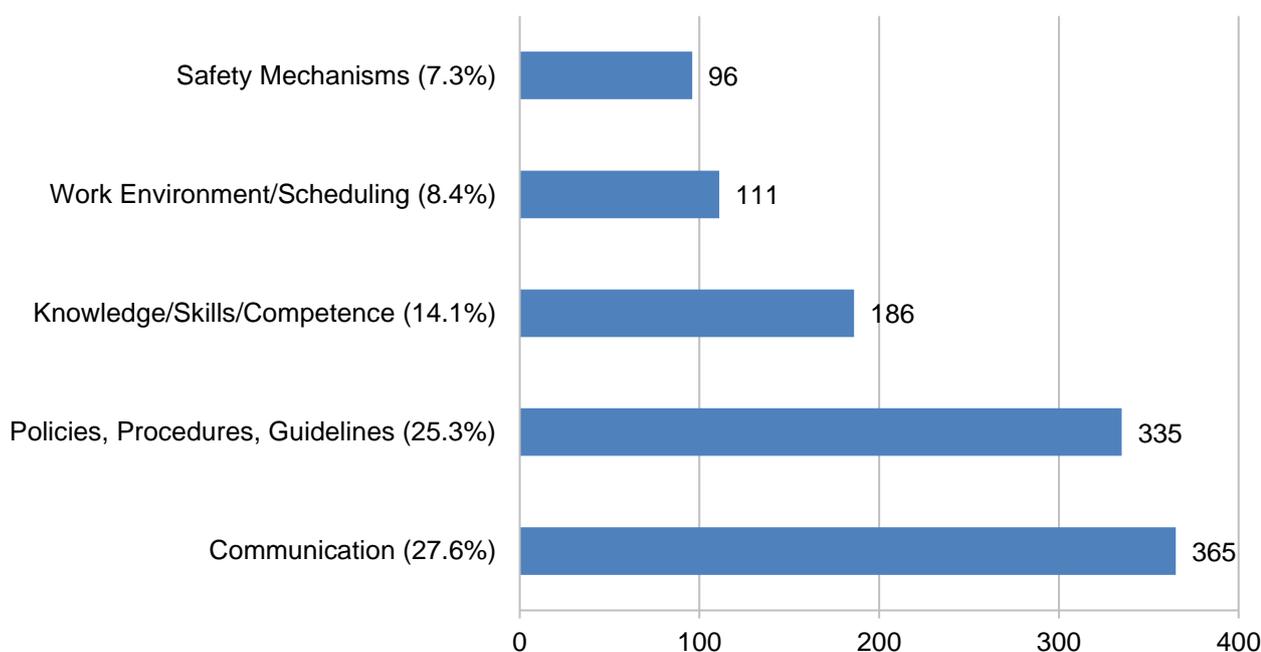
* Incidents in this Tier Three category include incorrect patient information in health care documentation/records, prescribing, dispensing and administration of medication to the wrong patient, and therapeutic and diagnostic procedures performed on the wrong patient.

† Incidents in this Tier Three category include procedures performed at the wrong site, and incorrect manual handling and patient restraint procedures.

§ Most incidents in this Tier Three category relate to illegible prescriptions.

For patient identification clinical incidents, the most common contributory factor was issues related to communication (see Figure 25), which were cited in 27.6% (n=365) of all closed patient identification incidents. Issues relating to policies, procedures and guidelines was the next most frequently reported contributory factor (n=335; 25.3%).

Figure 25: Frequency and Percentage of Top Five Contributory Factors for Closed Patient Identification Clinical Incidents for 2017/18



Note: More than one contributory factor can be assigned to each clinical incident. Prior to 2017/18 contributory factor data was reported using confirmed incidents rather than closed incidents. As such the data presented in this report may not be comparable with previous year's reports.

Key Messages and Information: Patient Identification Clinical Incidents

Patient identification and procedure matching may be a small activity, but in busy clinical environments with patients who are acutely ill, these clinical incidents can delay diagnosis and treatment and cause harm. Of the ten SAC 1 incidents confirmed in 2017/18, two reported an outcome of serious harm; one where a procedure was completed but under incorrect patient details, and the other was an incorrect procedure performed, delaying correct treatment for the patient. Both cases required improved processes to match the patient's information to their intended treatment, and highlighted the importance of regularly reviewing and identifying at what points system breakdowns occur, in order to improve processes in the patient journey.

The WA health system has strategies in place to prevent patient identification errors including, in some hospitals, electronic systems such as automated bar coding in electronic medical records. However, three of the five Tier Three categories that relate to patient identification clinical incidents include documentation/records that are incorrect, ambiguous or even illegible which indicates continued diligence, whether related to paper or electronic documentation, is required to ensure the correct care is delivered to the correct patient every time.

The second edition of the NSQHS Standards has incorporated the Patient Identification and Procedure Matching Standard from the first edition into the Communicating for Safety Standard, intended to ensure systems for timely and effective communication and documentation are in place for patients. A new action, which will assist with patient identification, will require health services organisations to have clinical communication processes to support effective communication, especially during transfers of care and when critical information emerges or changes. Implementing best practice guidelines for patient identifiers, and monitoring and reviewing that patient identification and matching systems are in place continues to be a focus in this Standard.



Standard 6: Clinical Handover Clinical Incidents

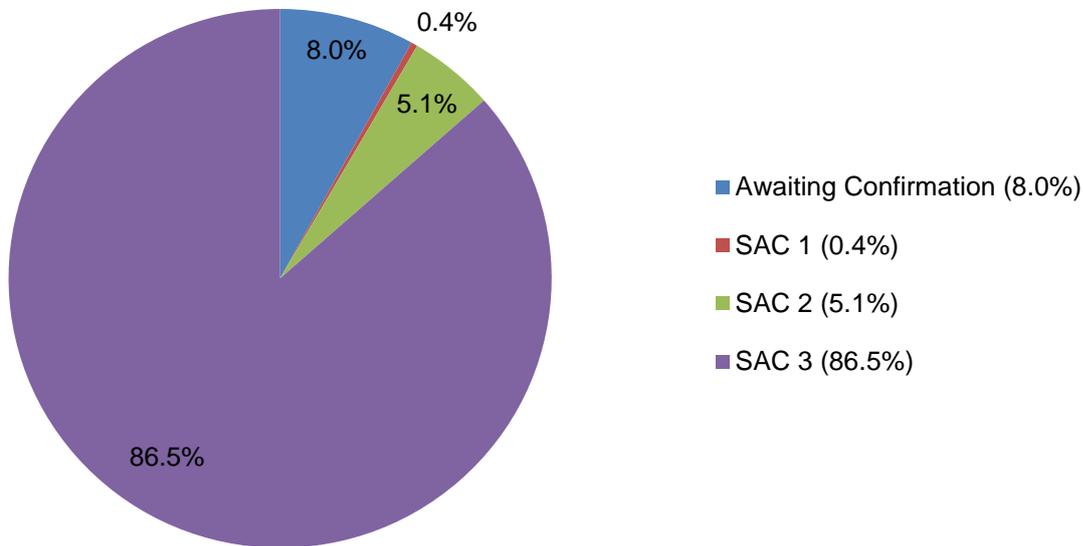
Standard 6 of the NSQHS Standards refers to clinical handover, which describes “the systems and strategies for effective clinical communication whenever accountability and responsibility for a patient’s care is transferred” (ACSQHC, 2013). The Datix Clinical Incident Management System incident classification was reviewed to identify responses that would best capture clinical handover incidents and includes the following categories:

- Incorrect/insufficient/delayed handover
- Discharge processes being inappropriate/insufficient/incomplete
- Medical records/forms/bar codes/labels/results/reports being unavailable/ambiguous/incorrect/incomplete/illegible/misfiled/mislabeled
- Patient discharge information/instructions being unavailable/ambiguous/incorrect/incomplete/illegible
- Health care referrals/discharge correspondence being unavailable/ambiguous/incorrect/incomplete/illegible.

In the 2017/18 reporting period 2,101 clinical handover clinical incidents were notified, of which 1,932 clinical incidents were confirmed, and the remainder (n=169) were awaiting confirmation. Clinical handover incidents accounted for 6.6% of all clinical incidents reported in this period.

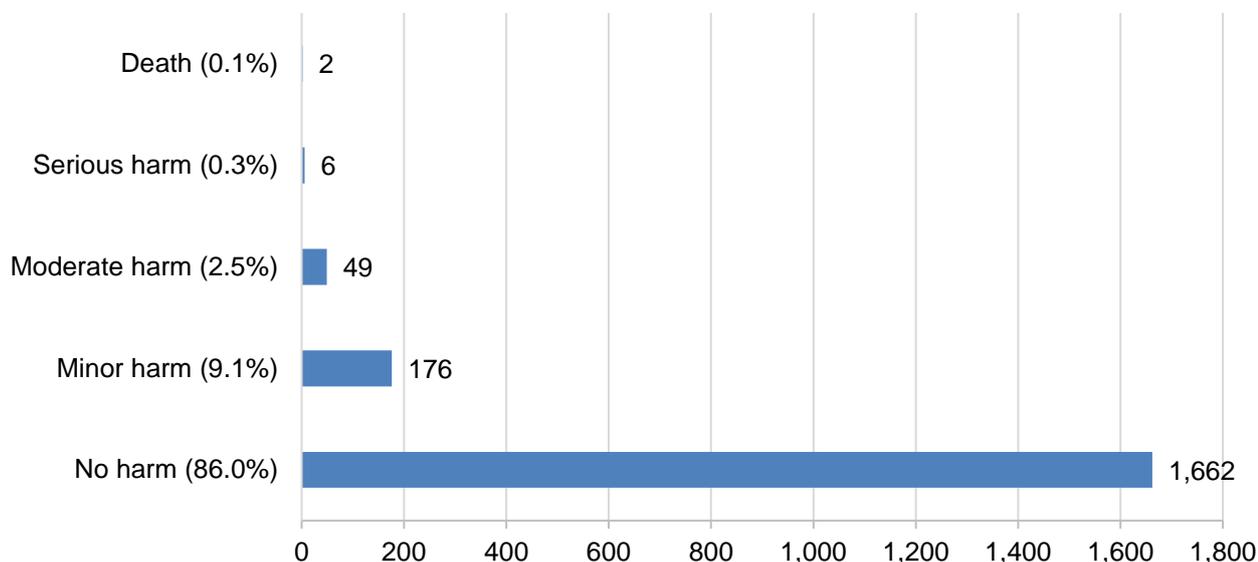
Findings revealed that clinical handover incidents were most frequently categorised as SAC 3 clinical incidents (n=1,817; 86.5%; see Figure 26). There were eight clinical handover SAC 1 incidents reported, of which six involved incorrect, incomplete or insufficient handover or transition of the patient.

Figure 26: Percentage of Clinical Handover Clinical Incidents by SAC Rating for 2017/18



The majority of confirmed clinical handover incidents resulted in no harm to the patient (86.0%; n=1,662; see Figure 27), with two incidents describing a patient outcome of death.

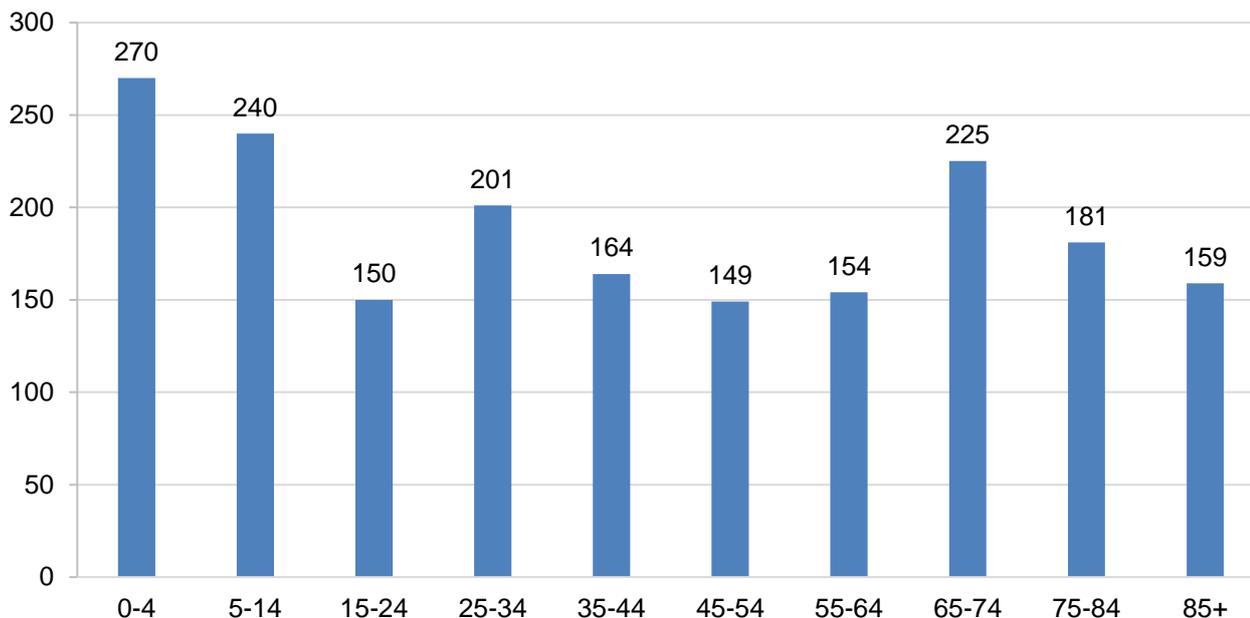
Figure 27: Frequency and Percentage of Confirmed Clinical Handover Clinical Incidents by Patient Outcome for 2017/18



Note: Patient outcome missing data n=37; 1.9%

Females accounted for 53.1% (n=1,009) of patients involved in confirmed clinical handover clinical incidents, with males making up 46.9% (n=891; missing n=248). Patient ages ranged from 0-98 years with a median age of 39 years (see Figure 28).

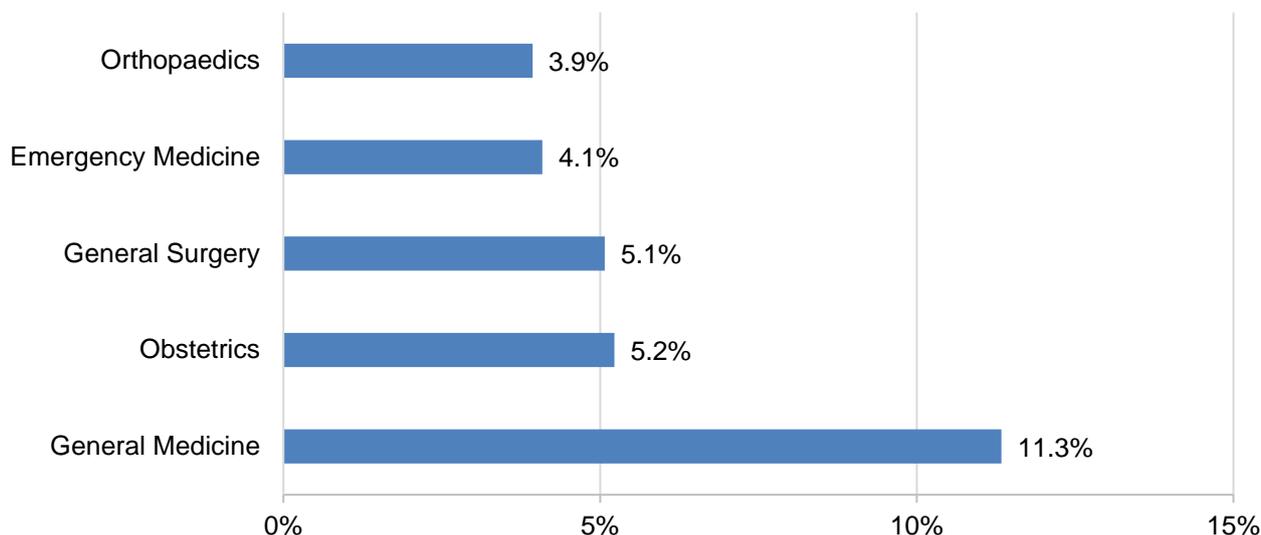
Figure 28: Distribution of Patients Affected by Confirmed Clinical Handover Clinical Incidents by Age Group for 2017/18



Note: Patient age missing data n=255; a clinical incident may affect multiple patients

The treating specialties which reported clinical handover clinical incidents more frequently are shown in Figure 29. These five specialties accounted for 29.7% (n=573) of all confirmed clinical handover clinical incidents reported in this 12-month period. The General Medicine specialty reported the most number of clinical handover clinical incidents (n=219; 11.3%).

Figure 29: Percentage of Confirmed Clinical Handover Clinical Incidents by Top Five Treating Specialties for 2017/18



Note: Treating specialty missing data n=594; 30.7%

The top five most frequent clinical handover clinical incident categories accounted for 90.6% (n=1,751) of all confirmed clinical handover incidents reported for the 2017/18 period. Information that was ambiguous, incorrect or incomplete was the most frequently identified clinical handover category, accounting for 51.0% (n=985) of confirmed incidents in this period (see Table 15).

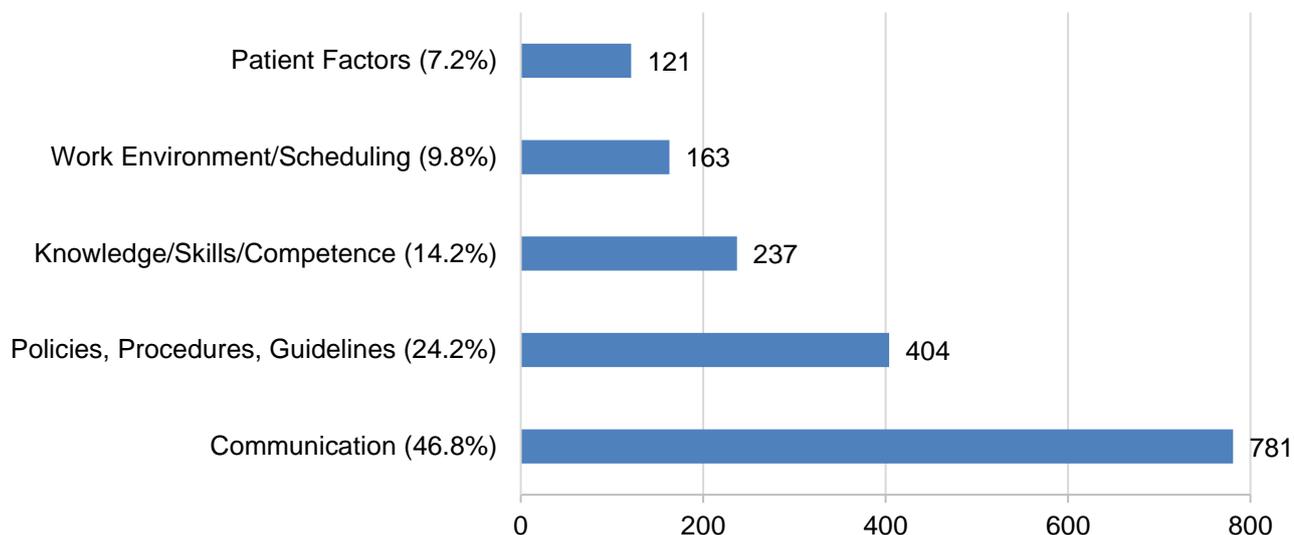
Table 15: Frequency and Percentage of Top Five Tier Three Confirmed Clinical Handover Clinical Incidents Categories for 2017/18

| Tier Three Clinical Handover Categories | (n) | (%) |
|---|--------------|-------------|
| Ambiguous/incorrect/incomplete* | 985 | 51.0 |
| Temporarily unavailable/delay in accessing* | 266 | 13.8 |
| Between healthcare professionals insufficient/incorrect/ incomplete | 251 | 13.0 |
| Incorrect/insufficient handover | 176 | 9.1 |
| Discharge insufficient/incomplete | 73 | 3.8 |
| Total | 1,751 | 90.6 |

* Incidents for these Tier Three categories relate to health care records/documentation including bar codes, consultation referrals/requests, electronic medical records, forms, healthcare provider discharge correspondence, healthcare provider referral/consultation correspondence, imaging reports/results, informed consent documentation, labels, laboratory reports/test results, other test reports/results, paper medical records, patient discharge information/instructions and test request forms.

For clinical handover clinical incidents, the most common contributory factor was communication factors, which were cited in 46.8% (n=781) of all closed clinical handover incidents (see Figure 30). Issues relating to policies, procedures and guidelines was the next most frequently reported contributory factor (n=404; 24.2%).

Figure 30: Frequency and Percentage of the Top Five Contributory Factors for Closed Clinical Handover Clinical Incidents for 2017/18



Note: More than one contributory factor can be assigned to each clinical incident. Prior to 2017/18 contributory factor data was reported using confirmed incidents rather than closed incidents. As such the data presented in this report may not be comparable with previous year's reports.

Key Messages and Information: Clinical Handover Clinical Incidents

Clinical handover is an integral part of the delivery of health care, with thousands of handovers occurring safely and effectively each day. The majority of confirmed clinical incidents relating to clinical handover resulted in no harm or minor harm to the patient, however the potential for serious harm exists, particularly when managing complex patients having multiple risk factors.

The most frequently reported contributory factor in clinical handover incidents continues to be inadequate communication, with nearly half of all incident investigations in 2017/18 identifying this as an issue. The adoption of a standardised approach to clinical handover, such as ISOBAR (Identify, Situation, Observations, Background, Agree a plan, Readback), is one way to improve the communication of important information between clinicians during the transition of care.

Existing components of the Clinical Handover Standard of the NSQHS Standards have been moved to the new Communicating for Safety Standard in the second edition. This standard recognises the importance of effective communication and its role in supporting continuous, coordinated and safe patient care. This is most important in high-risk situations where effective communication and documentation is necessary, such as where transitions of care occur.

New items added in the second edition of the NSQHS Standards specifically relating to clinical handover require health service organisations to:

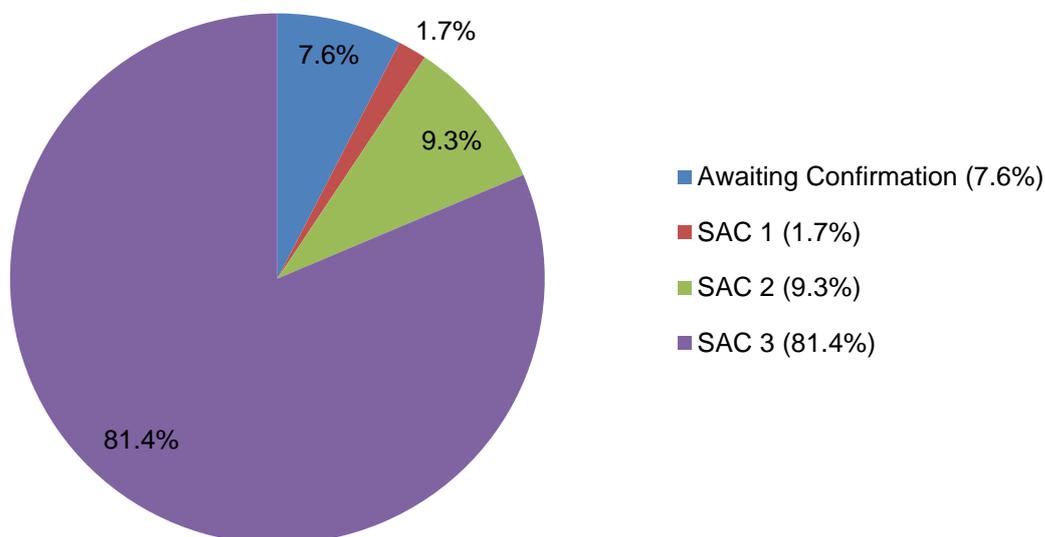
- Have in place processes to support effective communication when all or part of a patient's care is transferred within the organisation, between teams, between clinicians or between organisations
- Define the minimum information to be communicated at clinical handover (based on best practice guidelines), and the clinicians who are involved.

Standard 7: Blood and Blood Products Clinical Incidents

Standard 7 of the NSQHS Standards refers to “systems and strategies for the safe, effective and appropriate management of blood and blood products” (ACSQHC, 2013). In the 2017/18 reporting period, there were 172 blood and blood product clinical incidents notified with 159 clinical incidents confirmed, and a further 13 awaiting confirmation. Blood and blood product clinical incidents accounted for 0.5% of all clinical incidents reported in this period.

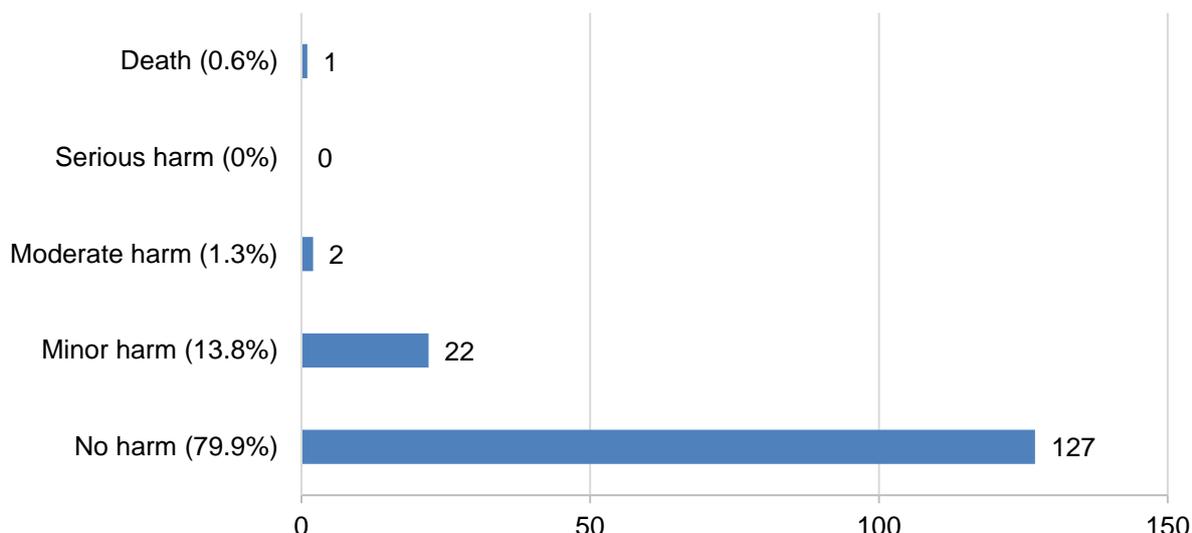
Findings revealed that the most frequent confirmed blood and blood products clinical incidents were categorised as SAC 3 clinical incidents (81.4%; n=140; see Figure 31). Of the three SAC 1 clinical incidents which involved blood or blood products, one related to administration of the incorrect product, one related to administration of an incompatible product, and one involved insufficient recognition of a significant change in patient status.

Figure 31: **Percentage of Blood and Blood Products Clinical Incidents by SAC Rating for 2017/18**



Findings also show that most confirmed blood and blood products clinical incidents resulted in no harm to the patient (79.9%; n=127; see Figure 32), with one incident describing a patient outcome of death.

Figure 32: Percentage of Confirmed Blood and Blood Products Clinical Incidents by Patient Outcome for 2017/18

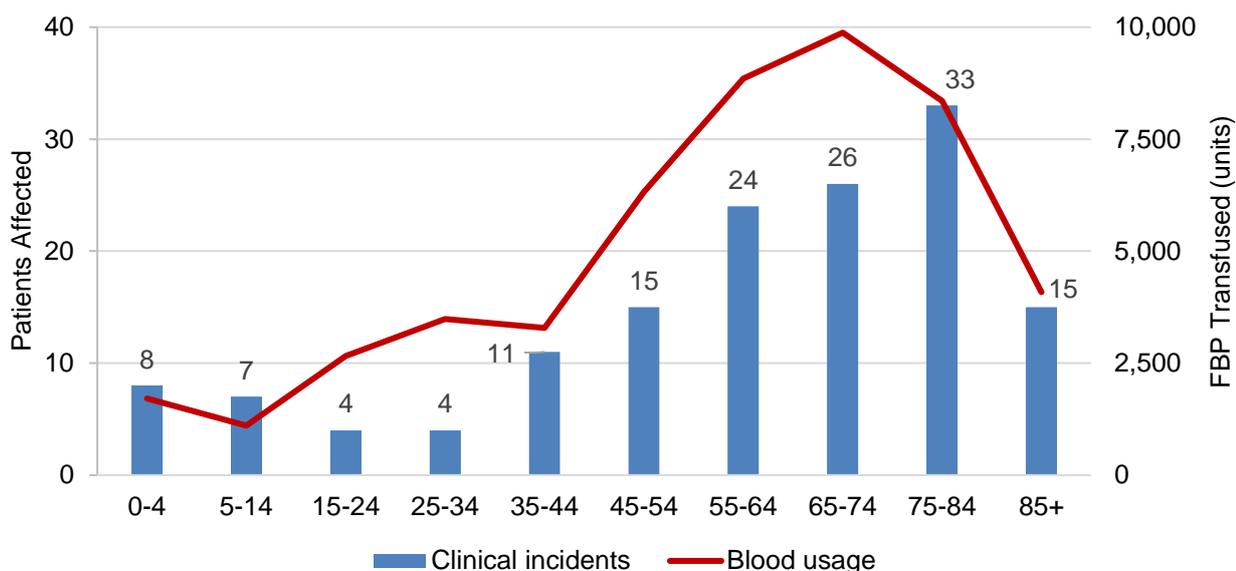


Note: Patient outcome missing data n=7; 4.4%

Males accounted for 58.7% (n=88) of patients involved in confirmed blood and blood products clinical incidents, with females making up 41.3% (n=62; missing n=9). Ages ranged from 0-94 years with a median age of 66 years.

In addition to the age distribution of patients involved in confirmed blood and blood products clinical incidents, Figure 33 shows the total units of fresh blood products (FBP) transfused at WA public hospitals in each age group during 2017/18. The distribution of blood and blood products clinical incidents by patient age was similar to the distribution of fresh blood products transfused during this period.

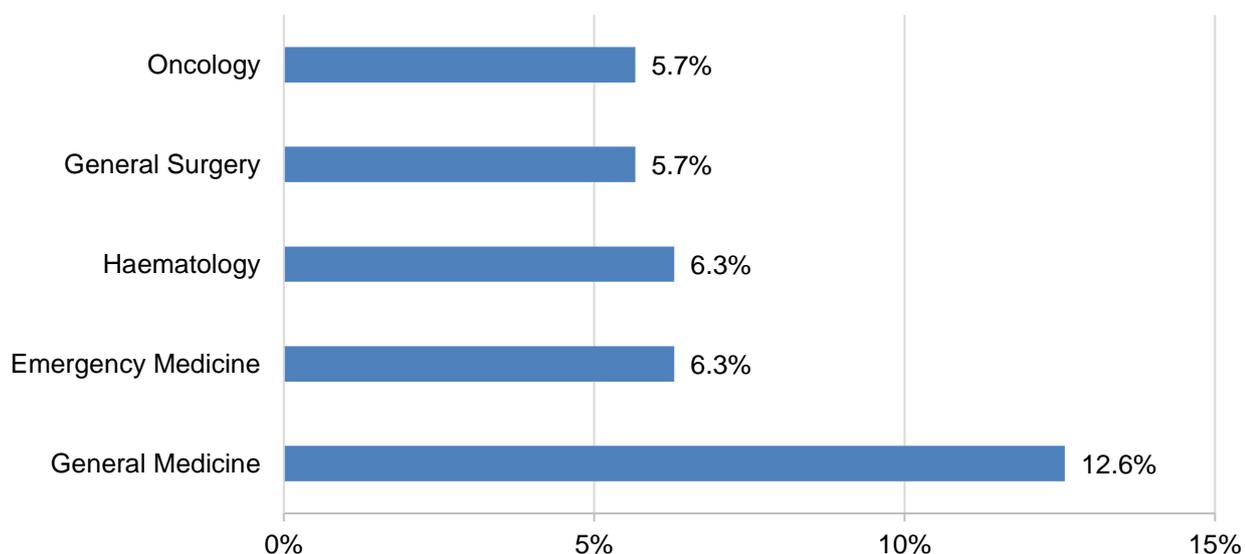
Figure 33: Distribution of Patients Affected by Confirmed Blood and Blood Products Clinical Incidents by Age Group and Fresh Blood Products Transfused for 2017/18



Notes: Patient age missing data n=12; a clinical incident may affect multiple patients. Blood usage data was provided by PathWest from the ULTRA database. Fresh blood products are comprised of red cells, platelets, fresh frozen plasma, cryoprecipitate and cryodepleted plasma.

The treating specialties which reported blood and blood product clinical incidents more frequently are listed in Figure 34. These five specialties accounted for 36.5% (n=58) of all confirmed blood and blood products clinical incidents reported in this 12-month period. The General Medicine specialty reported the greatest number of confirmed blood and blood products clinical incidents (n=20; 12.6%) followed by the Emergency Medicine and Haematology specialties (n=10; 6.3% each).

Figure 34: Percentage of Confirmed Blood and Blood Products Clinical Incidents by Top Five Treating Specialties for 2017/18



Note: Treating specialty missing data n=43; 27.0%

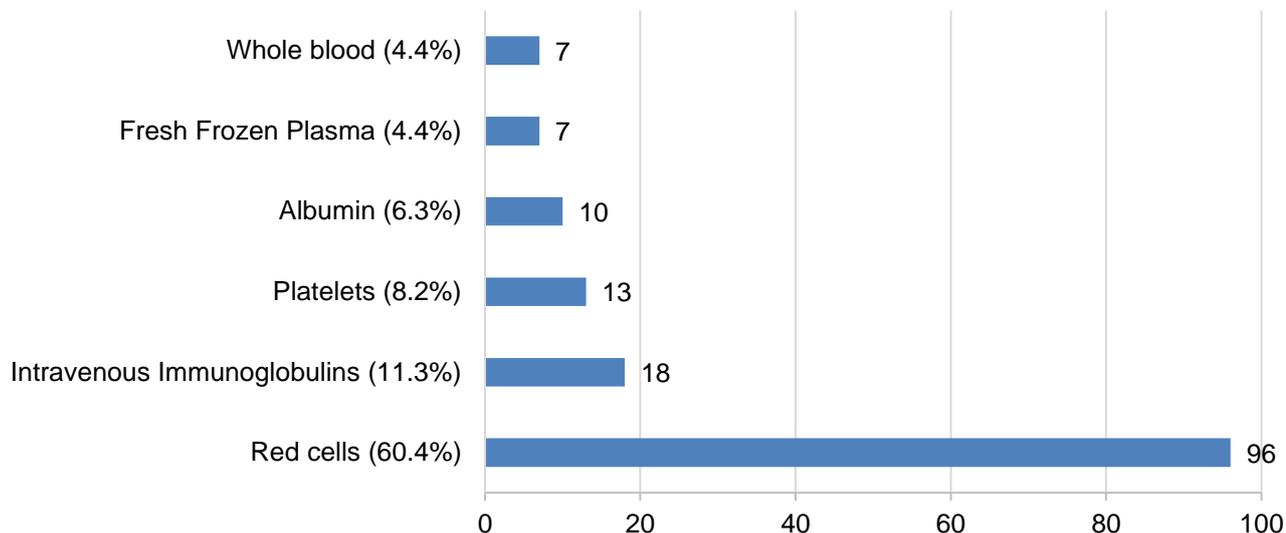
The top five most frequent blood and blood products clinical incidents categories accounted for 54.7% (n=87) of all confirmed blood and blood products clinical incidents reported for the 2017/18 period (see Table 16). Blood or blood products administered at the incorrect rate or frequency accounted for 15.7% (n=25) of clinical incidents, followed by insufficient or incomplete monitoring of the patient (n=18; 11.3%).

