mater health

Windows into safety & quality

Mater Health 2018

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Acknowledgement

The Windows into Safety and Quality – Mater Health 2018 report demonstrates Mater's commitment to delivering safe, high quality care to our community and our willingness to continually improve. It represents more than a collation of statistical data and gives detailed insight into how Mater operates and approaches our improvement process in line with our Mission and Values.

Mater's leader in patient safety, Susie Wilson, was instrumental in compiling this report. In a career with Mater that has spanned more than 30 years, Susie has played an integral role in shaping our organisation and its people. Mater would like take this opportunity to acknowledge Susie and the wonderful work she has done throughout her time with Mater. She has constantly strived, not only to make Mater a better healthcare service for every patient, but also a more transparent and accountable one. We thank Susie for her vision, unwavering commitment and her exceptional achievements in bringing to life the patient safety story at Mater.

"The simplest and most practical lesson I know … is to resolve to be good today, but better tomorrow."

Catherine McAuley

Mater Health

Mater Health is committed to delivering a world class health service for patients across all stages of their healthcare journey by providing high quality, compassionate care in line with Mater's Mission and Values.

Supported by Mater Group through the consistent integration of health, education and research, Mater Health aims to improve patient care with a consistent focus on providing safe, low variability, evidence-based healthcare which meets the needs of the community.

Comprising a network of hospitals in Brisbane, Redland and Springfield, pathology and pharmacy businesses, Mater Health cares for thousands of people each year.

Our Mission

In the spirit of the Sisters of Mercy, Mater offers compassionate service to the sick and needy, promotes a holistic approach to healthcare in response to changing community needs and fosters high standards of health-related education and research.

Following the example of Christ the healer, we commit ourselves to offering these services without discrimination.

Our Values

The Mater Values of Mercy, Dignity, Care, Commitment and Quality guide our interactions with those for whom we are privileged to care, our colleagues and the many people with whom we interact each day.

Mercy
The spirit of responding to one another.

Dignity
The spirit of humanity, respecting the worth of each person.

Care
The spirit of compassion.

Commitment
The spirit of integrity.

Quality
The spirit of professionalism.

Our hospitals

Mater has **7** hospitals

More than **10 000** babies are born at Mater Mothers' Hospitals each year

Mater cared for **141 469** inpatients and **351 425** outpatients in 2017/2018

96% of patients surveyed rated their overall quality of care as "Good" or "Very Good"

Mater Health employs **5616** people

Mater saw **62 751** emergency presentations in 2017/2018

A message from Mater Health Chief Executive Officer

For more than a century Mater Misericordiae Ltd. has been responding to changing community needs by providing compassionate care to patients and families in line with our Mission and Values.

Today, Mater's network of hospitals, known as Mater Health, forms a part of the broader Mater Group incorporating health, education, research, and foundation, and delivers inpatient and outpatient care to close to 500 000 patients each year. At Mater Health our daily focus is to provide care that meets the highest standards of safety and quality.

The Mater Health strategic plan sets out five key performance elements for our hospitals. These are safety, quality, experience, efficiency, and future. Each is used to assess performance and every one underpins our inpatient and outpatient interactions. Through the work of our Clinical Safety and Excellence Committee, which reports to the Mater Group Board, Mater Health is constantly undertaking rigorous reviews of clinical performance.

In 2016 Mater Health enhanced its commitment to safety and quality by transitioning our hospital leadership structure to a clinical stream model. The appointment of clinical leaders in the following four areas—Surgical and Acute Care Services, Medical Services, Mothers' Babies' and Women's Health and Clinical Support—has allowed us to embed a fully integrated approach to clinical governance. This approach is focused on eliminating unwarranted variation and ensuring that equal delivery of high quality care occurs across all of our healthcare services.

Mater Health is committed to ongoing improvement in everything we do and in 2018 we set ourselves a goal to advance our culture of learning. This meant providing all Mater Health staff (our Mater People) with tools and strategies that encourage the responsible and effective sharing of ideas, making space for the giving and receiving of feedback and providing confidence to speak up and hold ourselves and others to account. A recent safety climate survey has shown that this initiative has impacted positively on our culture across the organisation.

As Chief Executive Officer (CEO) of Mater Health I am pleased to present our annual safety and quality report, Windows into safety & quality—Mater Health 2018. The purpose of this report is to provide our community with information about the key aspects and priorities that underpin our approach to providing safe, effective, high-quality, person-centric healthcare.

The report highlights three important themes:

- Mater Group's advanced integration across the domains of health, education and research
- Mater Health's focus on clinical leadership and the significant outcomes this continues to deliver
- our organisation-wide commitment to learning and improvement.

The report describes the main aspects of our patient safety program and shares the story of our patient experiences, including how we manage and learn from patient complaints.

We are very proud of our work in the area of safety and quality and believe it is important to give all healthcare consumers information about our approach, the outcomes we achieve, and what we continue to strive for.

Mr Sean Hubbard
Chief Executive Officer
Mater Health

Executive Summary

In Part 1 of the report (Clinical governance) we set out the systems through which Mater is accountable to the community for continually improving the quality of its service and safeguarding high standards of care. Here we outline the Clinical Governance Framework that ensures effective clinical governance is maintained throughout all levels of Mater Health.

In Part 2 (Patient experience) we share the intelligence we gather from our patients about their Mater Health experiences. In the 2018 reporting period, 96% of patients surveyed rated their overall quality of care as 'Very Good or Good', and 90% of patients felt they were treated with respect and dignity at Mater Health. We also measure patient satisfaction through our complaints process. In 2018, 100% of patients surveyed said they were treated respectfully and compassionately.

In Part 3 (Quality of care) we look at the performance of Mater Health against national standards for safety, quality, clinical governance, patient experience and engagement. Mater Health is a strong performer across all areas and we regularly perform well against our benchmarked peers. In 2018, Mater Health infection rates were comparable to and in many cases better than our benchmarked peers. Also in 2018 hand hygiene compliance, at 82%, was above the national target. In addition, our Hospital Acquired Complication rates are mostly lower than those of peer hospitals within Australia.

Along with monthly clinical safety systems audits, Mater Health undertakes an annual Point Prevalence Patient Safety Bedside Audit (PSBA), which allows measurement of some of the most important clinical care processes known to prevent or reduce significant safety risks. Mater sits above the peer group average for many of these measures. In 2018 this audit found 92% of patients felt included in the handover process, which was above the benchmarked peer group of 86%.

In Part 4 (Patient safety) we explore the range of systems in place at Mater Health to support excellence in patient safety. Between 2016 and 2018 Mater Health achieved an improvement in the reported rate of patient harm from 5.95 per 10 000 patients to 4.1 per 10 000 patients. A reported clinical incident rate of 8.43% for 2018 demonstrates our strong reporting culture (national and international literature supports a rate of 10%). Of the 11 928 clinical incidents reported in 2018, 60% resulted in minor or no harm. Furthermore, 37% of these reported incidents were associated with the underlying condition of the patient and considered not to be related to either the provision or omission of care.

In Part 5 (Improving our performance) we look at the innovative approach Mater Health is taking as an organisation to ongoing learning and performance improvement. In 2016 Mater Health created a Quality By Design team to develop and facilitate continuous improvement initiatives in every facet of our operations. In line with the Mater Health strategy the Quality By Design team works with Mater People on a daily basis to effect practical changes that improve the way work is done, provide opportunities for capability development, and enhance leadership behaviours.

1 Clinical governance – our approach

Overview

The Mater Clinical Governance Framework is the set of systems that work together to ensure effective clinical governance is maintained throughout our organisation. The framework supports every Mater person to clearly understand their obligations and the obligations of others in safeguarding the highest standard of care for patients. The ongoing effectiveness of the Clinical Governance Framework is measured by the Clinical Safety and Excellence Committee, a committee of the Mater Group Board, which oversees all quality and safety systems and processes at work throughout the organisation, along with management of a rigorous schedule of quality assurance.

Governance and leadership

In line with the Clinical Governance Standard (Standard 1 of the National Safety and Quality Health Service Standards) the role of the Clinical Governance Framework is to set, monitor, and improve the care Mater Health delivers to patients each day. This framework provides a tiered system of governance and communication which operates between leaders at all levels and works as a guide for the Mater People who support them. It ensures excellence in the delivery of the following:

- clinical practice
- quality improvement
- performance and skills management
- incident and complaints management
- patient rights and engagement.

Mater Health Executive administers the Clinical Governance Framework and manages the ongoing review of its performance, reporting to the Clinical Safety and Excellence Committee.

Patient safety and quality systems

Mater Health has carefully integrated an array of safety and quality initiatives to actively maintain and improve safety and quality standards for our patients. The rigorous testing of policies and procedures; a focus on measurement and quality improvement, effective risk management and incident management strategies; and the encouragement of open disclosure through patient feedback and a robust framework for complaint management are key components of this.

Measurement and quality improvement

Our use of data and analytics is fundamental in monitoring the effectiveness of clinical governance and identifying areas for improvement. At Mater Health, we utilise data and information derived from a variety of systems in order to provide rich interrogation and visualisation of our quality and safety standards. These results are then harnessed to develop opportunities for innovation and continuous improvement. The goal is always to better understand and eliminate unwarranted clinical variation.

Clinical risk management

Mater Health Executive is the peak clinical governance committee accountable for clinical risk management. Each month Mater Health Executive reports on the effectiveness of our clinical risk management program and the mitigation strategies supporting it. Organisational safety and quality improvements are made from this continual review of performance.

Clinical incident management and open disclosure

At Mater, patient safety is our highest priority. Underpinning this is a commitment to building an organisational culture that supports both patients and staff so that they feel safe and comfortable to discuss their concerns. We have strong incident reporting systems in place and a systematic approach to investigating/analysing clinical incidents to ensure concerns are addressed in a timely and constructive way. We also make it a priority to strive for ongoing improvement in how we manage clinical incidents and open disclosure.

Our established systems and a strong culture of open discussion of incidents mean we are always asking the questions: what happened?; why did it happen?; and how did it happen? Through this process and by identifying the error-prone situations and settings, we are constantly improving the care our patients receive by implementing models of service delivery that prevent caregivers from committing errors and catching errors before they cause harm.

Clinical performance and effectiveness

There are a number of drivers of excellence in clinical performance. The experience and expertise of clinicians and their ability to work collaboratively with the broader healthcare team is one. Another is the delivery of ongoing skills development for medical, nursing, allied health, clinical support and administrative staff. Mater Health makes it a priority to continually appraise and enhance these professional groups so that we can be sure clinical skills and knowledge are aligned with best practice and contemporary evidence.

Activities to support practice review

Mater Health relies on the process of quality assurance to test whether the structures, systems and processes we have in place to achieve high standards of care are working effectively. Through quality assurance, we can identify and utilise the best clinical evidence to reduce unwarranted variation and create opportunities for growth. Mater Health assurance activities include:

- process audits of clinical care
- adverse event reporting
- clinical indicator monitoring/benchmarking
- monitoring of clinical care complications
- clinical simulation exercises
- stakeholder and patient feedback
- analysis of compliance against standards
- monitoring clinicians' performance and scope of practice.

The Me@Mater program

Me@Mater is a program of work designed to improve the experience of all Mater People and foster a positive working environment for everyone. Me@Mater aims to guide and enhance each staff member's own experience of working as part of our Mater team through a number of key initiatives that link individual pathways to the strategic objectives of the organisation.

One of the initiatives within the Me@Mater program is Speaking With Good Judgment (SWGJ)—a communication strategy which sets out an organisation-wide approach for voicing concerns and seeking answers to "what's right for patient care?" SWGJ guides Mater People on how to speak up (and give feedback), as well as how to receive the speaking up message.

Another Me@Mater initiative is PeerTalk. PeerTalk offers Mater People a confidential online platform for reporting concerns. When a report about a person's behaviour is received through PeerTalk, it is responded to in a confidential and supportive environment. A 'Peer Messenger' (a trained Mater person) is dispatched to share the reported concern with the staff member identified. Evidence has demonstrated that sharing concerns through the PeerTalk safety net and the follow-up activities which have been built into the program impacts positively on improving behaviours.

A structured approach to patient and service level review and reporting

Through our established clinical streams, each clinical service at Mater Health has systems in place to ensure that provision of care is regularly being reviewed in order to identify opportunities to manage clinical variation where it exists. Each clinical stream reports to governing committees on the following:

- the standard of care provided to patients against the desired standard
- the standard of care provided to patients against an appropriate peer group
- the appropriateness of care provided in relation to the capability of the services and clinical scope of practitioners.

Documenting clinical governance activities

Mater employs a set of modules within an overarching governance, risk and compliance software solution known as Mater's Events, Risks, Improvement and Compliance (ERIC) system to document clinical governance activities. The ERIC system tracks risks and associated activities, events (including incidents and unexpected clinical events), patient and family compliments and complaints, claims, and compliance obligations and associated activities. The system's interrelated modules also provide a repository for the documentation of quality improvement activities associated with opportunities found in assurance processes, risk identification, clinical incidents, patient complaints, clinical simulation and other improvement opportunities learned through analysis and discovery of new insights using data analytics.

Looking forward ...

In 2019 Mater Health will continue to build on the outcomes achieved through the aforementioned initiatives. New initiatives are also in development, including the introduction of daily operational huddles (a short stand up meeting of managers responsible for running various parts of the hospital) that focus purely on establishing and ensuring the hospital is ready to provide safe, high-quality patient-centric care each day.

2

Patient experience matters

Key points

Understanding patient experience measurement is vital!

96% of patients surveyed rated their overall quality of care as "Good" or "Very Good"

90% of patients felt they were always treated with respect and dignity

85% of patients said they were extremely likely to recommend Mater to their friends and family

This year we had:

100% of patients feeling that Mater staff treated them with respect and compassion when making their complaint

99% complaints acknowledged within 2 working days

89% resolution within 30 working days which is comparable to peer benchmarks

500 patient complaints reported

Patient experience matters

Overview

Mater values consumer experience as a crucial part of each and every interaction. The same motivation which drives us to deliver exceptional clinical outcomes drives our approach to service.

In 2017, we transitioned to an online feedback platform to better understand and measure patient experience, known as Patient Reported Experience Measurement (PREM). This platform uses customised surveys, dispatched quickly following a Mater Health patient's discharge (with their consent), to gather feedback on patient experiences.