Table 16: Frequency and Percentage of Top Five Tier Three Confirmed Blood and Blood Products Clinical Incidents Categories for 2017/18

| Tier Three Blood and Blood Products Categories | (n) | (%) |
|--|-----------|-------------|
| Incorrect rate/frequency | 25 | 15.7 |
| Insufficient/incomplete monitoring of patient | 18 | 11.3 |
| Not given when indicated/delayed | 15 | 9.4 |
| Loss of traceability label | 11 | 6.9 |
| Incorrect dose/number of units | 9 | 5.7 |
| Incorrect route | 9 | 5.7 |
| Total | 87 | 54.7 |

The types of blood and blood product most frequently involved in blood and blood products clinical incidents are shown in Figure 35. Red cells were associated with 60.4% (n=96) of confirmed blood and blood products clinical incidents, followed by intravenous immunoglobulins (n=18; 11.3%).

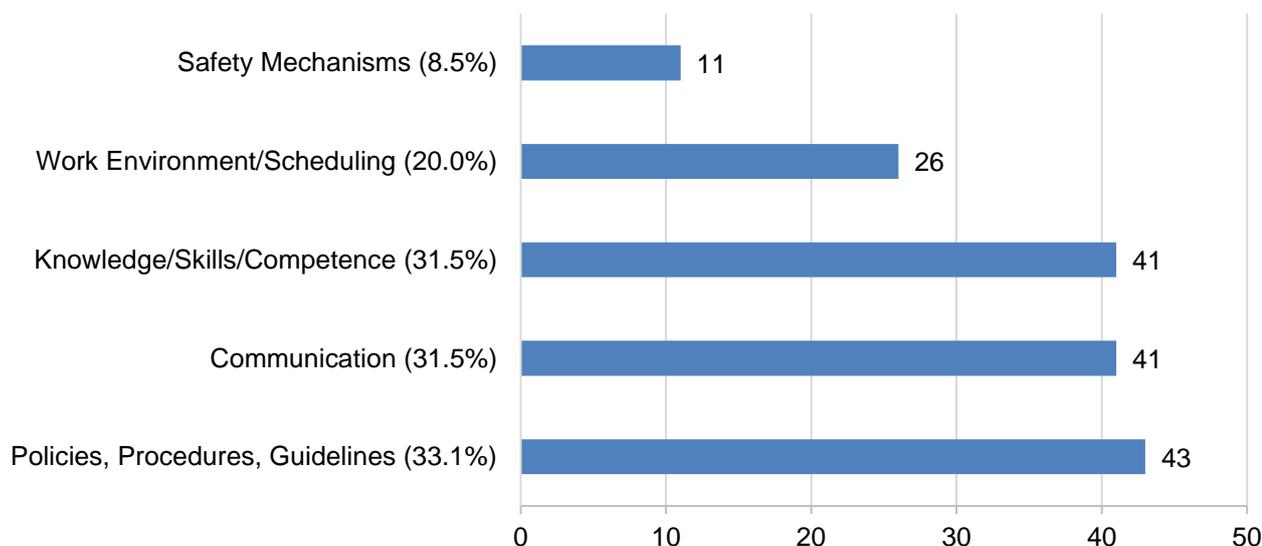
Figure 35: Frequency and Percentage of Confirmed Blood and Blood Products Clinical Incidents by Product Type for 2017/18



Note: A blood and blood product clinical incident may relate to more than one type of product. The Datix CIMS allows the capture of other product types in addition to fresh blood products.

The most common contributory factor for closed blood and blood products clinical incidents was policy, procedure and guideline factors (n=43; 33.1%), followed by communication factors and issues relating to the knowledge, skills or competence of staff (n=41; 31.5% each; see Figure 36). All three of these factors were identified as contributing to the one sentinel event classified as a haemolytic blood transfusion reaction from ABO incompatibility in 2017/18.

Figure 36: Frequency and Percentage of the Top Five Contributory Factors for Closed Blood and Blood Products Clinical Incidents for 2017/18



Note: More than one contributory factor can be assigned to each clinical incident. Prior to 2017/18 contributory factor data was reported using confirmed incidents rather than closed incidents. As such the data presented in this report may not be comparable with previous year's reports.

Key Messages and Information: Blood and Blood Products Clinical Incidents

Blood transfusions can save lives, however the incorrect administration of blood or blood products has the potential to cause serious harm or the death of a patient. Haemovigilance provides a very important source for identifying emerging trends in hazards related to blood transfusion. This, together with clinical incident reporting and the management of adverse events, can facilitate improvements in patient safety and the quality of health care, and ultimately deliver improved patient outcomes from transfusions.

In 2017/18, nine blood and blood products clinical incidents were reported to relate to administration via an incorrect route. Upon review it was identified that the majority of these incidents related to blood transfused via an unfiltered (A) line rather than the filtered (B) line. Blood products should always be transfused via a standard blood giving set, incorporating a 170-200 micron filter, to remove large clots and aggregates and ensure an effective transfusion flow rate. These incidents highlight the need to double-check the correct configuration of blood transfusion pumps and lines prior to transfusions being commenced.

While blood and blood product incidents account for just 0.5% (n=172) of all clinical incidents reported in 2017/18, occasionally these incidents result in the avoidable discard of blood or blood products. It is important to recognise that though the patient may not be harmed in these clinical incidents, there is an additional resource burden on the WA health system when this leads to the wastage of blood and blood products.

Minimising avoidable blood product discards is a key requirement of the NSQHS Standards. The DOH, together with HSPs and pathology providers, are working together to implement a WA blood discard reduction program to minimise avoidable discards of blood products.

The second edition of the NSQHS Standards will also introduce new items to the Blood Management Standard regarding:

- Optimising and conserving patients' own blood: Clinicians use blood and blood products processes to manage the need for, and minimise the inappropriate use of, blood and blood products
- Prescribing and administering blood and blood products: Health service organisations support clinicians to prescribe and administer blood and blood products appropriately, in accordance with national guidelines and national criteria.



Standard 8: Pressure Injury Clinical Incidents

In 2016, the National Pressure Ulcer Advisory Panel (NPUAP) redefined pressure injury definitions. “A pressure injury is localised damage to the skin and underlying soft tissue usually over a bony prominence or related to a medical or other device. The injury can present as intact skin or an open ulcer and may be painful. The injury occurs as a result of intense and/or prolonged pressure or pressure in combination with shear. The tolerance of soft tissue for pressure and shear may also be affected by microclimate, nutrition, perfusion, co-morbidities and condition of the soft tissue.”²⁴ Pressure injuries in adults occur most commonly on the lower leg or sacral area but can develop anywhere on the body.

There are several stages of pressure injury development which include:

- **Stage I:** “Intact skin with non-blanchable redness of a localised area.”
- **Stage II:** “Partial-thickness loss of skin with exposed dermis. The wound bed is viable, pink or red, moist, and may also present as an intact or ruptured serum-filled blister.”
- **Stage III:** “Full-thickness loss of skin, in which adipose (fat) is visible in the ulcer and granulation tissue and epibole (rolled wound edges) are often present. Slough and/or eschar may be visible.”
- **Stage IV:** “Full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone in the ulcer. Slough and/or eschar may be visible. Epibole (rolled edges), undermining and/or tunnelling often occur.”
- **Unstageable Pressure Injury:** “Full-thickness skin and tissue loss in which the extent of tissue damage within the ulcer cannot be confirmed because it is obscured by slough or eschar. If slough or eschar is removed, a Stage 3 or Stage 4 pressure injury will be revealed.”
- **Deep Tissue Pressure Injury:** “Persistent non-blanchable deep red, maroon or purple discoloration. Intact or non-intact skin with localised area of persistent non-blanchable deep red, maroon, purple discoloration or epidermal separation revealing a dark wound bed or blood filled blister.”²⁴

The NPUAP has also published other definitions relating to pressure injuries:

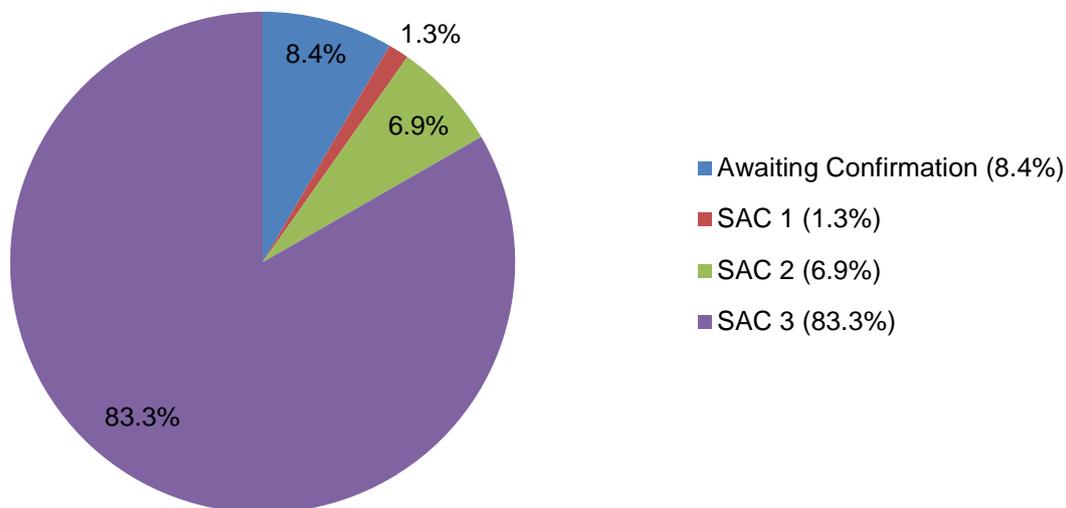
- **Medical Device Related Pressure Injury:** “Results from the use of devices designed and applied for diagnostic or therapeutic purposes. The resultant pressure injury generally conforms to the pattern or shape of the device. The injury should be staged using the staging system.”
- **Mucosal Membrane Pressure Injury:** “Found on mucous membranes with a history of a medical device in use at the location of the injury. Due to the anatomy of the tissue these ulcers cannot be staged.”

In the 2017/18 reporting period, there were 1,873 pressure injuries notified as clinical incidents with 1,716 pressure injury clinical incidents confirmed, and a further 157 pressure injury clinical incidents awaiting confirmation. Pressure injury clinical incidents accounted for 5.9% of all clinical incidents reported in this period.

²⁴ <http://www.npuap.org/resources/educational-and-clinical-resources/npuap-pressure-injury-stages/>

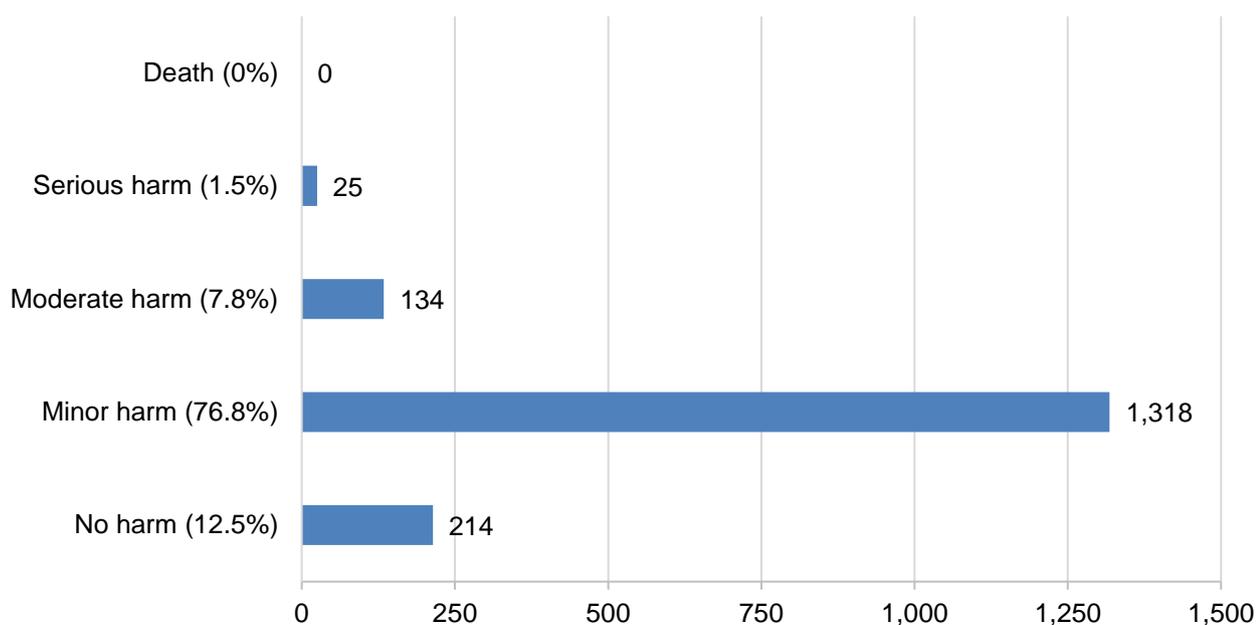
The majority of pressure injury clinical incidents were categorised as SAC 3 clinical incidents (n=1,561; 83.3%; see Figure 37). Of the 25 (1.3%) SAC 1 pressure injury clinical incidents reported during 2017/18, one was a Stage II pressure injury, one was a Stage III pressure injury, two were Stage IV pressure injuries and 21 were of unknown depth, comprising seven suspected deep tissue injuries and 14 unstageable pressure injuries.

Figure 37: Percentage of Pressure Injury Clinical Incidents by SAC Rating for 2017/18



Findings show that the most confirmed pressure injury clinical incidents resulted in minor harm to the patient (76.8%; n=1,318), and a further 12.5% (n=214) resulted in no harm (see Figure 38). No pressure injury clinical incidents were reported as resulting in the death of a patient.

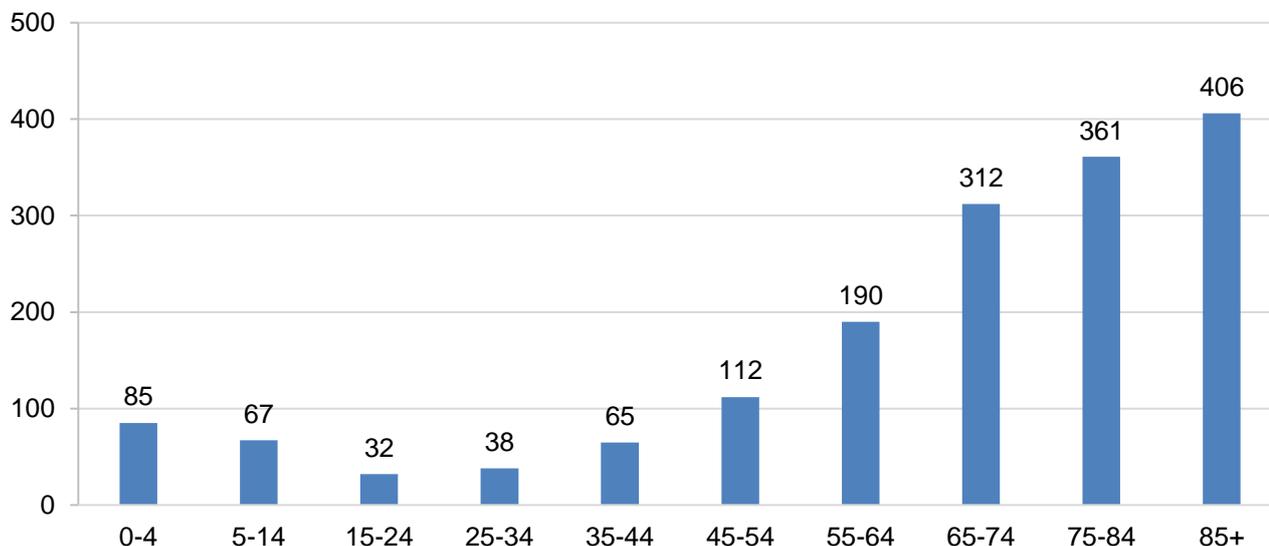
Figure 38: Frequency and Percentage of Confirmed Pressure Injury Clinical Incidents by Patient Outcome for 2017/18



Note: Patient outcome missing data n=25; 1.5%

Males were reported to have more pressure injuries (n=908; 54.3%) with females accounting for 45.7% (n=763; missing n=47). Ages ranged from 0-102 years with a median age of 72 years (see Figure 39).

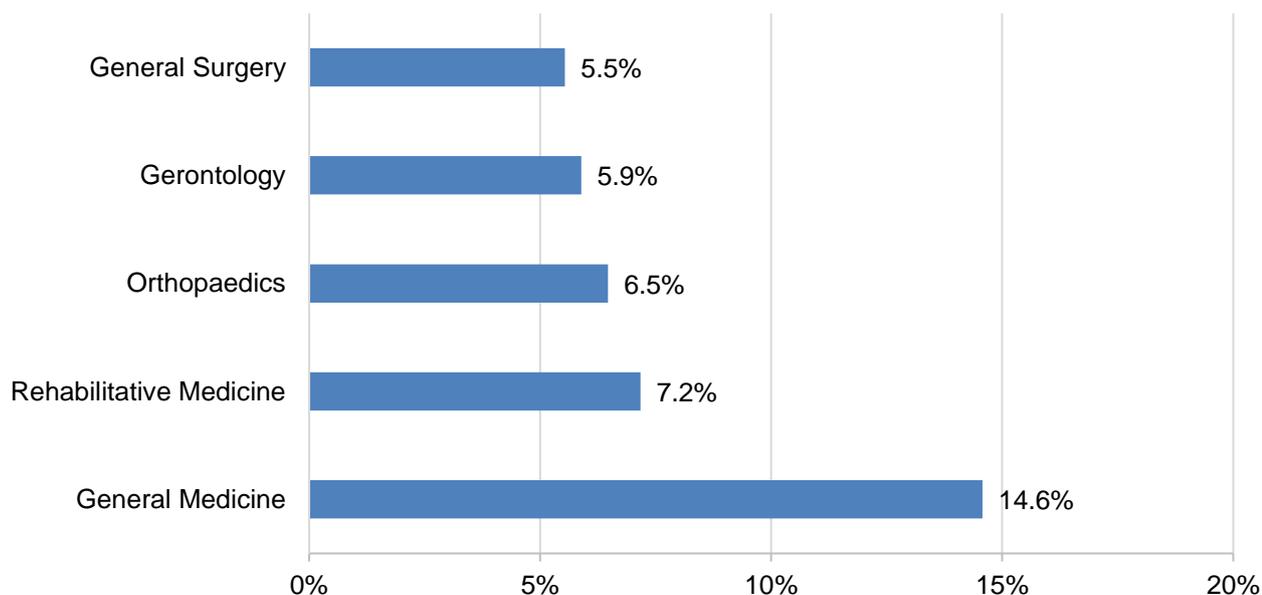
Figure 39: Distribution of Patients Affected by Confirmed Pressure Injury Clinical Incidents by Age Group for 2017/18



Note: Patient age missing data n=50; a clinical incident may affect multiple patients

The treating specialties which reported pressure injury clinical incidents more frequently are listed in Figure 40. These five specialties accounted for 39.6% (n=680) of all confirmed pressure injury clinical incidents reported in this 12-month period. The General Medicine specialty reported the most pressure injuries (n=250; 14.6%) followed by the Rehabilitative Medicine specialty (n=123; 7.2%).

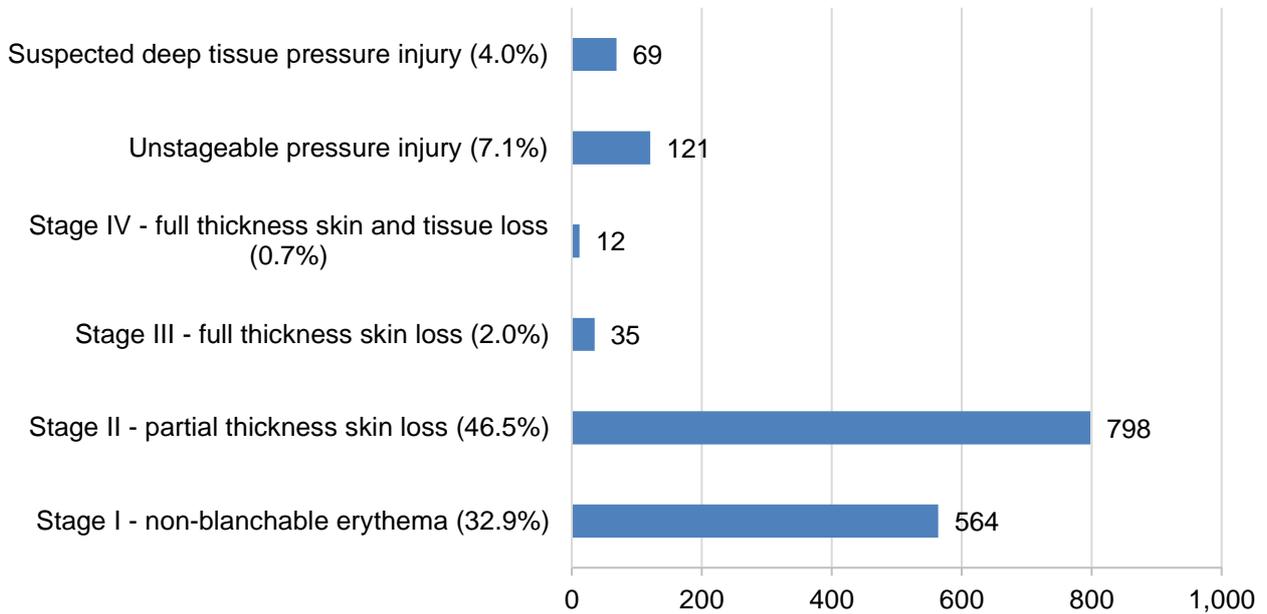
Figure 40: Percentage of Confirmed Pressure Injury Clinical Incidents by Top Five Treating Specialties for 2017/18



Note: Treating specialty missing data n=344; 20.0%

Findings revealed that the greatest number of confirmed pressure injury clinical incidents (n=798; 46.5%) were classified as a Stage II pressure injury with partial thickness skin loss (see Figure 41).

Figure 41: Frequency and Percentage of Confirmed Pressure Injury Clinical Incidents by Stage for 2017/18



In July 2017, the Datix CIMS was updated to allow for the identification of mucosal membrane pressure injuries, with 2.5% (n=43) of confirmed pressure injury clinical incidents allocated to this category. At the time of this report 4.3% of confirmed pressure injury clinical incidents had not been staged (n=74).

While the majority (60.5%; n=1,039) of patients had only one pressure injury, 493 patients had more than one pressure injury, with 35 of these patients having five to nine pressure injuries (see Figure 42).

Figure 42: Frequency of Pressure Injuries in Confirmed Pressure Injury Clinical Incidents for 2017/18

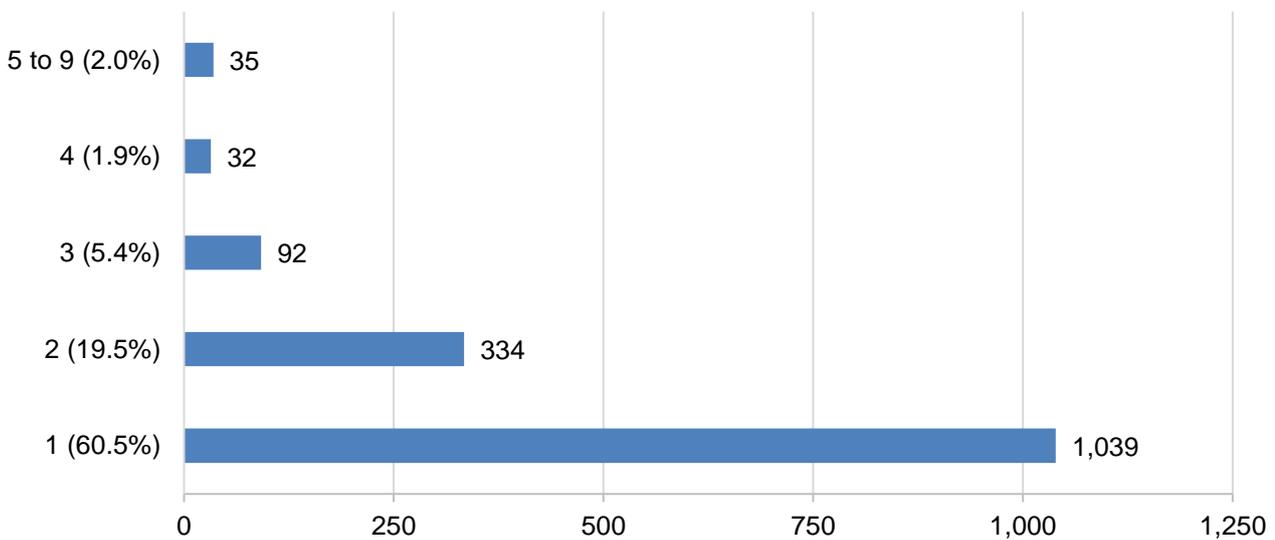
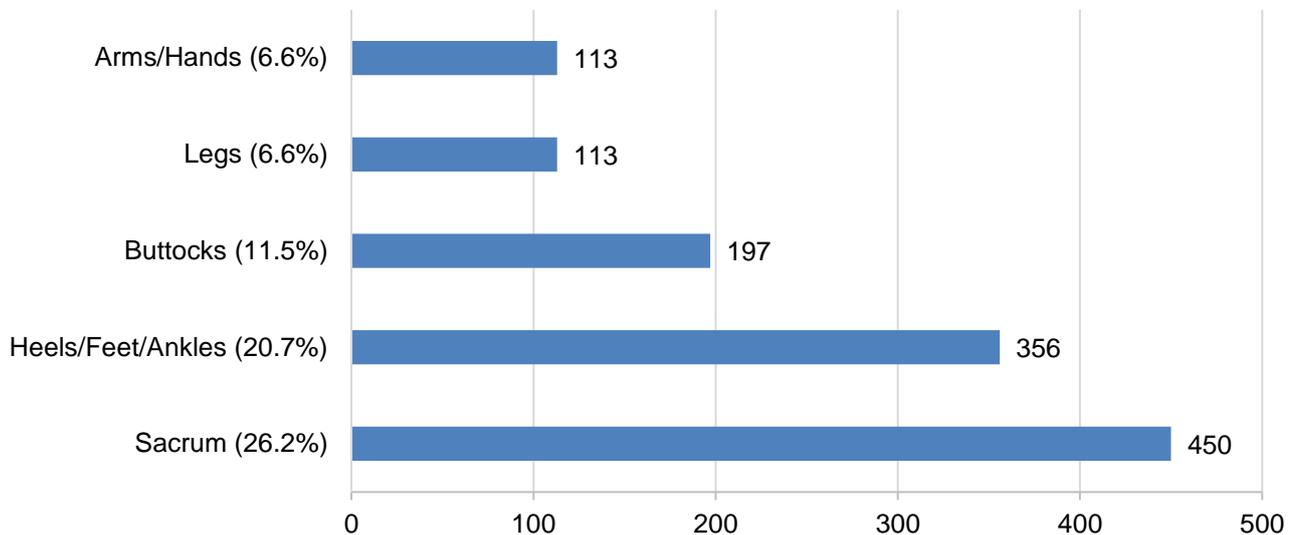


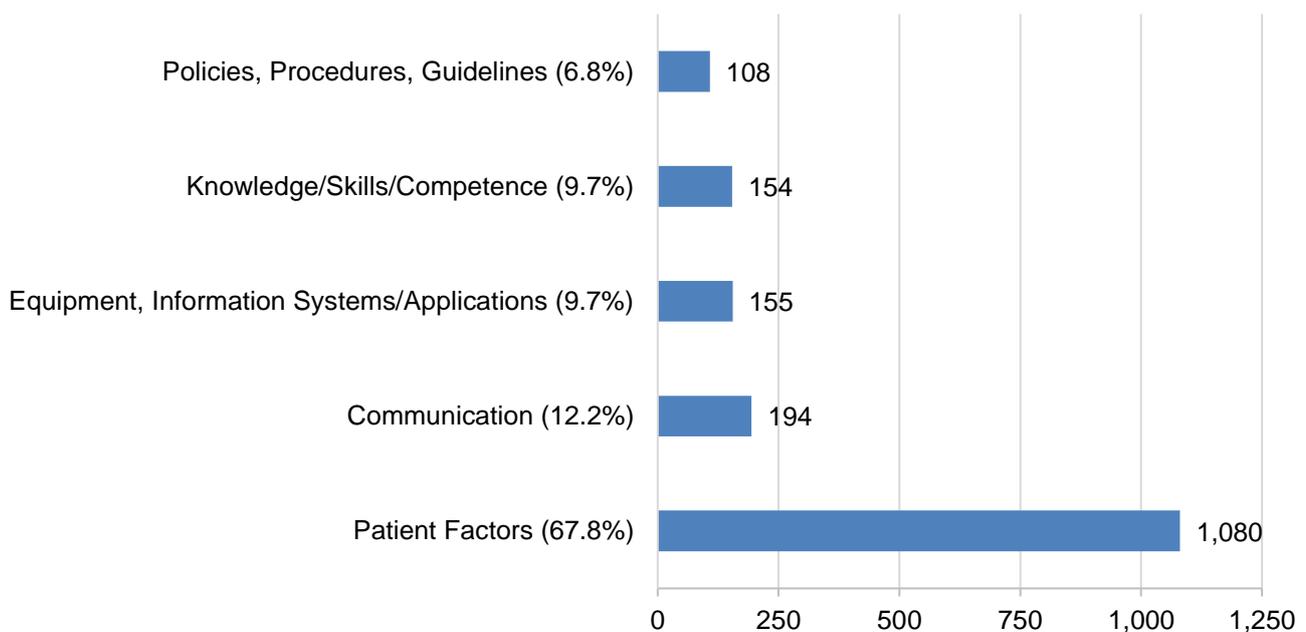
Figure 43 shows that 26.2% (n=450) of confirmed pressure injuries were located on the sacrum, followed by the heels, feet or ankles (n=356; 20.7%). These top five areas accounted for 71.6% (n=1,229) of pressure injury anatomical locations.

Figure 43: Frequency and Percentage of Top Five Anatomical Locations for Confirmed Pressure Injury Clinical Incidents for 2017/18



Patient factors were cited as a contributory factor in more than two-thirds (n=1,080; 67.8%) of closed pressure injury clinical incidents (see Figure 44). Examples of patient factors included being restricted to bed due to illness/medical condition, reduced mobility, and poor or inadequate nutrition.

Figure 44: Frequency and Percentage of Top Five Contributory Factors for Closed Pressure Injury Clinical Incidents for 2017/18



Pressure Injuries Not Present on Admission

Almost two-thirds (n=1,138; 66.3%) of confirmed pressure injury clinical incidents were not present on admission (see Table 17). Pressure injuries identified as present on admission (n=249; 14.5%) are included as clinical incidents because they were found to have deteriorated after admission, preventative/therapeutic interventions were not performed or were provided but not effective, or risk assessments or skin inspections were not performed or were delayed.

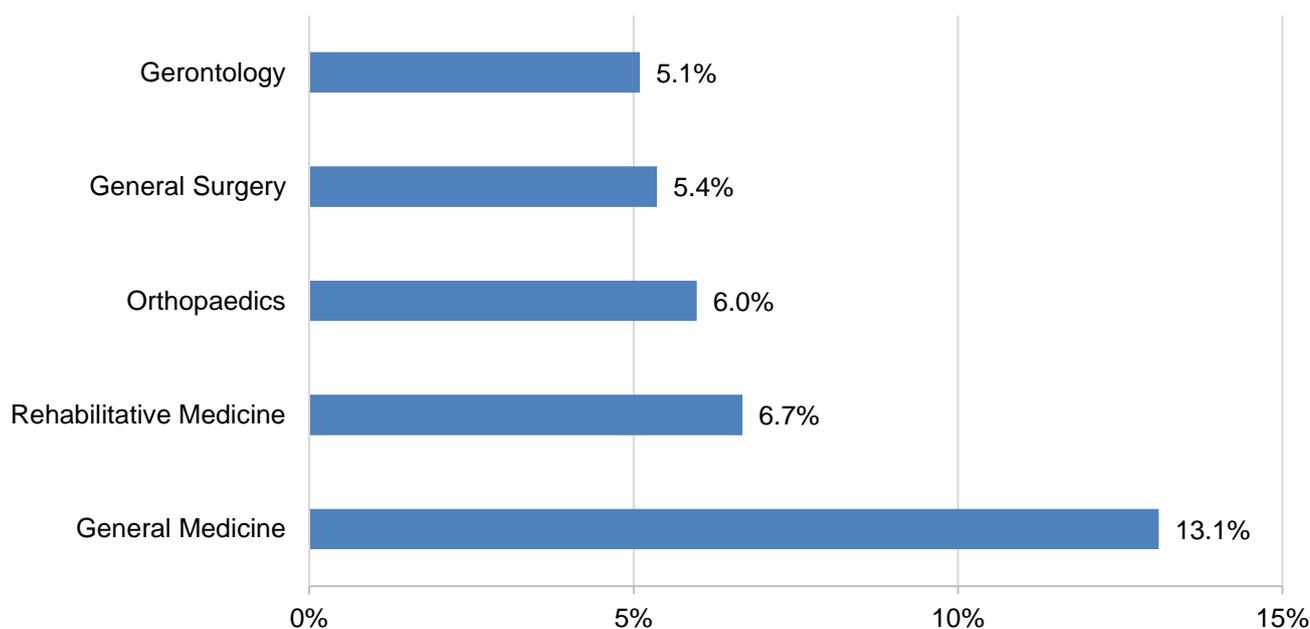
Table 17: Frequency and Percentage of Confirmed Pressure Injury Clinical Incidents by Tier Two Categories for 2017/18

| Pressure Injury Category | (n) | (%) |
|--------------------------------------|--------------|--------------|
| Not present on admission | 1,138 | 66.3 |
| Unknown whether present on admission | 329 | 19.2 |
| Present on admission | 249 | 14.5 |
| Total | 1,716 | 100.0 |

The gender distribution of pressure injuries that developed while in hospital was similar to that for all confirmed pressure injuries, with males reported to have developed pressure injuries more frequently (n=632; 56.7%) while in hospital than in females (n=482; missing n=25). The ages of these patients ranged from 0-102 years, with the median age slightly lower at 70 years.

The top five treating specialties accounted for 36.2% (n=412) of all clinical incidents relating to pressure injuries that developed while in hospital in this 12-month period, as shown in Figure 45. The General Medicine specialty reported the most pressure injuries (n=149; 13.1%) compared to any other treating specialty.