PREM aligns with Standard 2 of the National Safety and Quality Health Service Standards, Partnering with Consumers. In 2018 Mater Health incorporated the Australian Hospital Patient Experience Question Set (AHPEQS) developed by the Australian Commission on Safety and Quality in Health Care so that we are able to benchmark our PREM feedback against other Australian hospitals in the future.

In addition to gathering the post-care feedback, Mater Health has a number of initiatives in place which encourage patients to feel comfortable to provide feedback at any point in their care journey.

All feedback data received from patients is integrated into Mater's Analytics and Performance (A&P) visualisation application. This application facilitates the timely integration of patient experience data with other health performance information focused on safety and quality. The A&P application connects with other safety and quality information and is viewable by managers across Mater Health's network of hospitals and health services, enabling Mater managers to uncover insights into their patient care environment and recognise opportunities to improve.

Each month managers review the comments submitted by patients, allowing them to raise important pieces of feedback and recognise staff in cases where patients have taken the time to individually acknowledge outstanding care. Unit managers can escalate an incident if a serious issue is flagged in a survey response and all patients are offered a direct connection to our 'Patient Representative' (a patient advocate role) if the survey triggers a concern they wish to discuss with the hospital.

In addition, sentiment analysis is undertaken on all written patient feedback to draw out themes that promote conversation among Mater Health teams.

In short, Mater Health makes it a priority to use patient experiences from a number of sources including PREM survey data, written feedback, patient and carer escalation calls, and patient compliments and complaints.

Example of sentiment analysis

Patient Reported Experience Measurement (PREM) in action

Inpatients

The inpatient PREM tool utilises the Australian Hospital Patient Experience Question Set (AHPEQS) outlined earlier with a set of specific questions relating to the inpatient cohort, such as pain management, the responsiveness of staff, and communication and cooperation of healthcare teams.

Outpatients

The outpatient PREM tool combines the AHPEQS with a set of specific questions relating to the outpatient cohort, such as booking appointments, telehealth and allied health.

Cancer care

In June 2018 Mater Health implemented a new Adult Cancer Care PREM tool. Like our other PREM tools, it incorporates the AHPEQS, along with specific questions for the cancer patient cohort around treatment and therapy and coordination of multiple appointments.

Neonatal care

In September 2018 Mater Health implemented a 'trial' Neonatal Critical Care Unit PREM tool. The trial tool incorporates the AHPEQS, along with specific questions relating to the neonatal critical care cohort around environment, family centred care and discharge planning. The family/carer experience feedback is captured before discharge to allow the opportunity for Mater Health to provide further information or education to patients prior to their departure.

Periodic surveying

The PREM platform's tailored approach means we can also create specific PREM tools to gather patient feedback on services such as blood transfusions. This allows us to periodically benchmark Mater Health's performance against key areas of interest in the National Safety and Quality Health Service Standards (NSQHS), such as 'Informed Consent'.

At Mater Mothers' Hospitals, we welcome more than 10 000 babies every year. In 2017, based on information gathered over many years through patient experience feedback we opened our specialised 'Pregnancy Assessment Centre'. The centre provides pregnancy support to women throughout their pregnancy and up to 6 weeks post-partum. Importantly, it provides specialist support to women in early pregnancy (under 20 weeks gestation), and the service is offered 24 hours a day, seven days a week. It is one of the first specialist centres of its kind in Australia connected to a large maternity hospital. Since opening, we have been using PREM survey results to further evaluate its effectiveness.

Our results

1000

On average, we send more than 1000 survey invites each month to patients who have been admitted to Mater with approximately 48% of surveys being completed. Table 1 depicts Mater's performance. Overall the results were very positive.

95%

During the first 6 months of 2018, 95% of patients rated their care as *'very good'* or *'good'*. This rate compares favourably with other healthcare organisations in Australia.

85%

85% of patients were extremely likely to recommend Mater to family and friends.

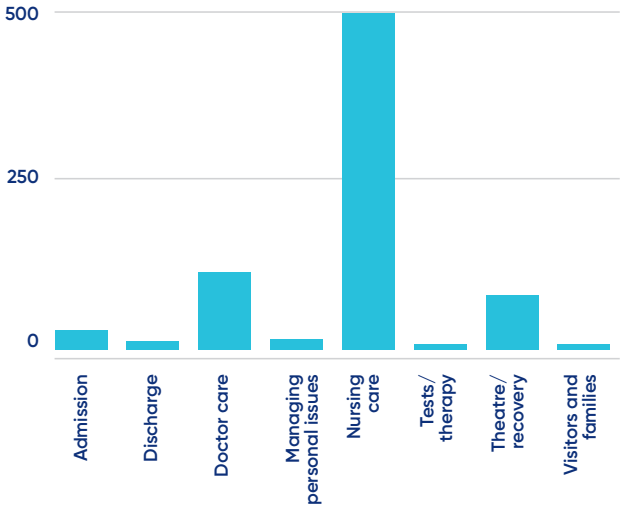
Table 1: Mater patient responses – inpatient survey results

Australian Hospital Patient Experience Questions Set (AHPEQS)	Mater patient responses (% of 'always' or 'mostly')
My views and concerns were listened to	92%
My individual needs were met	96%
I felt cared for	94%
I was involved as much as I wanted in making decisions about my treatment and care	95%
I was kept informed as much as I wanted about my treatment and care	93%
As far as I could tell, the staff involved in my care communicated with each other about my treatment	91%
I received pain relief that met my needs	90%
When I was in the hospital, I felt confident in the safety of my treatment and care	96%
Australian Hospital Patient Experience Questions Set (AHPEQS)	**Mater patient responses**
I experienced unexpected harm or distress as a result of my treatment or care	92% said 'No'
Overall, the quality of the treatment and care I received was …	95% rated 'very good' or 'good'

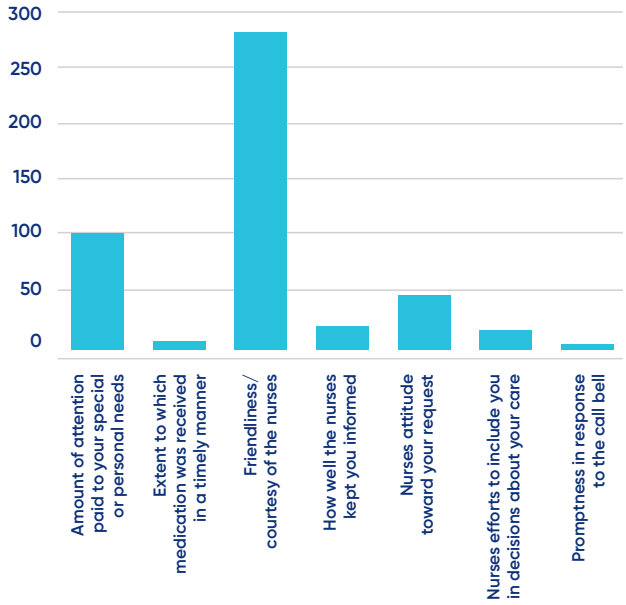
Graph 1a and 1b: Patient responses

85% of patients indicated they were extremely likely to recommend Mater to family or friends for similar care or treatment. The majority of patients chose 'friendliness and courtesy' of nursing care as the number one influencing factor (see Graph 1 and 1b). This indicates that the person-centred care approach provided by Mater nurses is of particular importance to our patient experience through their journey of care.

Graph 1a: Influencing factors of patient experience



Graph 1b: Influencing factors within nursing care



The voice of our patients

According to global research undertaken by the Beryl Institute, 91% of consumers believe that the patient experience is significant to the healthcare decisions they make and consider a good experience to be a contributing factor to good health outcomes. Continuously evaluating valuable feedback from our patients enables us to identify opportunities for improvements early, supporting us to provide the best possible health service for our patients. Table 2 provides some examples of qualitative feedback received back from patients.

Table 2: Examples of qualitative feedback

Patient comments
"All areas are of an exceptionally high standard"
"The staff and doctors were amazing, I love Mater Hospital! I have always had the best treatment and support when visiting from Cairns. Thank you :)"
"I chose to come to the Mater. Its level of care, cutting edge research and technology, participation in new research and practice/policy, application of new evidence based practice/policy, etc "
"I was delighted to be recognised two years later by the same theatre nurse and also to be greeted on my arrival on the ward by one of the nurses who had cared so well for me two years ago. It goes to show that these wonderful professionals really care about each patient as an individual"
"The staff were all wonderful; from the nurses to the kitchen staff, the doctors to the QLD X-ray staff, the cleaners and the house-keeping staff … all such assets to Mater Health"

Empowering patients and their families to speak up

An essential element of our patient safety program has been designed to give patients, carers and families support to speak up if they feel concerns about their care have not been adequately addressed. This is known as Patient and Carer Escalation (PACE). PACE allows patients, carers and families to call a senior independent clinician to the bedside within 10 minutes to review the patient and discuss concerns. In the 2018 reporting year, seven PACE calls were activated. The themes of these calls included patients seeking information about the coordination of their clinical care between specialists, the adequacy of pain management, and the patient's readiness for discharge from hospital. All calls were responded to within 10 minutes. In addition, all calls were reviewed to consider opportunities for improving the system and processes of care.

Managing patient complaints

Classification of complaint themes in Mater Health's Events, Risks, Improvement and Compliance (ERIC) system mirrors, to a large extent, the classifications used in the Australian Charter of Healthcare Rights and Mater's Patient Charter. These themes are access, safety, participation, respect, privacy and communication. Where possible, staff are encouraged to resolve concerns raised by patients/carers at the point of service. However, in situations where a patient, family or carer feels their concerns have not been resolved, a formal complaint process is initiated and the complaint is recorded in ERIC.

Analysis of themes in complaint data allows Mater Health to identify areas for improvement and take action to enhance the experience of our patients. Mater Health has a Consumers in Care Committee in place to monitor the number, rate and severity of complaints, complaint themes and identified learnings.

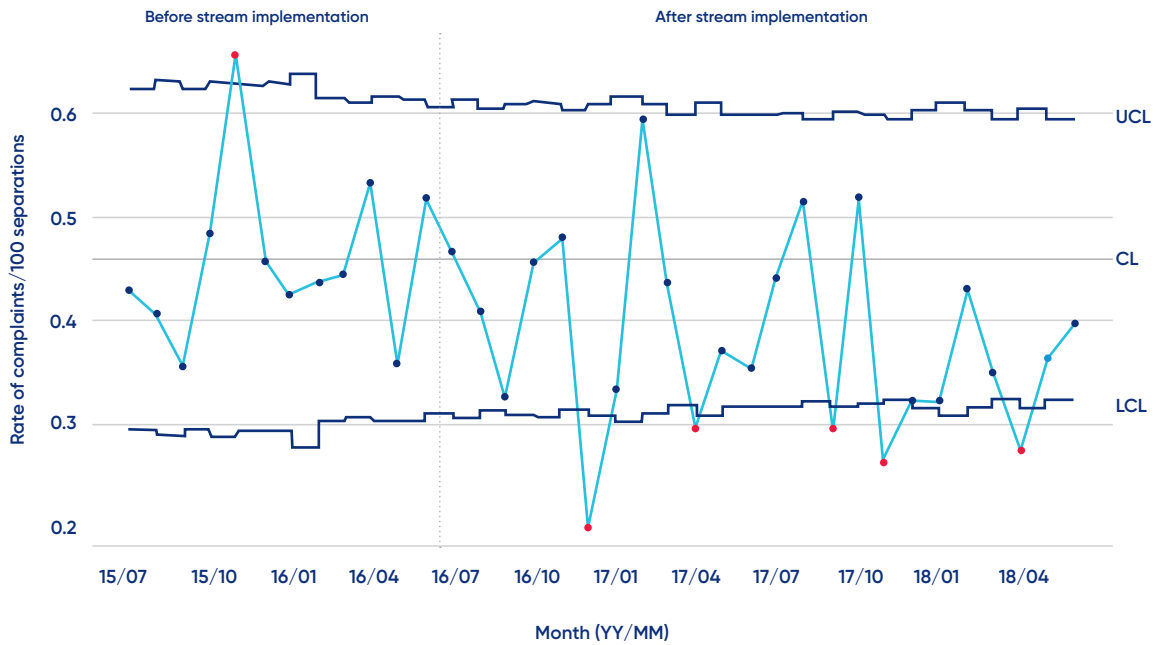
Patient complaints analysis

In the two years since Mater Health transitioned to a clinical stream model, there have been numerous occasions where the rate of complaints per month decreased (see Graph 2). Towards the end of this reporting year, there were a number of consecutive months where the rate of complaints was consistently below the long-term average.

Summary of key findings

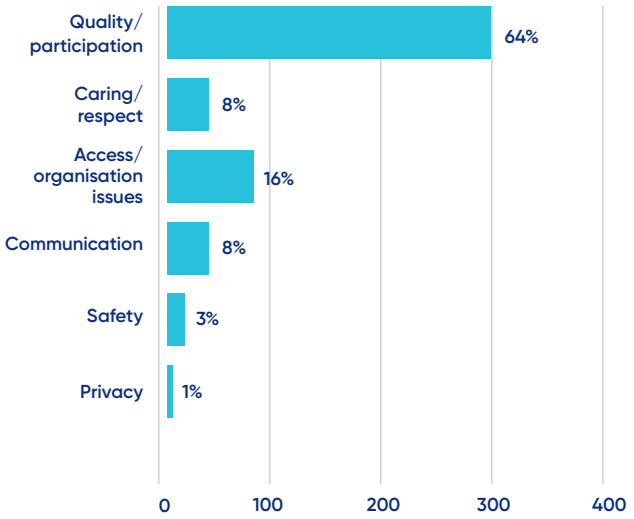
There were 141 469 patient separations for the 2018 reporting period with one complaint for every 282 patients. The top four complaints were related to: service issues, quality of care, assessment and treatment. Five hundred patient complaints were submitted this year; 94% (469) of these were directly related to healthcare.

Graph 2: Rate of complaints per 100 separations (July 2015 – June 2018)



Graph 3 displays the number of complaints by category, noting that quality/participation account for 64% of the complaints received. This category captures a patient's perception of their treatment and care experiences with 19% related to treatment, 23% to the quality of care, 38% to patient journey and 20% to access.

Graph 3: Numbers of complaints by Category (Mater Health) - July 2017 - June 2018



Complaint data is benchmarked in Australia amongst other hospital networks. Mater Health compares well to peer benchmarked data for these measures. Our rate for acknowledgement of complaints within five days is 98.7% compared to a peer group aggregate that sits below 96%. Further, 89% of complainants in the 2018 reporting year received a written response within 30 working days, which is comparable to peers.

Complaint severity and resolution outcome

Complaints that raise 'potential' or 'actual' serious concerns are marked as either 'Major' or 'Extreme', and the relevant Group Executives/Clinical Stream Directors and members of Clinical Governance are notified immediately that they have been lodged.

The majority of complaints lodged with Mater Health during the 2018 reporting year were rated as 'Moderate'. The resolution outcome for complaints is objectively assessed by the Patient Representative.

Mater Health works with the Office of the Health Ombudsman (OHO) to resolve any complaints lodged with the Ombudsman relating to care delivered at our hospitals and health services. During the 2018 reporting period, the Office of the Health Ombudsman received 39 complaints relating to Mater Health. The majority of these were managed and resolved through the initial assessment process. Only one investigation was undertaken by the OHO. All 39 complaints have subsequently been closed.

Mater Health strives to keep patients informed throughout the complaint investigation process. When the process is complete, we provide patients with a clear apology, acknowledge all the relevant processes, communicate deficiencies, and outline how we have addressed these to ensure they do not recur.

During the 2018 reporting year Mater Health introduced a mechanism to track patient/family/carer satisfaction with the complaint response process. We piloted this approach with 20 patients who submitted a complaint; this evaluation found that 19 of these patients were satisfied with the response they received and did not require clarification. Further, the pilot survey found:

- 100% of patients felt that Mater staff treated them with respect and compassion when making their complaint
- 75% of patients found it easy to make a complaint
- 95% of patients felt the complaint response process addressed their issues.

Looking forward ...

In 2019 the focus for our patient feedback efforts will be on facilitating more real-time opportunities for patients to comment on their care. We plan to do this through the implementation of the MyMater Bedside initiative.

MyMater Bedside is an advanced digital engagement system—delivered via a tablet at the bedside—that will allow patients to engage with their healthcare team about aspects of their care and access customised services with ease.

MyMater Bedside will operate in two modes: patient mode and clinician mode.

- In patient mode, patients can use the tablet to access services like ordering meals for themselves or a guest, entertainment or patient education, making requests for their comfort, learning about their care team and providing real-time feedback on their experience and Skyping with loved ones.
- In clinician mode, which is activated when a doctor or nurse swipes their identification badge over the tablet, patients and their healthcare team can collaborate on care. This might include reviewing medical images or other diagnostic results, completing clinical rounding, or conducting patient assessments.

Work is also underway on the design of new PREM tools tailored to our Day Procedure, Antenatal Care, Emergency Care and Critical Care services.

Quality of care

3

Overview

Mater's integrated quality management program is geared towards producing exceptional patient care and clinical outcomes that reach the highest standards. The program is supported by our conscientious collection and measurement of information, which allows us to regularly assess the quality of care being delivered to patients and identify opportunities where we can improve.

Our program embodies evidenced-based components, which are guided by the Australian Commission on Safety and Quality in Health Care. These components include:

- The National Safety and Quality Health Service Standards (mandatory compliance for certification and accreditation purposes)
- Clinical Care Standards (consensus best practice guidelines)
- Core Hospital Based Indicators (e.g. hospital standardised mortality ratios), and
- Hospital Acquired Complications (a list of 16 complications developed by the Commission for which clinical risk mitigation strategies may reduce, but not necessarily eliminate, the risk of that complication occurring).

In addition to these components, Mater Health undertakes a number of periodic benchmarking activities, including an annual patient safety bedside audit. All of these important mechanisms for assessing and evaluating our services ensure that we can identify any gaps in our systems and address them through fully-reasoned and tested strategies.

National Safety and Quality Health Service (NSQHS) Standards

The NSQHS Standards were developed by the Commission in collaboration with the Australian Government, States and Territories, clinical experts, patients and carers [See Appendix 1]. The primary aims of the NSQHS Standards are to improve the quality of health services and to protect the public from harm. They provide a nationally consistent statement of the level of care consumers can expect from health service organisations.

Mater Health has consistently performed well in this arena, meeting the NSQHS Standards across all criteria (i.e. safety, quality, clinical governance, patient experience and engagement). In November 2017, Mater Health underwent a full accreditation review with 15 external experts reviewing our services over the course of a week. The review found that Mater Health meets all 256 actions outlined in the 10 NSQHS Standards. Mater Health was also commended for its work. For example, we were meritoriously acknowledged for safeguarding patients through our innovative approach to managing nutrition and hydration, a key component of a patient's clinical care and overall wellbeing. The review also highlighted our Room Service initiative, which tailors a patient's nutritional needs (based on their condition) with their likes and dislikes. Mater Health is the first hospital in Australia to deliver a clinically-integrated room service model of nutrition, and this initiative supports many of the patient outcomes shared in this chapter.

In November 2017, a second edition of the NSQHS Standards was released. Health service organisations throughout Australia will be assessed against this new edition from January 2019, following a year-long transitionary period. The NSQHS Standards Second Edition broadens the scope of the original standards, capturing safety and quality assurance in important areas such as mental health and cognitive impairment, health literacy, end-of-life care, and Aboriginal and Torres Strait Islander health. It also streamlines standards and actions to make them clearer for health services to implement. The Second Edition sets out eight core standards and 148 specific actions. Everything outlined in the Second Edition must be implemented by health service organisations operating in Australia over the next three years.

Several Mater committees govern the work that is done by Mater Health to meet the NSQHS Standards. Mater Health's next accreditation review is scheduled for 2021.

Outlined below is an inside look at how Mater Health is meeting the new NSQHS Standards.

Preventing and Controlling Healthcare-Associated Infection (NSQHS Standard 3)

Healthcare-associated infections (HAI) are the most common complication affecting patients in the hospital. International studies suggest that at least half of HAIs are thought to be preventable. A range of process measures are in place at Mater Health to monitor compliance with known best practice and each of them assists in improving patient outcomes. Some examples include hand hygiene, antimicrobial use, antiseptic techniques and environmental cleaning. Mater Health monitors both national and international benchmarked HAI targets for comparison.

HAI surveillance program

The Mater Health Healthcare-Associated Infection Advisory Group meets every week to identify and discuss potential risks that have been found through the HAI surveillance program. The program includes the monitoring of clinical data (e.g. patient blood tests) and administrative data (such as readmissions) that can identify potential infections. Statistical process control charts are used to identify trends and differentiate between common and special causes. A range of key indicators are monitored, including surgical site infections, bloodstream infections, and significant organisms (e.g. multi-resistant organisms, known as MRO).

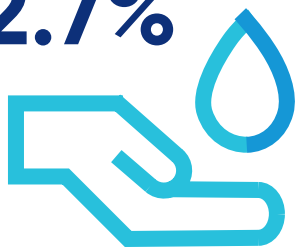
Hand hygiene

Hand hygiene among healthcare workers is still the single most effective intervention in reducing the risk of a healthcare-associated infections. The Five Moments of Hand Hygiene (refer image below) have been identified as the critical times that hand hygiene must be performed while in a patient care zone. The National Hand Hygiene Benchmark is set by the Australian Health Ministers' Advisory Council (AHMAC).

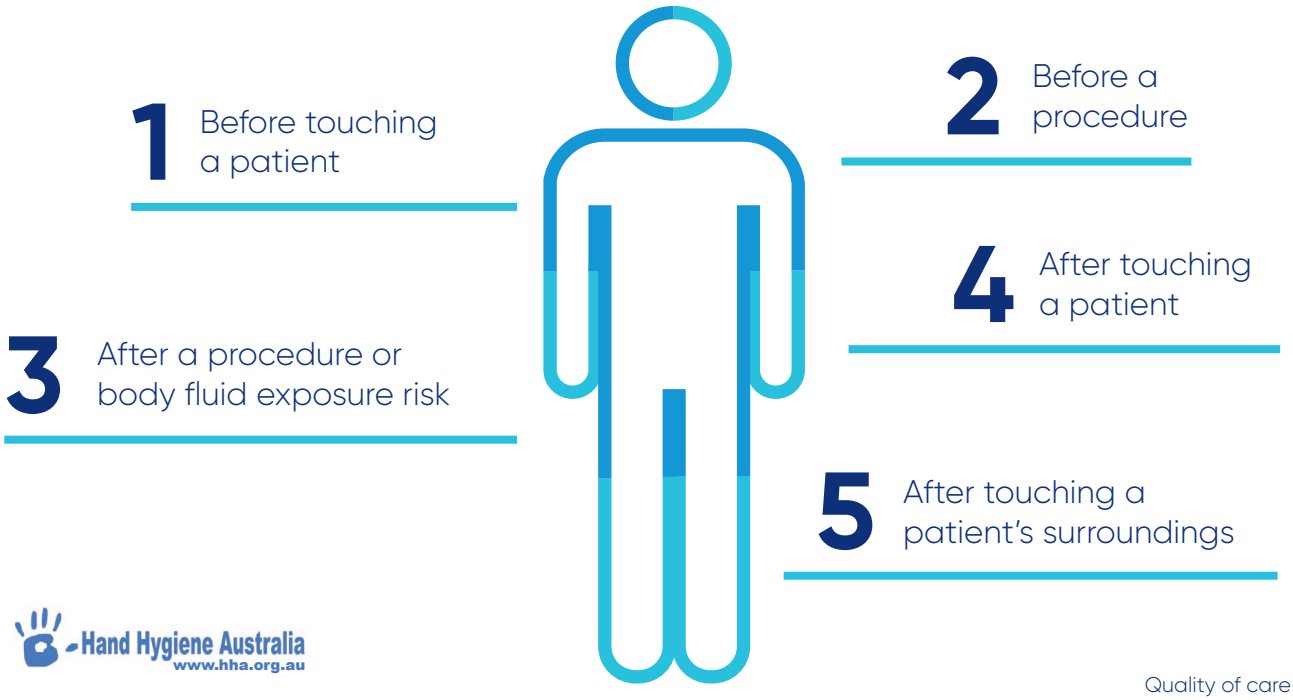
From 2017 the target for all hospitals across Australia was set at 80%. Mater Health has had a standardised hand hygiene program based on the National Hand Hygiene Initiative (NHHI) since 2010 and currently works to a target of 85% hand hygiene compliance. In the 2018 reporting period Mater achieved a hand hygiene compliance rate of 82.7%.

Our hand hygiene performance

82.7%



5 moments for hand hygiene



Surgical site infections

Surgical site infection (SSI) is one of the most common complications associated with surgery and is defined as microbial contamination of the surgical wound within 30 days post a surgical procedure or within 90 days post-surgery when an implant has been placed in a patient. The Mater Health HAI surveillance program includes continuous surveillance of procedures including hip and knee arthroplasty, posterior spinal fusion (neurosurgery), lower segment caesarean section, total abdominal hysterectomy, and microvascular breast reconstruction.

These procedures are targeted either because:

(i) they are commonly performed clean procedures and infections are potentially preventable, or

(ii) there is a higher risk of serious complications should infection occur.

Data collection includes patient and operative risks (e.g. procedure duration), as well as compliance with preventative measures such as surgical antibiotic prophylaxis and skin preparation with antiseptic. SSI is identified during the admission or post-discharge periods (i.e. readmission, emergency department presentation). Infections are classified as superficial incisional or deep incisional organ space depending on the severity of the wound infection.

Arthroplasty surgical site infections

The international rates of hip and knee arthroplasty infection are reportedly between 1% and 2%. Of these infections, there are two types that have differing consequences for patients. Superficial infections in hip and knee arthroplasty don't typically adversely affect the patient's long-term recovery and are commonly treated quickly with antibiotics. Deep wound infections, however, can be devastating for patients and can have consequences for long-term recovery.

The overall hip and knee arthroplasty infection rate for Mater Health in the 2018 reporting period was 1.5% with one patient in every 500 suffering a deep wound infection. It is important for hospitals to critically monitor hip and knee arthroplasty surgery as key markers of surgical performance, operating processes and post-operative care. Mater's performance indicates that our systems are performing well, and during the period of surveillance, our SSI outcomes are as good as the best-reported rates.

Healthcare-associated bloodstream infections

Healthcare-associated bloodstream infections (HCA BSI) are a serious cause of morbidity and mortality. More than half of these infections are related to healthcare procedures and the use of intravascular devices contribute to over one-third.

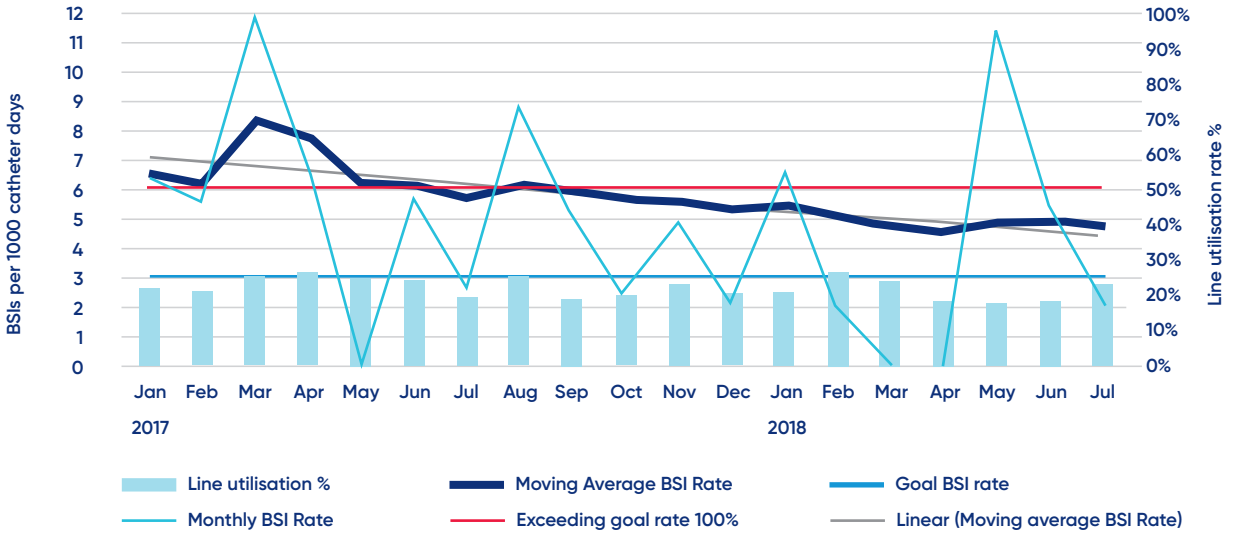
In 2018, based on reporting rates of other hospitals, Mater Health set itself a target to reduce infections to below 1.9 infections per 10 000 patient days. The rate achieved for this reporting period was 1.0 per 10 000 patient days, almost half of the target rate. Successful strategies introduced to reduce the rate of HCA BSI have included a focus on hand hygiene compliance (particularly Moment 2—before a procedure), improved education and feedback on the aseptic non-touch technique, the disinfection of devices prior to access (a "scrub the hub" ethos), and daily assessment of 'device need' (i.e. does the patient absolutely need the intravascular device). An audit of vascular devices has also been conducted, and an adult peripheral intravenous cannula (PIVC) insertion and management document form has been developed and is in trial.