Figure 45: Percentage of Confirmed Pressure Injuries Not Present on Admission by Top Five Treating Specialties for 2017/18



Note: Treating specialty missing data n=203; 17.8%

Table 18 shows that the majority of hospital-acquired pressure injuries were classified as either Stage I (n=388; 34.1%) or Stage II pressure injuries (n=532; 46.7%).

Table 18: Frequency of Confirmed Pressure Injuries Not Present on Admission by Stage and SAC Rating for 2017/18

| Pressure Injury Category | SAC 1 | SAC 2 | SAC 3 | Total |
|--|-----------|-----------|------------|--------------|
| Stage I - non-blanchable erythema | - | 3 | 385 | 388 |
| Stage II - partial thickness skin loss | - | 37 | 495 | 532 |
| Stage III - full thickness skin loss | 1 | 4 | 13 | 18 |
| Stage IV - full thickness skin/tissue loss | 1 | 3 | 4 | 8 |
| Unstageable pressure injury | 11 | 9 | 42 | 62 |
| Suspected deep tissue pressure injury | 4 | 9 | 26 | 39 |
| Total | 17 | 65 | 965 | 1,047 |

However, it is concerning that of the eight patients who developed a Stage IV pressure injury while in hospital and the 18 who developed a Stage III pressure injury, only two cases were classified and confirmed as SAC 1 clinical incidents. Mucosal membrane pressure injuries accounted for 3.0% (n=34) of confirmed pressure injuries that were not present on admission, and the remainder had not been staged (n=57; 5.0%) at the time of this report.

While the majority of patients developed only one pressure injury in hospital (n=681; 59.8%; see Figure 46), 325 patients had more than one pressure injury with 22 patients having five to nine pressure injuries.

Figure 46: Frequency of Pressure Injuries Not Present on Admission in Confirmed Pressure Injury Clinical Incidents for 2017/18

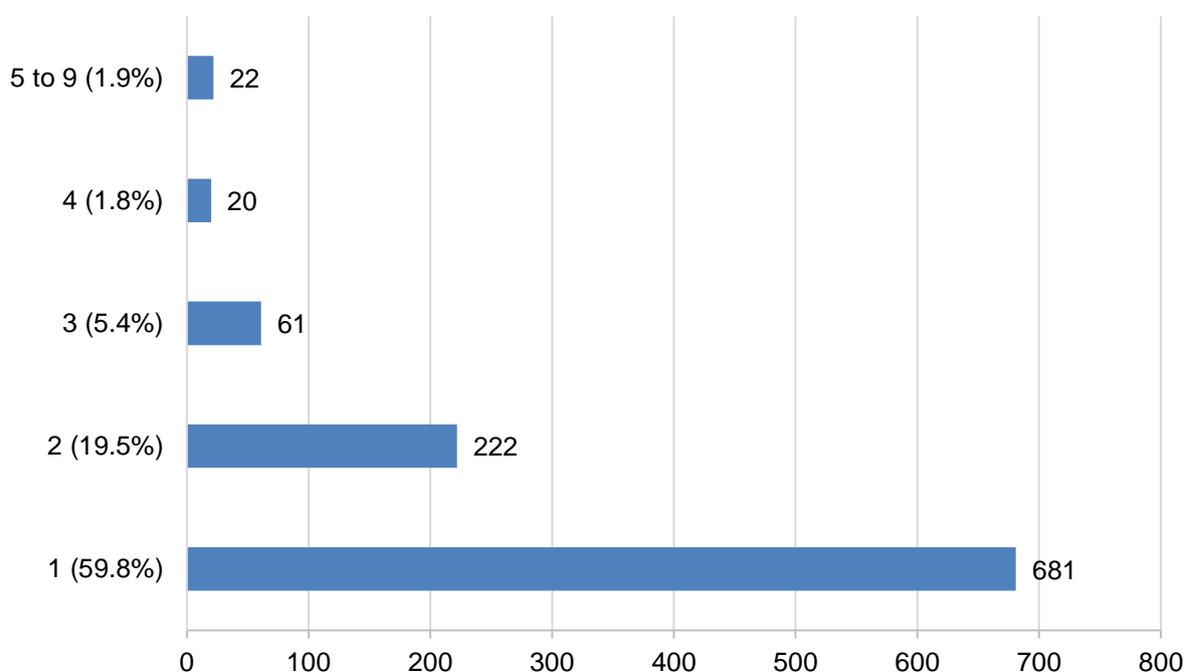
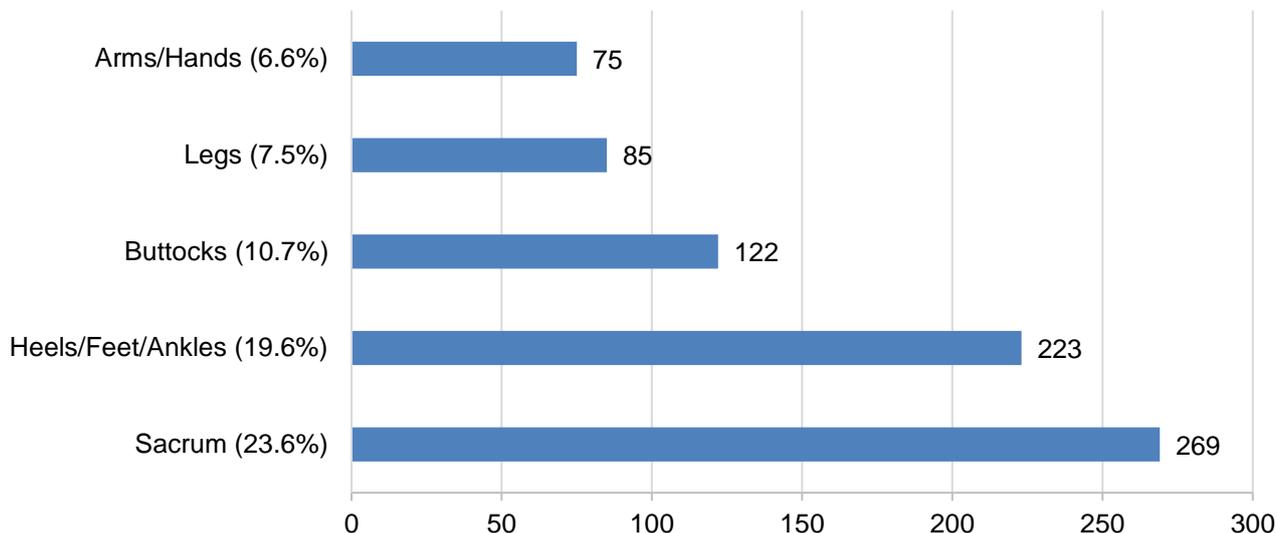


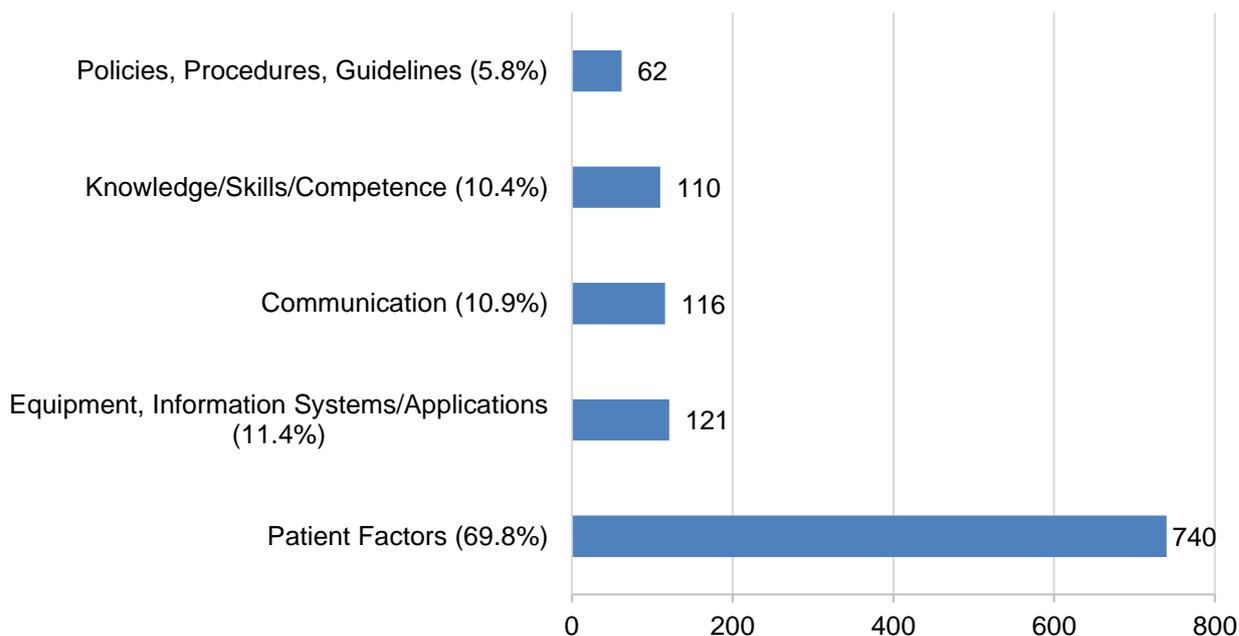
Figure 47 shows that nearly one-quarter of pressure injuries that developed while in hospital were located on the sacrum (n=269; 23.6%), followed by the heels, feet and ankles (n=223; 19.6%). These top five areas accounted for 68.0% (n=774) of pressure injury anatomical locations that developed during a hospital stay.

Figure 47: Frequency and Percentage of Top Five Anatomical Locations for Pressure Injuries Not Present on Admission for 2017/18



Patient factors were cited as the most frequent contributory factor (n=740; 69.8%) in pressure injury clinical incidents that developed while in hospital (see Figure 48). This was followed by issues related to equipment, which were identified as contributory in 11.4% (n=121) of hospital-acquired pressure injury clinical incidents.

Figure 48: Frequency and Percentage of Top Five Contributory Factors for Pressure Injuries Not Present on Admission for 2017/18



Key Messages and Information: Pressure Injury Clinical Incidents

Pressure injuries can take a long time to heal, and can affect patients' quality of life by causing significant pain, disturbing sleep and mood, and increasing the chance of infection. Hospital-acquired pressure injuries can extend the length of hospitalisation, which impacts on both patients and their families, as well as increasing the cost of treatment. In 2017/18, nearly two-thirds of confirmed pressure injury clinical incidents related to pressure injuries that developed following admission to hospital.

In the second edition of the NSQHS Standards, most actions relating to the prevention and management of pressure injuries have been placed in the Comprehensive Care Standard. This Standard is intended to ensure that patients receive coordinated delivery of the health care required or requested, and that risks of harm for patients during health care are prevented and managed. In 2017/18, patient factors were identified as contributory to the development of a pressure injury in hospital in more than two-thirds of cases investigated as clinical incidents. Assessment of the risk factors for individual patients, and the use of appropriate strategies and interventions to minimise the likelihood of pressure injuries developing is a key component of managing this risk.

Of the pressure injuries that developed during a hospital admission, 77.8% (n=885) were attributed to preventative and/or therapeutic interventions having been provided, but not being effective, and a further 18.1% (n=206) were attributed to preventative and/or therapeutic interventions not having been performed. While it is comforting that the number of hospital-acquired pressure injuries resulting from lack of, or delayed, skin assessment or risk assessment is low, this data highlights the need for regular and ongoing assessment of the patient throughout their stay in hospital, to confirm that the strategies and interventions in place continue to be adequate and are effective in minimising pressure injuries.

The pressure injury fact sheet in the ACSQHC's HACs Information Kit⁵ outlines clinical governance structures and quality improvement process that are intended to support best practice in pressure injury prevention and management, including the development of a comprehensive care plan for each patient, and the delivery of comprehensive care. For further information regarding HACs please refer to the Quality of Care section of this report.

The clinical incident data has shown again this year that further education is required regarding the SAC rating that should be assigned to serious pressure injury clinical incidents, with the majority of Stage III and Stage IV pressure injuries confirmed as SAC 2 or SAC 3 incidents. Patients who develop a Stage III or Stage IV pressure injury while in hospital should always be confirmed as a SAC 1 clinical incident.



Standard 9: Clinical Deterioration Clinical Incidents

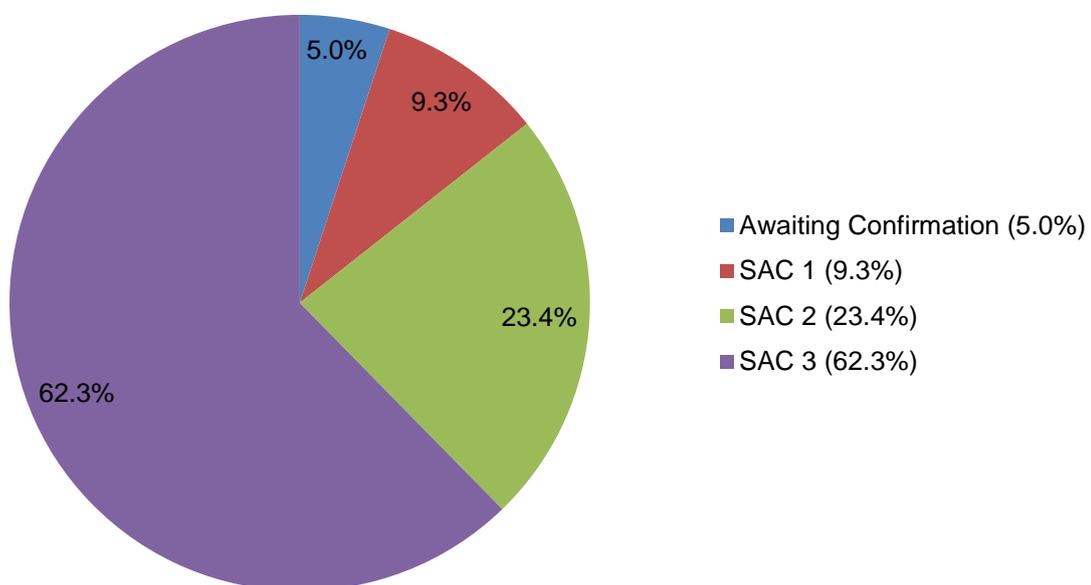
Standard 9 of the NSQHS Standards relates to “recognising and responding to clinical deterioration in acute health care and its intention is to ensure a patient’s physical deterioration is recognised promptly” (ACSQHC, 2013). Clinical deterioration incidents are captured under several Tier Three categories within Datix CIMS which include²⁵:

- Alteration of established early warning score parameters
- Early warning scores miscalculated
- Failure/insufficient recognition of significant change in patient status
- Failure/insufficient response to significant change in patient status
- Failure to activate rapid response/resuscitation team
- Unplanned elevation of care to intensive care setting
- Unplanned return to surgery.

The SAC 1 category of delay in recognising and responding to clinical deterioration is also captured in addition to the Tier Three definitions stated above.

In the 2017/18 reporting period, there were 838 clinical deterioration incidents notified with 796 clinical deterioration incidents confirmed, and a further 42 awaiting confirmation. Clinical deterioration incidents accounted for 2.6% of clinical incidents reported in this period. The most frequent clinical deterioration incidents were categorised as SAC 3 clinical incidents (n=522, 62.3%, see Figure 49)

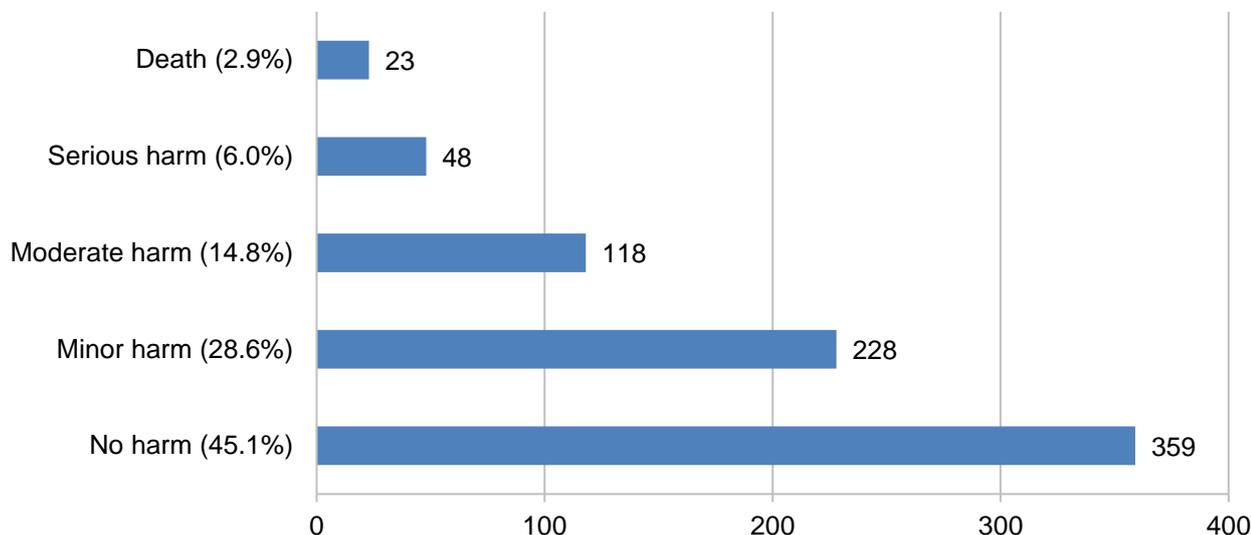
Figure 49: Percentage of Clinical Deterioration Clinical Incidents by SAC Rating for 2017/18



²⁵ The three-tiered Datix CIMS clinical incident classification list was reviewed in 2015, with codes relevant to NSQHS Standard 9 agreed. The classification list was updated in April 2017, and codes relating to Standard 9 were updated. As the updated coding has been applied from 2017/18, data presented for Standard 9 in this report may not be comparable with previous years’ reports.

When patient outcomes from clinical deterioration clinical incidents were reviewed, the majority of confirmed incidents were found to have resulted in no harm to the patient (45.1%; n=359; see Figure 50). Twenty-three incidents (2.9%) described the outcome as the death of the patient.

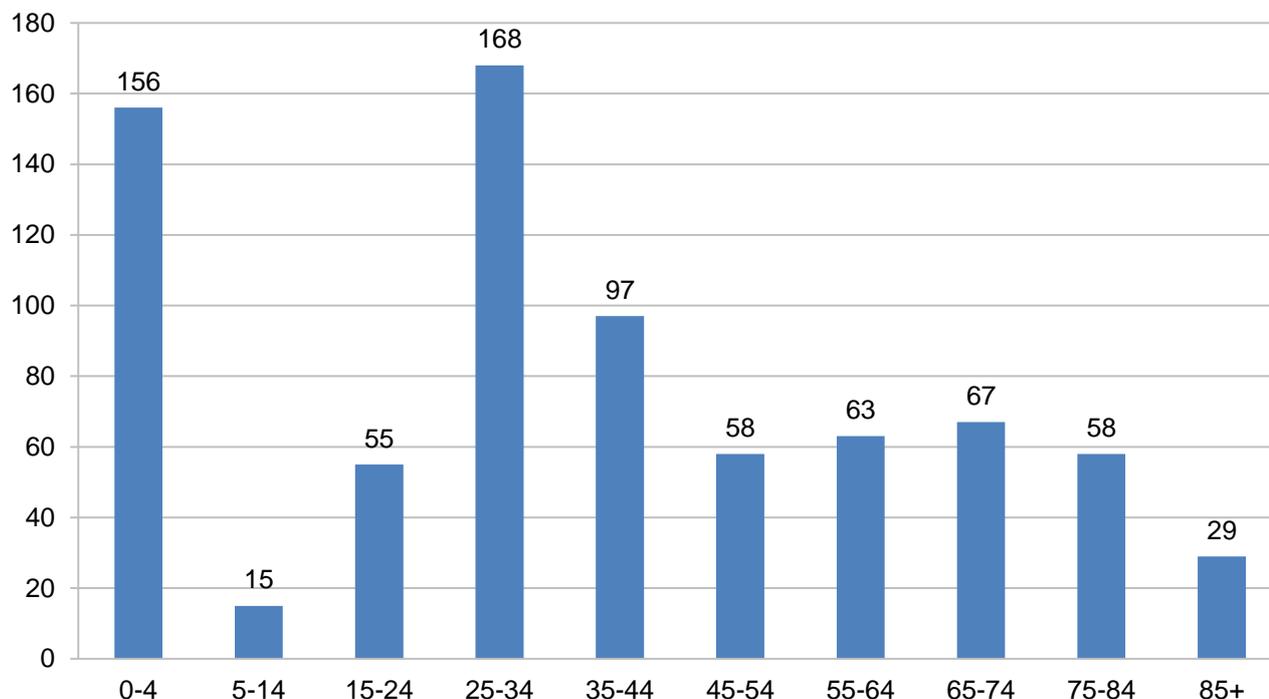
Figure 50: Percentage of Confirmed Clinical Deterioration Clinical Incidents by Patient Outcome for 2017/18



Note: patient outcome missing data n=20; 2.5%

Females accounted for 63.9% (n=496) of patients involved in confirmed clinical deterioration clinical incidents, with males making up 36.1% (n=280; missing n=25). Patient ages ranged from 0-97 years with a median age of 34 years (see Figure 51).

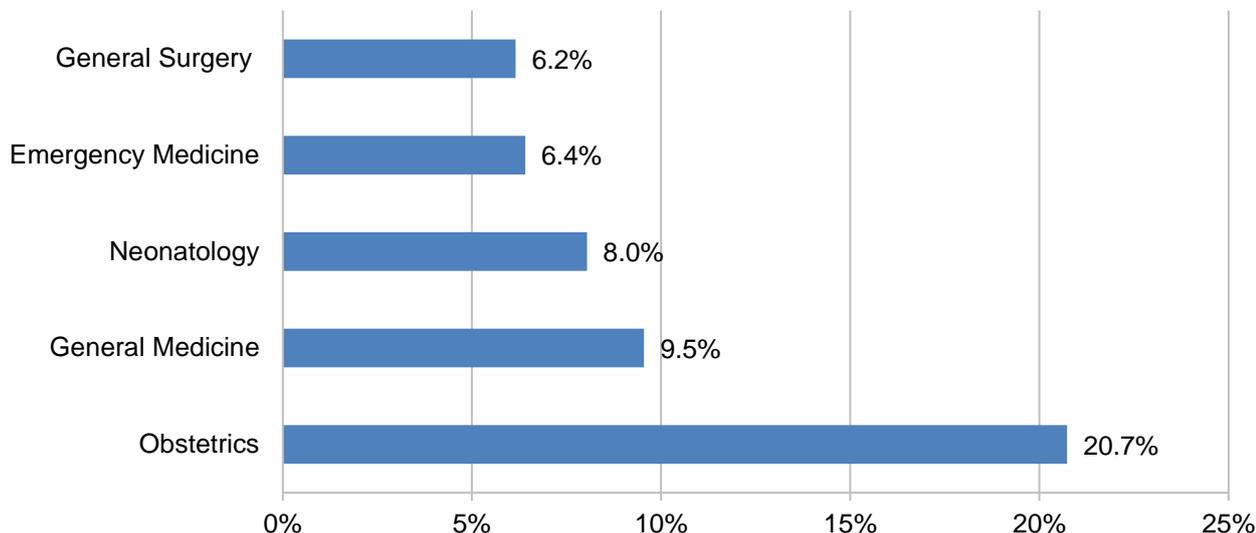
Figure 51: Distribution of Patients Affected by Confirmed Clinical Deterioration Clinical Incidents by Age Group for 2017/18



Note: Patient age missing data n=35; a clinical incident may affect multiple patients

The treating specialties that reported clinical deterioration clinical incidents more frequently are shown in Figure 52. These five specialties accounted for 50.9% (n=405) of all confirmed clinical deterioration incidents reported in this 12-month period. The Obstetrics specialty reported the most number of clinical deterioration incidents (n=165; 20.7%).

Figure 52: Percentage of Confirmed Clinical Deterioration Clinical Incidents by Top Five Treating Specialties for 2017/18



Note: Treating specialty missing data n=155; 19.5%

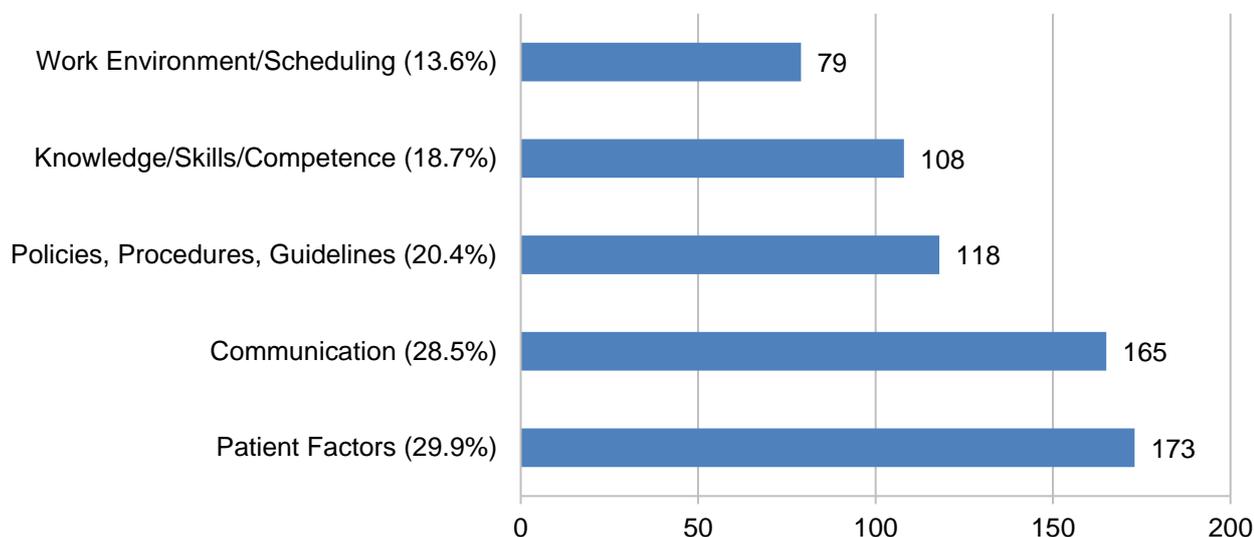
The top five most frequent clinical deterioration clinical incident categories accounted for 96.0% (n=764) of all confirmed clinical deterioration incidents reported for the 2017/18 period. Unplanned elevation of care to an intensive care setting was the most frequently identified category, accounting for 33.4% (n=266) of confirmed incidents in this period (see Table 19).

Table 19: Frequency and Percentage of Top Five Tier Three Confirmed Clinical Deterioration Clinical Incidents Categories for 2017/18

| Tier Three Clinical Deterioration Categories | (n) | (%) |
|--|------------|-------------|
| Unplanned elevation of care to intensive care setting | 266 | 33.4 |
| Failure/insufficient response to significant change in patient status | 194 | 24.4 |
| Failure/insufficient recognition of significant change in patient status | 180 | 22.6 |
| Unplanned return to surgery | 69 | 8.7 |
| Failure to activate rapid response/resuscitation team | 55 | 6.9 |
| Total | 764 | 96.0 |

For clinical deterioration clinical incidents, the most common contributory factor was patient factors which were cited in 29.9% (n=173) of all closed incidents (see Figure 53). Issues relating to communication were the next most frequently reported contributory factor (n=165; 28.5%).

Figure 53: Frequency and Percentage of the Top Five Contributory Factors for Closed Clinical Deterioration Clinical Incidents for 2017/18



Note: More than one contributory factor can be assigned to each clinical incident. Prior to 2017/18 contributory factor data was reported using confirmed incidents rather than closed incidents. As such the data presented in this report may not be comparable with previous year's reports.

Key Messages and Information: Clinical Deterioration Clinical Incidents

Recognising and responding promptly to a patient who is deteriorating requires consideration of many factors. Key to this is early identification of clinical deterioration, in order to implement timely interventions.

The Tier Three categories for clinical deterioration incidents continue to show a high percentage related to an unplanned elevation of the patient's care to an intensive care setting or a failure or insufficient response to a significant change in the patient's status. Responding to a change in the status of a patient can be assisted by having formal systems in place, such as rapid response teams. These teams, and the structured escalation protocols put in place, can assist in identifying and tracking factors which may indicate early warning signs of deterioration and flag the appropriate care required.

The second edition of the NSQHS Standards have a continued focus on organisation-wide approaches to support recognition and response systems for deteriorating patients, as well as escalating care when appropriate. The new Recognising and Responding to Acute Deterioration Standard has an increased focus on identifying and responding to factors linked to a person's acute deterioration in mental state, and will require health service organisations to have processes:

- For clinicians to recognise acute deterioration in patients' mental state
- To ensure rapid referral to mental health services to meet the needs of patients whose mental state has acutely deteriorated.

Standard 10: Falls Clinical Incidents

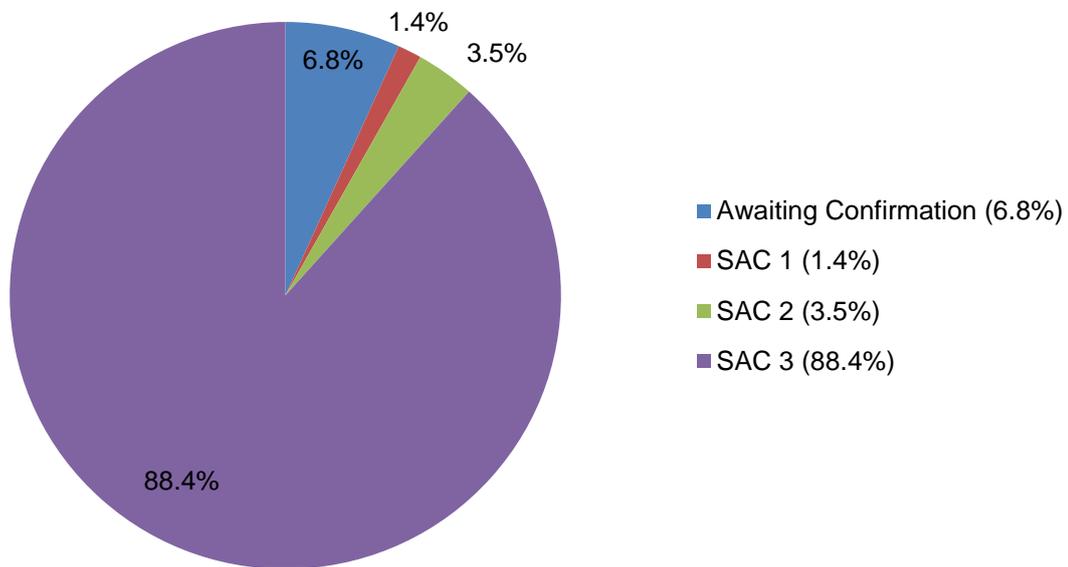
Standard 10 of the NSQHS Standards refers to “preventing falls and harm from falls” (ACSQHC, 2013), the intent of which is to properly assess patients’ risk of falling, to try and prevent falls from occurring and minimise the harm that results.

Falls clinical incidents are captured under two Tier Two categories within Datix CIMS:

- Witnessed Slips/Trips/Falls (includes faints)
- Suspected Slips/Trips/Falls (un-witnessed, includes faints).

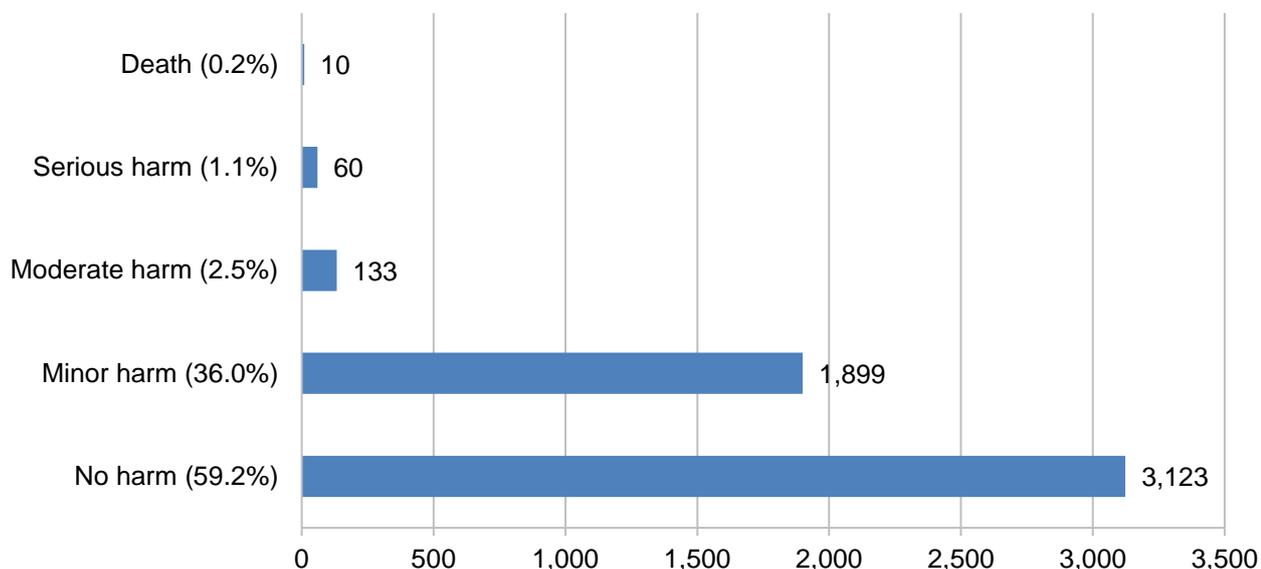
In the 2017/18 reporting period, there were 5,658 falls incidents notified with 5,276 falls confirmed, and a further 382 awaiting confirmation. Falls clinical incidents accounted for 17.7% of clinical incidents reported in this period. The majority of falls clinical incidents were categorised as SAC 3 clinical incidents (n=5,001; 88.4%; see Figure 54).

Figure 54: Percentage of Falls Incidents by SAC Rating for 2017/18



Findings show that most falls incidents resulted in the patient sustaining no harm (n=3,123; 59.2%; see Figure 55), with ten incidents reporting a patient outcome of death.