Central line-associated bloodstream infection in the Neonatal Critical Care Unit

Each year Mater Health cares for thousands of premature babies in the Neonatal Critical Care Unit (NCCU), often born up to 16 weeks prematurely. Premature birth places newborns at high risk of early life complications, especially infection. Therefore, it is especially important that Mater Health undertakes continuous, prospective surveillance of all bloodstream infections (BSIs) in the NCCU. The aim of this is to support clinical teams in identifying potential risks to babies and make sure human and environmental improvement efforts are prioritised.

The Mater Health target for for central line-associated bloodstream infections in this population has been set at three per 1000 catheter line days, which we are seeking to reach in 2019. It is an ambitious target and below the reported rates found in literature. Our current rate is 4.1 per 1000 catheter line days (see Graph four on page 21), which has been achieved through a steady and consistent downward trend over 18 months. It is recognised that this is a relatively small population of patients in hospitals and coupled with the scarcity of openly reported infection rates means performance is difficult to judge.

Graph 4: Central line-associated bloodstream infection rates – Neonatal Critical Care Unit January 2017-June 2018



Significant organisms

Significant organisms are those infectious agents that are transmissible between patients, most commonly through the cross-contact of healthcare workers. They include multi-resistant organisms (MROs) such as methicillin-resistant *Staphylococcus aureus* (MRSA), vancomycin-resistant enterococci (VRE), and extended-spectrum beta-lactamase (ESBL) producing gram-negative organisms; as well as respiratory viruses (e.g. influenza) and gastrointestinal infections (e.g. norovirus).

In most instances, MRO infections have clinical manifestations that are similar to infections caused by susceptible organisms. However, options for treating patients with these infections are often extremely limited. Furthermore, increased length of stay, costs, and mortality have been associated with MROs.

Mater has used comparison data from South Australia (there is no national reporting of this data) to measure its performance on this HAI. The rates detailed below are for the 2018 reporting period:

- There were 64 cases of ESBL-producing organisms = 1.0 per 10 000 patient days (comparison rate = 0.97)
- There were 55 cases of MRSA = 1.2 per 10 000 patient days (comparison rate of 1.5).
- There were 39 cases of VRE = 0.83 per 10 000 patient days (comparison rate = 0.9)

Clostridium difficile

Clostridium difficile (C. difficile) is a bacterium that is found in the bowel. Infection with toxigenic C. difficile causes diarrhoea and colitis. Less commonly it causes toxic megacolon, colonic perforation and in rare circumstances, death. C. difficile infection is closely associated with antimicrobial use. Avoiding inappropriate antimicrobial use (antimicrobial stewardship programs) is the most important way to prevent a potentially life-threatening infection. Mater Health has Infection Prevention and Control and Antimicrobial Stewardship Programs in place to monitor new isolates of C. difficile. The benchmark set by the Australian Commission on Safety and Quality in Health Care is 1.0 per 10 000 patient days, slightly below the rate reported at Mater Health in the 2018 period of 1.3.

Mater is committed to preventing and managing infection control related issues by continuously evaluating evidence-based strategies which can be implemented to prevent the emergence and transmission of healthcare associated infections.

Medication Safety (NSQHS Standard 4)

The NSQHS Medication Safety Standard recognises that medicines are the most common treatment used in healthcare and that while they have the potential to provide great benefit for patients, they can also cause harm. Many of the adverse events related to medicine use in healthcare are avoidable.

As required by the NSQHS Medication Safety Standard, Mater Health minimises the risk of harm from medicines by:

Ensuring systems are in place to support the safe procurement, supply, storage, compounding, manufacturing, prescribing, dispensing, administration and monitoring of the effects of medicines.

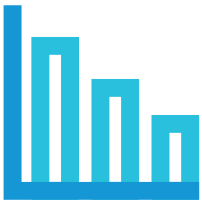
Ensuring information about medicines used by patients (a best possible medication history) and information about reactions to medicines in the past (adverse drug reactions) are recorded and available to clinicians.

Providing information to patients about their medicine needs and risks, reviewing patient medicines and providing an accurate, current list of medicines to the patient and their clinician when care is being transferred.

Since 2008, our work towards improving systems for the safe and quality use of medicines has been guided by a detailed Medication Safety Strategy that draws on the international expertise of the Institute for Safe Medication Practices (ISMP) in the United States and Canada. The Medication Safety Self-Assessment (MSSA) for Australian Hospitals (adapted for Australia by the NSW Clinical Excellence Commission and endorsed by the ISMP) is also used by Mater Health to encourage a workplace culture that contributes to medication safety. These initiatives, in conjunction with our close monitoring of clinical incidents and near-miss reporting, provide for a multifaceted approach to medication safety.

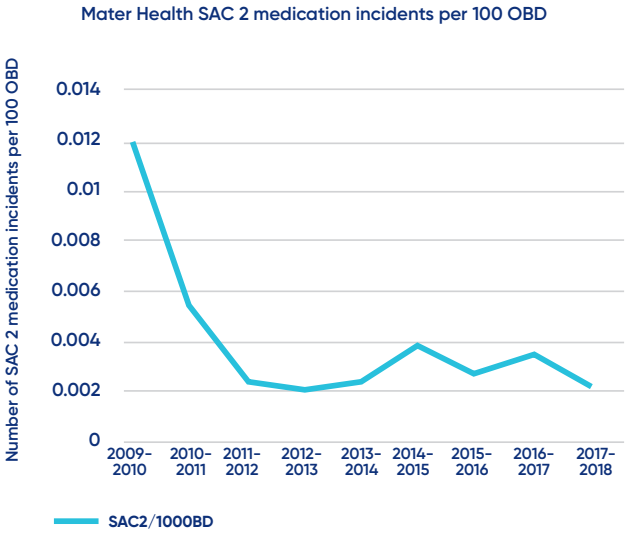
95%

Patients who were satisfied with the information they received about their medicines



The Mater Health Medication Safety Strategy has seen a **six-fold reduction** in the number of medication incidents with harm between 2010 and 2018 (see Graph five).

Graph 5: SAC 2 medication incidents per 100 Occupied Bed Days (OBD)



Comprehensive Care (NSQHS Standard 5)

The goal of the Comprehensive Care Standard is to ensure that patients receive care that is aligned with their expressed goals of care and healthcare needs, considers the effect of an individual's health issues on their life and wellbeing, and is clinically appropriate. The standard requires that healthcare service providers identify patients at risk of specific harm by applying appropriate screening and assessment processes, ensuring that all risks are managed or prevented.

Some insight into the Mater Health approach to comprehensive care is outlined below.

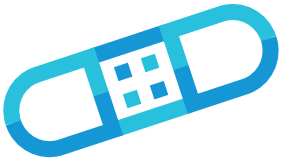
Falls-related injury is one of the leading causes of morbidity and mortality in older Australians. More than 80% of injury-related hospital admissions in people aged 65 years and over is due to falls and fall-related injuries. A patient's falls risk can increase when they are admitted to hospital due to a range of factors such as illness, a new environment, new medications and walking in unsafe footwear. The NSQHS standards require health organisations to establish and maintain specific systems to prevent falls, including screening and/or assessing patients for falls-risk.

During the 2018 reporting period, Mater Health recorded 5.7 falls per 1000 episodes of care in patients over 65 years of age. This rate is comparable to our benchmarked peers. Mater Health adheres to a multi-disciplinary approach to falls prevention. This approach includes an educational focus (falls risk assessment on admission), strategies and interventions to ensure patient call bells are within reach and attended to promptly, the provision of traction socks and easy access to appropriate walking aids, along with hourly staff rounding.

86%

Completed falls prevention risk assessment

Pressure injuries are a common cause of harm to patients and form as a result of prolonged pressure to an area of skin. In many cases, pressure injuries are preventable. Pressure injuries can occur in any patient with associated risk factors. They are not only restricted to decreased mobility and can include factors such as nutritional status, skin integrity, age and the level of oxygenated blood supply to pressure points. In 2018 Mater Health recorded 1.2 pressure injuries per 1000 patients, which is comparable to our benchmarked peers. Across Mater Health, staff use a risk assessment tool to assist in identifying patients 'at risk' or 'high risk' of pressure injury. There has been increased emphasis on timely completion of these patient risk assessments in order to implement the necessary strategies to prevent harm and pressure injuries to patients. Additionally, each hospital has access to wound management therapists to assist and provide expert advice on appropriate management and prevention of pressure injuries. Future work to eliminate hospital-acquired pressure injuries causing harm is a high priority.



75%

Completed pressure injury risk assessment

Communicating for Safety (NSQHS Standard 6)

The intention of NSQHS Communicating for Safety Standard is to ensure timely, purpose-driven and effective communication and documentation that supports continuous, coordinated and safe care for patients. At Mater Health we use the SHARED acronym (Situation, History, Assessment, Risk, Expectation Escalation and Documentation) to facilitate communication on a patient's condition. SHARED delivers consistency to handovers of patient care, while developing teamwork and supporting a culture of patient safety. At Mater Health, patients are encouraged to be active participants in their bedside clinical handover process with staff. Results of our 2018 patient safety audit and patient experience survey reflect how Mater is performing against these important process standards of care and communication with patients, families and their carers.

Clinical communication

S ituation

H istory

A ssessment

R isk

E xpectation
E scalation

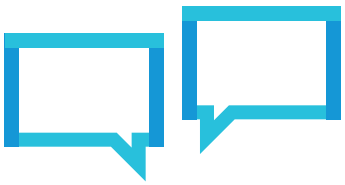
D ocumentation

94%

At the time of leaving the hospital, 94% of patients felt they were given enough information about how to manage their care at home

92%

Patients who felt included in the handover process



73%

73% of patients reported that their views and concerns were 'Always listened to', while a further 22% reported 'Mostly'. At ward level, the use of the patient safety 'huddle' and 'buzz' meetings, along with the implementation of an 'after-hours' and weekend patient safety 'huddle' has demonstrated significant improvements in communication and increased staff awareness of pertinent patient safety risks.

Blood Management (NSQHS Standard 7)

Blood management requires clinical leaders and senior managers to implement systems which ensure the safe, appropriate, efficient and effective care of the patients' blood. Blood management also involves monitoring the clinical appropriateness of blood and blood products prescribed during treatment, along with effectively managing the availability and safety of stored blood and blood products.

In 2017 the Mater Health Blood Management Committee focused on minimising patient exposure to allogeneic blood products, and reducing the risks associated with transfusion.

This focus included:

- Adopting a single unit approach for non-bleeding adult patients. There has been a 24% increase in patients receiving only a single unit transfusion, which has significantly reduced the overall usage of blood products and exposure of risk to patients. 72% of all transfusions at Mater Health are now single units.
- Monitoring prescribing practices by auditing clinical indication for blood transfusions. Our latest review results showed that 60% of all transfusion prescriptions were appropriate, complete, and supported with clinical rationale and evidence.
- Monitoring the compliance of remote storage equipment and minimising the risk of blood products being unsuitable for transfusion. There was 100% compliance with all aspects of remote blood storage equipment—underpinning the reliability of the systems in place to manage the movement of blood products across a large and diverse organisation.
- Reducing the amount of blood and blood products discarded and unable to be recycled.

In the reporting year, 6637 bags of red blood cells were transfused to patients during their treatment and care at Mater Health. Our significant efforts to manage the appropriate use of this precious resource has resulted in a 14% reduction in patients receiving a transfusion.

60%

Blood transfusions were compliant based on clinical indication

Recognising and Responding to Acute Deterioration (NSQHS Standard 8)

The NSQHS Standard 'Recognising and Responding to Acute Deterioration' requires organisations to establish and maintain effective systems to better support patients at-risk of sudden deterioration in their condition. Mater Health has a Medical Emergency Team (MET) and Code Blue response team trained to provide rapid assistance in the management of a deteriorating patient.

A range of policies, procedures and work instructions relating to this standard have already been implemented, and a suite of 'early warning' tools have been developed with the support of the Australian Commission on Safety and Quality in Health Care and Queensland Health. Our early warning tools are used to assist clinicians in their clinical assessment of patients and provide an appropriate response to acute deterioration. Our performance on recognising and responding to acute deterioration is strong:

- **Medical Emergency Team calls:** The average rate of MET calls over the reporting period (2017-2018) was 12.24 per 1000 patients. This compares with reported rates of 26 per 1000 patients in other hospitals and while it is difficult to infer much with this measure in isolation, when combined with other performance measures a lower rate can demonstrate a hospital system that is safely caring for patients who show early signs of deterioration, reducing the need to call specialist teams urgently to provide emergency rescue treatment.
- **Unexpected admissions to intensive care:** Of the patients who do need a MET to attend them, less than one in 10 require admission to the Intensive Care Unit (ICU). The proportion of patients transferred to the ICU as a result of a MET call reflects a number of factors including patient acuity, ward skill mix and timing of MET call in relation to the patient deterioration.
- **Unexpected cardiac arrest in hospital:** The rate of unexpected cardiac arrests at Mater Health was 0.15 per 1000 episodes of care in this reporting period. Cardiac arrests are considered an imprecise measure for the system of recognition and response; however, coupled with other measures, it can provide useful insights. Survival rates for in-hospital cardiac arrests are poor; on average only 15–20% of patients who experience cardiac arrest, survive. The few reported rates in Australia reveal a hospital aggregate rate to be just over one per 1000 patients, higher than the rate noted at Mater.

Each of these measures are difficult to interpret in isolation. Collectively, and in considering the available comparison data, there is evidence to suggest the systems in place to support acute patient deterioration in hospital at Mater Health are working well. Our outcomes are indicative of a system that has matured significantly. Mater Health has invested in out-of-hours medical and nursing resources which support at-risk patients and a workplace culture willing to call for help earlier and prevent adverse outcomes.