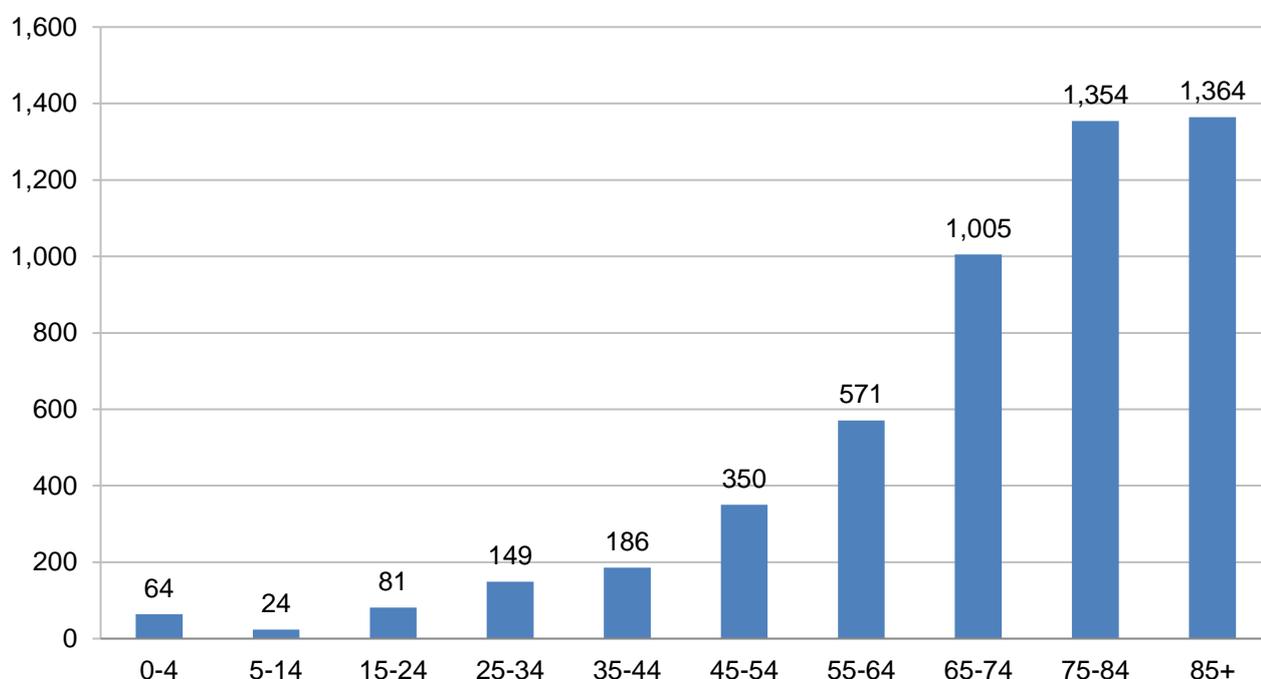
Figure 55: Frequency and Percentage of Confirmed Falls Clinical Incidents by Patient Outcome for 2017/18



Note: Patient outcome missing data n=51; 1.0%

Males accounted for 55.3% (n=2,846) of falls incidents with females making up 44.7% (n=2,297; missing n=134). Ages ranged from 0-103 years with a median age of 76 years (see Figure 56).

Figure 56: Distribution of Patients Affected by Confirmed Falls Clinical Incidents by Age Group for 2017/18

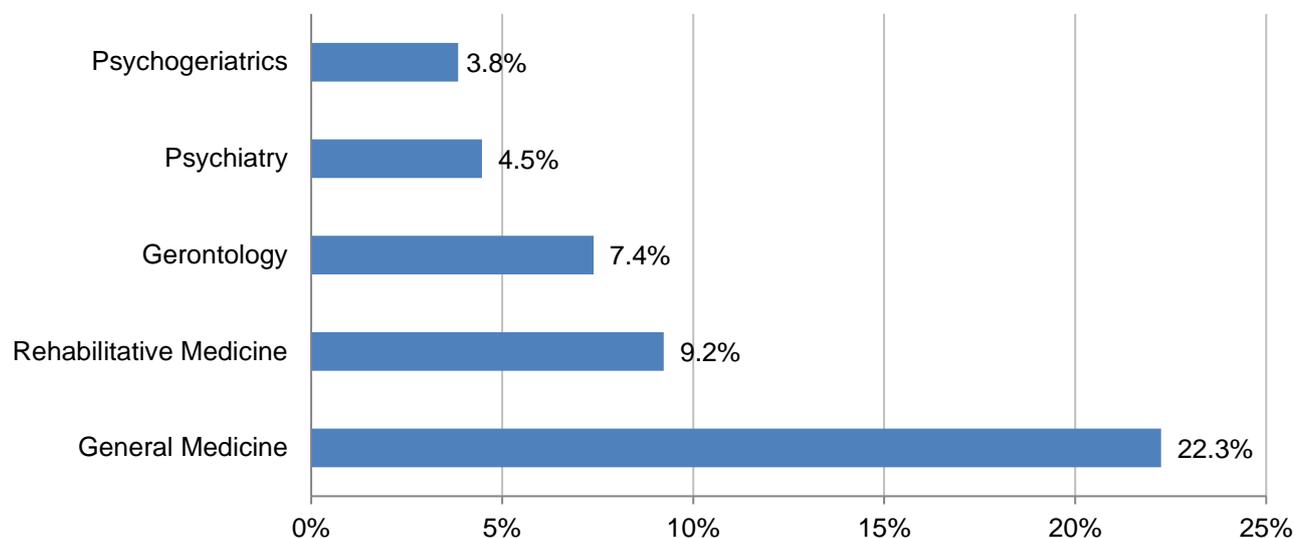


Note: Patient age missing data n=129, a clinical incident may affect multiple patients

The top five treating specialties accounted for 47.2 % (n= 2,490) of confirmed falls incidents reported in this 12-month period. The General Medicine specialty reported the highest

frequency of falls incidents (n= 1,174; 22.3%) followed by the Rehabilitative Medicine specialty (n= 487; 9.2%; see Figure 57).

Figure 57: Percentage of Confirmed Falls Incidents by Top Five Treating Specialties for 2017/18



Note: Treating specialty missing data n=1,234; 23.4%

Findings revealed that the majority of falls clinical incidents (n=3,477; 65.9%) were categorised as “suspected slips/trips/falls” as they were unwitnessed (see Table 20).

Table 20: Frequency and Percentage of Confirmed Tier Two Falls Categories for 2017/18

| Tier Two Falls Category | (n) | (%) |
|-------------------------|--------------|--------------|
| Unwitnessed falls | 3,477 | 65.9 |
| Witnessed falls | 1,799 | 34.1 |
| Total | 5,276 | 100.0 |

When identifying the height the patient fell, 38.2% (n= 2,018) of confirmed falls clinical incidents were classified as a low fall from a height of 0.5 metres or less, with a further 1,604 (30.4%) falls incidents occurring from a standing position.

The top five most frequent activities at the time a patient fell accounted for 69.9% (n=3,689) of confirmed falls incidents. At the time of the fall, 1,091 (20.7%) patients were walking while a further 806 (15.3%) patients were attempting to sit or stand (see Table 21).

Table 21: Frequency and Percentage of Top Five Falls Incidents by Activity for 2017/18

| Falls by Activity at Time of Fall | (n) | (%) |
|-----------------------------------|--------------|-------------|
| Walking | 1,091 | 20.7 |
| Attempting to sit/stand | 806 | 15.3 |
| Toileting or attempting to toilet | 788 | 14.9 |
| Getting in/out of bed | 613 | 11.6 |
| Bending/leaning/reaching over | 391 | 7.4 |
| Total | 3,689 | 69.9 |

Nearly one-third of falls occurred at the bedside (n=1,691; 32.1%) with a further 1,574 falls incidents occurring in a ward setting (29.8%; see Table 22).

Table 22: Frequency and Percentage of Top Five Places Where Falls Incidents Occurred for 2017/18

| Place of Fall | (n) | (%) |
|---------------|--------------|-------------|
| Bed | 1,691 | 32.1 |
| Ward | 1,574 | 29.8 |
| Bathroom | 1,092 | 20.7 |
| Dining Room | 135 | 2.6 |
| Grounds | 129 | 2.4 |
| Total | 4,621 | 87.6 |

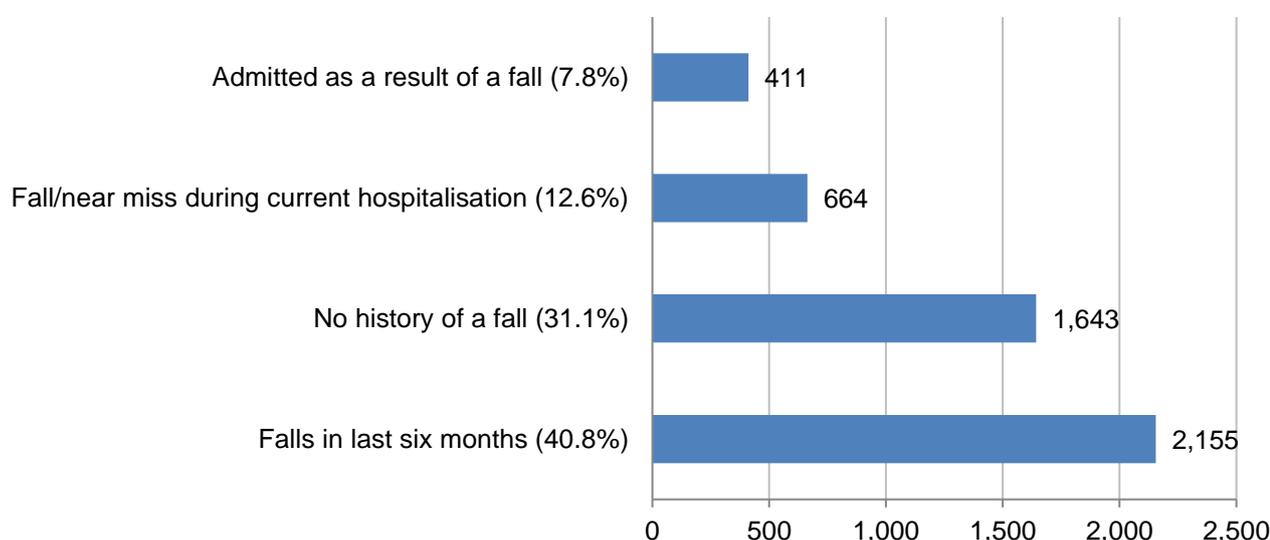
The outcome of falls continues to be poorly documented within Datix CIMS, with 73 (1.4%) incidents reported as resulting in a fracture, 12 clinical incidents resulting in a subdural haematoma (0.2%) and 1,115 incidents (21.1%) stating “other outcome”. In 2017/18, 77.3% (n=4,076) of confirmed falls incidents did not state an outcome.

The majority of confirmed falls incidents (n= 3,499; 66.3%) were reported as having an unknown mechanism as to why the patient fell. Slips and trips were the next most frequently identified fall type and accounted for 18.2% (n=963) of all falls, followed by faints, cardiac collapse or epilepsy (n=214; 4.1%; missing data n=600).

Ninety-one percent (n=4,799) of patients who sustained a fall were shown to have a falls risk assessment in place, with 2,274 (43.1%) of patients having had their most recent falls risk assessment completed within the last 24 hours, and 1,326 (25.1%) within the last week. Nearly sixteen percent (n=833) of patients had a falls risk assessment completed more than one week ago, while the remainder did not have any falls risk assessment performed (n=843; 16.0%).

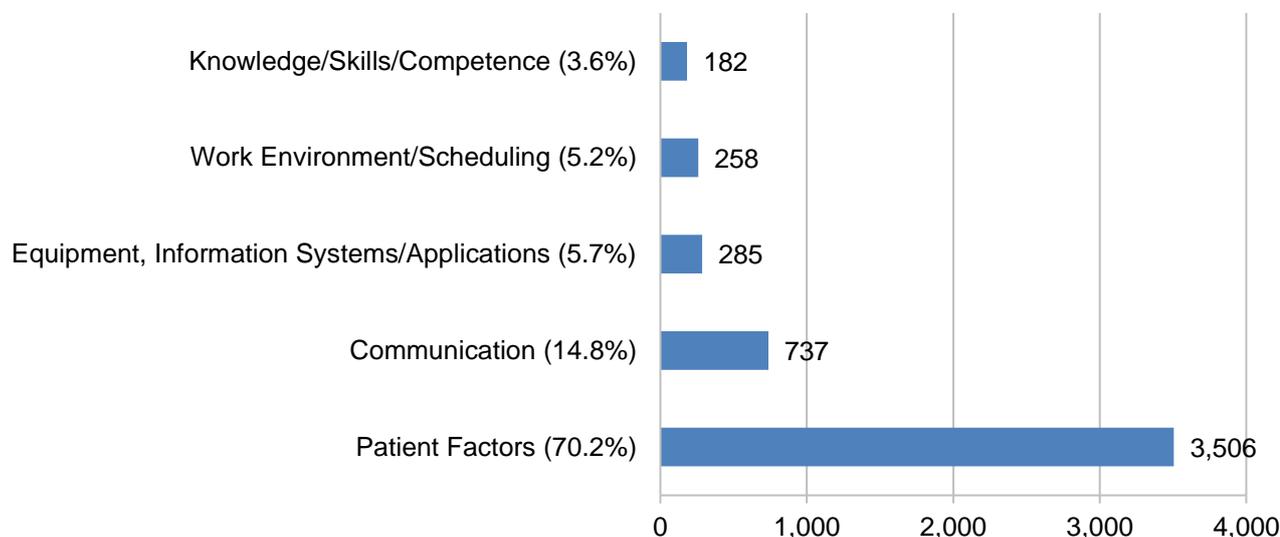
Nearly one-third (n=1,643; 31.1%) of patients who fell had no previous history of a fall, while 40.8% (n=2,155) of patients who sustained a fall had also experienced a fall within the last six months (see Figure 58).

Figure 58: Frequency and Percentage of Falls History for 2017/18



Patient factors (n=3,506; 70.2%) were cited as the main contributory factor in falls clinical incidents followed by communication factors (n=737; 14.8%; see Figure 59).

Figure 59: **Frequency and Percentage of Top Five Contributory Factors for Closed Falls Clinical Incidents for 2017/18**



Key Messages and Information: Falls Clinical Incidents

Falls prevention continues to be a focus at both state and national levels, and the second edition of the NSQHS Standards has developed a new Comprehensive Care Standard which encompasses criteria for the prevention of falls. It is important that falls prevention continues to be a focus for HSPs moving forward into the second edition of the NSQHS Standards.

The majority of falls resulted in minor or no harm (n=5,022; 95.2%) to the patient, however 58 SAC 1 falls clinical incidents did result in serious harm and nine described an outcome of death. As falls are one of the most frequently reported SAC 1 categories, it is important to continue reviewing falls prevention strategies and interventions, and engaging with carers and their families to reduce the risk of falls and the harm that results.

Of the confirmed falls incidents reported, 40.8% (n=2,155) of patients had experienced a fall within the last six months. It is thus very important for clinicians to view a patient's care as a continuum, and plan appropriate discharges to other settings, such as the community. Focusing on systems which strengthen collaboration and information for patients, carers and families between hospital falls prevention and community falls initiatives such as the Stay On Your Feet® program aligns with the new Comprehensive Care Standard, where the intention is to safely manage transitions between episodes of care.

While 91.0% of patients who sustained a fall had a falls risk assessment in place, rescreening and assessing the patient's risk factors after a change in their environment or condition will assist in ensuring a current falls assessment and strategies are in place. Of the total confirmed falls (n=5,276) in 2017/18, 45.6% of falls incidents cited delirium, dementia or a cognitive impairment as a risk factor (n=2,407). This finding supports the new Comprehensive Care Standard, which identifies that systems must be in place to identify cognitive impairment in patients.



Quality of Care

Quality in health care is imperative from both an individual and patient population perspective. The delivery of health care occurs in a highly complex system, and when system processes break down the quality of care provided is compromised. Mitigating these risks can reduce complications of treatment, which can affect patient recovery and outcomes, increase the time spent in hospital and cost to the health system, and divert resources away from other patients.

From a patient population perspective, the WA health system utilises administrative data collections such as the Hospital Morbidity Data Collection to better understand the quality of health care delivery. The HMDC captures all inpatient activity and discharge data, which may include hospital-acquired conditions captured by the condition onset flag (COF) code.

The PSSU have used HMDC data to complement data notified to the Datix CIMS and to review the quality of care that has been delivered to our patients. The codes from the ACSQHC's Hospital-Acquired Complications list has also been used to gain a better understanding of the types of HACs experienced by patients in the WA health system.

Hospital-Acquired Complications

A hospital-acquired complication refers to a complication for which clinical risk mitigation strategies may reduce (but not necessarily eliminate) the risk of that complication occurring.²⁶ Since 2012, the ACSQHC has been working with clinicians to identify HACs which could be reduced if appropriate risk mitigation strategies were in place.

Australia's national list of HACs consists of 16 categories of complication, with some HAC categories being comprised of multiple diagnoses (see Table 23). The national HACs list was developed via a thorough process that included reviews of the literature, expert clinical advice and testing with public and private hospitals. The national HACs list and data specification will be reviewed on an ongoing basis, and the ACSQHC has established a HACs Curation Clinical Advisory Group to facilitate this. As part of a broad quality improvement approach, the HACs can be monitored by clinicians, safety and quality professionals, managers and executives, and governing bodies to provide insight into the state of safety and quality within a health service.

The ACSQHC has released a detailed information kit designed to facilitate the adoption and use of the HACs list to support the provision of safe and high quality health care. The information kit:

- Includes strategies to prevent and maintain low rates of HACs
- Supports clinicians to include prevention strategies for HACs in their delivery of care
- Assists health service organisations to assess the quality and safety of clinical care
- Supports health service organisations to evaluate the impact of QI activities
- Links HAC reduction strategies to the NSQHS Standards (second edition).

From 1 July 2018, the funding level for acute episodes of care in hospitals will be reduced where one of 13 HACs occurs. Separate adjustments have been determined for each HAC, and are risk-adjusted to take account of the increased likelihood of some patients experiencing a HAC during their hospital stay.²⁷

²⁶ Further information regarding the HACs is available at the ACSQHC website: <https://www.safetyandquality.gov.au/our-work/indicators/hospital-acquired-complications/>

²⁷ IHPA National Efficient Price Determination 2018-19 available at: https://www.ihipa.gov.au/sites/g/files/net4186/f/publications/national_efficient_price_determination_2018-19.pdf

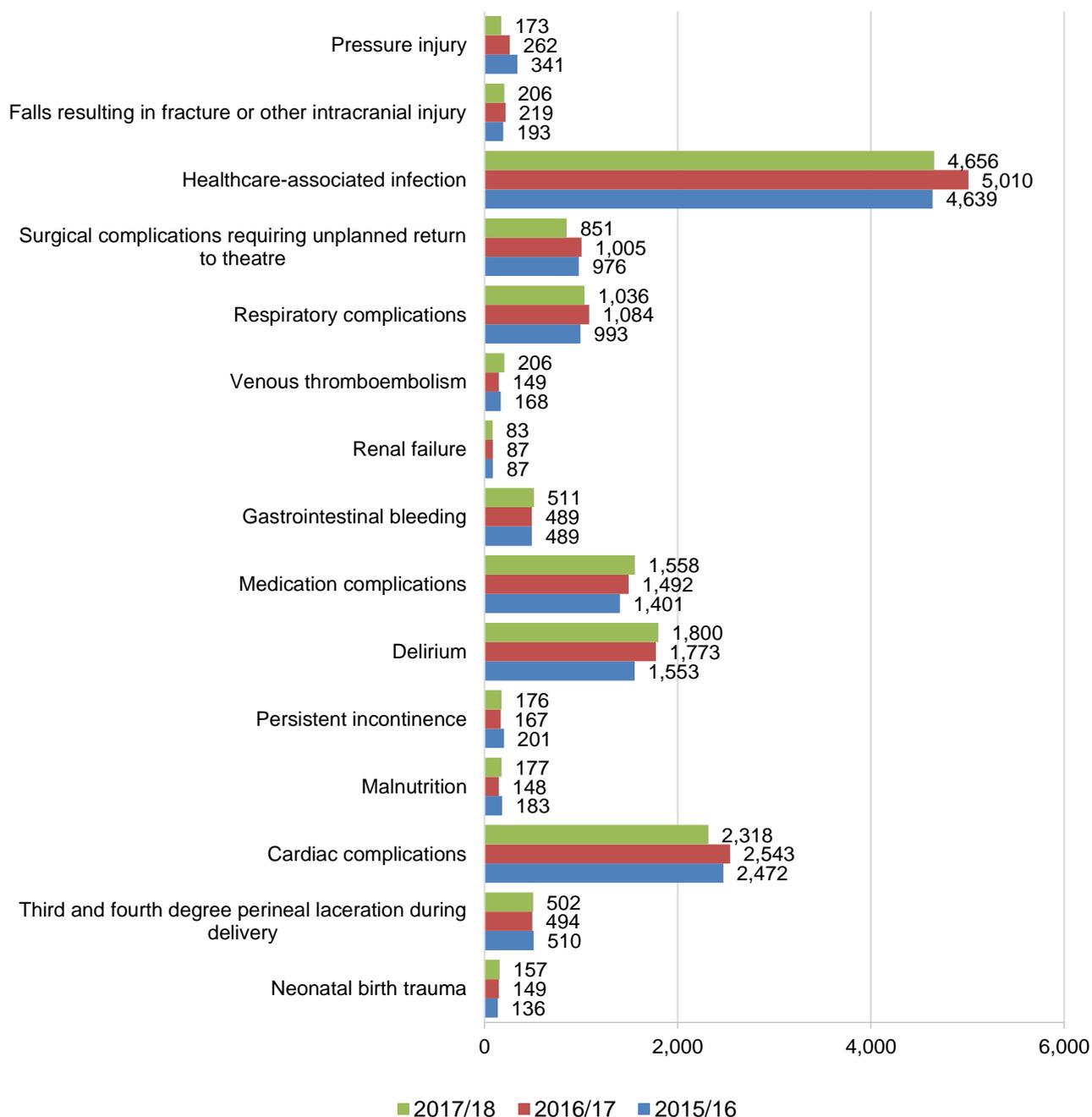
Table 23: **National List of Hospital-Acquired Complications**

| Hospital-Acquired Complication | Diagnosis |
|--|---|
| 1. Pressure injury | Stage III ulcer Stage IV ulcer Unspecified decubitus ulcer and pressure area |
| 2. Falls resulting in fracture or other intracranial injury | Intracranial injury Fractured neck of femur Other fractures |
| 3. Healthcare-associated infection | Urinary tract infection Surgical site infection Pneumonia Bloodstream infection Central line and peripheral line associated bloodstream infection Multi-resistant organism Infection associated with prosthetics/implantable devices Gastrointestinal infections |
| 4. Surgical complications requiring unplanned return to theatre | Post-operative haemorrhage/haematoma requiring transfusion and/or return to theatre Surgical wound dehiscence Anastomotic leak Vascular graft failure Other surgical complications requiring unplanned return to theatre |
| 5. Unplanned intensive care unit admission* | Unplanned admission to intensive care unit |
| 6. Respiratory complications | Respiratory failure including acute respiratory distress syndrome requiring ventilation Aspiration pneumonia |
| 7. Venous thromboembolism | Pulmonary embolism Deep vein thrombosis |
| 8. Renal failure | Renal failure requiring haemodialysis or continuous veno-venous haemodialysis |
| 9. Gastrointestinal bleeding | Gastrointestinal bleeding |
| 10. Medication complications | Drug related respiratory complications/depression Haemorrhagic disorder due to circulating anticoagulants Hypoglycaemia |
| 11. Delirium | Delirium |
| 12. Persistent incontinence | Urinary incontinence |
| 13. Malnutrition | Malnutrition |
| 14. Cardiac complications | Heart failure and pulmonary oedema Arrhythmias Cardiac arrest Acute coronary syndrome including unstable angina, STEMI and NSTEMI (heart attack) |
| 15. Third and fourth degree perineal laceration during delivery* | Third and fourth degree perineal laceration during delivery |
| 16. Neonatal birth trauma* | Neonatal birth trauma |

* Denotes HACs not subject to funding adjustment in 2018/19

Western Australian hospital morbidity data were reviewed with regard to HACs for the 2015/16, 2016/17 and 2017/18 years.²⁸ Findings showed that healthcare-associated infections were the most frequently reported HAC category, being identified in 1.1% of separations in 2015/16 (n=4,639) and 2016/17 (n=5,010), and 1.0% in 2017/18 (n=4,656; see Figure 60).

Figure 60: Frequency of Hospital-Acquired Complications by Year for 2015/16 to 2017/18



The next most frequently mentioned HAC category over this period was cardiac complications, identified in 0.6% of separations in 2015/16 (n=2,472) and 2016/17 (n=2,543), and 0.5% in 2017/18 (n=2,318).

²⁸ A separation is counted once within each HAC category, but is counted multiple times across HAC categories. The methodology used to identify separations with HACs, and the corresponding denominators, is as per the specification issued by the ACSQHC in November 2017. The denominators used for HAC categories 15 and 16 are different to those for HAC categories 1-14. Due to changes in the HAC specification over time this data may not be comparable to previous reports.

From July 2015 to June 2018, the frequency of HACs relating to renal failure, gastrointestinal bleeding and malnutrition have remained stable in the WA health system. The rate of renal failure in hospital was identified as 2 patients per 10,000 separations, the rate of gastrointestinal bleeding was 11 patients per 10,000 separations, and the rate of malnutrition was 4 patients per 10,000 separations.

Over this period, the frequency of HACs relating to persistent incontinence was noted to have been five patients per 10,000 separations (n=201) in 2015/16 and four patients per 10,000 separations (n=176) in 2017/18. The frequency of HACs relating to delirium was 36 patients per 10,000 separations (n=1,553) in 2015/16 and 39 patients per 10,000 separations (n=1,800) in 2017/18.

Third and fourth degree perineal lacerations occurred in 3.1% (n=510) of vaginal births in 2015/16, 3.0% (n=494) in 2016/17 and 3.1% (n=502) in 2017/18. Neonatal birth trauma occurred in 0.6% of births during this period (2015/16, n=136; 2016/17, n=149; 2017/18, n=157). Funding adjustments for third and fourth degree perineal lacerations during delivery and neonatal birth trauma are not being applied in 2018/19 due to the small patient cohort, and other issues, which have so far prevented development of a robust approach to risk adjustment. Funding adjustments are also not currently being applied for unplanned intensive care unit admissions, as these cannot be identified in current data sets.

Data for the HAC categories that are comprised of multiple diagnoses are presented below for the 2015/16, 2016/17 and 2017/18 years. Please note that as an individual separation may meet the criteria for multiple diagnoses with a HAC category, the frequencies may not align with those for the overall HAC categories.

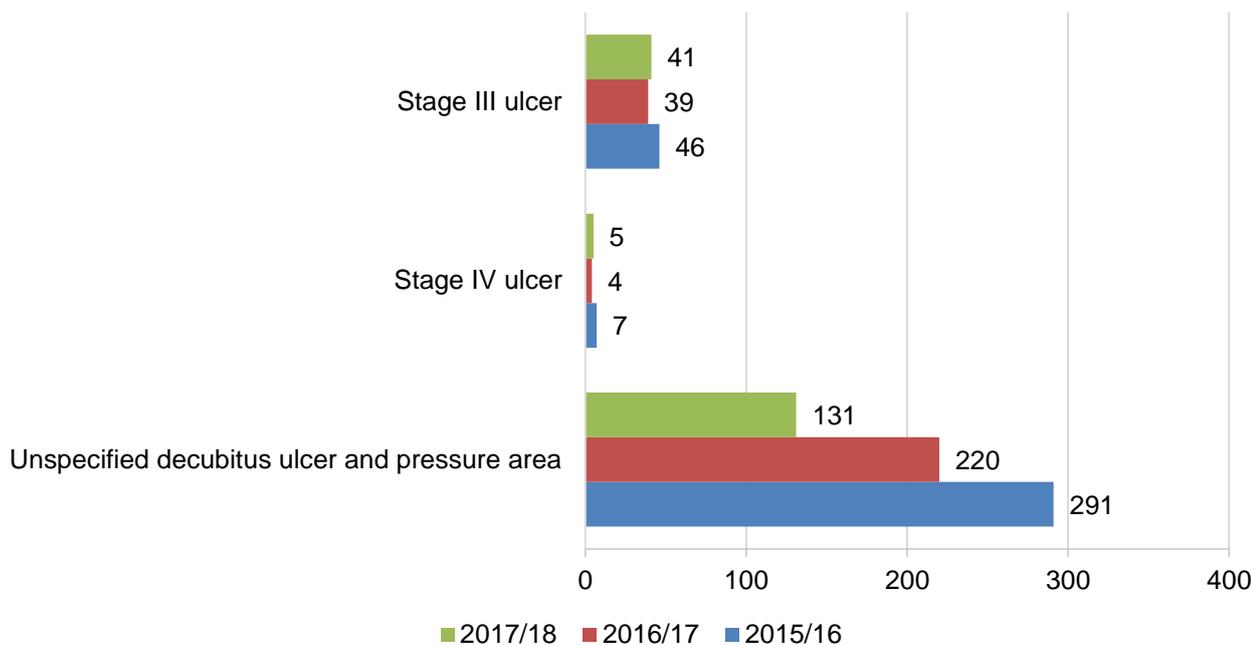


Pressure injury

Most patients who developed a pressure injury in hospital were diagnosed with an unspecified decubitus ulcer or pressure area. The frequency of this complication has declined from seven patients per 10,000 separations (n=291) in 2015/16 to three patients per 10,000 separations (n=131) in 2017/18 (see Figure 61).

The frequency of Stage III and Stage IV ulcers acquired during a hospital stay has remained low and relatively stable over this period.

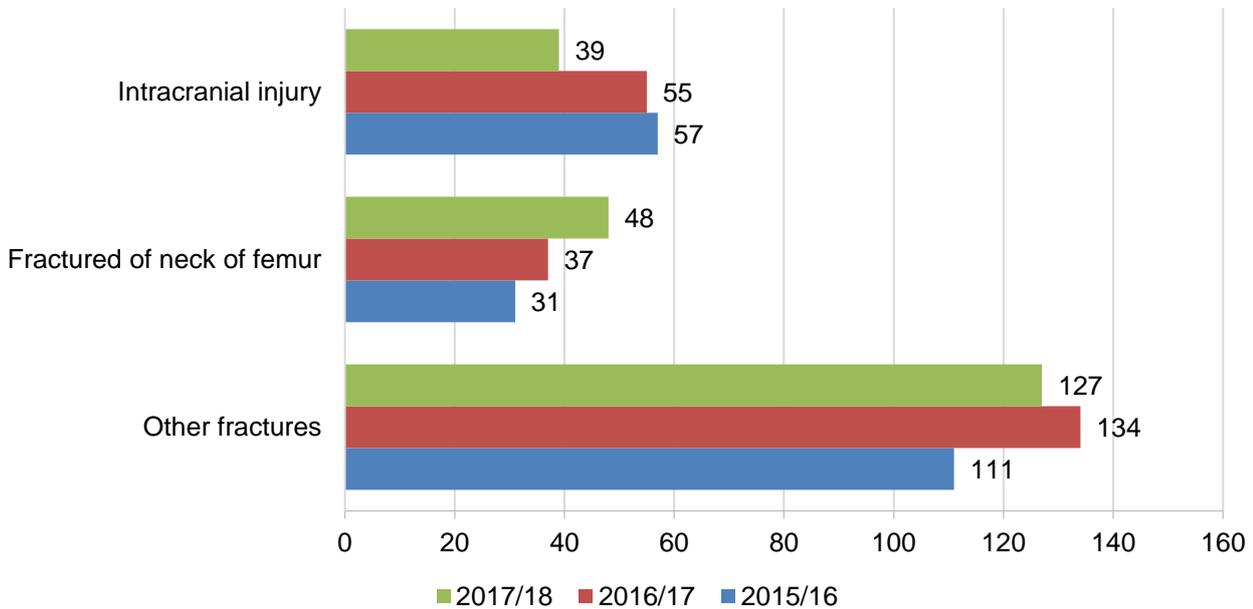
Figure 61: Frequency of Patients Developing Pressure Injury by HAC Diagnosis and Year for 2015/16 to 2017/18



Falls resulting in fracture or other intracranial injury

Most patients who experienced a fall resulting in fracture or other intracranial injury in hospital were diagnosed with a fracture other than an intracranial injury or fractured neck of femur (see Figure 62). The number of falls resulting in a fracture or other intracranial injury has remained relatively stable from 2015/16 to 2017/18 at 4 patients per 10,000 separations.

Figure 62: Frequency of Patients Experiencing Falls Resulting in Fracture or Other Intracranial Injury by HAC Diagnosis and Year for 2015/16 to 2017/18



Healthcare-associated infection

Figure 63 shows the diagnoses for the HAI category of the HACs. The overall rate of HAIs identified by this HAC category has declined slightly from 108 patients per 10,000 separations (n=4,639) in 2015/16 to 100 patients per 10,000 separations (n=4,656) in 2017/18.

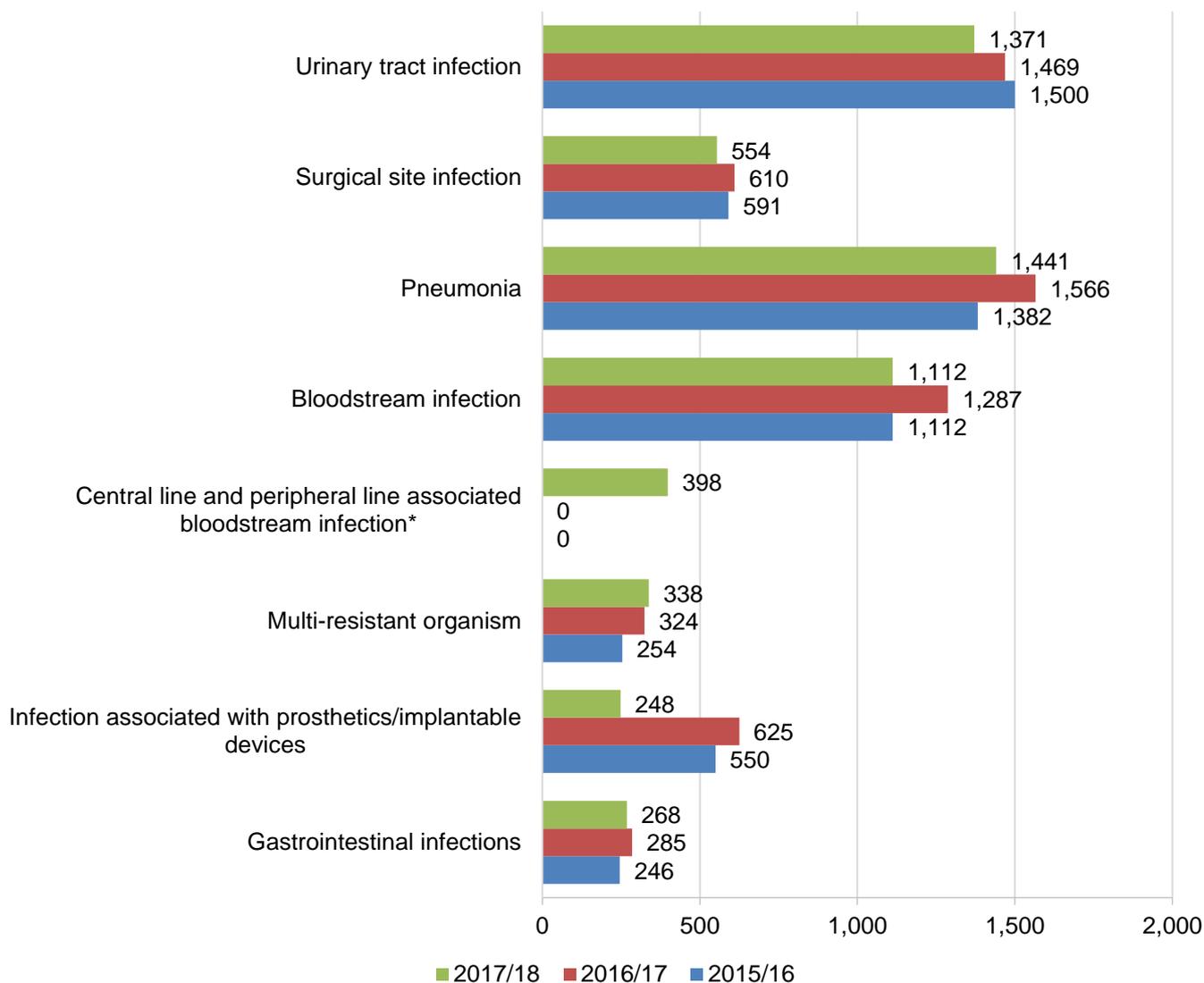
Pneumonia, urinary tract infections, and bloodstream infections have been the three most commonly identified HAC diagnoses during the period July 2015 to June 2018, with pneumonia the most frequent in 2016/17 (n=1,566) and 2017/18 (n=1,441).