Further work we are undertaking in this area includes our innovative simulation program, which is being delivered by Mater Education. The program has provided an opportunity to engage clinicians in easily accessible in-situ simulations during their workday, with no impact to patient care delivery. The program provides participants with the knowledge and clinical skills necessary to improve performance in the initiation and provision of complex life-sustaining interventions in the event of life-threatening emergencies. A key benefit of the program is that it enables identification and correction of issues as they occur in real time in the real clinical environment, without patient compromise.

End-of-life care

An End-of-Life quality improvement plan and program is in place at Mater Health. This initiative is guided by the Australian Commission on Safety and Quality in Health Care (2015) National Consensus Statement: *'Essential elements for safe and high-quality end-of-life care'*. The Consensus Statement sets out suggested practice for the provision of end-of-life care in settings where acute care is provided. Achievements to date from this initiative at Mater Health includes the development of our Adult Resuscitation Plan. This plan reflects a patient's preference of care founded on their values and beliefs, agreed upon in joint discussion with the clinical team based on good medical practice.

Clinical Care Standards

In 2013, the Australian Commission on Safety and Quality in Health Care introduced a set of Clinical Care Standards as part of the overarching Safety and Quality Framework for Health Care. The Clinical Care Standards differ from the NSHQS Standards in that they are not 'minimum hospital performance expectations' but nationally agreed statements on the care patients should be offered by health professionals and health services for a specific clinical condition in line with current best evidence. These Clinical Care Standards play an important role in ensuring the delivery of appropriate care and reducing unwarranted variation. Each Clinical Care Standard has a set of quality statements that describe key aspects of care that a patient should be offered as part of a clinical pathway.

They also describe high priority areas for quality improvement, based on areas of known practice variation, national and internationally, and information on known treatments, procedures and processes of care that have proven to be most effective. A set of indicators accompany the quality statements to help monitor how well the care is implemented. Currently, there are nine published Clinical Care Standards. Mater Health is proactively addressing and monitoring the components of care in each standard as they are released. These include:

- antimicrobial stewardship
- acute coronary syndrome
- acute stroke
- delirium
- hip fracture care
- osteoarthritis of the knee
- heavy menstrual bleeding
- venous thromboembolism (VTE) prophylaxis and treatment
- colonoscopy.

Useful and complementary information about care is also captured by some clinical registries. An example is the Australian and New Zealand Hip Fracture Registry where data submission allows for ongoing monitoring of Mater's performance against the hip fracture clinical care standard, including benchmarking with peers. The table below lists important quality indicators in providing high standards of care. Quality indicators for each standard are measured to identify system improvement opportunities so that all patients can reliably receive the highest standard of evidence-based, person-centred care at Mater.

Table 3: Clinical care standards – progress and results

Acute coronary syndrome	Acute stroke	Antimicrobial stewardship	Osteoarthritis of the knee
100% of patients who experience acute coronary syndrome had a complete individualised care plan for discharge out of hospital including education and community referrals.	100% of family/ carers of patients who suffered a stroke have a formal needs assessment – an improvement from 75% in the previous year.	91% of blood cultures were reviewed within 24 hours following prescription of broad spectrum antimicrobials to allow de-escalation to narrow-spectrum antimicrobials.	100% of patients with newly diagnosed osteoarthritis of the knee had a comprehensive person-centred assessment prior to any intervention.

Delirium	Hip fracture	Heavy menstrual bleeding	Colonscopy and Prevention of venous thromboembolism
Mater has recently implemented organisation-wide delirium risk screening and, after the initial launch, 40% of patients had a delirium risk assessment on admission. This result is expected to improve considerably in the next 12 months.	100% of patients had an ortho-geriatrician or physician involved in their care from time of admission to support early-rehabilitation and pain management in order to reduce complications in this vulnerable patient cohort.	In an audit sample of women undergoing hysterectomy at Mater facilities, 100% of women were offered less-invasive interventions prior to hysterectomy with Mater's rate of hysterectomy significantly lower than peers at 1.92 per 100 patient episodes. Compared to other women's hospitals our rate is 73.1% below peers.	Quality indicators published in September and October 2018 are in the process of forming part of Mater's care standards quality measurement and improvement system.

National Core Hospital-Based Outcome Indicators

The establishment of a set of core, hospital-based outcome indicators (CHBOI set) was implemented by the Australian Commission on Safety and Quality in Health Care to provide hospitals with a Toolkit for internal safety and quality improvement. Mater Health monitors its performance against these indicators through its quality program. The table below indicates our performance against peer hospitals.

Table 4: Core hospital based indicators

Indicates performance is better than peers

Indicates performance is equal to peers

Hospital standardised mortality ratio which is calculated as a ratio of the number of deaths to the expected number of deaths among patients in acute care hospitals.

Healthcare associated *Staphylococcus aureus* bacteraemia.

Death in low-mortality Diagnosis Related Groups (DRG) which is in-hospital deaths in DRG with a mortality rate less than 0.5%.

In-hospital mortality for:

- acute *myocardial infarction*
- stroke
- fractured neck of femur
- pneumonia.

Clostridium difficile.

Unplanned/unexpected hospital readmission of patients discharged following management of:

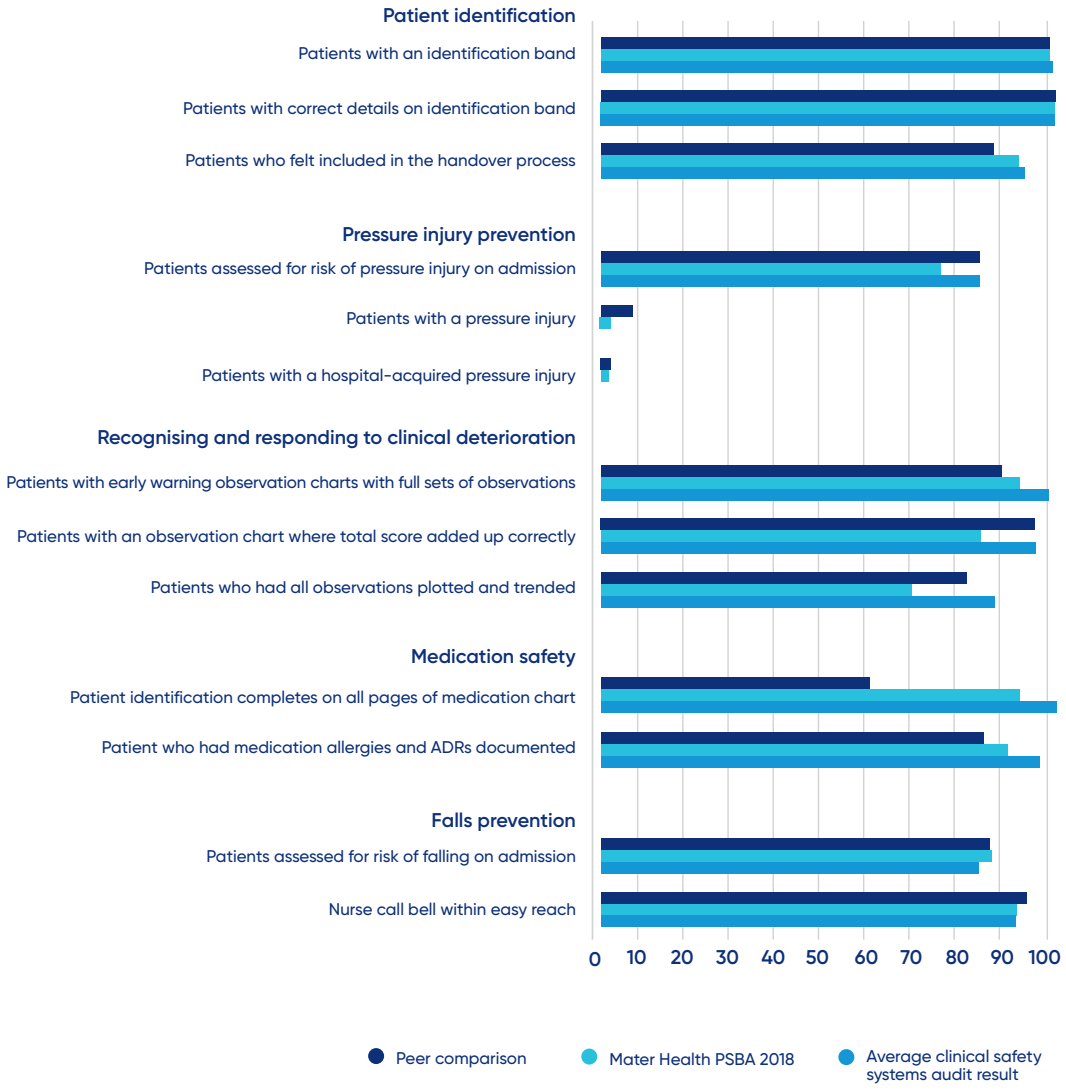
- acute *myocardial infarction*
- knee replacement
- hip replacement
- paediatric tonsillectomy and adenoidectomy.

Patient Safety Bedside Audit

On an annual basis, Mater Health undertakes a point prevalence Patient Safety Bedside Audit (PSBA) that allows measurement of some of the most important clinical care processes known to prevent or reduce significant safety risks. The audit provides a key opportunity to benchmark Mater Health performance with peer hospitals and the requirements of the NSQHS Standards.

Collecting meaningful data in this way has become integral to our 'Quality of Care' strategy. Questions typically focusing on quality and risk are included in both the PSBA and the clinical safety systems audit program. The clinical safety systems audit program is a Mater-wide program of sequential auditing relating to the NSQHS Standards. This allows us to assess 'what we are doing well' and 'what needs improvement' on a continual basis. This process has enabled frontline staff to engage further in quality processes and proactively use the information to track their improvement at ward level and influence practice change. Graph six presents the results of the annual PSBA conducted at Mater in 2018, compared to peers and the average monthly Mater clinical safety systems audit results. The results indicate that Mater sits above the peer group average for several of the measures.

Graph 6: Patient Safety Bedside Audit Results – 2018



Hospital-acquired complications

As part of Mater's ongoing efforts to improve its health care systems to make them highly reliable and remove unwarranted variation, we are focused on using a range of data sources beyond clinical incidents, complaints and patient feedback. Mater Health uses administrative data sets (or coded data) generated for every patient after an episode of care in hospital to identify trends and patterns in things like complications and side-effects of treatment. This coded data reflects the care that was provided and assists health organisations, funders, researchers and governments to understand cost and variation in health services and populations accessing healthcare.

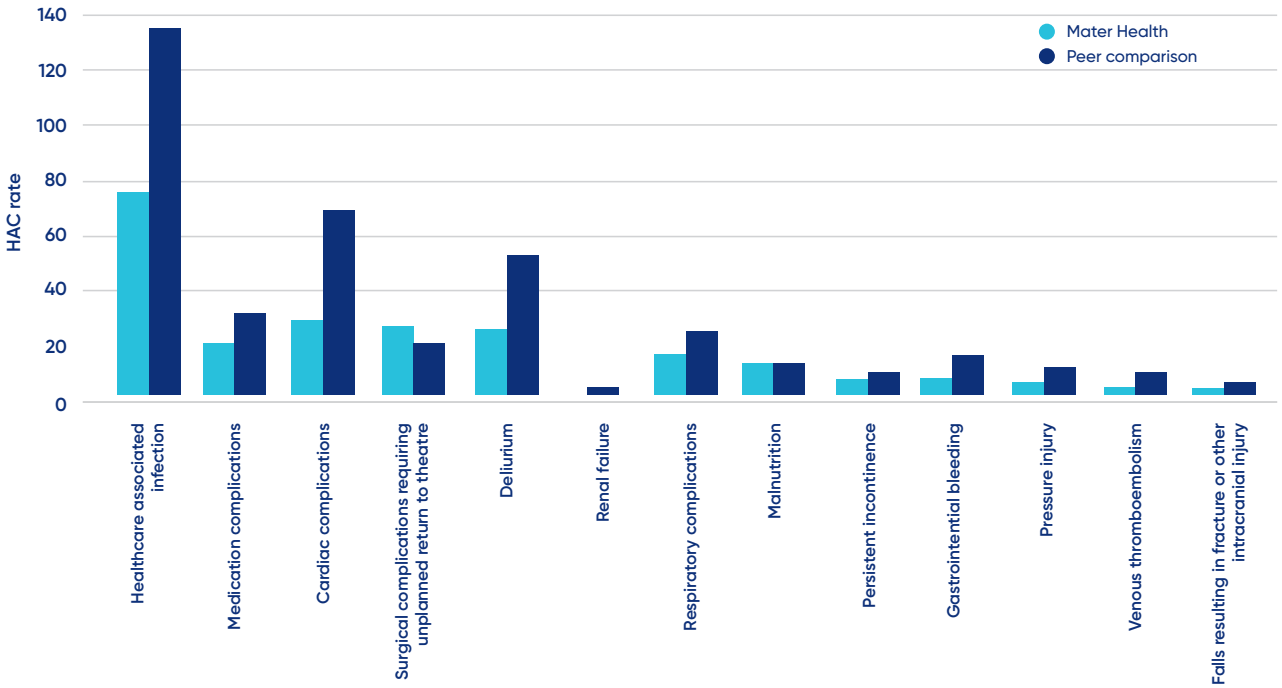
In 2018 the commission published a list of 16 complications (described as Hospital-Acquired Complications – HACs) for which clinical risk mitigation strategies may reduce (but not necessarily eliminate) the risk of occurrence (see Table five). Mater Health strives to prevent these complications where possible through ongoing evaluation of clinical practice and utilisation of best evidence-based clinical care processes.

Mater closely monitors HACs, enabling timely investigation and the development of strategies to reduce their incidence. Mater Health's HAC rates are largely below the Australian hospital average (See Graph seven on page 31).

Table 5: List of hospital-acquired complications

Hospital acquired complications	
Pressure injury	Gastrointestinal bleeding
Falls resulting in fracture or other cranial injury	Medication complications
Healthcare-associated infection	Delirium
Surgical complications requiring unplanned return to theatre	Persistent incontinence
Unplanned intensive care unit admission	Malnutrition
Respiratory complications	Cardiac complications
Venous thromboembolism	Third and fourth degree perineal laceration during delivery
Renal failure	Neonatal birth trauma

Graph 7: Hospital-acquired complications per 10,000 hospitalisations



Clinical benchmarking

Mater Health submits clinical outcome data to a variety of benchmarking networks. Given the breadth of clinical services we deliver to patients, it is necessary to tailor our benchmarking networks to ensure we are comparing ourselves with relevant 'like' hospitals. As a result, Mater Health contributes to many networks through differing organisations:

- Australian Council for Healthcare Standards using the Performance Indicator Reporting Tools
- Health Roundtable
- Hospital Benchmarking Network with the Catholic Negotiating Alliance
- Women's Healthcare Australasia Queensland Health (e.g. Variable Life Adjusted Displays - VLADs)
- Children's Healthcare Australasia.

See Appendix 2 for information about these sources.

Benchmarking enables staff to track their progress over time and monitor changes already made, as well as compare their performance with other like organisations. All data is collected using standardised data definitions and submitted utilising sources of information found in clinical coding and patient information databases, or through manual audit and collation. Reports display our progress and easily identify clinical outcome data that is 'statistically significant' (either above or below the general peer group). The reports also use a traffic light system to depict any changes or improvements (i.e. green for maintenance or improvement since the last quarter and red for a decline). Mater Health will continue to invest in dedicated monitoring of HACs and other assurance processes throughout 2019.

Looking forward ...

In 2019 Mater Health will continue to implement systems and strategies that ensure we are meeting all of the standards set out in the National Safety and Quality Health Service Standards Second Edition. Our efforts to analyse variation will continue to ensure that we are constantly improving reliability and identifying innovative ways to deliver better care to our patients.

4

Patient safety – our priority

Key points

11 928
clinical incidents were reported in the reporting year giving an incident reporting rate of 8.43%

Mater had **zero** events which met the threshold of the 8 nationally agreed sentinel events

60% of incidents were classified as minor harm or near misses with a further 37% of incidents occurring as a result of a patient's underlying disease

The rate of patient harm has reduced statistically since 2016

Overview

At Mater Health patient safety governs the care we deliver. We are committed to maintaining a culture of full and open disclosure where staff are encouraged to report all clinical incidents. This is supported by a systematic approach to investigating and analysing clinical incidents and activating change in our practices where required. To reduce the potential for harm and improve patient safety, we also focus on identifying error-prone situations and settings and implementing systems that will minimise the opportunity for errors to occur. Mater Health is committed to transparency in everything we do. Therefore we openly report any identification of gaps in care and we strive to create valuable opportunities to discuss these with patients, families and carers.

Clinical incident reporting

The Mater Health approach to clinical incident reporting, investigation and follow-up aims to:

- support a culture that is just, fair-minded, unbiased, objective and non-discriminatory
- encourage and support the reporting of clinical incidents and near-misses
- standardise clinical incident investigation processes
- guide the management and response to clinical incidents
- promote open and honest discussion with patients, families, and carers following harm
- support clinical staff who have been involved with serious clinical incidents.

All clinical incidents are required to be reported by clinical staff on duty at the time of the event. This practice is reinforced through our quality and safety policy framework, which aligns with NSQHS Standard 1—Clinical Governance. The Mater Health Comprehensive Care Committee is the primary governing committee that monitors indicators for the incident management model. These indicators include incident reporting rates by our four clinical streams, incidents classified by harm, incident themes and identified learnings.

For the 2018 reporting period, Mater Health recorded 141 469 patient separations. In the course of providing care to these patients, **11 928 clinical incidents** were reported, deriving an overall reported **clinical incident rate of 8.43%**.

Increased compliance by Mater People to report incidents (importantly 'near miss incidents') and a willingness to share potential areas for improvement before patient harm occurs is the core reason for an increasing rate of incident reporting. Our reporting rates have steadily increased over time from 3.9% in the 2007 reporting period to our current 8.43%. We recognise that the clinical incident reporting system is by no means the only system by which episodes of patient harm can be identified. This is one of a number of mechanisms used by Mater Health to monitor and respond to opportunities to improve care.

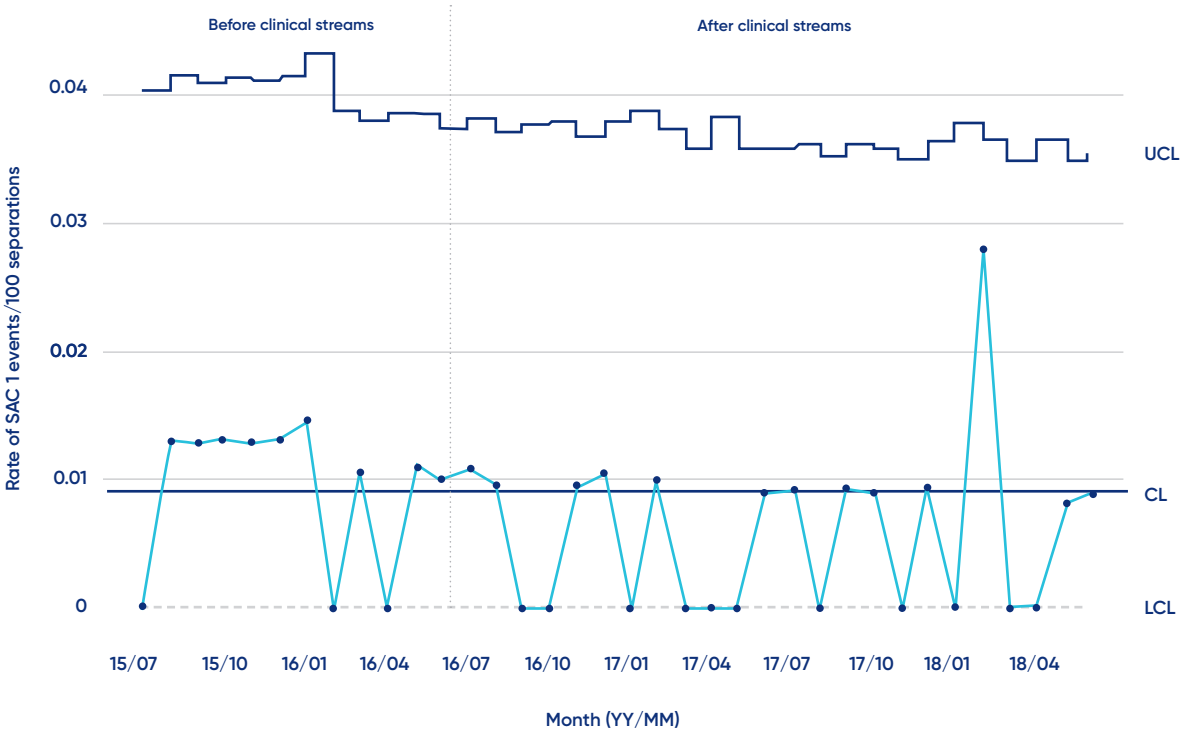
Severity of harm

Reported clinical incidents are assigned a Severity Assessment Code (SAC) rating (see Appendix 2 for an overview of the different SAC ratings applied). There can be difficulties and challenges when attempting to identify whether the reported clinical incident is related to the underlying condition of the patient, particularly in the setting of complex and chronic care. Therefore, expert knowledge of each care setting and in-depth investigations are crucial.

Likely permanent harm or death (SAC 1 events)

All incidents rated as SAC 1 are investigated by conducting a Root Cause Analysis (RCA) or Clinical Incident Systems Analysis Governance. An explanation of these investigation methodologies is outlined later in this section. Graph eight shows the rate for SAC 1 incidents per 100 patients over the past three years. The harm severity breakdown displays a natural variation of low numbers over time with no trend or outliers indicated. In the 2018 reporting year, Mater Health recorded nine SAC 1 incidents.

Graph 8: SAC 1 clinical incidents per 100 separations (2015-2018)



Sentinel events

Sentinel events are defined as adverse events that occur due to hospital system and process deficiencies, and which result in the serious harm or death of a patient. The Australian Commission on Safety and Quality in Health Care has worked closely with all jurisdictions to develop a national core set of sentinel events. These are:

1. procedures involving the wrong patient or body part resulting in death or major permanent loss of function
2. suicide of a patient in an inpatient unit
3. retained instruments or other material after surgery requiring re-operation or further surgical procedure
4. intravascular gas embolism resulting in death or neurological damage
5. haemolytic blood transfusion reaction resulting from ABO (blood group) incompatibility
6. medication error leading to the death of a patient reasonably believed to be due to incorrect administration of drugs
7. maternal death associated with pregnancy, birth or the puerperium
8. infant discharged to the wrong family.

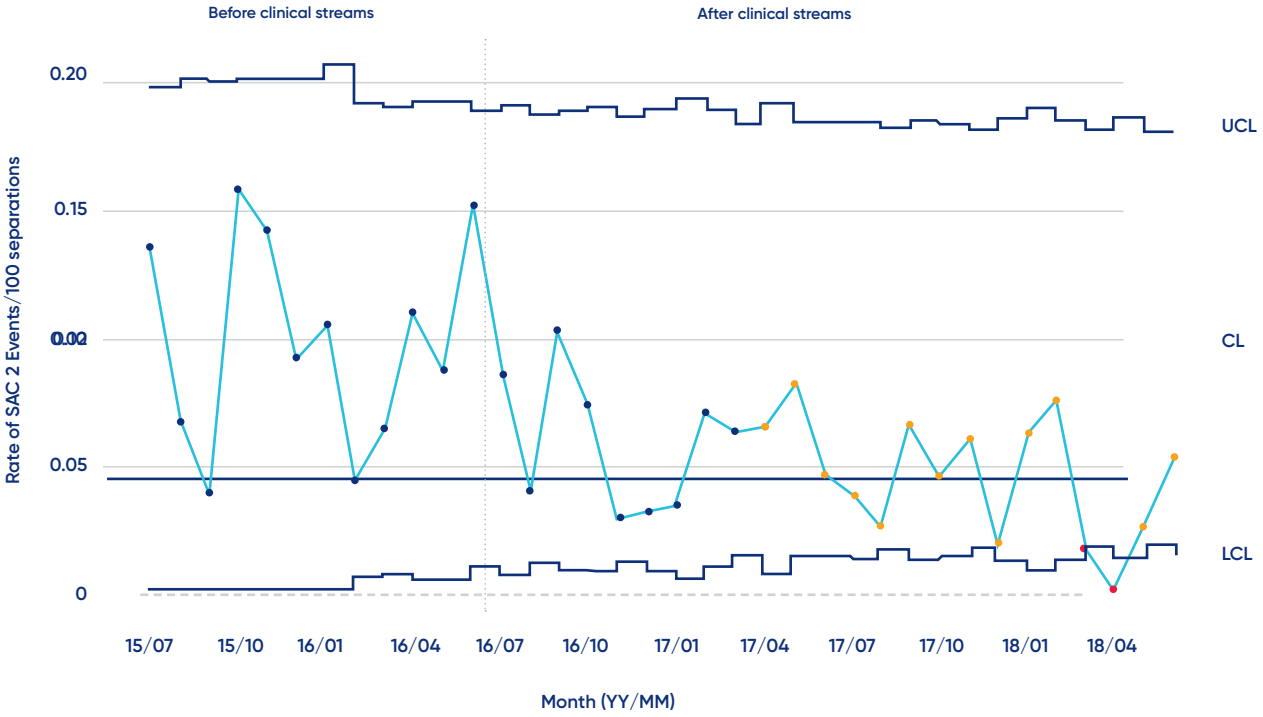
No events reported at Mater Health during the 2018 reporting year aligned with any of the nationally agreed sentinel event categories.

Temporary harm (SAC 2 events)

Incidents assigned a SAC 2 rating are assessed to determine the most appropriate method of investigating the incident. Unlike SAC 1 events, there is a broad scope to judge temporary harm and it is not always clear as to the severity of the temporary harm. During the 2018 reporting period, the total number of SAC 2 incidents was 53 (representing 0.44% of all incidents reported).

Graph 9 demonstrates that the rate of SAC 2 events has significantly reduced following the introduction of our clinical stream structure in July 2016. The sustained reduction in the rate of SAC 2 events is due to a concerted commitment over a number of years to identify system and process gaps and then implementing recommendations from the system reviews.

Graph 9: SAC 2 clinical incidents per 100 separations (excluding HAI's) 2015–2018



Some of the SAC 2 events reported were linked to a particular theme. Examples of these themes include falls, pressure injuries, and recognition of the deteriorating patient. As noted earlier, significant work is being undertaken in these important patient safety areas to reduce risk.

Minor harm (SAC 3 events/near miss events)

In 2018 there were 2955 SAC 3 events reported (representing 25% of all reported incidents). Since July 2015, SAC 3 numbers have remained relatively stable with no trends being shown. 'Near miss' events are incidents that do not cause injury, ill health, damage, harm or other loss but have the potential to do so. The importance of reporting near misses cannot be underestimated. Of the 11 928 incidents reported in the current period, 4254 (35.6%) were near misses. This level of reporting is similar to the previous year.

Adverse outcome events

Incidents which do not fit the criteria of a SAC definition can be 'adverse outcomes'. Of the 11 928 incidents reported in the 2018 reporting period 4436 (37.18%) were adverse outcomes. By way of example, an adverse outcome may be the reporting of an unexpected admission to intensive care, where all care provided was optimal on review and there was no clinical incident.

Response to harm

Open disclosure

A strong ethos of open disclosure becomes critical in the event of a patient experiencing a clinical incident in hospital. Patients have the right to be provided with information about what happened, along with a full report on the steps being taken to prevent its recurrence. At Mater Health open disclosure is a priority. Mater Education and our Clinical Governance Unit, in liaison with the Cognitive Institute, has developed an Open Disclosure Education Program that provides clinicians with the principles, elements and processes for effective open disclosure. The program gives Mater People the tools to put theory into practice via innovative simulation exercises and an online training module.

The pace and pattern of grief and loss for patients experiencing a serious clinical incident is not predictable and does not always align with the processes and timelines of an organisation. At Mater Health we understand the need to travel alongside patients and families, providing empathy and care throughout the process and beyond.