In 2015/16 urinary tract infections were more frequently identified as HACs (n=1,500) than other diagnoses in the HAI category. The rate of urinary tract infections identified has decreased from 35 patients per 10,000 separations in 2015/16 to 29 patients per 10,000 separations (n=1,371) in 2017/18.

The frequency of surgical site infections identified in this HAC category has also declined, from 591 patients in 2015/16 to 554 patients in 2017/18.

The rate of complications identified as relating to multi-resistant organisms was six patients per 10,000 separations (n=254) in 2015/16 and seven patients per 10,000 separations (n=338) in 2017/18.

Figure 63: Frequency of Patients Identified with Healthcare-Associated Infection HACs by HAC Diagnosis and Year for 2015/16 to 2017/18



*Data relating to the diagnosis “Central line and peripheral line associated bloodstream infection” cannot be separated from, and is reported under, “Infection associated with prosthetics/implantable devices” for 2015/16 and 2016/17. The ability to report these diagnoses separately was created by refinement of the ICD-10-AM codes that was implemented in the WA health system from 1 July 2017.

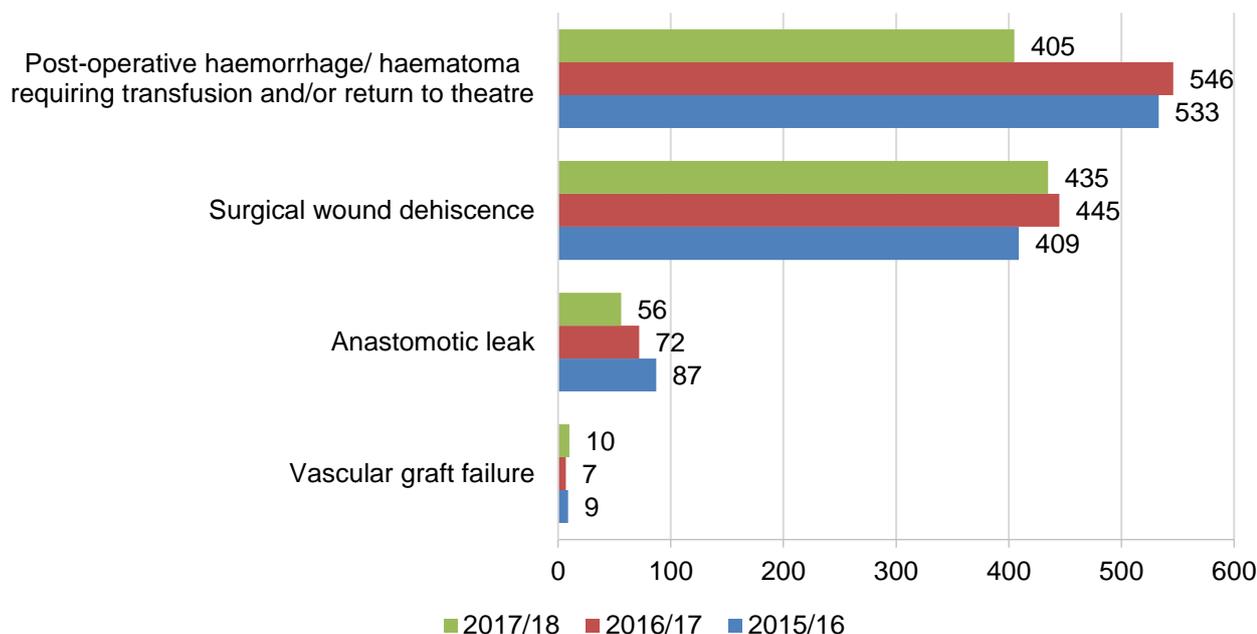
Surgical complications requiring unplanned return to theatre

Figure 64 shows the HAC diagnoses for patients experiencing surgical complications that required them to be returned to theatre. Post-operative haemorrhage/haematoma requiring transfusion and/or return to theatre and surgical wound dehiscence (where a surgical wound ruptures along the incision line) accounted for most diagnoses in this HAC category over the period July 2015 to June 2018.

The frequency of surgical wound dehiscence has remained relatively stable over this period with 435 patients identified with this complication in 2017/18. Encouragingly, the frequency of post-operative haemorrhage/haematoma requiring transfusion and/or return to theatre has decreased over this time, from 533 patients in 2015/16 to 405 patients in 2017/18.

The frequency of anastomotic leak has also decreased, from 87 patients in 2015/16 to 56 patients in 2017/18. The frequency of vascular graft failure has remained low over this period.

Figure 64: Frequency of Patients Experiencing Surgical Complications Requiring Unplanned Return to Theatre by HAC Diagnosis and Year for 2015/16 to 2017/18

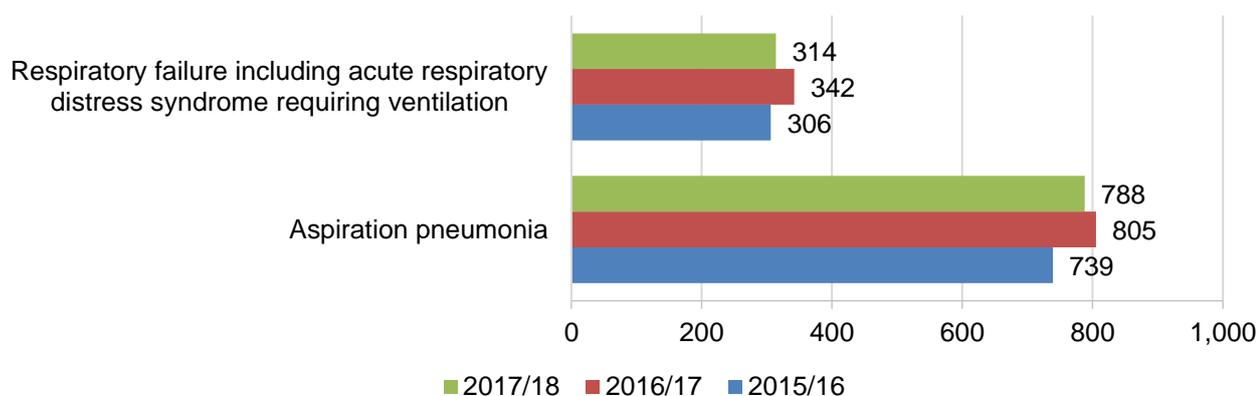


Note: Data relating to the fifth diagnosis in this HAC category, "Other surgical complications requiring unplanned return to theatre", is not currently available as the as the data item "Unplanned return to theatre" is of insufficient quality for use.

Respiratory complications

The majority of patients experiencing respiratory complications while in hospital between July 2015 and June 2018 were diagnosed with aspiration pneumonia (see Figure 65) with this complication being identified at a rate of 17 patients per 10,000 separations (n=788) in 2017/18. The rate of respiratory failure including acute respiratory distress syndrome requiring ventilation has also remained relatively stable over this period (seven patients per 10,000 separations; n=314 in 2017/18). It is worthwhile to note that 6.4% (n=66) of patients that met the criteria for this HAC category in 2017/18 developed both respiratory failure and aspiration pneumonia while in hospital.

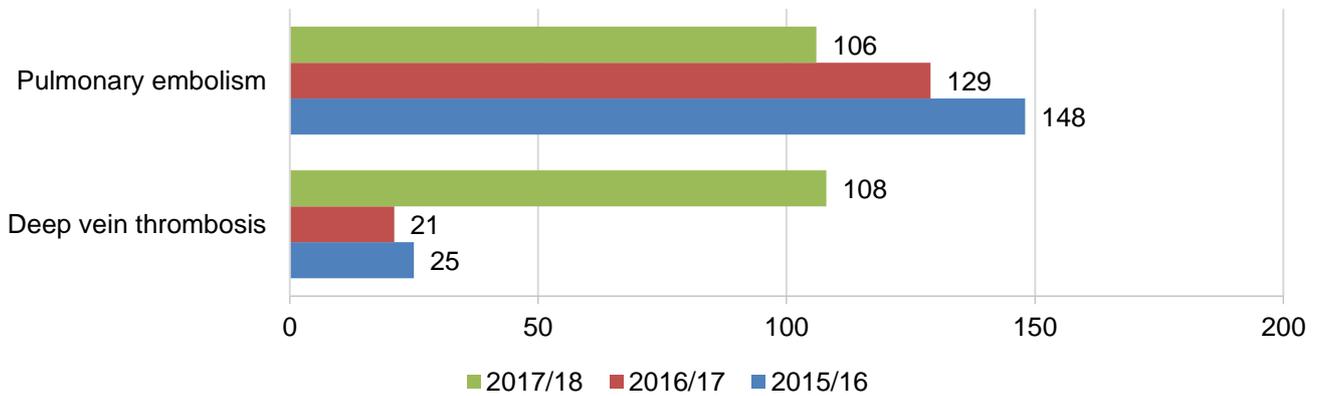
Figure 65: Frequency of Patients Experiencing Respiratory Complications by HAC Diagnosis and Year for 2015/16 to 2017/18



Venous thromboembolism

Patients developing pulmonary embolism while in hospital were identified at the rate of three patients per 10,000 separations (n=148) in 2015/16 and two patients per 10,000 separations (n=106) in 2017/18 (see Figure 66). The rate of deep vein thrombosis has increased markedly, from less than one patient per 10,000 separations (n=25) in 2015/16 to more than two patients per 10,000 separations (n=108) in 2017/18.

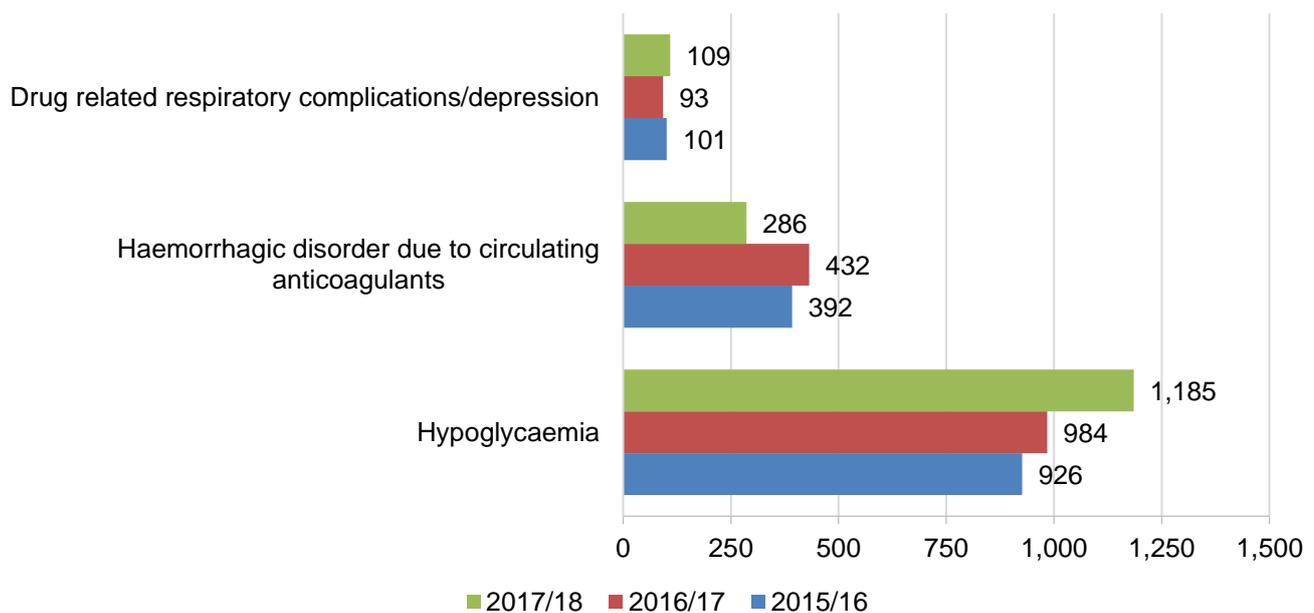
Figure 66: Frequency of Patients Experiencing Venous Thromboembolism by HAC Diagnosis and Year for 2015/16 to 2017/18



Medication complications

Hypoglycaemia (low blood sugar) was the most commonly identified medication complication in hospital, at a rate of 22 patients per 10,000 separations (n=926) in 2015/16 and 25 patients per 10,000 separations (n=1,185) in 2017/18 (see Figure 67). Over this time the diagnosis of bleeding disorders due to anticoagulants has declined, from nine patients per 10,000 separations (n=392) in 2015/16 to six patients per 10,000 separations (n=286) in 2017/18. The frequency of medication related respiratory complications has remained stable over this period at two patients per 10,000 separations (n=109) in 2017/18.

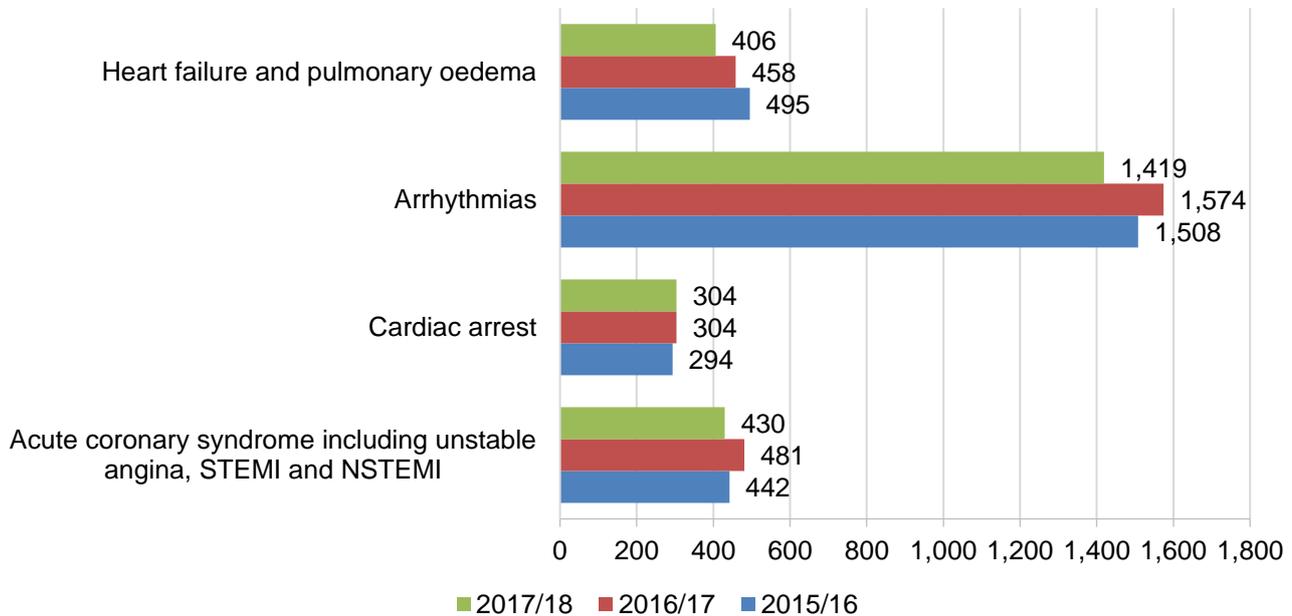
Figure 67: Frequency of Patients Experiencing Medication Complications by HAC Diagnosis and Year for 2015/16 to 2017/18



Cardiac complications

Arrhythmia (disturbance of the heart’s rhythm) was the most commonly identified cardiac complication in hospital, and has declined from 35 patients per 10,000 separations (n=1,508) in 2015/16 to 30 patients per 10,000 separations (n=1,419) in 2017/18 (see Figure 68). Rates for the other complications in this HAC category have also decreased slightly over this period.

Figure 68: Frequency of Patients Experiencing Cardiac Complications by HAC Diagnosis and Year for 2015/16 to 2017/18



Key Messages and Information: Hospital-Acquired Complications

While the national HACs list does not include all possible complications that can occur within hospitals, it is important to recognise that the clinicians and other experts who developed the list selected these HACs based on preventability, patient impact, health service impact and clinical priority. Moreover, the HACs list will be subject to ongoing review and refinement. The HACs represent an additional avenue by which health service organisations, managers and clinicians can monitor the quality and safety of the health care they provide.

The ACSQHC has released a comprehensive information kit⁵, including both detailed and clinician fact sheets, to support health service organisations implement the NSQHS Standards (second edition). The detailed fact sheets are designed for use by health service managers (including clinical, quality and service managers) and outline key areas including tips for the prevention and management of the HACs, and how to minimise specific patient harm.

The HACs data presented in this report shows that, overall, the frequency of HACs, and the individual diagnoses within each HAC category, has remained relatively stable over the period from July 2015 to June 2018. The stand-out observation is a greater than four-fold increase in the frequency of deep vein thrombosis from 2015/16 to 2017/18, while at the same time there was a one-third decrease in the frequency of bleeding disorders associated with circulating anticoagulants, and a 25% decrease in the frequency of post-operative haemorrhage/haematoma requiring transfusion and/or return to theatre. In October 2018, the ACSQHC released its Venous Thromboembolism Prevention Clinical Care Standard which aims to support the delivery of appropriate evidence-based care in this area, and can be accessed at: <https://www.safetyandquality.gov.au/publications/venous-thromboembolism-prevention-clinical-care-standard/>.



Coronial Review

The Coronial Liaison Unit was established in 2005 to improve communication between the WA health system and the Office of the State Coroner. The CLU reviews health related findings from coronial inquests and allocates these to appropriate stakeholders for consideration and implementation of recommendations. This information drives quality improvement in health care which supports the provision of a high standard of health care. Health Service Providers and other stakeholders provide advice and comments on coronial findings and an account of actions taken to improve patient safety. This feedback is communicated to the State Coroner in a biannual report. The CLU continues to work effectively with the Office of the State Coroner to share lessons learned from mortality review to improve future patient care within the WA health system.

Table 24 provides a summary of WA health system activity and response to coronial inquests and recommendations for the last three years. Recommendations are not considered completed until they have been implemented in *all* applicable services (ongoing recommendations may be partially implemented). Closed recommendations are those that have been considered by the CLU and relevant stakeholders and are not endorsed with reasonable justification, have not been implemented as existing systems/processes have been deemed to adequately manage the risk, or the changes are extensive (i.e. part of a large-scale project spanning a number of years) and are a long-term commitment of the WA health system.

Table 24: Overview of Coronial Liaison Unit Activity for 2015/16 to 2017/18

| | 2015/16 | 2016/17 | 2017/18 |
|--|---------|---------|---------|
| Total number of health related coronial inquest findings received by CLU | 28 | 22 | 21 |
| Total number of health-related recommendations (including mental health) ²⁹ | 21 | 8 | 7 |
| Number of general health related recommendations | 16 | 5 | 7 |
| Number of general health related recommendations completed/closed ³⁰ | 10 | 2 | 5 |
| Number of mental health related recommendations | 5 | 3 | - |
| Number of mental health related recommendations completed/closed | 4 | 2 | - |

The Coronial Review Committee was established in January 2014. The Committee operates closely with the CLU and provides a mechanism for recommendations and/or coronial inquest findings to be considered in a collaborative manner with key stakeholders across the WA health system. The Committee exists to improve the governance and decision-making in relation to the state-wide implementation and response to coronial recommendations. Committee members review and endorse the sharing of the WA health system’s progress against coronial recommendations in the bi-annual report to the Coroner.

²⁹ Health related recommendations are those that are within the WA health system’s jurisdiction to action (directed to the Department of Health, a Health Service Provider, a hospital, or a Contracted Health Entity; and/or are applicable to the services provided by the WA health system).

³⁰ Status as at most recent report to the State Coroner (August 2018). Completed actions are recorded in the year that the findings were released, rather than year of completion.

The following synopses are provided for coronial inquests where the coroner's recommendations and/or findings have implications for the WA health system and where findings have been released from 1 July 2017 to 30 June 2018 (the month and year that each of the findings were released are noted in brackets). All HSPs are encouraged to use these summaries to raise awareness of important messages to facilitate continuous quality improvement. Full inquest findings can be accessed at the Office of the State Coroner's website: <http://www.coronerscourt.wa.gov.au/default.aspx>.

Mr P (July 2017)

Mr P was a 49-year-old man, a seaman on a vessel off Western Australia when he died of bronchopneumonia. In the days leading up to his death, Mr P became increasingly unwell, with nausea and vomiting and complaining of shoulder and abdominal pain. Mr P and his crew mates requested the Captain organise medical retrieval. Rather than responding to these requests directly, the Captain contacted the ship's agent requesting the ship's agent meet the ship when it berthed, but did not mention in this correspondence how unwell Mr P was. A helicopter was sent to the ship with a security guard who had first aid training to assist in transporting Mr P to shore. Shortly before the helicopter arrived, crew members noted that Mr P was not breathing and CPR was commenced, but ceased after a few minutes as crew members believed that Mr P had died. The helicopter that was sent was not equipped for patient transport, however did transfer Mr P to the hospital where medical staff found Mr P to be deceased on arrival.

It was identified during inquest that Mr P's death was probably preventable, had medical assistance been sought earlier. The coroner made one recommendation, which was for the Government of Western Australia to undertake a strategic review of the aeromedical retrieval services in Western Australia.

Ms T (August 2017)

Ms T was a 56-year-old woman who died of bronchial asthma and emphysema while on overnight leave from the hospital where she was an involuntary patient under the *Mental Health Act 1996*. Ms T had a history of paranoid schizophrenia, emphysema, congestive heart failure and was a heavy smoker.

While admitted to hospital for an emphysema exacerbation, Ms T's mental health deteriorated and she was transferred to the mental health unit. During her stay on the mental health unit Ms T continued to require medical management of her emphysema. After a few weeks Ms T's health had improved and she was given overnight leave to go home, where she lived alone. When Ms T did not return to the hospital the following day a welfare check was arranged, during which Ms T's consultant and two other staff members found Ms T to be deceased.

The coroner was satisfied that Ms T's supervision, treatment and care were appropriate. No recommendations were made.

Baby CJ (August 2017)

Baby CJ died shortly after he was born from hypoxia. Baby CJ was his mother's fifth child, with his mother's first delivery being a caesarean section and subsequent deliveries all being vaginal births after caesarean section. Labour with CJ progressed slowly, requiring syntocinon augmentation and antibiotics for prolonged rupture of membranes. After a few hours of labour Baby CJ's mother developed worsening abdominal pain and the cardiotocography was non-reassuring. The obstetrician on duty, aware of the possibility of uterine rupture, recommended

an emergency caesarean section; however, Baby CJ's parents declined. Baby CJ was later delivered by forceps with no signs of life initially. Extensive resuscitation attempts were unsuccessful.

Expert opinion during inquest determined the cause of Baby CJ's death to be hypoxia due to intrauterine pneumonia and haemorrhage. The coroner noted that Baby CJ's case identified the importance of good communication between expectant parents and medical staff prior to, and during labour. No recommendations were made.

Ms J (August 2017)

Ms J was a 54-year-old woman who died from respiratory depression as a result of opioid toxicity. Ms J was being treated in hospital for a recurrent infection that required surgical excision. Given Ms J's intolerance of many pain medications and preference for transdermal fentanyl patches, this was prescribed post-operatively. The following day Ms J was noted to be doing well post-operatively however during the night she was found to be unresponsive. Resuscitation attempts, including the administration of naloxone, were unsuccessful.

The coroner accepted expert opinion, provided during inquest that there are existing limitations to prescribing fentanyl patches in the community (with the exception of palliative care patients). The coroner made a recommendation that the prescribing of fentanyl patches should be limited to appropriate specialists.

CNR (August 2017)

CNR was a 16-year-old boy who died as a result of heart failure. At the age of nine, CNR was diagnosed with rheumatic fever and four years later he developed valvular heart disease and heart failure. At 10 years of age CNR underwent heart surgery; however due to poor blood supply to the heart he suffered significant heart damage. Over the following years, CNR's health worsened and he was eventually admitted to hospital in acute kidney failure. CNR remained in hospital as his health continued to deteriorate, until he died in his sleep.

The coroner found that the care provided to CNR was reasonable and appropriate. No recommendations were made; however, the coroner did express concerns over the existence of rheumatic fever in Western Australia.

Mr D (September 2017)

Mr D was a 39-year-old man who died of multiple injuries as a result of a traffic accident. Mr D had developed a psychotic illness when he was in late twenties and was under a Community Treatment Order under the *Mental Health Act 1996* at the time of his death. In the months leading up to his death Mr D had requested his psychiatrist complete paperwork to help him gain a commercial driver's license. His psychiatrist declined, as the psychiatrist felt the request to be premature. When Mr D saw his GP a few weeks later, the GP completed the form, not realising that assessment for commercial licences for persons with chronic psychiatric conditions required completion by a psychiatrist. A few months later, after driving a friend to the airport, Mr D's car swerved to the wrong side of the highway and collided with an oncoming truck. It was established that the brakes had not been applied, Mr D was not wearing a seat belt and there was no mechanical fault of the car.

The coroner found that Mr D's death occurred by way of suicide, likely to have been an impulsive act without much preplanning, and could not have been easily predicted or prevented. No recommendations were made.

Mr Y (September 2017)

Mr Y was a 32-year-old man who died as a result of multiple injuries sustained in a traffic accident. Mr Y had a long-standing history of mental illness, with varying diagnoses including schizoaffective disorder. At the time of Mr Y's death he was under a Community Treatment Order under the *Mental Health Act 1996*.

Mr Y was found in his car, having crashed in a gully near where a tree branch had fallen on the road in bad weather. It was noted during inquest that Mr Y had been speeding and failed to negotiate a bend in the road in poor weather and that the area was prone to single vehicle collisions, having insufficient guide posts and curve warning.

The coroner was satisfied with the medical care that had been provided to Mr Y and made no recommendations.

Ms V (September 2017)

Ms V was a 28-year-old woman who took her own life after calling '000' saying she'd found a body at her home. Ms V had a history of depression, anxiety and borderline personality disorder, which was being managed by a mental health service in the community.

When police attended Ms V's home, CPR was not commenced as she was believed to be deceased. Paramedics arrived shortly after this and commenced resuscitation, with return of spontaneous circulation within 15 minutes. Ms V later died in hospital.

The coroner did not make any recommendations; however, did question whether police vehicles should carry automatic external defibrillators.



Mr O (September 2017)

Mr O was a 41-year-old man who died from sepsis and multi-organ failure. Mr O was diagnosed with Crohn's disease and was admitted to hospital for treatment, which included initiation of the medication mercaptopurine. Mr O's health appeared to be improving while in hospital and he was discharged home. Prior to his discharge, Mr O had blood taken to test for the metabolic enzyme thiopurine methyltransferase (TPMT). People who lack the TPMT enzyme and are on mercaptopurine therapy are at increased risk of the medication causing toxic effects on their liver and pancreas and can develop aplastic anaemia. Mr O was unable to metabolise mercaptopurine as he lacked the TPMT enzyme; however, this was not known by the medical staff who were managing his care while in hospital. Three weeks after Mr O's discharge home, he returned to hospital with profound bone marrow suppression and sepsis and died shortly thereafter.

The coroner noted that there were lacking policies and safe processes around the prescription of mercaptopurine, follow-up of test results and follow-up care. The coroner made two recommendations relating to the implementation of systems to track test results and highlight urgent and/or abnormal test results, including for patients who have been discharged from hospital.

JDC (November 2017)

JDC was a 17-year-old woman who died as a result of a fungal brain infection. Driving home from a party where she had been drinking alcohol, the car JDC was driving was seen to swerve and roll several times. JDC was transferred by ambulance to a hospital where she was found to have multiple lacerations and head wounds, including injury to the left parietal area of her scalp. JDC underwent surgery the following day and remained in hospital for ongoing treatment. Post-operatively JDC developed a serious infection which was complicated by diabetes that, until this time, had been undiagnosed. JDC became increasingly unwell, requiring admission to the ICU. Treatment with antifungals and insulin were unsuccessful.

The coroner was satisfied that the care provided to JDC was adequate and made no recommendations.

Ms L (December 2017)

Ms L was a 69-year-old woman who had been admitted to hospital for an elective lumbar spine laminectomy. The procedure went well, however two days post-operatively Ms L complained of feeling uncomfortable and it was noted that her abdomen was distended. It was presumed that Ms L was suffering from constipation, a common post-operative complication. Ms L was treated for constipation however she continued to complain of abdominal pain, nausea and vomiting and it was noted that her abdomen was distended and firm to touch. An X-ray was ordered; which occurred the following morning. The X-ray was suggestive of a perforation of the stomach or bowel but this was not reviewed by, or communicated directly to, Ms L's treating team. Later that same day a rehabilitation consultant reviewed Ms L and, noting the X-ray findings, arranged for her to be transferred to a tertiary site for emergency surgery.

Ms L underwent an emergency laparotomy and a right hemicolectomy was performed. Post-operatively Ms L was transferred to the ICU, where her condition continued to deteriorate. She died later that night.

It was determined that Ms L died as result of intra-abdominal sepsis and shock with multi-organ failure. The coroner commented that the delay in diagnosis of perforation did not improve Ms L's prospects for a successful outcome, and that earlier intervention would have improved her chance of survival. The coroner made two recommendations relating to the communication of

urgent radiological findings and timely medical review of patients who require intensive intervention.

Mr S (January 2018)

Mr S was a 24-year-old man who had been diagnosed with anxiety and presented to hospital several times with thoughts of self-harm. During his third presentation to hospital, Mr S injured himself although he was unable to explain why he had done so. Mr S was made an involuntary patient with a provisional diagnosis of a psychotic episode. The following day Mr S was reviewed by a psychiatrist and neurologist and was transferred to a secure mental health unit. On Mr S's admission to the unit he was assessed to be at high risk for suicide. The following day Mr S appeared to have improved, denying any suicidal thoughts and showing no signs of depression or psychosis. During a security check the following morning, Mr S was found to have hung himself. Resuscitation attempts were unsuccessful.

The coroner considered the decision to hold Mr S as an involuntary patient and the frequency of observations that were provided. The coroner was satisfied that the medical care was of a reasonable standard and that Mr S's death was unexpected and unpredictable. No recommendations were made.

KPLW (January 2018)

KPLW was a seven-year-old child who was born a healthy baby. At six weeks of age KPLW was admitted to hospital where tests revealed multiple injuries to her body and an acquired brain injury. KPLW was diagnosed with cerebral palsy, profound developmental delay, epilepsy, sleep apnoea and asthma. Due to KPLW's physical and cognitive disabilities she required around the clock care. KPLW's care was transferred to foster carers who were experienced in caring for children with special needs.

In the weeks leading up to her death, KPLW developed a chest infection for which she was initially treated with antibiotics. When she did not improve, she was admitted to hospital for treatment, where she improved and was discharged home on oral antibiotics. During KPLW's second night at home post discharge from hospital, her carers noted her breathing to become laboured and immediately brought her to hospital. Shortly after arriving at the hospital KPLW stopped breathing. Resuscitation was delivered without success.

The inquest determined that KPLW died from respiratory failure and acute pancreatitis. The coroner was satisfied that KPLW had been provided a very high level of treatment and care. No recommendations were made.

Mr K (February 2018)

Mr K was a 49-year-old man with significant intellectual impairment and a history of psychotic symptoms, with various diagnoses. In his late thirties, Mr K had a lengthy hospital admission, during which he took medications given to him and self-administered atropine eye drops which he took orally as off-label use for his hypersalivation (a common side effect of anti-psychotic medications). Mr K was discharged to the community, with arrangements for a live-in carer. Shortly after his discharge Mr K's carer found him one morning to be deceased.

The coroner determined that Mr K's death was due to the accidental ingestion of a toxic quantity of atropine. The coroner did not make any recommendations; however, did make suggestions regarding dispensing containers for oral use of atropine eye drops and warnings of the potentially toxic effects of orally ingested atropine.

Mr C (March 2018)

Mr C was 63 years-of-age when he presented to an emergency department with complaints of chest pain. Medical investigation for Mr C's symptoms commenced including taking an ECG, which needed to be faxed to a doctor for interpretation and instruction as there were no doctors on site after hours. While undergoing investigations Mr C suffered cardiac arrest. Resuscitation was unsuccessful.

The coroner was satisfied that staff identified that Mr C was likely suffering a myocardial infarction and administered appropriate treatment. It was noted during inquest that there is now in place 24-hour emergency televideo services for hospitals without doctors on site. Expert opinion was that Mr C suffered a large myocardial infarction and that the chance of survival was poor, regardless of location. No recommendations were made.

Ms Q (March 2018)

Ms Q was a 60-year-old woman with a long history of paranoid schizophrenia for which she was receiving treatment through a community mental health service. Ms Q's mental health had rapidly deteriorated several times in the past, including threatening or attempting to set fire to her home. Ms Q's son, noting her mental health to be deteriorating, alerted the police and Ms Q's mental health team to this, however these alerts were unsuccessful in instigating a timely assessment. The following day Ms Q was found to be deceased. It was believed she died as the result of a fire in her home.

The coroner identified that actions had been taken to address systems and procedures to better equip agencies to escalate concerns regarding a person's deteriorating mental health status. The coroner was satisfied with the system improvements that had been implemented and made no recommendations.

HLS (April 2018)

HLS was a 15-year-old boy who had been diagnosed with severe Fetal Alcohol Spectrum Disorder (FASD) shortly after his birth. As a result of FASD, HLS was intellectually impaired and had behavioural issues which included solvent abuse. In an attempt to remove the risk of solvent abuse, HLS was moved to live with family members who resided in a remote location. A few months after he moved, HLS went missing. An extensive search was undertaken and HLS was found the following day.

The coroner determined that HLS died as a result of crocodile and shark attacks. Expert opinion was sought during inquest regarding FASD prevention, assessment and management. As a result, the coroner made one recommendation regarding screening and support for pregnant women who use alcohol and that children identified to be at risk for FASD undergo assessment.

Mr R (May 2018)

Mr R was a 62-year-old man who was terminally ill due to severe cardiac and respiratory disease. Mr R was incarcerated when he was diagnosed with an abdominal aortic aneurysm, however surgery was contraindicated due to his health issues. Once it was identified that the aneurysm had extended and was at risk of rupture, Mr R was transferred to hospital. While in hospital, Mr R's aneurysm ruptured and he underwent emergency surgery. The surgery led to Mr R developing renal failure, requiring dialysis. Shortly after, at the request of Mr R, dialysis ceased and palliative care was delivered.

The coroner was satisfied that the treatment and care provided to Mr R was appropriate. No recommendations were made.