Root Cause Analysis (RCA)

An RCA is generally undertaken when a reportable event has occurred. A reportable event is defined in the *Hospital & Health Boards Regulation 2012 (Qld).* These are:

- Maternal death or serious maternal morbidity associated with labour or delivery.
- The death of a person associated with the incorrect management of the person's medication.
- The death of a person, or neurological damage suffered by a person, associated with an intravascular gas embolism.
- The wrong procedure being performed on a person, or a procedure being performed on the wrong part of a person's body, resulting in the death of the person or an injury being suffered by the person.
- The retention of an instrument, or other material, in a person's body during surgery that requires further surgery to remedy the retention.
- The death of a person, or an injury suffered by a person, associated with a haemolytic blood transfusion reaction resulting from the wrong blood type being used for the person during a blood transfusion.
- The suspected suicide of a person receiving inpatient health care.
- Suspected suicide of a person with a mental illness who is under the care of a provider of mental health services while residing in the community.
- Any other death of a person, or an injury suffered by a person, that was not reasonably expected to be an outcome of the health service provided to the person.

Reference to 'injury' in the above is defined as an injury that is likely to be permanent.

At Mater Health our approach is to put patients and their families first; informing them at the outset that an RCA investigation is to take place and providing them with the opportunity to put forward any questions they may wish to have answered as part of the investigation.

The investigation process is patient and family-centric—our goal being to travel with the patient throughout this difficult and often grief-stricken time as we seek answers. When the RCA is completed a letter is sent from Mater Health to the family inviting them to meet with hospital representatives to discuss the outcome of the RCA findings. It is relevant to note that, in the past, Mater Health has received public acknowledgement from the Queensland State Coroner in relation to its thorough approach when undertaking RCA investigations.

Clinical Incident Systems Analysis

Clinical Incident Systems Analysis (CISA) is a useful approach to use when there is a specific single adverse event requiring review, such as instances where there has been actual patient harm, a significant near miss, or process and system issues are identified or suspected. A small multidisciplinary team reviews the clinical incident in detail using the evidence-based CISA methodology. Unlike the RCA process, the CISA process is not governed by legislation. Many of the processes that underpin RCA methodology, including travelling with the family, are used throughout the review.

Being proactive—learning and sharing

In the past year, in response to growing evidence that pro-active quality reviews of serious near misses can deliver strong service outcomes, Mater Health has conducted several proactive clinical reviews. Two of these reviews are detailed below.

Case study 1: Focus on patients with diabetes who have foot complications

A review of the Mater High-Risk Diabetic Foot Service was undertaken in the first half of 2018. This review identified the need for an increased level of coordinated care. In response to this, a multidisciplinary team and speciality clinics involving vascular, endocrine and orthopaedics were established. Patient feedback on these changes was then measured using the Australian Hospital Patient Experience Questions Set relating to the coordination of their care. The feedback we received was overwhelmingly positive:

- 74% of patients rated 'always' to the question 'As far as I could tell, the staff involved in my care communicated with each other about my treatment' and;
- 77% of patients rated 'always' to the question 'I was kept informed as much as I wanted about my treatment and care'.

In a patient's own voice: "I can't express how impressed I am with every aspect of my care, treatment and support I have been given. The Mater team worked efficiently, checking and cross-checking within and between each sector to ensure nothing is missed. Most of all I was treated as a person, not a number and kept informed of what was happening all the time".

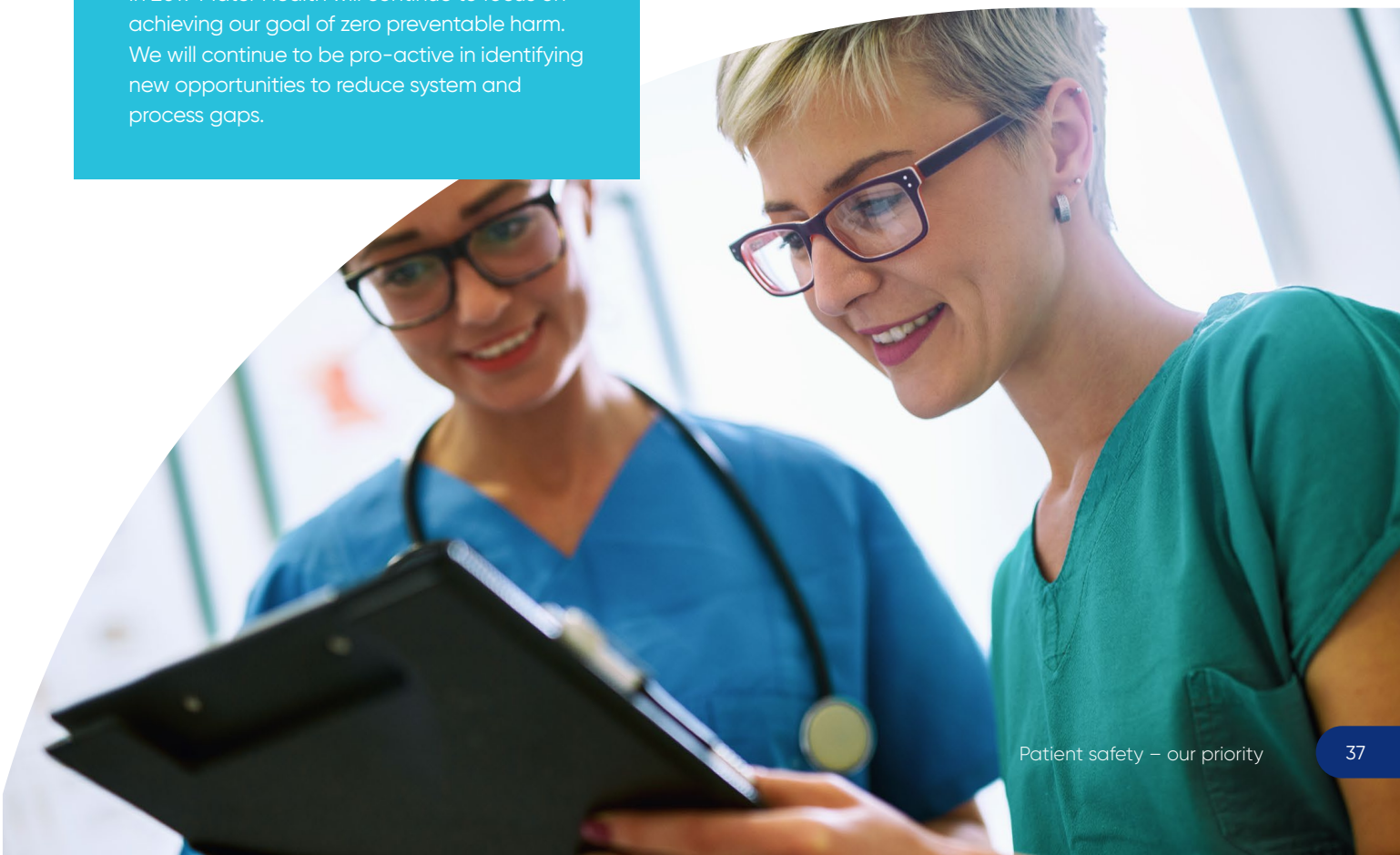
Case study 2: Focus on falls in cancer patients

In July 2018, Mater Health conducted a clinical review to examine the issue of patients with cancer experiencing falls. The goal was to identify opportunities where we could reduce falls incidents in this patient group. The review identified several needs and resulted in the introduction of new initiatives relating to care paths, clinical handover, and patient rounding to ensure the proactive identification of at-risk patients and deliver increased monitoring to those identified.

Following these changes, we sought feedback from patients. Almost 90% of patients surveyed said they received rapid assistance from a staff member when they needed it.

Looking forward ...

In 2019 Mater Health will continue to focus on achieving our goal of zero preventable harm. We will continue to be pro-active in identifying new opportunities to reduce system and process gaps.



5

Improving our performance

“The largest room in the world is the room for improvement”

Overview

Mater is an organisation committed to learning and improving. In 2015, as part of Mater Health's strategy, an expert team was established to cultivate continuous improvement at all levels throughout Mater. This team is known as the Quality By Design team and they have developed an innovative toolkit to stimulate improvement opportunities and analyse their success

The Quality By Design team works in close collaboration with Mater's world class ministries, Mater Education and Mater Research, to assist them in achieving this.

The Quality By Design team's vision is to support, guide and foster a culture of improvers at Mater.

Quality By Design

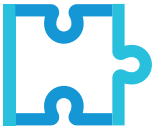
Supporting Mater Health

Safety–Efficiency–Quality–Experience–Future

Continuous Improvement

Continuous practical changes to improve the way the work is done every day, supported by Mater Improvement Framework and A3 Thinking with a focus on low variability, high value care.

Includes translation of evidence into practice and practice into research.



Leadership Behaviour

Supported through

Management

Including Daily Management System

Capability Development

Sustainable improvement capability in all people at all levels of Mater Health.

Access to Institute of Healthcare Improvement (IHI) Basic Certificate in Quality and Safety and A3 Workshops supporting interactive learning. Provision of improvement networking opportunities

Mater People and culture

The basic thinking, mindset and assumptions required to drive this transformation include Frontline Permission – Improvement Everyday - Shared Improvement Language.

The Mater improvement toolkit sets out our standard methodology for problem-solving and continuous improvement, and it provides the systems, processes and support to enable Mater Improvers.

The methodology focuses on asking three important questions:

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What changes can we make that will result in improvement?

The toolkit then employs Plan-Do-Study-Act (PDSA) cycles for small, rapid-cycle tests of change. This strategy is operationalised and reported on through the A3 Thinking template (see Appendix 3). The A3 template prescribes how to investigate a problem through deep diagnostics, solution design, testing through PDSA cycle/s, and then implementation and sharing. The toolkit's methodology helps focus time and attention on the steps to improvement.

Achievements to date using the Mater Improvement Framework and A3 Thinking template include:

A significant reduction in the triage time of referrals in outpatients (reduced from an average of 7 days to 1 day).

Improved staff and patient experience with expanded training and utilisation of our Mater Volunteers in accessing patient isolation rooms.

A reduction in printing costs of clinical records (>$500 000 annually).

A decrease in waste of consumables in Birth Suite (elimination of disposing of unused supplies).

A significant focus for the Quality By Design team in 2018 has been the introduction of the Mater Mothers' Hospital Daily Management System. This innovative model of teamwork is a way of ensuring that regular, structured communication occurs about daily operations and performance. It supports the service to answer the question, 'Are we ready to provide safe care today—and if not, why not?'

Case Study 1: Care of patients with tracheostomy

During 2018, an innovative model of care was introduced in ward 10A of Mater Hospital Brisbane to increase ward capacity and improve the outcomes we achieve for our higher acuity patients. The new model takes a cross stream clinical approach and incorporates the use of short stay and acute medical beds.

Part of this strategy was an identified need to enhance our clinical capability to meet the demands of patients with complex needs. One such opportunity was in the care of patients with tracheostomy. Representatives from Mater Education, medical, nursing, speech pathology and physiotherapy joined forces to establish an ongoing learning program for all staff. Simulation-based tracheostomy workshops were developed and delivered. The workshops are now available to all Mater People who wish to develop their competency in the care of the patient with a tracheostomy. To date, 99 Mater People from various disciplines (including young adult, surgical, neuroscience and paediatrics, rehabilitation, emergency department medicine) have completed the workshops.

Alongside the workshop initiative, an interdisciplinary tracheostomy support response team was introduced in ward 10A to improve the timeliness of support and advice for patients. A review of Mater's governance documents was also undertaken, and a revised tracheostomy procedure was developed, providing comprehensive best practice guidance in the management of patients with tracheostomy.

Case study 2: Reducing the risk of severe perineal trauma

Together with select peer Women's Healthcare Australasia (WHA) Hospitals, Mater has been participating in a national IHI collaborative to focus on reducing the rate of severe perineal trauma (marked number "3" in the funnel plot—Graph ten). Mater's multidisciplinary improvement team has been working to implement a bundle of best practice interventions including the use of warm packs, more liberal use of episiotomy with instrumental birth, and hands-on controlled delivery of the fetal head. The most recent peer review data shows that Mater Mothers' Hospitals now have one of the lowest rates of 3rd/4th degree perineal trauma in the peer group.

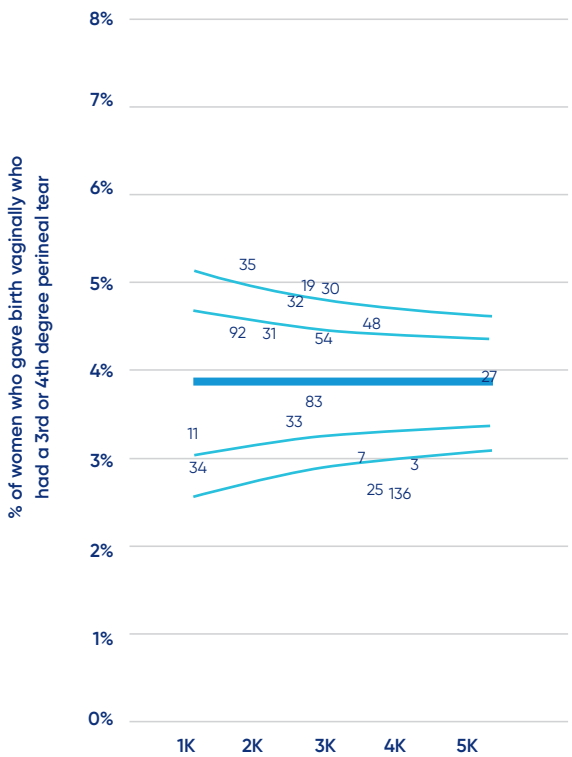
Mater Mothers' Hospitals best practice interventions, in line with the IHI collaborative, include:

- regular meetings with key staff
- Plan Do Act Study (PDSA) cycles
- changes to policy documents where necessary
- multidisciplinary education
- skills development
- learning packages for competency for episiotomy, per rectum examination and grading of perineal trauma
- regular newsletters and updates
- 'quality' KPI for our Birthing Services Team.

Planned next steps include a drive to achieve compliance of 95%.

Graph 10 demonstrates the rate of severe perineal trauma noting that Mater is marked 3 in the funnel plot. It is relevant to note that Mater Health is a high-volume provider with one of the lower rates.

Graph 10: Rate of severe perineal trauma – Mater is identified as number 3



Learning from harm

Examples of the improvements undertaken as a result of large system improvements relating to adverse events are listed in Table six.

Table 6: Examples of improvement activities undertaken during 2018

Improvement initiative	What does this mean and why is it important?	What we did to improve
To continue our commitment to improving our clinical handover processes with specific focus on patient involvement and handover at the transfer of patients	Clinical handover facilitated in a structured way provides essential information on a patient's condition and gives consistency to handovers of patient care whilst developing teamwork and a culture of patient safety.	We have continued to encourage patients to be active participants in their bedside clinical handover process. The recent results of the annual PSBA indicate that 92% of our patients felt included in the handover process, which was above the benchmarked peer group of 86%. We have also focused on critical components of handover at transfer.
To recognise and respond to clinical deterioration	This area remains a high priority despite the significant improvement in recent years so Mater can eliminate all instances of patients suffering a clinical incident through under-appreciation of their clinical deterioration.	We have evidence of system improvement across a range of measures including the extremely low rate of in-hospital cardiac arrest (0.15 per 1000 patients). Mater's rate sits well below benchmark data.
To reduce bloodstream infection rates in neonates	To prevent healthcare acquired infections associated with intravascular devices which can potentially compromise neonates.	The NCCU team have undertaken considerable improvement activities, through education, training, simulation, process design, environmental changes and agreed protocols for teamwork. The neonatal central-line-associated bloodstream infection rate decreased from 8 per 1000 to 4.1 per 1000 line days in the reporting period.
To reduce the risk of extravasation injury from iron infusions	When iron infusions infiltrate into the tissues it can cause a permanent stain.	We are replacing our large volumetric infusion pumps in 2019 so that pressure setting limits can be tailored for different medications. This will reduce the likelihood of pumps continuing to deliver an iron solution against the increased resistance found with tissued peripheral intravenous cannulas.
To improve electronic fetal heart rate recording interpretation and analysis	Accurate interpretation of fetal heart rate analysis allows staff to recognise and respond to instances of potential fetal distress.	The new INFANT software will enhance K2 Guardian functionality to assist clinicians in the analysis of CTG patterns so that early, reliable interpretation of fetal distress can be acted upon. This is the first implementation of this type of artificial intelligence focusing on improving the outcomes of birth in Australia.
To reduce the risk of a patient developing sepsis	Early identification and recognition of sepsis allows for appropriate intervention and management.	We developed an evidence-based standardised algorithm to assist staff to recognise, manage and treat sepsis. There have been no significant adverse events this year relating to under-appreciation of sepsis.

Looking forward ...

Performance improvement will continue to be a focus for Mater Health in 2019. The Quality By Design team will support Mater Health to integrate daily management processes across all of Mater's hospitals and provide education that increases workforce capacity to systematically undertaken improvements in local areas. Another initiative identified for 2019 is the continued improvement of our data collection and utilisation. A number of our existing data sources, such as clinical outcome/audit data, incident themes, complaint themes, and PREM data will be overhauled to identify safety and quality improvements.

Closing message from Mater Health Chief Executive Officer

At Mater Health we are committed to a process of continual improvement. Our overarching goal is to deliver exceptional care to patients every single time.

Throughout 2019 we will continue to focus on advancing the culture of learning at Mater by providing our Mater People with the tools and strategies they need to effectively and responsibly share ideas, give and receive feedback, speak up, and hold themselves and others to account.

We will maintain our pursuit of clinical excellence through the ongoing refinement of systems and processes of care— seeking always to understand, measure, improve, evaluate and assure. We will continually ask the question: How will our activities benefit our patients and their families?

We will also continue to build on clinician leadership; integrating education and research wherever possible to ensure that we have confident health services and competent teams at work, using and developing the best evidence to deliver excellence in patient care and experience.

Appendix 1:
The National Safety and Quality Health Service Standards – second edition

1. **Clinical governance**, which aims to ensure that there are systems in place within health service organisations to maintain and improve the reliability, safety and quality of health care.

2. **Partnering with consumers**, which aims to ensure that consumers are partners in the design, delivery and evaluation of healthcare systems and services, and that patients are given the opportunity to be partners in their own care.

3. **Preventing and controlling healthcare-associated infection**, which aims to reduce the risk of patients getting preventable healthcare-associated infections, manage infections effectively if they occur, and limit the development of antimicrobial resistance through the appropriate prescribing and use of antimicrobials.

4. **Medication safety**, which aims to ensure that clinicians safely prescribe, dispense and administer appropriate medicines, and monitor medicine use. It also aims to ensure that consumers are informed about medicines, and understand their own medicine needs and risks.

5. **Comprehensive care**, which aims to ensure that patients receive comprehensive healthcare that meets their individual needs, and that considers the impact of their health issues on their life and wellbeing. It also aims to ensure that risks to patients during healthcare are prevented and managed through targeted strategies.

6. **Communicating for safety,** which aims to ensure that there is effective communication between patients, carers and families, multidisciplinary teams and clinicians, and across the health service organisation, to support continuous, coordinated and safe care for patients.

7. **Blood management**, which aims to ensure patients' own blood is safely and appropriately managed, and that any blood and blood products that patients receive are safe and appropriate.

8. **Recognising and responding to acute deterioration**, which aims to ensure that acute deterioration in a patient's physical, mental or cognitive condition is recognised promptly and appropriate action is taken.

Appendix 2: Glossary

Mater has developed definitions and incident classifications in consideration of recognised definitions, including the Australian Commission on Safety and Quality in Health Care.

Term	Definition
Adverse event	When some event or circumstance results in a patient suffering harm or disappointment that falls within Severity Assessment Code definitions *(see further for this definition)*.
Adverse outcome	If an event occurs that does not meet SAC definitions – the term 'adverse outcome' can be chosen. An example of an adverse outcome is a pressure injury noted on admission. This is important to note for patient care but arises prior to the episode of care in hospital.
Children's Healthcare Australasia	Children's Healthcare Australasia (CHA) is a non-profit community of children's hospitals and paediatric units throughout Australia and New Zealand. Originally established in 1988 as the Association of Paediatric Teaching Hospitals, CHA has a long history of providing support to children's hospitals and paediatric services, and facilitating sharing and learning among healthcare providers about best practice.
Clinical incident	A clinical incident is an event or circumstance which could have or did lead to unintended and/or unnecessary harm to a person and/or a complaint, loss or damage.
Clinicians	Those staff members who provide clinical care to patients. Includes Medical Practitioners, Nurses, Midwives and Allied Health Professionals.
Complainant	Person or agency expressing dissatisfaction.
Complaint	An expression of dissatisfaction or concern made to Mater by, or, on behalf of, a patient of Mater. A complaint may be made in person, by phone, fax, email, social media or writing. Verbal complaints can be made and will be documented by the staff member who receives the complaint.
Confidentiality	In the management of clinical incidents Mater aims to ensure that the confidentiality of patients, reporters, clinicians and those who assist in the investigation and/or management of a clinical incident is maintained. It is relevant to note that confidentiality does not equate to anonymity.
Episode of care	An episode of care refers to a particular phase of treatment (reflected by the care type) rather than to each individual patient day. There may be more than one episode of care within the one hospital stay period also referred to as a separation. An episode of care ends when the principal clinical intent of care changes (i.e. the care type changes) or when the patient is formally discharged from the hospital.
ERIC (Events, Risks, Improvements and Compliance)	The ERIC system allows Mater People to report and manage incidents, hazards, risks, compliments, complaints, claims and improvement activities that affect patients, staff, visitors, childcare children and service delivery. ERIC can also be used to manage compliance with legislation and standards.
Expression of regret	An expression of sorrow for a harm or grievance. It should include the words 'I am sorry' or 'we are sorry'. An expression of regret may be preferred over an apology in special circumstances (e.g. when harm is deemed unpreventable).

Term	Definition
Formal clinical incident investigations	**Clinical Incident Systems Analysis:** Clinical Incident Systems Analysis (CISA) is a useful approach to use when there is a specific single adverse event to be reviewed in instances where there has been actual patient harm, a significant near miss, or process and system issues are identified or suspected. A small multidisciplinary team reviews the adverse event in detail using the CISA methodology which is evidenced-based. The CISA model is similar, in part, to the RCA methodology in terms of the process used to uncover the contributory factors and root causes of an event except for an important difference, the process is not governed by legislation. As for RCA, the focus is on systems and processes, not on individual blame.
	Root Cause Analysis: RCA is a systematic process of analysis aimed at identifying factors that contributed to an event and the measures that could be implemented to prevent a recurrence of similar events. An RCA is a quality improvement technique that allows health service facilities to assess and respond to "reportable events". It is governed by legislation set out in the *Hospital and Health Boards Act 2011* (Qld).
	Proactive Clinical Incident Review (PAR): The PAR model is sometimes used following a significant near miss event or where themes emerge in a cluster of incidents. The PAR model is similar, in part, to the RCA methodology in terms of the process used to uncover the contributory factors and root causes of an event except for an important difference, the process is not governed by legislation. As for RCA, the focus is on systems and processes, not on individual blame.
Hospital Benchmarking Network	The Catholic Negotiating Alliance (CNA) and Adventist HealthCare (AHCL) established the Hospital Benchmarking Network (HBN) to enable its members to compare and identify innovators in patient care. The methodology used to analyse data sets is identical to Health Roundtable.
Health Roundtable	Health Roundtable is a non-profit membership organisation of up to 150 health services across Australia and New Zealand with 23 years of experience in health service improvement. HRT provides benchmarking services for performance indicators along with opportunities for collaboration and improvement sharing.
Higher level response (see also Open Disclosure)	A comprehensive open disclosure process usually in response to an incident: • resulting in death or major permanent loss of function; or • permanent or considerable lessening of body function; or • significant escalation of care or major change in clinical management (e.g. admission to hospital, surgical intervention a higher level of care or transfer to intensive care unit); or • major psychological or emotional distress. These criteria should be determined in consultation with patients, their family and carer(s). A higher level response may also be instigated at the request of the patient even if the outcome of the adverse event is not as severe.
Incident management	Includes identification, notification, prioritisation, investigation, classification, analysis, action and feedback.
Incident report	An incident report is the electronic record of the report of an incident captured within ERIC by the reporter.

Term	Definition
Liability	The legal responsibility for an action and/or inaction.
Lower level response (see also Open Disclosure)	A timely open disclosure process usually in response to near misses and no-harm incidents: • incidents resulting in no permanent injury; • requiring no increased level of care (e.g. transfer to operating theatre or intensive care unit); and • resulting in no, or minor, psychological or emotional distress. These criteria should be determined in consultation with patients, their family and carer(s).
Mater People	Anyone who carries out work for Mater including employees, contractors, subcontractors, visiting medical officers, employees of labour hire companies (e.g. nursing agency staff), outworkers, apprentices and trainees, students, volunteers, and person(s) conducting a business or undertaking who are individuals if they perform work for Mater.
Near miss	An incident that did not cause injury, ill health, damage, harm or other loss, but had the potential to do so.
Occupied bed days	The sum of the length of stay over a particular period of time.
Open disclosure	An open discussion with a patient about an incident(s) that resulted in harm to the patient while they were receiving healthcare. The elements of open disclosure are: • an apology or expression of regret; • a factual explanation of what happened and the potential consequences; • an opportunity for the patient, their family and carer(s) to relate their experience; and • an explanation of the steps being taken to manage the event and prevent recurrence. The discussion and exchange of information may take place over several meetings.
Performance Indicator Reporting Tool (PIRT)	The Performance and Outcomes Service (POS) coordinates the development, collection, collation, analysis and reporting of the Australian Council of Healthcare Standards (ACHS) Clinical Indicators. This national clinical data set facilitates benchmarking by participating healthcare organisations at a peer and national level. The Performance Indicator Reporting Tool is used to submit and report this data.
Responsible supervisor	A person who directs and/or supervises work in a Mater workplace. Note that the term 'Responsible supervisor' does not correlate with any particular classification, title or status in the organisation.

Term	Definition
Reportable events **Defined by the Hospital and Health Boards Regulation 2012 (Qld)**	• Maternal death or serious maternal morbidity associated with labour or delivery; • The death of a person associated with the incorrect management of the person's medication; • The death of a person, or neurological damage suffered by a person, associated with an intravascular gas embolism; • The wrong procedure being performed on a person, or a procedure being performed on the wrong part of a person's body, resulting in the death of the person or an injury being suffered by the person; • The retention of an instrument, or other material, in a person's body during surgery that requires further surgery to remedy the retention; • The death of a person, or an injury suffered by a person, associated with a haemolytic blood transfusion reaction resulting from the wrong blood type being used for the person during a blood transfusion; • The suspected suicide of a person receiving inpatient healthcare; • The suspected suicide of a person with a mental illness who is under the care of a provider of mental health services while residing in the community; or • Any other death of a person, or an injury suffered by a person, that was not reasonably expected to be an outcome of the health service provided to the person *(*A reference to an injury is a reference to an injury that is likely to be permanent).*
Severity Assessment Code (SAC)	*The measurement of consequence to a patient associated with a clinical incident. The SAC score is used to determine the appropriate level of analysis, action and escalation for clinical incidents.* SAC 1: Death or likely permanent harm which is not reasonably expected as an outcome of healthcare SAC 2: Temporary harm which is not reasonably expected as an outcome of healthcare SAC 3: Minor harm which is not reasonably expected as an outcome of healthcare.
Variable Life Adjusted Display (VLAD)	The Variable Life Adjustment Display (VLAD) methodology was introduced to Queensland Health to provide an easily understood graphical overview of clinical outcomes over time and plots the cumulative difference between expected and actual outcomes. The data is updated monthly and includes a mechanism for flagging when further investigation of performance is warranted.
Women's Healthcare Australasia	Women's Healthcare Australasia (WHA) is a non-profit community of more than 100 women's hospitals and maternity units throughout Australia. Originally established in 1994 by the then Chief Executives of the Women's Hospitals to help staff of these services to share information, WHA has since expanded into a vibrant community of more than 100 maternity hospitals and units across Australia. This includes the largest tertiary maternity services in capital cities through to the smallest rural and remote maternity services and every type of service in between.

Appendix 3:

Mater improvement framework

Process owner:
Improvement team:
Report author: Date: Version:

Title:

What is the problem?

1.

2. Problem/improvement Opportunity identified

What is the current condition?

3. Problem/aim statement

4. Access to data

Diagnostics/root cause analysis?

5. Deep diagnostics

Diagnostic tools include 'go see', patient tracking, 5 whys, cause and effect diagrams, value stream mapping, process mapping...

What is the target condition/or goal?

Identify potential change

6. Identify potenial change

Improvement countermeasure Concepts include:

- standard work
- visual management
- 5S

Plan

7. Series of PDSA cycles

Status

Metrics

8. Decision to embed and spread

Follow up

9. Implementation plan

10. Evaluate and share

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