Ms R (June 2018)

Ms R was a 59-year-old woman who was found to have an aggressive cancer in her bile ducts. She underwent surgery which removed the cancer entirely however a small bleed occurred during surgery. The bleed required Ms R to undergo a second surgery, however this led to a bile leak which resulted in an intra-abdominal infection. Ms R was treated for the infection, however a few weeks after her second operation her health deteriorated. The coroner determined that Ms R died from intra-abdominal sepsis, multi-organ failure and bowel perforation following surgery for a cholangiocarcinoma.

As this inquest raised the question of ideal timeframes for such liver surgeries, the coroner did encourage the relevant professional organisations to consider providing guidance on this issue and reflecting this guidance in surgery urgency categorisation policies. No recommendations were made.

LCTM (June 2018)

LCTM was born a healthy baby but six weeks premature. Due to LCTM's prematurity he needed to remain in hospital for several weeks after his birth. LCTM's parents were young and his father was under the care of the Department of Child Protection and Family Support as he was noted to have a history of violence and substance abuse. LCTM was to be discharged home to live with his mother and her family as it was assessed that this was a safe and supportive environment. Shortly before LCTM's planned discharge home, LCTM's mother left him alone in the hospital room with his father for a short time. When LCTM's mother returned to the room she found him not breathing and immediately sought help. LCTM died a few days later.

The coroner identified the cause of death to be complications of a head injury from blunt force trauma. No recommendations were made, however the coroner emphasised a need for pre-birth planning to identify an unborn baby who may be at risk.

Mr C (June 2018)

Mr C was a 39-year-old man who had a history of mental illness, with a diagnosis of schizoaffective disorder with anti-social personality traits. Mr C was known to harm himself and attempt suicide when acutely unwell. After an altercation with an acquaintance, Mr C was taken into police custody. His mother, concerned for Mr C's safety, contacted the police to request Mr C be taken to hospital for a mental health assessment. As Mr C did not demonstrate that he was at risk of harming himself, police took him home after he was charged. The following day, Mr C's mother was unable to contact him so she contacted his Case Manager to request a welfare check. The Case Manager found Mr C to be deceased at his home.

The coroner found that Mr C died by way of suicide. The coroner made one non-health related recommendation regarding the delivery of regular training to police officers on mental health issues.

Review of Death

The Review of Death Policy 2013³¹ recognises the role that mortality review plays in improving the safety and quality of health care by complementing improvements identified through the investigation of clinical incidents and patient complaints.

Under the ROD Policy, all hospital deaths must be reviewed and categorised in terms of preventability within four months of the date of death. Appendix Two provides a diagrammatical representation of the interaction of reviews of death with clinical incident management and the Western Australian Audit of Surgical Mortality processes.

Data provided by public health care providers and private licensed health care facilities showed that for deaths occurring during the period 1 January to 31 December 2017, 95.4% of hospital deaths were reviewed within four months of the date of death (see Table 25).

Public and private hospitals are also required to indicate when notifying a SAC 1 clinical incident if the notification was an outcome of a mortality review process. From July 2017 to June 2018, 3.9% (n=23) of confirmed SAC 1 clinical incidents were reported as being notified following a mortality review process. This is the fourth year that Datix CIMS data has been used to identify SAC 1 clinical incident notifications arising from a mortality review process, and care should be exercised if comparing this figure to previous years.

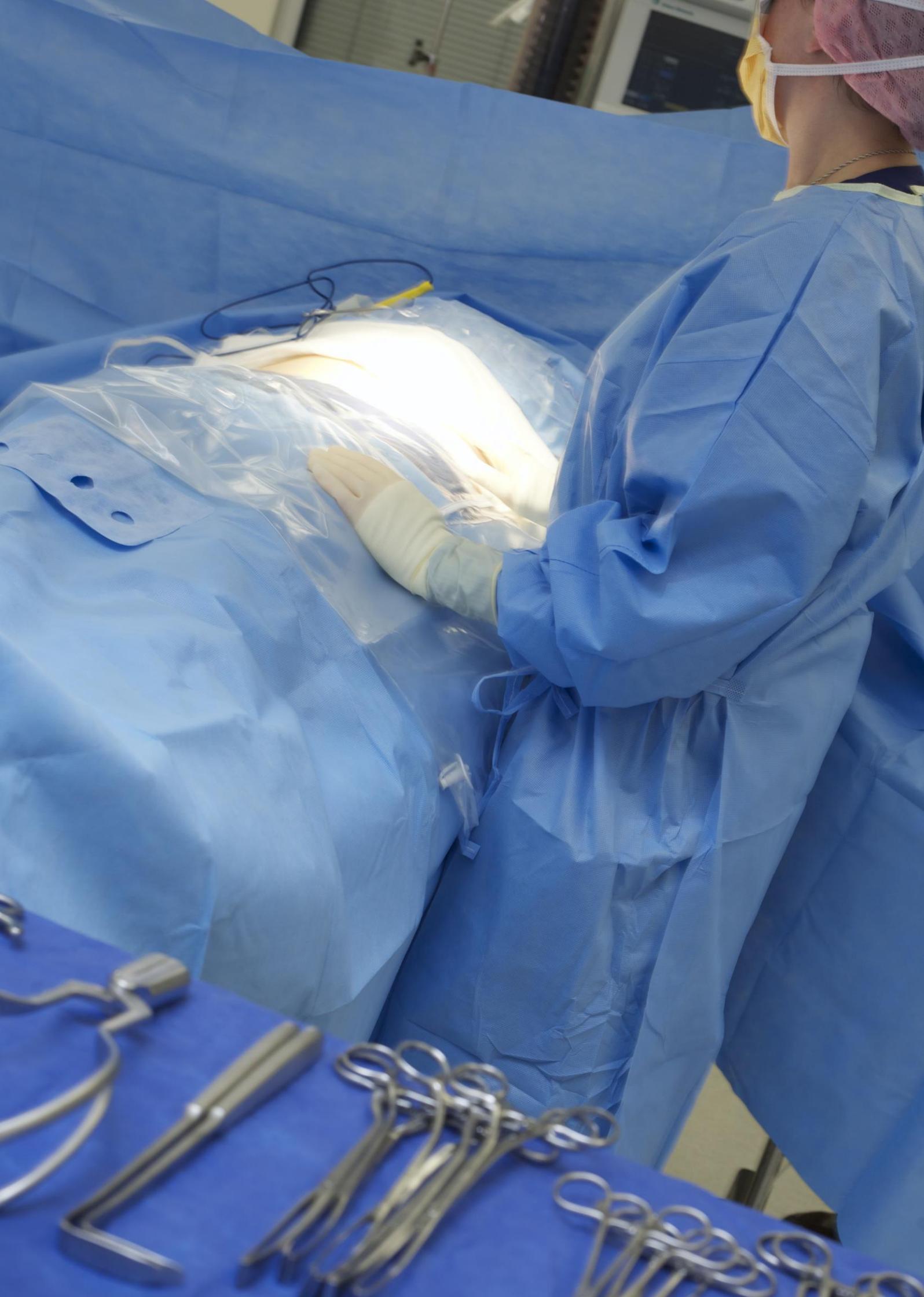
Table 25: Review of Death Indicator for 2017

| Indicator | Outcome |
|--|---------|
| Percentage of deaths with a completed review within four months of the date of death (reflecting deaths that occurred between 1/1/2017 and 31/12/2017) | 95.4% |

Note: Data comprises public and private hospitals. A completed review includes a death: a) where no further investigation is required; b) with a completed WAASM audit, c) notified as a SAC 1 clinical incident following identification of a potentially preventable death.

The ROD Policy was last revised in 2013 and has been undergoing review and revision during 2017/18. This process has included the review of local, national and international literature and approaches to mortality review to identify the key aspects of effective mortality review processes. Extensive consultation with ROD Policy stakeholders throughout the WA health system was conducted in May and June 2018, and it is projected that the revised ROD Policy will take effect from January 2019. One of the main changes is the requirement that hospitals' processes for reviews of death explore the opportunities that may exist for improvement in the delivery of health services, including end-of-life care, as well as the preventability of death.

³¹ The Review of Death Policy (2013) is available at: http://www.health.wa.gov.au/circularsnew/circular.cfm?Circ_ID=12990



Western Australian Audit of Surgical Mortality

The Western Australian Audit of Surgical Mortality³² is a review of surgical deaths using a peer review methodology. The WAASM is managed by the Royal Australasian College of Surgeons (RACS) and funded by the DOH. The WAASM has been operating since 2002, with data reported by calendar year.

Participation in the WAASM fulfils mortality review obligations mandated by the ROD Policy. All deaths that occur in WA hospitals (including private hospitals) where the patient was under the care of a surgeon are notified to the WAASM and reviewed.

The RACS' Continuing Professional Development (CPD) Guide³³ mandates surgeons' participation in the Australian and New Zealand Audit of Surgical Mortality (ANZASM) "if a surgeon is in operative based practice, has a surgical death and an audit of surgical mortality is available in the surgeon's hospital".³⁴ Non-participation jeopardises a surgeon's registration with the Medical Board of Australia.

Surgeons are asked to complete a form about a death, and are asked to identify when there has been an area for consideration,³⁵ an area of concern³⁶ or an adverse event. The case then undergoes first line assessment, whereby it is de-identified and sent to a peer surgeon at a different hospital for review. Second-line assessment is the process whereby cases are reviewed by a second peer surgeon along with the patient's medical notes. Cases are only referred for second-line assessment if an area of concern or adverse event has been identified, or where there is the potential for lessons to be learned (refer to Appendix Three: Western Australian Audit of Surgical Mortality Process for an overview of the audit process).

In 2017, 567 deaths met the WAASM criteria across public and private hospitals. Seventy-one cases were referred for second-line assessment (17.5% of the 406 cases with a returned first-line assessment).

For the WAASM, an adverse event is defined as "an unintended injury caused by medical management, rather than by the disease process, which is sufficiently serious to lead to prolonged hospitalisation, lead to temporary or permanent impairment or disability of the patient at the time of discharge or contribute to/or cause death". The WAASM has identified seven adverse events that caused death in 2016 (two of these were considered definitely preventable) and six adverse events that caused death in 2017³⁷ (two were considered definitely preventable; see Table 26).

³² Information regarding the WAASM is available at: <https://www.surgeons.org/for-health-professionals/audits-and-surgical-research/anzasm/waasm/>

³³ The RACS' CPD Guide is available at: <https://www.surgeons.org/media/25021780/racs-continuing-professional-development-cpd-guide-2017.pdf>

³⁴ <http://www.surgeons.org/for-health-professionals/audits-and-surgical-research/anzasm/>

³⁵ Area of consideration: The clinician believes an area could have been improved.

³⁶ Area of concern: The clinician believes an area of care should have been better.

³⁷ 2017 data includes that for which the audit process was complete at 29 March 2018.

Table 26: Frequency Adverse Events Causing Death that were Considered Definitely Preventable and Associated Deaths for 2007 to 2017

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|--|------|------|------|------|------|------|------|------|------|------|------|
| AEs considered definitely preventable ^{a,b} | 7 | 6 | 5 | 4 | 7 | 4 | 1 | 6 | 2 | 2 | 2 |
| Deaths associated with preventable AE ^a | 6 | 6 | 5 | 3 | 7 | 2 | 1 | 4 | 2 | 2 | 2 |
| Total surgical deaths ^c | 667 | 682 | 602 | 592 | 570 | 592 | 566 | 578 | 581 | 592 | 567 |
| Deaths as % of surgical deaths | <1% | <1% | <1% | <1% | 1.2% | <1% | <1% | <1% | <1% | <1% | <1% |

^a Includes cases complete as at 29 March 2018 (incomplete cases excluded).

^b Multiple adverse events that caused death and were considered definitely preventable may have been recorded for a single surgical death.

^c For years 2007-2008 inclusive surgical deaths are total deaths reported to WAASM; for years 2009-2017 inclusive surgical deaths are those reported as meeting the WAASM criteria in the WAASM Annual Reports.



In 2017, six adverse events causing death were identified including one each that related to the decision to operate, injury to the heart during open surgery, perforation of the duodenum during an endoscopic operation, pulmonary embolism, seniority of the surgeon and anaesthetic technique (see Table 27).

Table 27: Frequency of Adverse Events Causing Death for 2015 to 2017 (Including Events that were Considered Not Preventable)

| Adverse Event | 2015 | 2016 | 2017 |
|---|-------------|-------------|-------------|
| Accidental arterial rupture | - | 1 | - |
| Anastomotic leak after open surgery | - | 1 | - |
| Arterial or venous complication | 1 | - | - |
| Aspiration pneumonia | - | 1 | - |
| Aspiration pneumonia during anaesthesia | - | 1 | - |
| Decision to operate | 1 | - | 1 |
| Delay in recognising complications | - | 1 | - |
| Diagnosis missed by medical unit | 1 | - | - |
| Injury caused by fall in hospital | 1 | - | - |
| Injury to heart during open surgery | 1 | - | 1 |
| Injury to spleen during endoscopic operation | 1 | - | - |
| Open surgery – organ related technical | 1 | - | - |
| Perforation of duodenum during endoscopic operation | - | - | 1 |
| Post-operative bleeding after open surgery | 1 | - | - |
| Post-operative care unsatisfactory | 1 | - | - |
| Post-operative pancreatitis | - | 1 | - |
| Premature discharge from hospital | - | 1 | - |
| Pulmonary embolism | 1 | - | 1 |
| Surgeon too junior | - | - | 1 |
| Unsatisfactory medical management | 1 | - | - |
| Wrong anaesthetic technique | - | - | 1 |
| Total | 11 | 7 | 6 |

Note: 2017 data includes those cases that were complete at 29 March 2018. Multiple adverse events that caused death may have been recorded for a single surgical death.

A total of 165 adverse events were identified during the period 2007 to 2017. The most frequently reported adverse events by surgeon assessors over the audit period of 2007 to 2017 were complications of surgery (n=26), anastomotic leak (n=20), and delay to treatment (medical and surgical) (n=17; see Table 28).

Table 28: Most Frequently Reported Adverse Events Causing Death for 2007 to 2017 (Including Events that were Considered Not Preventable)

| Adverse Event | 2007 to 2017 |
|---|---------------------|
| Complication of surgery | 26 |
| Anastomotic leak | 20 |
| Delay to treatment (medical and surgical) | 17 |
| Medical management/assessment issues | 13 |
| Bleeding associated with operation | 13 |
| Pulmonary embolus | 12 |
| Decisions relating to surgical treatment | 11 |
| Injury caused by fall in hospital | 9 |
| Gastrointestinal perforation | 9 |
| Infection (including septicaemia) | 7 |
| Other adverse events | 28 |
| Total | 165 |

Note: Only adverse events with frequencies ≥ 5 have been included. Adverse events have been grouped by the PSSU based on event descriptions provided by the surgeon assessors for the WAASM.

The WA Audit of Surgical Mortality Annual Reports can be accessed online at:

<https://www.surgeons.org/for-health-professionals/audits-and-surgical-research/anzasm/waasm/>

The ANZASM provides central oversight for each of the jurisdictional surgical audits, including WAASM, and provides national overview of data. The PSSU encourages all health practitioners to review the case note review booklets for educational and professional development purposes. The ANZASM case note review booklets can be accessed online at:

<https://www.surgeons.org/for-health-professionals/audits-and-surgical-research/anzasm/>

Consumer Feedback Review

Consumer Feedback Case Study

An elderly man was in hospital receiving palliative care. When the man passed away, a nurse called his daughter to inform her of this. The woman asked if it was possible for a few family members and herself to come to hospital, to say their goodbyes. The nurse agreed and the family members arrived shortly thereafter. Upon arrival to their father's room the family found him propped up in bed, appearing dishevelled. The family expressed that their father appeared to still be suffering, rather than at peace. The family felt they were left unable to say their goodbyes in an appropriate manner.

This complainant's story emphasises the importance of considering the cultural, spiritual and psychosocial needs of a patient's family and/or carer in health care delivery. The organisation who received this feedback investigated this event and in response implemented regular education to staff on bereavement support and reviewed its guidelines on patients who die in hospital, to identify opportunities to improve the experience of the patient and family during this difficult time.

Overview of Consumer Feedback Management

Feedback from consumers about their health care experience provides an invaluable quality improvement mechanism. The thorough consideration of consumer feedback provides an organisation with insight into why certain areas are well meeting the needs of patients and their families, as well as helping identify areas which an organisation can enhance or do differently, to improve the patient experience. The above case study highlights how a consumer, in taking the time to provide feedback, can lead to improvements being implemented in the system.

Consumer feedback can be captured from a number of sources; that is, directly from the consumer or a representative of the consumer, for example a parent, spouse, or carer. However, all feedback is consumer initiated, meaning a consumer must actively approach a WA health system staff member, fill out a feedback form, or provide feedback electronically (e.g. via email). Patient Opinion is a not-for-profit organisation that maintains a website which allows consumers to anonymously post feedback about their health care experience. The website then alerts the relevant organisation when feedback has been posted, enabling organisations to post a response to the feedback online. Following the successful pilot of this feedback tool by the WA Country Health Service in 2015/16, this service has been made available across the WA health system. Feedback can be posted by WA health system consumers and/or feedback and organisational responses viewed at <https://www.patientopinion.org.au/services/wa>.

The Datix Consumer Feedback Module is the mechanism used by the WA health system to record consumer feedback. Feedback captured within Datix CFM relates to contacts, compliments and complaints. For complaints, CFM provides a record of the complaint's investigation findings, the strategies used to resolve the complaint as well as any quality improvement mechanisms that were implemented. To assist with specifying the subject of complaints received, Datix CFM provides a three-tiered classification system. Each tier of the classification system provides increased detail of the issues identified, providing further insight into the subject(s) of the complaint. As one complaint will often identify multiple issues, this data enables comprehensive learning from consumer feedback and assists in the identification and implementation of relevant improvements.

A robust complaints management process is one key component in the delivery of high quality health care. In November 2017, the ACSQHC released the second edition of the NSQHS Standards. These Standards expand upon the first edition's requirements for consumer feedback management and will be used to assess health care organisations from January 2019. As part of its increased consumer focus, these updated Standards now address improving care for Aboriginal and Torres Strait Islander (ATSI) persons, which was a gap in the first edition.

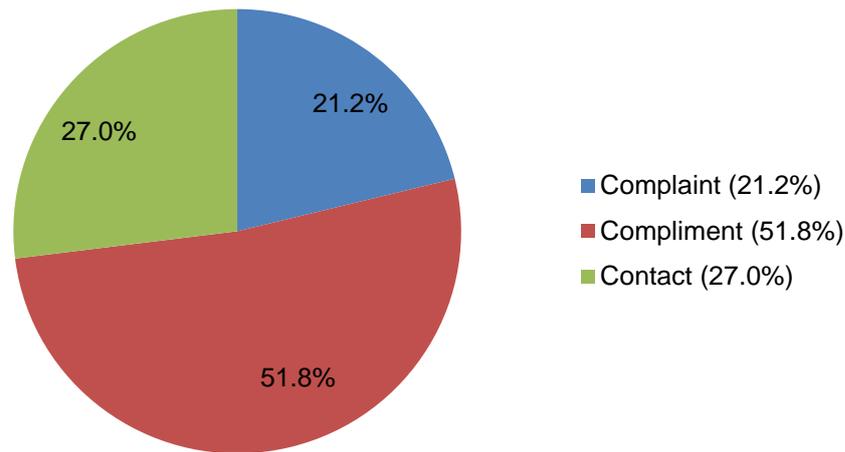
In addition to capturing consumer feedback via Datix CFM, the WA health system actively seeks feedback through the annual Patient Evaluation of Health Services survey. This survey is managed by the Health Survey Unit of the Department of Health and invites feedback from a random sample of consumers who meet set criteria, seeking to assess consumers' experience and satisfaction with their hospital stay. Survey respondents are asked about a range of aspects of their care, including communication, personal needs and their clinical management. As the PEHS survey does not require consumers to initiate the feedback cycle it is a mechanism to capture feedback from consumers which may not otherwise be known.

In 2017/18, 4,091 consumers who had been inpatients for a period of 0-34 nights participated in the survey. Results from the PEHS survey have been included in this report to enhance the Datix CFM consumer feedback findings. The PEHS results presented in this report are derived from survey results from several adult inpatients groups, with the exception of mental health patients. As such, PEHS information is not included in the Mental Health section of this report. More information regarding the PEHS is available from the Senior Research Officer at PEHS@health.wa.gov.au.

Consumer Feedback Overview

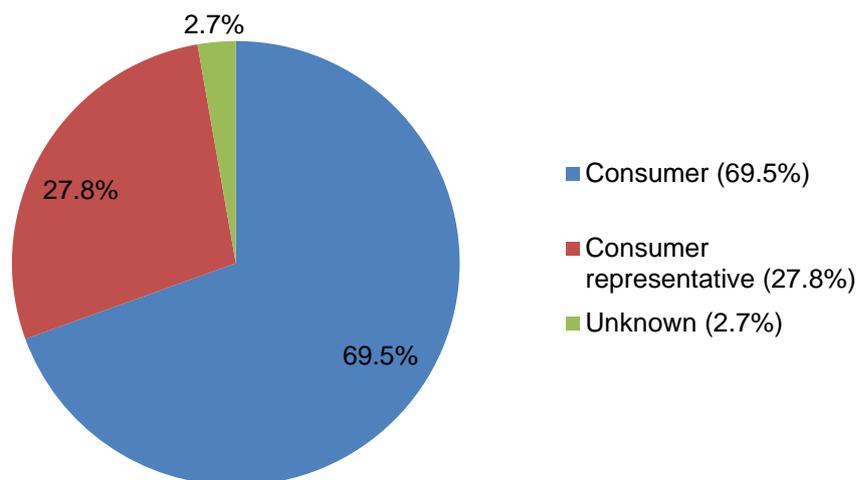
WA health system consumers and their representatives provided feedback on 18,889 occasions in 2017/18 (see Figure 69). Of these, 51.8% (n=9,792) were positive in nature, provided as compliments to the WA health system. In contrast, 21.2% (n=4,004) of feedback, provided as complaints, depicted a negative experience of consumer interaction with the WA health system. The remainder of feedback received by the WA health system (27.0%; n=5,093) was provided as contacts, which can include requests for information or assistance, or informal complaints regarding a minor aspect of service that were resolved at the point of first contact.

Figure 69: Type of Consumer Feedback Received by the WA Health System for 2017/18³⁸



In 2017/18, 69.5% (n=13,121) of feedback items were received from the consumer directly, with a further 27.8% (n=5,250) received from consumer representatives, as shown in Figure 70. This is consistent with previous years' results.

Figure 70: Person Reporting the Feedback Item to the WA Health System for 2017/18



The reporting of consumer feedback can be limited if patients are not aware of how they can give feedback. In 2017/18, 77.0% of respondents to the PEHS survey were aware that each hospital has a complaint service. As awareness is an important factor impacting the reporting of feedback, WA health system staff should be promoting the availability of a consumer feedback service to all consumers and encouraging consumers to provide feedback, whether negative or positive.

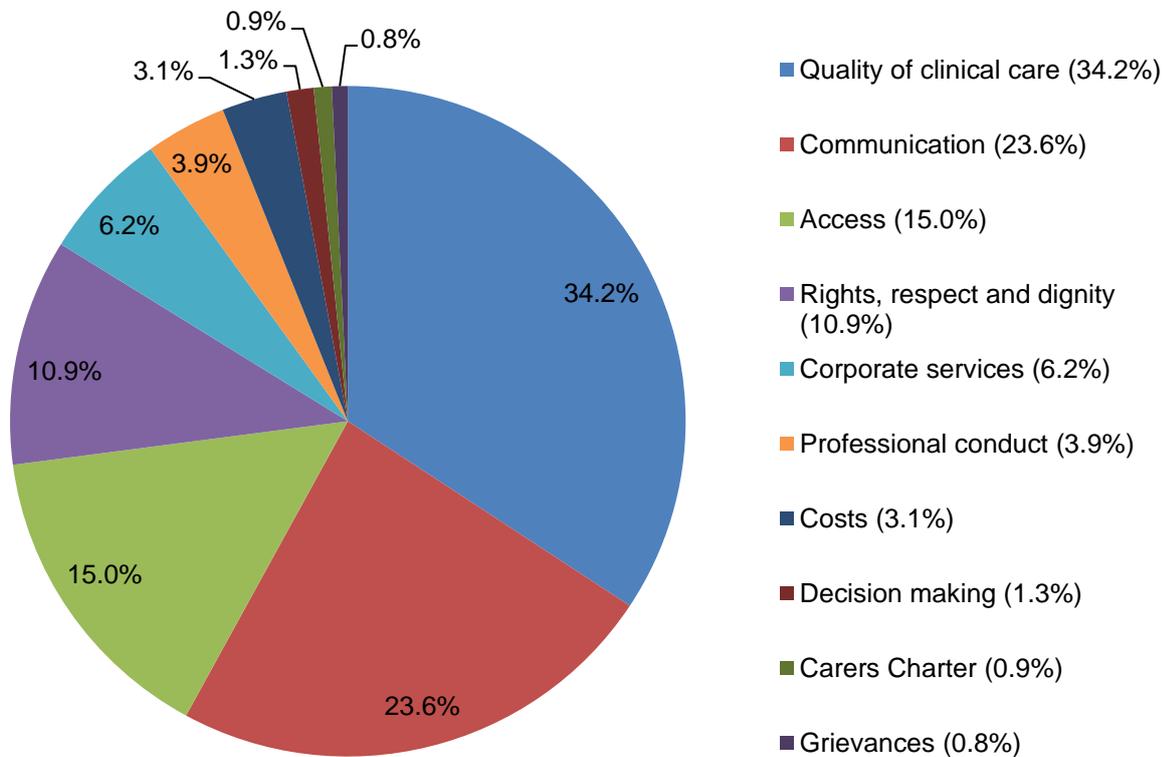
³⁸ It is mandatory for all complaints received by WA hospitals and health care providers to be entered in Datix CFM, and all complaints relating to public patients at public-private partnership hospitals (Joondalup Health Campus, Peel Health Campus and St John of God Midland) to be reported to PSSU. Recording of compliments and contacts in Datix CFM is optional. Public-private partnership hospitals do not provide PSSU with compliments and contacts data.

Complaints Overview

Each complaint received by HSPs must have at least one complaint issue identified, with the possibility for multiple issues to be identified in one complaint. Complaints are categorised in accordance with the two-level categorisation described in the *Health and Disability Services (Complaints) Regulations 2010*, with a further third level of categorisation made mandatory during the 2016/17 year for the WA health system. The complaint categorisation used in the WA health system is explained in the WA Health Complaints Management Policy.³⁹

In 2017/18 a total of 7,118 issues were identified in the 4,004 complaints received. Issues are recorded as reported by the person providing the feedback to the hospital or health service. The proportion of issues identified in each category in 2017/18 is shown in Figure 71. The top four complaint categories reported in 2017/18 are consistent with previous years'. Analysis of these complaint categories is presented in this report for both general health and mental health complaints.

Figure 71: Issues Identified by Person Reporting the Feedback in Complaints Received by the WA Health System for 2017/18



³⁹ The WA Health Complaints Management Policy is available at: https://ww2.health.wa.gov.au/Articles/A_E/Complaint-management

Complaints Demographics

A variety of demographic information is captured in Datix CFM, which may be used to identify specific consumer groups⁴⁰. Of the 4,004 complaints received in 2017/18, the person affected identified their country of birth to be other than Australia on 49 occasions (1.2% of total complaints) and the affected person was identified to speak a language other than English on four occasions. Of those with a country of birth other than Australia, the top four complaint categories were consistent with the overall complaints data, however the main complaint issue was communication (n=31; 28.2% of total country of birth other than Australia) rather than quality of clinical care (the main complaint category for all complaints).

In 2017/18 the affected person identified to be Aboriginal and/or Torres Strait Islander on 65 occasions (1.6% of total complaints). Communication was the most common issue cited (n=34; 25.4% of total ATSI complaint issues) which was primarily related to inappropriate verbal and non-verbal communication and a failure to listen to a consumer, carer or family member. The receipt of complaints relating to communication where the affected person is ATSI may provide the organisation with the opportunity to identify and implement strategies to improve its effective and safe communication with ATSI persons. The second most common complaint issue where the affected person was ATSI related to quality of clinical care (n=32; 23.9% of total ATSI complaint issues), followed by rights, respect and dignity (n=24; 17.9% of total ATSI complaint issues) and then access (n=22; 16.4% of total ATSI complaint issues).

One or more disabilities for the person affected was identified on 48 occasions (1.2% of total complaints) in 2017/18. The most common issue for this group was quality of clinical care (n=29; 39.2% of total disability complaint issues), which largely involved concerns about discharge or transfer arrangements followed by inadequate treatment and assessment. The second most common complaint for persons with a disability was access (n=17; 23.0% of total disability complaint issues). These complaints may provide the opportunity to review how well an organisation considers an individual's situation when planning for discharge or transfer to another site as well as any necessary improvements in access to services for persons with a disability.

Monitoring complaints from persons who identify as ATSI, are culturally and linguistically diverse and/or have a disability is one way an organisation can assess the degree to which the care it provides meets the needs of these specific consumer groups. Subsequently, this can assist organisations in the identification of relevant strategies to improve service delivery and the experience for these consumer groups.

Complaints Resolution

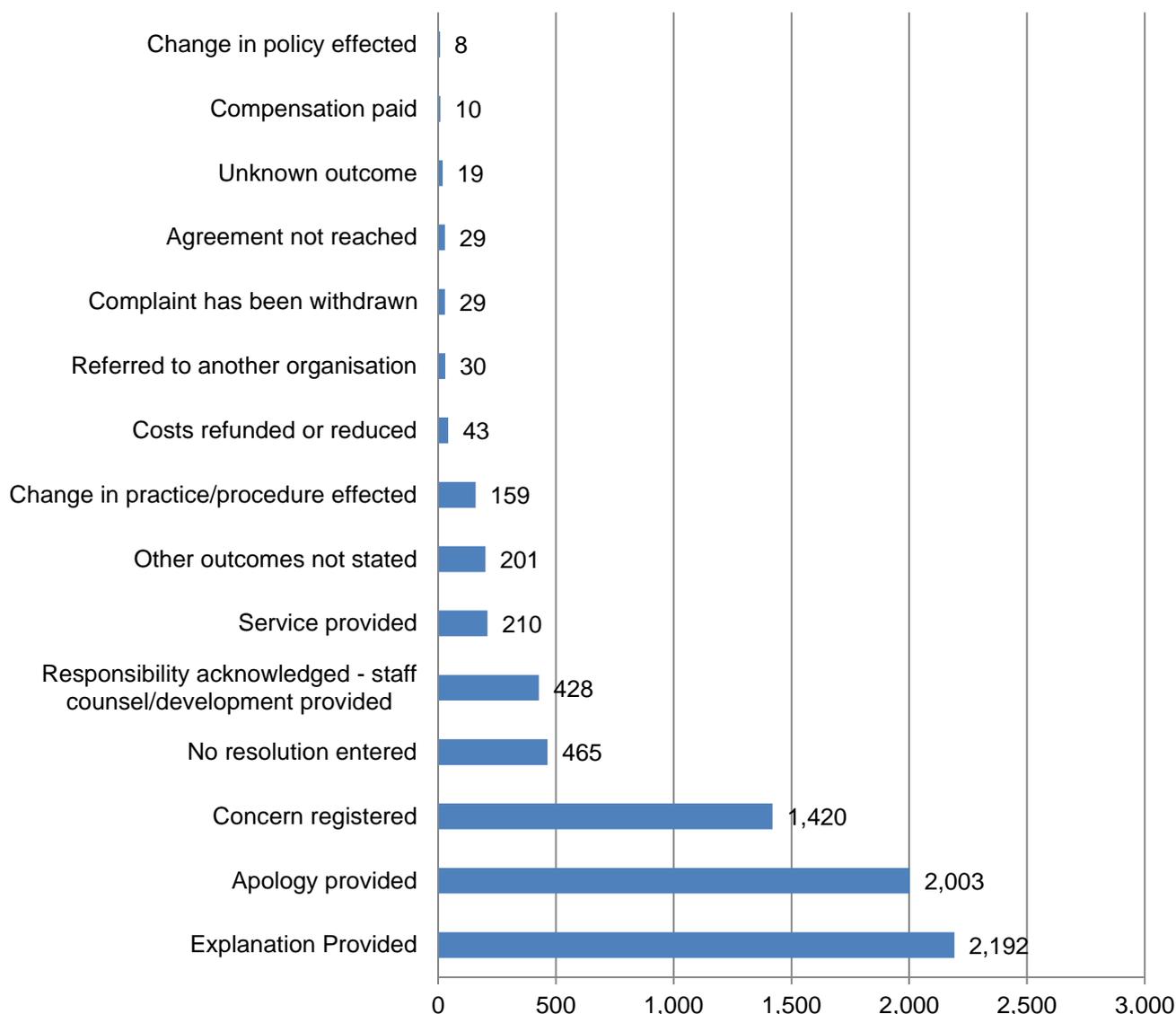
Part of the complaint management process is determining a resolution appropriate to the situation and then implementing this resolution strategy. Each closed complaint record will have at least one resolution achieved, with the possibility of multiple resolutions being achieved in one complaint record. The total resolutions achieved across the WA health system in 2017/18 are shown in Figure 72.

These results demonstrate that complaints are resolved by the WA health system primarily through acknowledging the complainant's concern(s), apologising for the event/experience and providing an explanation. When an explanation is provided in response to a complaint it is

⁴⁰ As demographic data is not mandatory to report, the available data will not reflect a complete demographic profile and numbers will be small. Thus, caution is required when interpreting demographic data.

important that the explanation is delivered in a sensitive manner and is individualised to the concerns outlined by the complainant, rather than merely outlining the facts. Doing so will provide reassurance to the complainant that the organisation has considered the facts of the situation in conjunction with the patient's experience.

Figure 72: **Complaints Resolution Achieved in 2017/18**⁴¹



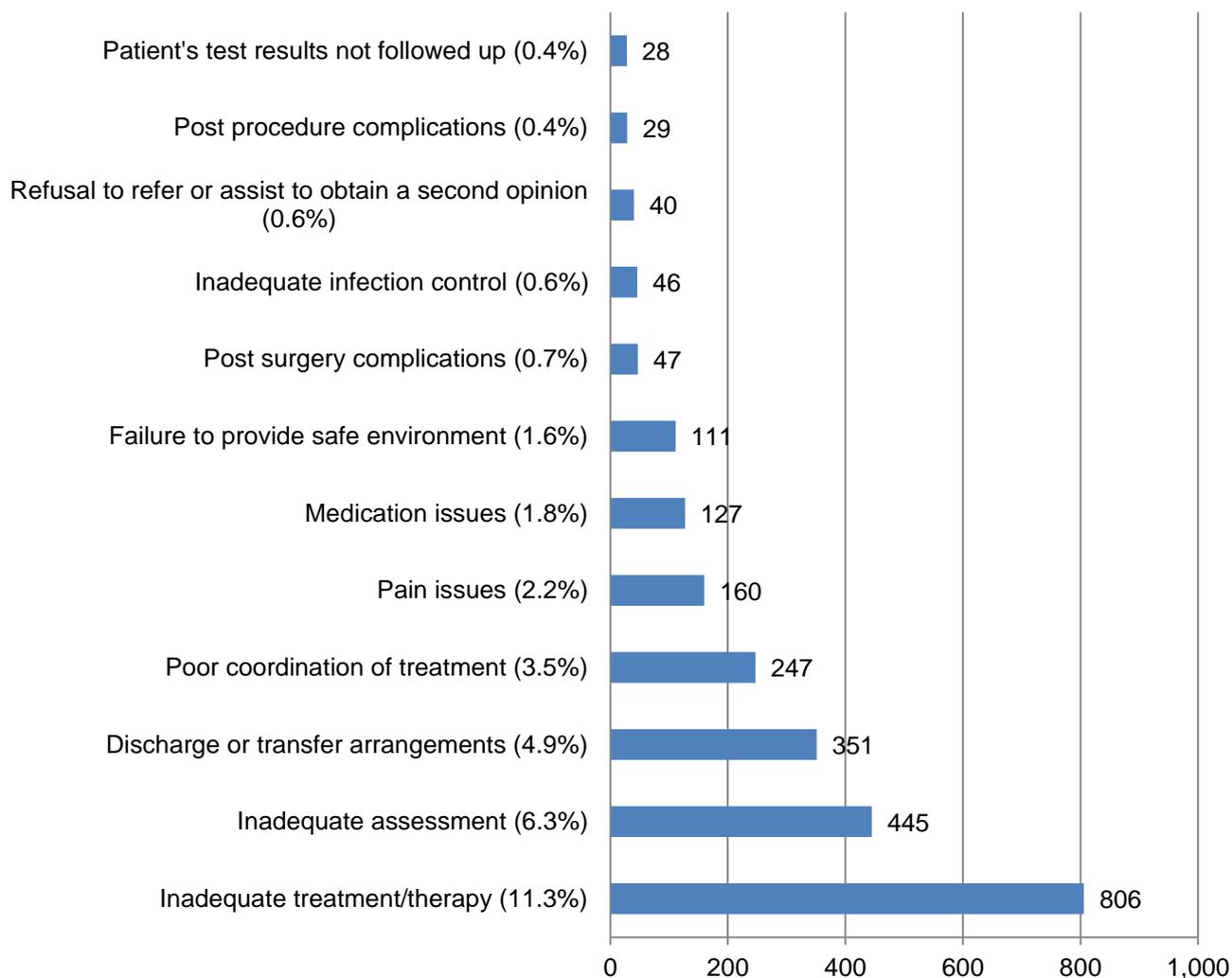
Quality of Clinical Care Complaint Issues

In 2017/18 there were 2,437 complaint issues in the quality of clinical care category. This comprised 34.2% of the total complaint issues reported by HSPs over the year (see Figure 73).

The majority of quality of clinical care issues related to inadequate treatment/therapy (n=806; 11.3 % of total issues) and inadequate assessment (n=445; 6.3 % of total issues). The management of discharge or transfer arrangements were viewed to be unsatisfactory on 351 occasions (4.9% of total issues).

⁴¹ Resolution information is not received for public-private partnership hospitals (Joondalup Health Campus, Peel Health Campus and St John of God Midland).

Figure 73: Frequency and Percentage of Complaint Issues Relating to Quality of Clinical Care for 2017/18



In 2017/18, 88.4% of respondents to the PEHS survey considered their admission to be worthwhile in achieving the expected results, and the majority stated they 'usually' or 'always' had confidence in their doctor and nursing staff (92.7% and 94.0% respectively). The majority of respondents (91.0%) felt that their doctor spent as much time as needed on their care and treatment. Similarly, 94.2% of survey respondents felt nursing staff provided as much attention as needed to their care. The survey also revealed that 82.7% of respondents considered arrangements at discharge with the doctor and others continuing their care to be good or excellent. Of those patients who said they needed special equipment, 66.4% stated that hospital staff organised the special equipment required at discharge.

The Patient First project was launched by the Department of Health in 2006 to educate consumers and carers about the health care process and problems that may occur, to support consumers in being informed and actively involved in their health care. The project was reviewed in 2017/18 and based upon feedback from over 100 consumers, a suite of patient information resources 'Patient First' were developed to replace the original Patient First booklet. The suite includes a 'Patient Safety Card' that has been translated into 14 languages in addition to English. This suite of resources seeks to assist consumers in understanding their hospital journey, their rights and responsibilities, making informed decisions, asking questions and staying safe in hospital. More information about the Patient First project and resources can be accessed via http://healthywa.wa.gov.au/Articles/F_/Going-to-hospital.

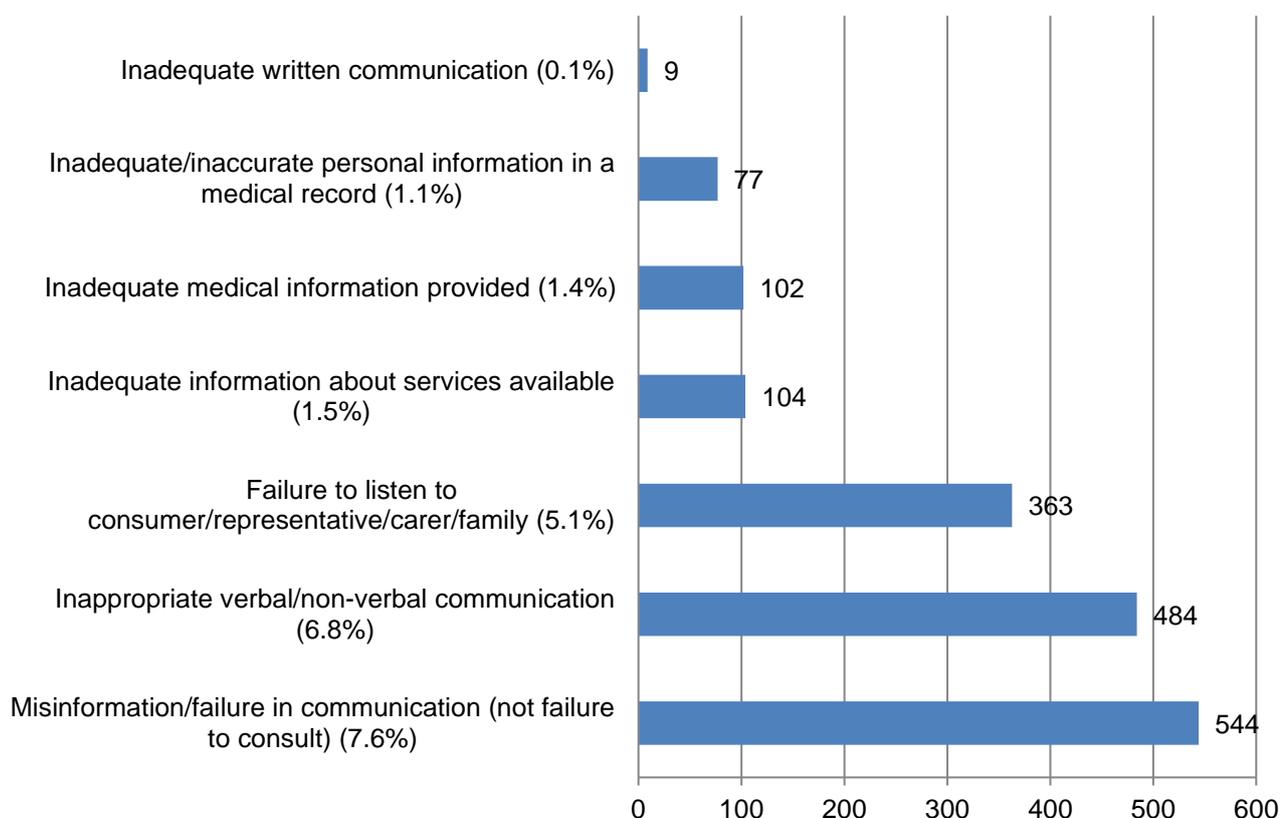
Key Messages and Information: Quality of Clinical Care Complaint Issues

Complaints within the quality of clinical care category largely relate to consumer concerns regarding their assessment, any treatment provided or withheld and arrangements for their discharge home or transfer to another facility. These complaints identify a consumer's clinical experience that is inappropriate, insufficient, incorrect and/or fails to consider and incorporate the individual's clinical situation. Such complaints may identify the occurrence of a clinical incident, which if not already known to the organisation can be reported in the Datix CIMS and followed up accordingly. Quality of clinical care complaints are valuable as they can be used by organisations to identify a clinical service or process that should be amended or expanded to improve the safety and quality of services for consumers.

Communication Complaint Issues

In 2017/18 there were 1,683 communication issues reported in complaints to the WA health system, constituting 23.6% of total complaint issues. Provision of misinformation or a failure in communication (not a failure to consult) was the most commonly reported issue with 544 (7.6% of total complaint issues) instances being reported across the WA health system in 2017/18 (see Figure 74). Inappropriate verbal or non-verbal communication was the second most common communication complaint issue with 484 (6.8% of total issues) instances of inappropriate communication being reported.

Figure 74: Frequency and Percentage of Complaint Issues Relating to Communication for 2017/18



Aspects of communication are widely assessed in the PEHS survey. In 2017/18, 92.6% of respondents reported that health care staff checked that they understood the information provided to them. The majority of respondents (85.6%) rated health care professionals'

responses to their questions as ‘good’ or ‘excellent’. Respondents primarily rated the explanations provided about their condition and treatment as ‘good’ or ‘excellent’ (86.0% of responses) and that ‘as much information as was needed’ was provided to themselves, as well as family members, about their progress (84.8% and 88.5% of responses respectively).

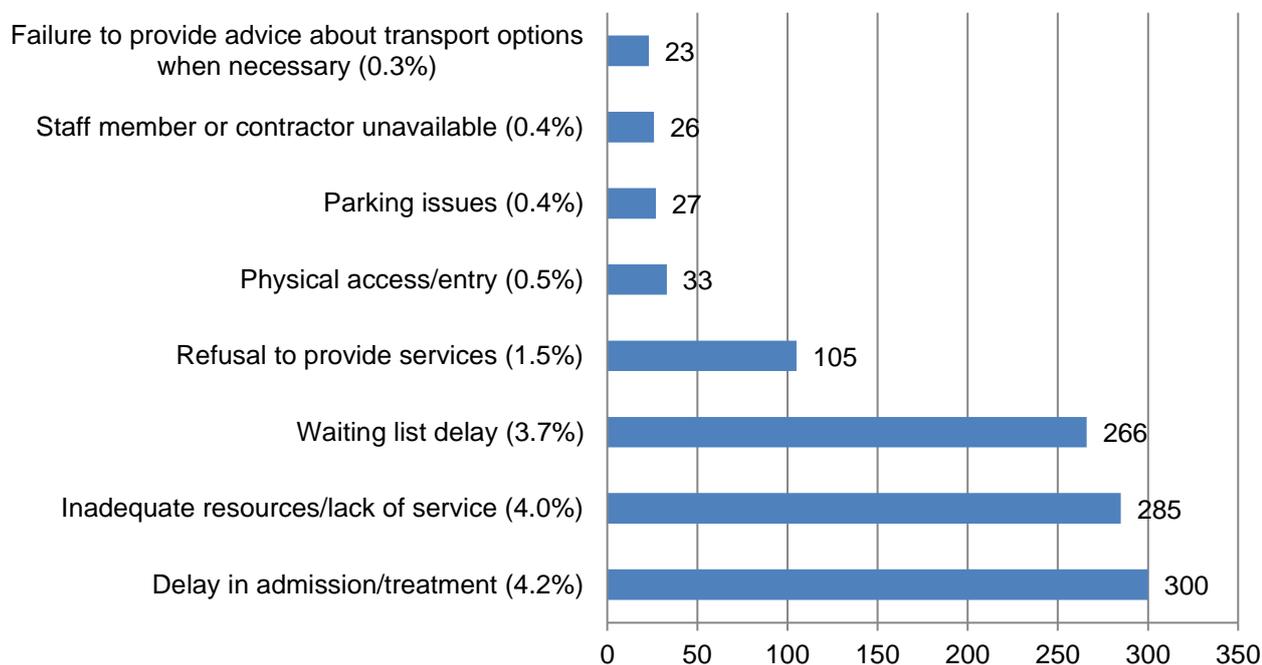
Key Messages and Information: Communication Complaint Issues

The most common communication complaints relate to misinformation or a failure in communication and inappropriate verbal and non-verbal communication. This highlights the association between patient experience and providing care where consumers are listened to, and provided information that is accurate and easy to interpret and delivered in a respectful manner. The benefits of good communication include a positive relationship between the patient and the health care provider, and patient understanding of clinical findings, any treatments and necessary self-care strategies. Conversely, a breakdown in communication is often identified as a factor in clinical incidents. Health care professionals taking the time to provide information in a respectful manner and ensuring understanding will assist in achieving a positive patient experience and may improve clinical outcomes.

Access Complaint Issues

Complaint issues encompassing access to health care represented 15.0% of total complaint issues (n=1,065). Issues surrounding a delay in admission or treatment (n=300; 4.2%) and inadequate resources or lack of service (n=285; 4.0%) constituted the majority of issues in this category (see Figure 75). A waiting list delay comprised 3.7% of total complaint issues, with 266 issues reported across the WA health system.

Figure 75: Frequency and Percentage of Complaint Issues Relating to Access for 2017/18



With regard to information provided to patients on the reason for any long delays, the PEHS survey revealed that 75.8% of respondents felt they received ‘as much as needed’ information, 14.5% ‘wanted more’, and 9.5% ‘got none’. Only 0.2% stated they received ‘too much’ information. Respondents largely rated the time they waited to see a doctor (if needed) as ‘excellent’ or ‘good’ (39.3% and 31.4% respectively), with the remainder of respondents rating this as ‘adequate’ or ‘poor’ (19.9% and 9.6% respectively). The majority of PEHS respondents (82.1%) rated access to any extra support needed to be ‘as much as needed’.

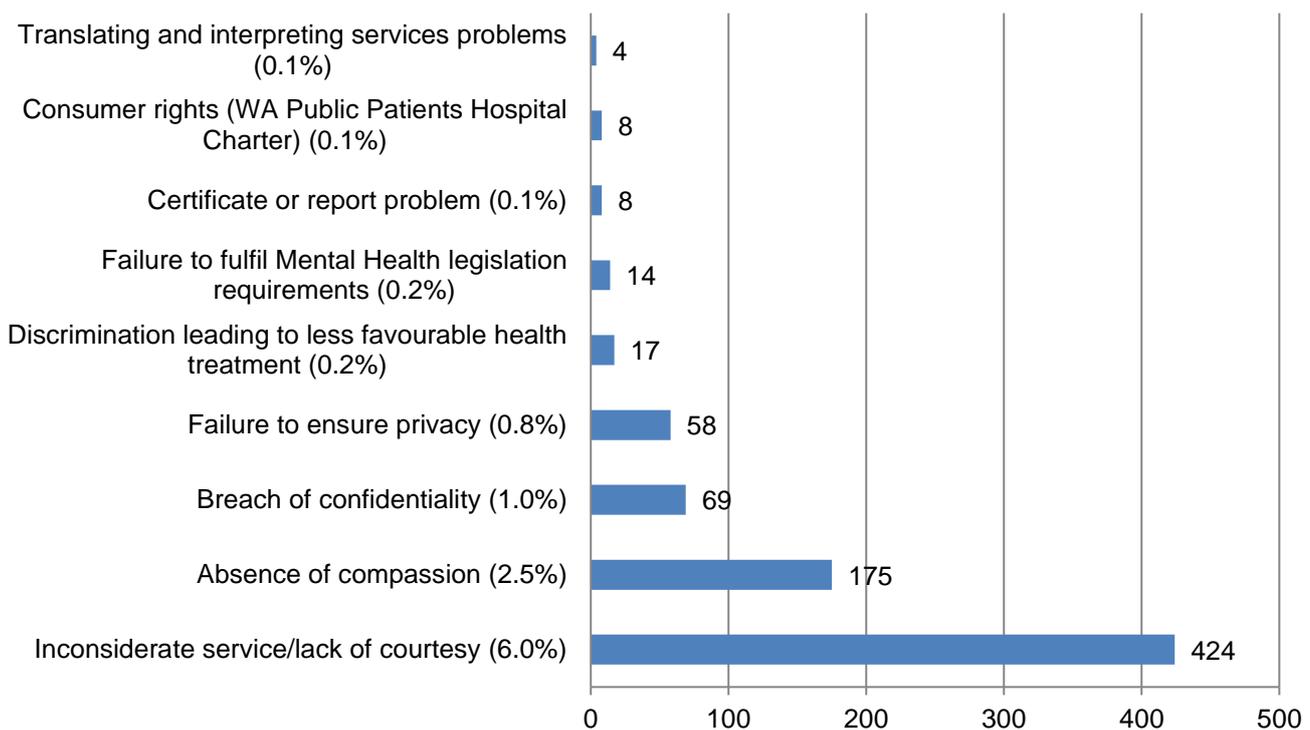
Key Messages and Information: Access Complaint Issues

Due to finite resources within the public health system, consumers may experience a delay in accessing treatment or services from time-to-time. Access to treatment and services across the WA health system are considered in conjunction with established safe timeframes, as certain conditions will have a greater requirement for timely services/treatment when compared to others. Should an appointment or admission need to be delayed, communicating the reasons for this to the consumer will assist in the consumer’s understanding and appreciation of resource limitations.

Rights, Respect and Dignity Complaint Issues

A total of 777 complaint issues relating to rights, respect and dignity were reported across the WA health system in 2017/18 (10.9% of total complaint issues). Inconsiderate service/lack of courtesy and absence of compassion continue to be the most common issues in the rights, respect and dignity category, with 424 and 175 issues reported respectively (6.0% and 2.5% of total issues reported respectively; see Figure 76). Breaches of confidentiality were the third most common type of issue reported in this category, with 69 complaint issues constituting 1.0% of total issues.

Figure 76: Frequency and Percentage of Complaint Issues Relating to Rights, Respect and Dignity for 2017/18



The majority of PEHS survey respondents reported that they were ‘always’ (86.6%) treated with politeness and consideration, with 8.0% reporting ‘usually’, 4.6% reporting ‘sometimes’, and 0.7% of respondents reporting ‘never’. When asked “How often were you shown respect while being examined or interviewed?” 90.8% of PEHS survey respondents reported ‘always’, 5.5% reported ‘usually’, 2.9% ‘sometimes’ and 0.8% ‘never’. The PEHS survey also asks “Were you asked who, other than hospital staff, could be given information about your condition?” to which 30.4% replied ‘no’ and 69.6% replied ‘yes’. When asked if they were aware of a Public Patients Charter that lists their rights as a patient, 51.4% responded ‘no’ and 48.6% responded ‘yes’.

Key Messages and Information: Rights, Respect and Dignity Complaint Issues

It is often said that people may not remember what you said but will remember how you made them feel. Treating each patient as a unique individual, recognising their lived experience is vital to the delivery of considerate and compassionate services. The benefits of considerate, compassionate care are numerous and include a positive patient experience, improved patient outcomes and even extend to staff satisfaction. Through prioritising considerate and compassionate care, health care providers and organisations can be certain that they will be making a positive, long lasting impact on recipients of the WA health system's services.

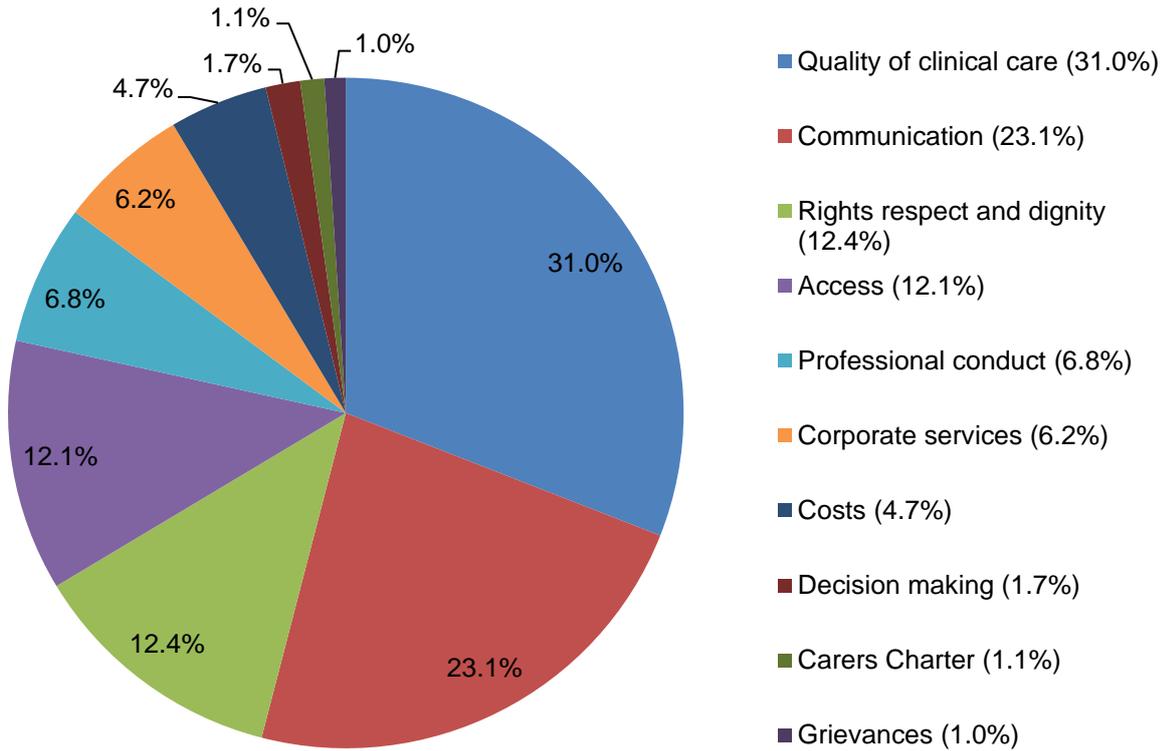


Mental Health Complaints

For the purpose of this section, the term mental health complaint describes those complaints notified against HSPs providing specialised mental health care in community services or hospitals, and is presented as a subset of the total complaint data described previously.

In 2017/18 there were 467 mental health complaints reported across the WA health system. These complaints raised 785 issues, reported in each of the categories described in the *Health and Disability Services (Complaints) Regulations 2010* as shown in Figure 77.

Figure 77: Issues Identified by Persons Reporting the Feedback in Mental Health Complaints Received by the WA Health System for 2017/18



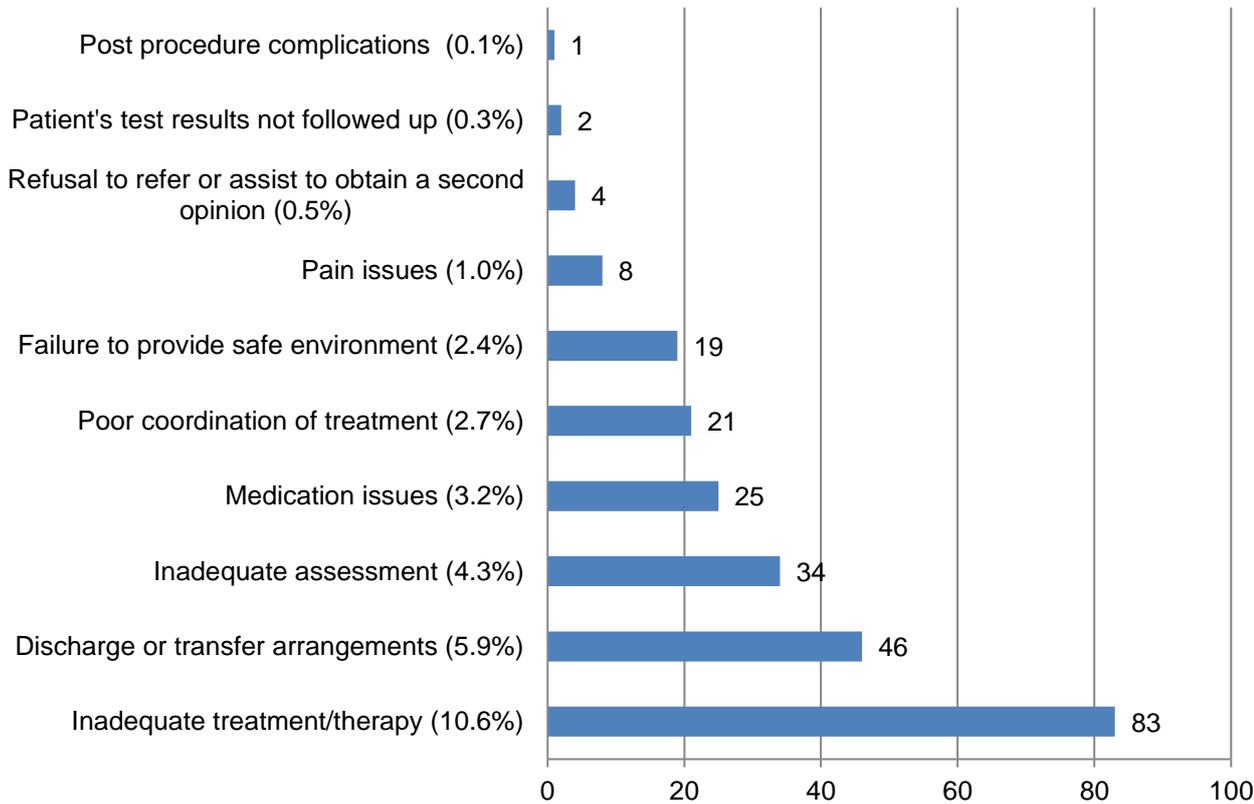
Mental Health Complaint Issues Relating to Quality of Clinical Care

In 2017/18, 243 issues in mental health complaints received by the WA health system related to the quality of clinical care category, comprising 31.0% of the total mental health complaint issues received. As shown in

Figure 78, the most frequently reported quality of clinical care issue was inadequate treatment/therapy (n=83, 10.6% of total mental health complaint issues). This highlights a patient experience of treatment and/or therapy that did not meet the expected standard.

Premature, unsuitable or delayed discharge or transfer constituted the majority of issues reported in the category discharge/transfer arrangements (n=46; 5.9% of total mental health complaint issues). Consumers who made complaints in relation to inadequate assessment (n=34; 4.3% of total mental health complaint issues) were commonly concerned that their symptoms were not adequately investigated or that their condition was missed or incorrectly diagnosed. These issues may indicate consumer concerns of an assessment that negatively impacted on their clinical management.

Figure 78: Frequency and Percentage of Mental Health Complaint Issues Relating to Quality of Clinical Care for 2017/18



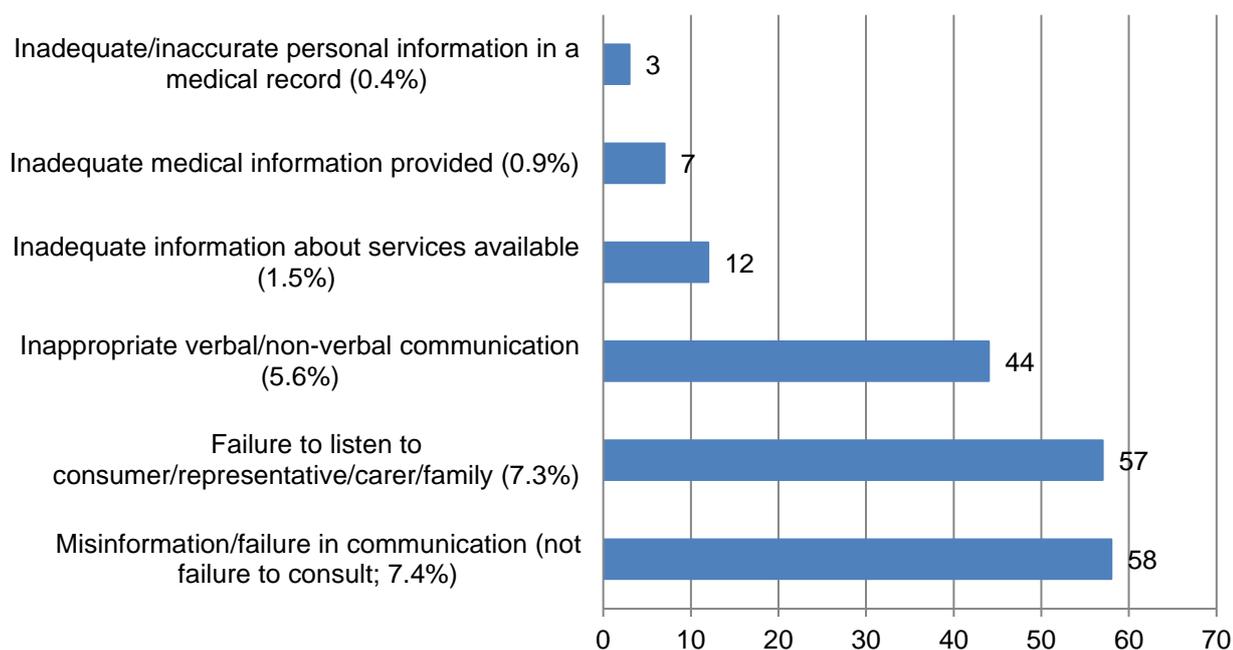
Note: Percentages relate to total mental health complaint issues.

Mental Health Complaint Issues Relating to Communication

Issues relating to communication comprised 23.1% (n=181) of total issues reported in mental health complaints across the WA health system in 2017/18, with a breakdown of this category shown in Figure 79.

Misinformation/failure in communication (n=58; 7.4% of total mental health complaint issues) and failure to listen to consumer/representative/carer/family (n=57; 7.3% of total mental health complaint issues) were most frequently raised. These issues highlight the importance of effective communication and that to achieve effective communication one must not only appropriately provide information but also listen to the consumer, their family and carers.

Figure 79: Frequency and Percentage of Mental Health Complaint Issues Relating to Communication for 2017/18



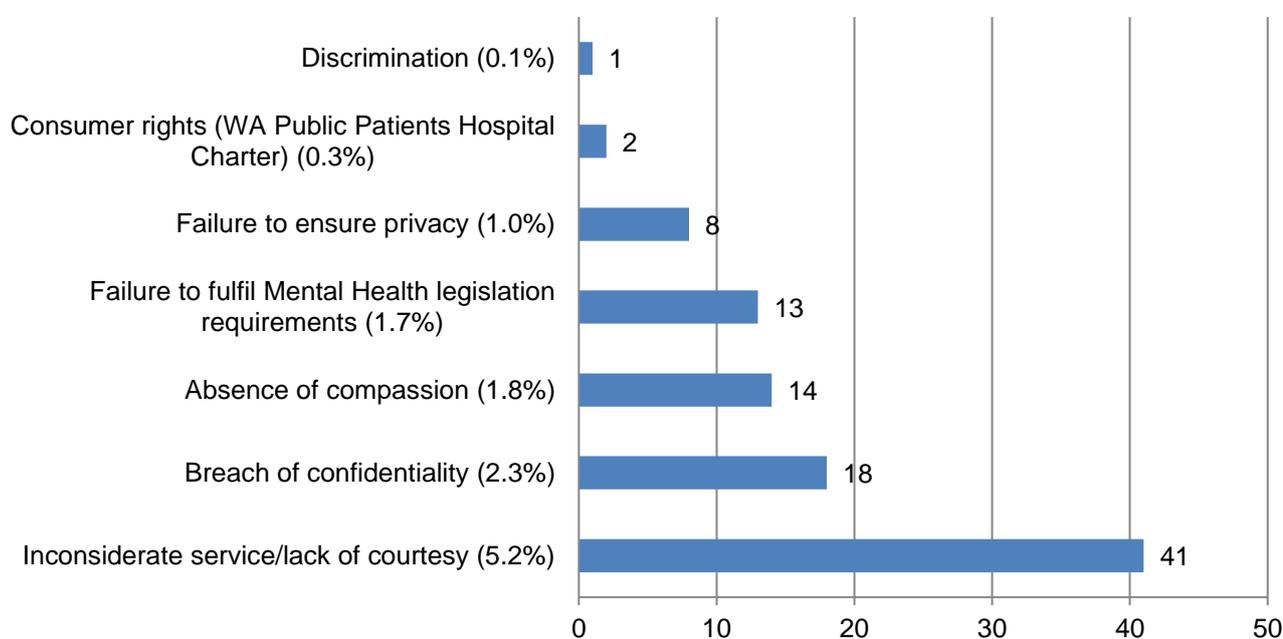
Note: Percentages relate to total mental health complaint issues.

Mental Health Complaint Issues Relating to Rights, Respect and Dignity

There were 97 issues reported in mental health complaints in 2017/18 that related to rights, respect and dignity, which constituted 12.4% of total mental health complaint issues across the WA health system.

The most frequently reported issue was inconsiderate service/lack of courtesy (n=41; 5.2% of total mental health complaint issues), with an unhelpful or patronising attitude and an unhelpful manner being reported in this category (see Figure 80). Complaints relating to a breach of confidentiality were the second most common complaint in this category (n=18; 2.3% total mental health complaint issues) and were more commonly reported for mental health complaints when compared to all complaints (2.3% versus 1.0% respectively). These complaints largely related to concerns that consumer information had been provided to a third party without their consent.

Figure 80: Frequency and Percentage of Mental Health Complaint Issues Relating to Rights, Respect and Dignity for 2017/18

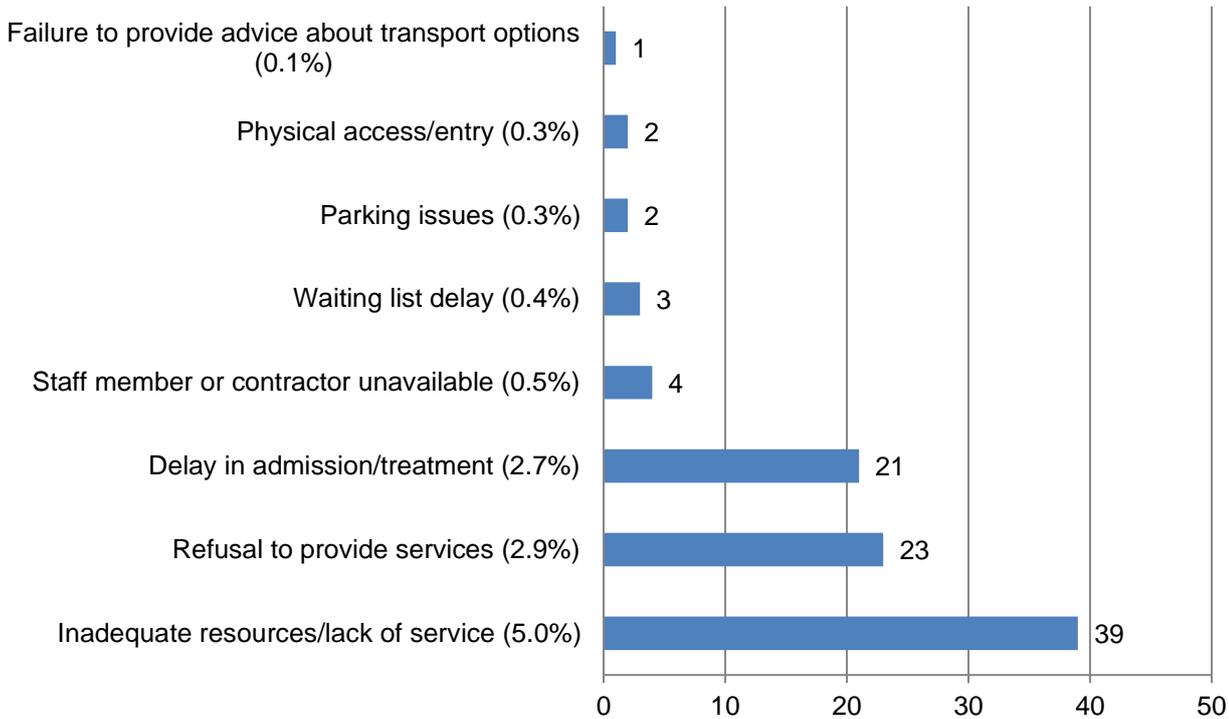


Note: Percentages relate to total mental health complaint issues.

Mental Health Complaint Issues Relating to Access

Mental health complaint issues relating to access constituted 12.1% (n=95) of total mental health complaint issues in 2017/18. As shown in Figure 81, inadequate resources/lack of service issues accounted for many of these of these (n=39; 5.0% of total mental health complaint issues). A refusal to provide services accounted for 2.9% of mental health complaint issues (n=23).

Figure 81: **Frequency and Percentage of Mental Health Complaint Issues Relating to Access for 2017/18**



Note: Percentages relate to total mental health complaint issues.

Key Messages and Information: Mental Health Complaints

Considering mental health complaints separately to all complaints is a meaningful way to gauge how well services are meeting the needs of mental health consumers. The top four complaint categories for mental health complaints were similar to those for all complaints; however, complaints relating to rights respect and dignity ranked higher than access for mental health complaints in comparison to all complaints. This may reflect an increased need for health care providers to deliver care that ensures this vulnerable group feels safe, secure, involved and respected.

Within the communication category, mental health complaints more commonly reported issues with a failure to listen to consumer/representative/carer/family when compared to all complaints (7.3% versus 5.1% respectively). This demonstrates the importance of health care providers listening to the consumer and those close to them, to enable insight into the individual's situation and then using this to inform an appropriate management plan. When an individual feels listened to they are more likely to be an active participant in their health care and this may lead to improved outcomes.

Current Achievements

Adoption and implementation of initiatives to address and improve patient safety are essential to the transformation of health care delivery. The WA health system continues to foster a strong patient safety ethos that is demonstrated by the following achievements:

1. The PSSU's Senior Clinical Advisers reviewed and provided feedback to HSPs and private health care providers on more than 720 SAC 1 clinical incident investigation reports received during 2017/18. This provides the DOH with oversight and ensures consistency in the investigation of serious clinical incidents across the WA health system.
2. Four PSSU CIM and Complaints Quarterly Reports were produced in the last 12 months. These reports provide WA health system staff with a state-wide account of clinical incident data in a timelier manner and help facilitate system learnings from a whole of WA health system perspective.
3. Developed to complement the CIM and Complaints Quarterly Reports are the Clinical Incident Check Up Reports.⁴² These reports focus on specific types of clinical incidents to provide WA health system staff with a snapshot of clinical incidents and the types of clinical actions that can be implemented to address the underlying causes. In 2017/18, state-wide Clinical Incident Check Up Reports were released addressing:
 - Follow-up of medical imaging results
 - Clinical deterioration
 - Fetal harm
 - Pressure injuries.
4. Five Focus Reports⁴² were developed for internal review purposes relating to:
 - Incidents involving co-sleeping with infants from July 2005 to June 2017
 - Incidents involving patients taking the medication clozapine from January to December 2017
 - Incidents involving sedation associated with the transfer of mental health patients from March 2014 to March 2018
 - Incidents involving the use of anticoagulant medications from July 2016 to June 2017 (written by the Medicines and Technology Unit, DOH)
 - Complaints relating to absence of compassion and lack of courtesy that were received by HSPs from July 2016 to December 2017.
5. The Coronial Liaison Unit continued to provide a six-monthly "Progress Report for Health Related Coronial Recommendations" to the State Coroner, detailing actions taken across the WA health system in response to coronial recommendations. The PSSU supports the sharing of lessons learned and quality improvement initiatives across the health system, and continues to publish the executive summary of this report on the PSSU intranet site.⁴²
6. In 2017/18 the Coronial Review Committee members discussed 21 inquest findings with seven health related recommendations. Members also reviewed inquest findings where no recommendations were made, to enable consideration of current systems and processes and identify quality improvement opportunities.
7. *From Death We Learn 2016 (2017 Edition)*⁴³ was released in February 2018. This annual publication reviews the coronial inquests that have taken place and provides key messages, recommendations and actions taken by the WA health system to address concerns. This publication also includes discussion points to promote conversation about key issues and raise awareness of existing strategies to address them.

⁴² Check Up Reports, Focus Reports and the executive summaries of the Progress Report for Health Related Coronial Recommendations are available to WA health system staff at: <https://doh-healthpoint.hdwa.health.wa.gov.au/directory/Clinical%20Services%20and%20Research/Patient%20Safety%20Clinical%20Quality/PSSU/Pages/About%20Us.aspx>

⁴³ From Death We Learn is available at: <http://ww2.health.wa.gov.au/Reports-and-publications/From-Death-We-Learn>

8. Participation in ongoing Commonwealth initiatives regarding pricing and funding for safety and quality, including ongoing review of the approach to implementing penalties associated with sentinel events (which commenced on 1 July 2017), and commenting on proposals for penalties associated with HACs (which commences on 1 July 2018) and avoidable hospital readmissions.
9. Participation in the review of the national sentinel events list being led by the ACSQHC, including finalisation of a new list of wholly preventable sentinel events by its Sentinel Events Review Steering Committee.
10. A minor update to the CIM Policy was completed, to implement the list of wholly preventable sentinel events in WA from 1 July 2018.
11. A comprehensive investigation of the medication module in Datix CIMS was completed, to identify whether it would provide improvements in user experience and data capture.
12. Reviews of the three DOH committees managed by the PSSU were completed, examining their effectiveness and alignment with the role of the DOH as manager of the WA health system. Following the review one committee was disbanded, with the other two committees continuing to meet.
13. Revision and redrafting of the Review of Death Policy progressed during 2017/18, including the completion of consultation with stakeholders across and external to the WA health system. The revised ROD Policy is anticipated to take effect from 1 January 2019.
14. A further 'Closing the Loop' audit was completed in January 2018, highlighting that HSPs must continue to support the CLP requirements of the CIM Policy through reinforcing the use of SMARTA and evaluation tools to create strong, specific and effective recommendations and reduce dependence on action/process outcome measures.
15. The DOH completed configuration and deployment of a new Enterprise Risk Management system to replace the previous RiskBase system. The ERM provides the DOH and HSPs with a contemporary platform to manage both clinical and corporate risks.



Future Focus

It is now two years since the new governance structure for the WA health system took effect under the *Health Services Act 2016*, with the roles and responsibilities of the HSP boards and the DOH with respect to the safety and quality of health care in WA becoming clearer over this time. Through a combination of circumstances, some of which were within the control of the WA health system and many others which were not, the financial resources available for the provision of health care in WA will not be able to grow at the rate seen in the past. A key challenge for the WA health system moving forwards will be how to make the best use of the resources that are available to it.

Recognising that this was the case, the Government of Western Australia announced the Sustainable Health Review in June 2017, to prioritise the delivery of patient-centred, high quality and financially sustainable healthcare across the State. The SHR Panel's Interim Report², released in February 2018, identified that while the WA health system has made a significant investment in infrastructure over recent years, "what is required for the sustainability of the WA health system now goes beyond buildings. Transformational change is needed, giving emphasis to reinvestment, people, culture and behaviour".

The SHR Panel's interim report identified 12 preliminary directions aimed at improving the delivery of health services in WA, including focussing on person-centred services, making better use of resources with more care in the community, facilitating effective interaction between acute and community-based mental health services, supporting equity in country health, developing partnerships for Aboriginal health outcomes and creating and supporting the right culture in the WA health system.

With the SHR Panel's Final Report due to the State Government in November 2018 a key focus for HSPs and the DOH will be the development and implementation of new models of care, particularly in the areas of mental and rural health care, to deliver the efficient and sustainable health system that WA requires, without sacrificing the high standard of safety and quality that already exists.

From 1 January 2019, the second edition of the ACSQHC's NSQHS Standards will be the benchmark against which all WA health system hospitals will be assessed. The second edition of the NSQHS Standards maintains its focus on risk, monitoring, quality improvement, training and performance management, and the new Clinical Governance Standard is explicit in recognising the importance of leadership and culture in establishing effective clinical governance systems. A key focus for HSPs as they work towards accreditation under the second edition of the NSQHS Standards should be on delivering health care systems that meet the accreditation requirements 24 hours a day, seven days a week.

The second edition of the NSQHS Standards also recognises the importance of risk management as an essential component of good clinical governance, and requires health service organisations to have systems and processes in place to identify, document, and manage risks to the organisation, including those identified via the analysis of clinical incidents and complaints. With the implementation of the WA health system's new Enterprise Risk Management system, HSPs and the DOH now have a contemporary platform to record and manage both clinical and corporate risks. Proactive risk management by HSPs is a vital strategy to avoid clinical incidents occurring, minimise preventable harm, and maximise patient and carer satisfaction. The new ERM system represents an opportunity for the DOH and HSPs to mature their approach to risk management.

The second edition of the NSQHS Standards has created a new Comprehensive Care Standard, which describes the integrated screening, assessment and risk identification processes for developing an individualised care plan, to prevent and minimise the risks of harm to patients. This Standard incorporates actions regarding falls and pressure injuries from the first edition, as well as adding a focus on poor nutrition, cognitive impairment, and unpredictable behaviours and restrictive practices in mental health. Clinical incident records in the Datix CIMS are currently tagged against the first edition of the NSQHS Standards, and this will be reviewed during 2018/19 to establish the best approach to tagging incidents against the second edition.

In 2018/19, the IHPA's initiatives regarding pricing and funding for safety and quality extend beyond penalties relating to sentinel events, to include funding reductions for acute episodes of care that include one of 13 defined hospital-acquired complications. While the national HACs list does not include all possible complications that can occur within hospitals, the HACs selected have been identified as responding to clinical risk mitigation strategies. The HACs represent an additional avenue by which health service organisations, managers and clinicians can monitor the quality and safety of health care and identify areas where improvement may be possible.

During 2017/18, the ACSQHC coordinated a review of the existing national sentinel event categories and a revised list of events considered to be wholly preventable and focussing on patient outcomes of serious harm or death were endorsed by the Australian Health Ministers' Advisory Council in December 2017. At the time of writing this report the revised list of sentinel events is awaiting endorsement by the COAG Health Council. In 2018/19, reporting of sentinel events to the IHPA will continue to be based on the original sentinel event categories; however, in anticipation of the revised sentinel event categories being endorsed nationally the PSSU has acted proactively to ensure that updates are embedded in CIM Policy with effect from 1 July 2018, and prior to any changes to national sentinel event reporting requirements taking effect.

The PSSU has planned a full review of the CIM Policy and CIM Toolkit during 2018/19, to bring these into line with the requirements for mandatory policies issued under the *Health Services Act 2016*, and to further embed the principles of clinical incident management within the WA health system. The 'Closing the Loop' audit conducted in January 2018 highlighted that HSPs must continue to support the CLP requirements of the CIM Policy to create strong, specific and effective recommendations that will lead to sustained improvements in practice following a clinical incident.

It has become evident that a clear approach to clinical incident investigation training, with a focus on the development, implementation and evaluation of effective recommendations designed to address system factors, is now required for the WA health system to evolve in this area. A further opportunity for the WA health system lies in the development of programs to support members of staff following adverse events and clinical incidents that result in harm to patients, to minimise the 'second victim phenomenon' that can occur.

The updated Review of Death Policy is currently in the final stages of approval, with implementation planned for January 2019. The updated ROD Policy will require hospitals' processes for reviews of death explore the opportunities that may exist for improvement in the delivery of health services, including end-of-life care, as well as the preventability of death. The PSSU also intends reviewing the Complaint Management Policy during 2018/19.



Appendix One: SAC 1 Clinical Incident Notification List

Clinical incidents that must be reported as SAC 1 (includes 8 national sentinel event categories*).

| Severity Assessment Code 1 Categories (National Sentinel Events) | |
|--|--|
| 1 | Procedures involving the wrong patient or body part resulting in death or major permanent loss of function. |
| 2 | Suicide of an inpatient (including patients on leave) Mental Health Services are required to report to the Chief Psychiatrist and to the State Coroner (for involuntary patients) episodes of unexpected death. |
| 3 | Retained instruments or other material after surgery requiring re-operation or further surgical procedure Retention of a foreign object in a patient after surgery or other procedure including surgical instruments or other material such as gauze packs inadvertently left inside the patient when the surgical incision is closed - excluding objects intentionally implanted as part of a planned intervention and objects present prior to surgery that are intentionally retained. |
| 4 | Intravascular gas embolism resulting in death or neurological damage Death or serious disability associated with intravascular gas embolism that occurs while the patient is being cared for in a facility - excluding deaths associated with neurosurgical procedures known to present a high risk of intravascular gas embolism. |
| 5 | Haemolytic blood transfusion reaction resulting from ABO incompatibility |
| 6 | Medication error resulting in death of a patient. Death or serious injury associated with a medication error, including, but not limited to errors involving: <ul style="list-style-type: none">• the wrong drug• a contaminated drug• the wrong dose• the wrong patient• the wrong time• the wrong rate• the wrong preparation• the wrong route of administration• insufficient surveillance (e.g. blood tests, clinical observation). |
| 7 | Maternal death associated with pregnancy, birth and the puerperium. This includes the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes. |
| 8 | Infant discharged to wrong family or infant abduction |

* Effective 1 July 2018, the CIM Policy was amended to incorporate the 10 revised sentinel event categories endorsed by the Australian Health Ministers' Advisory Council (AHMAC) in December 2017. Sentinel event reporting in this document is for incidents notified prior to 1 July 2018 and in accordance with the above categories.

Severity Assessment Code 1 Categories (Other)

SAC 1 includes all clinical incidents/near misses where serious harm or death is/could be specifically caused by health care rather than the patient's underlying condition. Note, this list is NOT EXHAUSTIVE.

Medication error (not resulting in death) includes:

The inappropriate administration of daily oral methotrexate*
The intravenous administration of epidural medication*
Wrong gas being administered. *

Fetal complications associated with health care delivery:

Unrelated to congenital abnormality in an infant having a birth weight greater than 2500 grams causing death, or serious and/or ongoing perinatal morbidity.
Complications not anticipated yet arose and were not managed in an appropriate/timely manner resulting in death, serious and/or ongoing morbidity.
Delivery at a site other than where labour commences which requires transfer to another facility for a higher level of care resulting in death, or serious and/or ongoing morbidity.

Misdiagnosis and subsequent management (refers to physical and mental health)

Failure to monitor and respond to oxygen saturation*

Delay in recognising/responding to physical clinical deterioration

Complications of resuscitation:

Events in which staff experienced problems in managing an emergency situation or resuscitation resulting in death, or serious and/or ongoing morbidity.
Failed resuscitation where resuscitation guidelines could not be followed due to a deficiency of equipment, communication, or staffing resulting in death, or serious and/or ongoing morbidity.

Complications of anaesthetic management:

Unintended intra-operative awareness.
Anaesthetic events resulting in death, or serious and/or ongoing morbidity.

Complications of surgery:

Wrong site surgery not resulting in death or major permanent loss of function*
Pulmonary embolism
Injury to major blood vessels.

Complications of an inpatient fall.

Hospital process issues:

Events in which hospital processes such as triaging, assessment, planning or delivery of care e.g. miscommunication of test results, response to abnormal test results contributed to death, or serious and/or ongoing morbidity, Information technology incidents.
Transport or transfer – Events in which delays in transport or transfer contributed to death, or serious and/or ongoing morbidity.
Misidentification of patients. *

Infection control breach (e.g. IV cannula related bacteraemia infections).

The unexpected death of a mental health client (e.g. suspected suicide, unnatural/violent death).

Mental health clinical deterioration resulting in serious harm

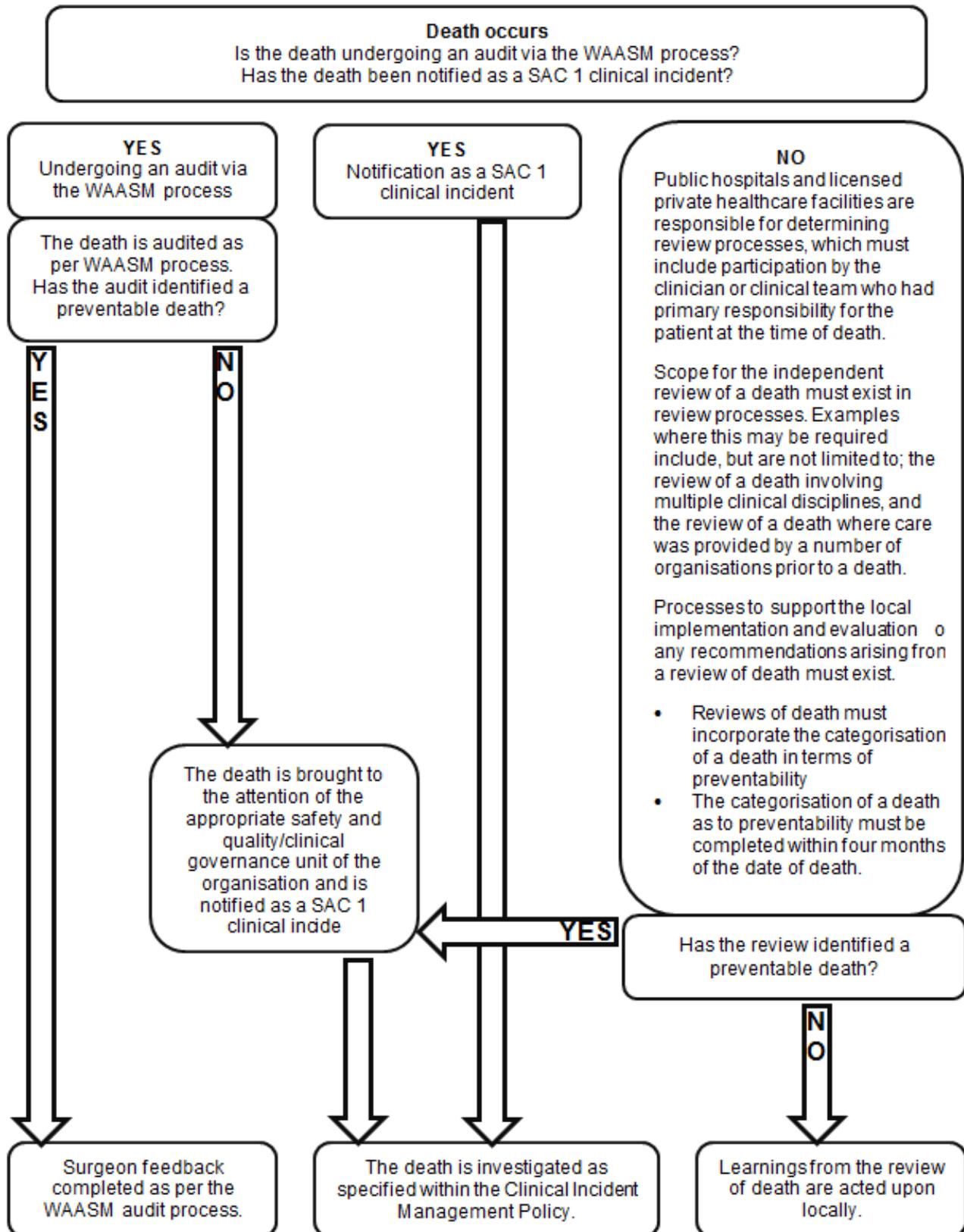
Missing or absent without leave of any high risk mental health patient/consumer. ♦

Patient missing or absent without leave with adverse outcome

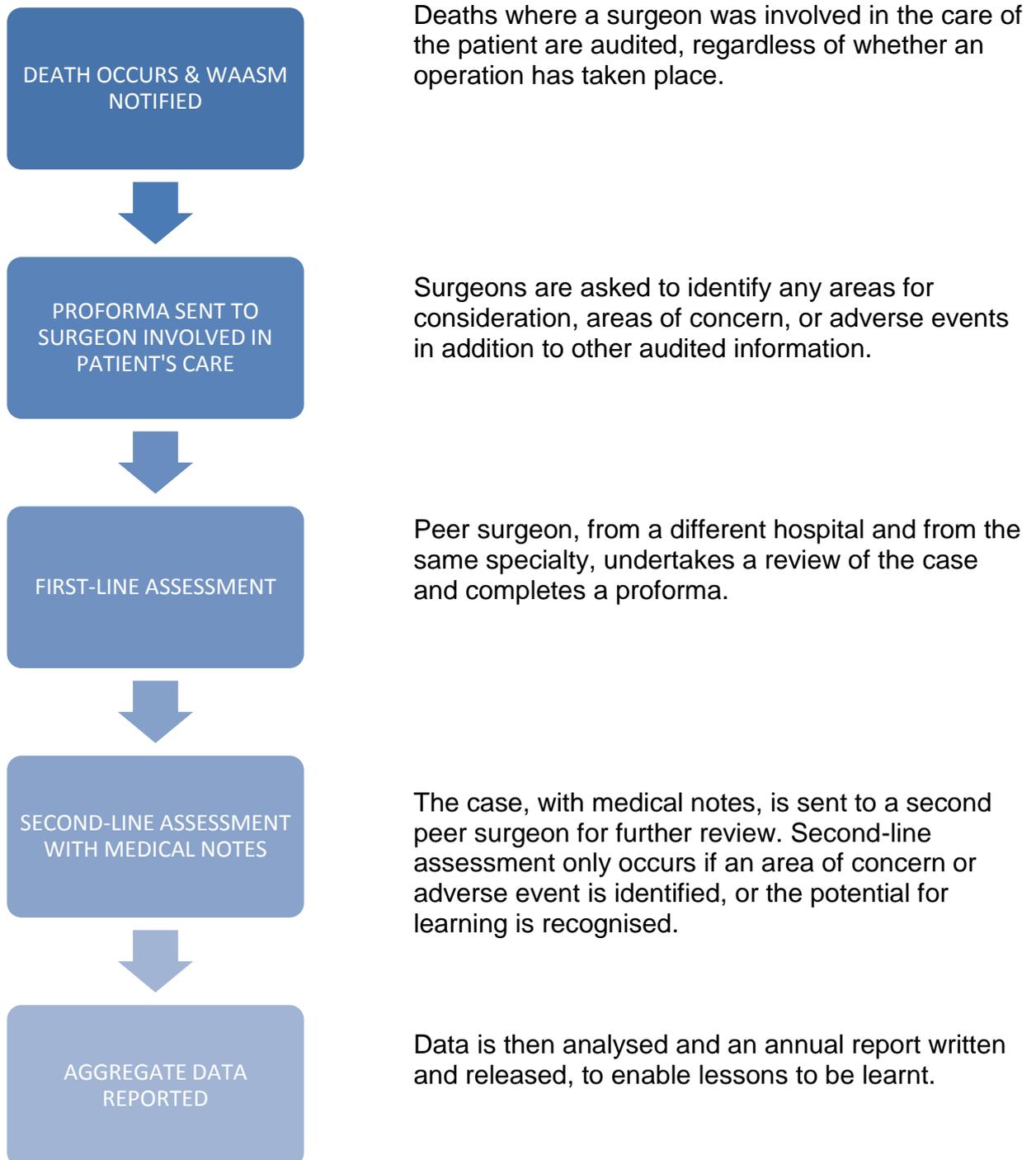
Wrong route administration of oral/enteral treatment*

This SAC 1 notification list is not exhaustive and if unsure of whether to notify an incident, please contact your line manager or local risk manager/Safety Quality and Performance team or the PSSU for advice. *Never Events refer to serious, preventable patient safety incidents that should not occur if preventative measures are in place. ♦High risk mental health patients include those patients determined to be at high risk of causing significant harm to themselves or others, or being harmed by others. The assessment of a mental health patient as high risk is based on the patient's medical condition and is determined using clinical judgement. For example, if a mental health patient who is deemed at high risk of suicide leaves hospital, this would be notified as a SAC 1 clinical incident. Further information can be found in the *Policy for Mandatory Reporting of Notifiable Incidents to the Chief Psychiatrist* available at: https://www.chiefpsychiatrist.wa.gov.au/wp-content/uploads/2018/10/Notifiable-Incidents-Policy-Public-Services-2018_v3.pdf

Appendix Two: Interaction of the Review of Death Policy with CIM and WAASM Processes



Appendix Three: Western Australian Audit of Surgical Mortality Process



Data Quality Statement for this Report

Quality Dimensions

| | |
|---------------------------|--|
| Institutional Environment | <p>Clinical Incident data are obtained from across WA health system hospitals and health care providers. It is mandatory to report all SAC 1 and SAC 2 clinical incidents. SAC 1 clinical incidents are also received from all WA licensed private hospitals (including Contracted Health Entities; CHEs) and contracted non-government agencies. The PSSU undertakes all data analysis presented within this report unless otherwise stated.</p> <p>Hospital separation and bed day data, and hospital-acquired complication data are extracted from the Hospital Morbidity Data Collection and are provided by Data Integrity Management. HACs data are extracted based on version 1 of the HACs specification issued by the ACSQHC in November 2017.</p> <p>Consumer feedback data are obtained from WA health system hospitals, including complaints from public patients treated by CHEs. It is mandatory for public hospitals and CHEs to report complaints data in accordance with the Complaints Policy.</p> <p>The WAASM data are obtained from the Royal Australasian College of Surgeons. The PEHS survey is conducted by Edith Cowan University via Computer assisted Telephone Interviews (CATI) as contracted by the DOH Health Survey Unit, Epidemiology Branch.</p> |
| Relevance | <p>The purpose of the clinical incident data is to report all state-wide clinical incidents notified within the 2017/18 period. SAC 1 incidents include data from the WA health system which includes hospitals and community health care providers plus data from licensed private hospitals (including CHEs) and contracted non-government services.</p> <p>Rates calculations include inpatient clinical incidents only (unless otherwise specified) with the denominator including separation/bed days data from WA health system hospitals' inpatient activity data. Mental health clinical incidents rates include mental health incidents notified in the community with non-admitted mental health occasions of service data used as the denominator. The web based Datix CIMS has improved rates analysis by providing more specific location information.</p> <p>The purpose of the Consumer Feedback data is to report all complaints and other consumer feedback received by the WA public health system to the Datix CFM database, as well as complaints data reported to PSSU by CHEs within the 2017/18 period. Complaints inform about patient centred care and are an integral component of CIM.</p> <p>WAASM data includes deaths that occurred under the care of a surgeon, whether a procedure occurred or not. The WAASM follows a peer review model of audit and can identify areas of concern for the care of a surgical patient.</p> <p>The HACs are complications of care for which clinical risk mitigation strategies may reduce (but not necessarily eliminate) the risk of that complication occurring. As part of a broad quality improvement approach, the HACs can be monitored by clinicians, safety and quality professionals, managers, executive, and governing bodies to provide insight into the state of safety and quality in a health service organisation. The HACs data, including rate calculations, is based on the HACs specification issued by the ACSQHC in November 2017.</p> <p>The PEHS survey is administered to gauge patient satisfaction with the WA health system. Questions asked in the PEHS survey are dependent on hospital size and length of stay. Percentages reported from the PEHS are representative of the sample size for each question asked. Frequencies are omitted from this report to avoid confusion due to variable denominators.</p> |

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|------------------|---|
| Timeliness | <p>The reference period for this data is 1 July 2017 to 30 June 2018. Due to data coding delays, there is a two to three-month lag time regarding some Datix CIMS data such as confirmed SAC data. As such, data frequencies may change over time and prohibit comparison with previous reports.</p> <p>WAASM data includes cases that had completed the review process by the census date of 29 March 2018. WAASM data includes cases where the death occurred over the period 1 January 2007 to 31 December 2017.</p> <p>The HACs data was extracted from HMDC on 7 September 2018. The HACs Data for 2015/16 and 2016/17 has been extracted using the HACs specification issued by the ACSQHC in November 2017, prohibiting comparison with previous reports. Coronial inquest summaries include all health-related inquest findings released between 1 July 2017 and 30 June 2018. The status of coronial recommendations is current as at the most recent <i>Progress Report for Health Related Coronial Recommendations</i> (August 2018).</p> |
| Accuracy | <p>Data are entered into the Datix CIMS and CFM databases on a routine basis by WA health system staff at each facility. Datix CIMS data are entered in real time by the notifier. All data entered undergo data validation processes both at a local and state-wide level. This is to ensure the data are clean and free from duplicates. Missing data are identified and rounding errors of + or – 1 are deemed acceptable. Data regarding clinical incidents relating to NSQHS Standards 3-10 are reported from the Datix CIMS via the three-tiered Common Classification System (CCS2). The CCS2 was reviewed in 2015, with codes relevant to NSQHS Standards agreed by the State Datix Committee (SDC). The CCS2 was updated in April 2017 and codes relating to some NSQHS Standards were also updated.</p> <p>WAASM data are reported in accordance with that reported to PSSU by the Royal Australasian College of Surgeons.</p> <p>HACs data are reported in accordance with that provided to PSSU by Data Integrity Management, and are extracted from the HMDC based on the HACs specification issued by the ACSQHC in November 2017.</p> <p>Data from PEHS are reported in accordance with the data provided to PSSU from the Health Survey Unit, Epidemiology Branch. The Health Survey Unit reports that reliability testing was conducted to test the questions used in the interview and the CATI methodology. Data is self-reported and is checked by the Health Survey Unit for valid values, logical consistency and historical consistency.</p> |
| Coherence | <p>The Datix CIMS and CFM data are dynamic and data lag times for some CIMS and CFM variables exist. Due to ongoing updates to the Datix CIMS and CFM data over time values may change, which can prohibit the comparison of data at different times.</p> |
| Accessibility | <p>The data are only accessible to WA health system employees who have been granted permission to access the Datix CIMS and/or CFM databases. The PSSU does allow access to de-identified CIMS data by external parties whose research proposal has been approved by PSSU and who have obtained DOH ethics approval.</p> <p>All requests for HMDC data require extraction and approval from Data Integrity Management.</p> <p>The WAASM data is protected under the Commonwealth's <i>Health Insurance Act 1973</i>. The release of aggregate data is subject to the authorisation of the Royal Australasian College of Surgeons.</p> <p>Data from PEHS were requested from the Health Survey Unit, Epidemiology Branch. Reports on the survey results for each hospital, health region and the State are provided by the Health Survey Unit to key WA health system employees for further disseminations as required.</p> |
| Interpretability | <p>Any queries regarding data found in this report can be directed to the Patient Safety Surveillance Unit, DOH.</p> |

Glossary

Anastomosis – an operative union of two structures (e.g. blood vessels, intestines, ureters).⁴⁴

Bed days – the number of days a patient stays in hospital between admission and discharge. An aggregate measure of health service utilisation.

Clinical incident – an event or circumstance resulting from health care which could have, or did lead to unintended and/or unnecessary harm to a person. Clinical incidents include:

- **Near miss** which is an incident that may have, but did not cause harm, either by chance or through timely intervention.
- **Adverse event** which is an injury/harm caused by medical management or complication thereof, instead of the underlying disease. It results in an increase in the level of care and/or prolonged hospitalisation and/or disability at the time of discharge. Medical management refers to management under health care services.
- **Sentinel event** which refers to unexpected occurrences involving death or serious physical or psychological injury, or risk thereof.³

Clinical Incident Management (CIM) – the process of effectively managing clinical incidents with a view to minimising preventable harm.³

Clinical Incident Management System (CIMS) – a database system developed for collecting and analysing information on clinical incidents. It covers voluntary reporting, investigating, analysing and monitoring of clinical incidents.

Contact – consumer feedback regarding a minor aspect of service where the individual is seeking information or assistance, or does not wish to lodge a formal complaint, or is satisfied that the feedback has been adequately addressed at the point of contact, negating the need for any follow up actions.

Contributory factor – a circumstance, action or influence which is thought to have played a part in the origin or development of an incident or to increase the risk of an incident.⁴⁵

Declassification – is the process by which a clinical incident can be made inactive following the comprehensive and systematic investigation of a notified SAC 1 clinical incident. This can only be done if no causative factors contributed to the patient's/consumer's outcome and in fact the clinical incident was not preventable.³

Decubitus ulcer - a skin ulcer that develops from lying in one position too long, so that the circulation in the skin is compromised by the pressure.

Dehiscence – a bursting open, splitting or gaping along natural or sutured lines.⁴⁴

⁴⁴ Stedman's Medical Dictionary. 27 ed. Baltimore: Lippincott Williams & Wilkins: 2000.

⁴⁵ World Health Organisation. Conceptual Framework for the International Classification for Patient Safety Technical Report. Version 1.1. January 2009.

Embolism – a plug that occludes a vessel. Could be composed of a thrombus, vegetation, mass of bacteria or some other foreign body.⁴⁴

Extravasation – to exude from or pass out of a vessel into the surrounding tissues.⁴⁴ Can occur during the infusion or injection of medication into a blood vessel.

Hypertension – high blood pressure; transitory or sustained elevation of systemic arterial blood pressure to a level likely to induce cardiovascular damage or other adverse consequences.⁴⁴

Injury – in the context of CIM includes burns, injury due to an impact or collision, pressure injuries, injury of unknown origin, unintended injury during a procedure or treatment, or other injuries not classifiable in the previous categories.

Mental Health Patient – refers to any involuntary or voluntary mental health patient as well as any referred mental health patient.

Never Events – Serious, preventable patient safety incidents that should not occur if preventative measures are in place.³

Sentinel event – refers to unexpected occurrences involving death or serious physical or psychological injury, or risk thereof. There are eight nationally endorsed sentinel event categories, endorsed by Australian Health Ministers (see Appendix 1 for a list of the eight sentinel events).³

Separation – a patient is separated at the time the hospital records the cessation of treatment and/or care and/or accommodation of a patient. Separation is synonymous with discharge.⁴⁶

Septicaemia – systemic disease caused by the spread of micro-organisms and their toxins within the blood.⁴⁴

Severity Assessment Code (SAC) – is the assessment of actual or potential consequences associated with a clinical incident. The SAC rating (1, 2 or 3) is used to determine the appropriate level of analysis, action and escalation.

- SAC 1 includes all clinical incidents/near misses where serious harm or death is/could be specifically caused by health care rather than the patient's underlying condition or illness. In WA, SAC 1 also includes the eight nationally endorsed sentinel event categories.
- SAC 2 includes all clinical incidents/near misses where moderate harm is/could be specifically caused by health care rather than the patient's underlying condition or illness.
- SAC 3 includes all clinical incidents/near misses where minimal or no harm is/could be specifically caused by health care rather than the patient's underlying condition or illness.³

Venous thromboembolism (VTE) – the formation of a blood clot, usually in a deep vein.⁴⁴

⁴⁶ Department of Health WA. Admissions, Readmissions, Discharge and Transfer Reference Manual (2017). Department of Health, Western Australia, editor. Perth. 2017.

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