2016-17

YEAR IN REVIEW

CLINICAL
EXCELLENCE
COMMISSION

PUTTING PATIENT SAFETY FIRST

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IMPROVING OUTCOMES

FOR PATIENTS IN NEW SOUTH WALES

1740 FEWER

CARDIAC ARRESTS
in NSW public hospitals
than predicted for July 2015 to June 2017

80%

OF PATIENTS WITH SEPSIS
receive IV antibiotics within 2 hours of diagnosis, compared to 57% in 2011

25 MORE

NSW public hospitals with hand hygiene rates
over 80 per cent, compared to 2015

AN IMPROVEMENT of
4.27 PER CENT
in pressure injury rates compared to 2015

13.8% REDUCTION

in infections
from *Staphylococcus Aureus* bacteraemia
2013-14 compared to 2015-16*

** SAB data for 2016-17 is published in December 2017*

Chair's Foreword

As the Chair the Board of the Clinical Excellence Commission, it is my great pleasure to present the 2016-17 Year in Review.

During this period the Clinical Excellence Commission has continued to deliver on our long standing quality and safety programmes as well as inspiring and implementing further improvements across many components of the New South Wales health care system.

With these actions, the Clinical Excellence Commission continued to achieve its goals and strengthened its position as the champion of safety and quality improvement for the NSW health system.

Our ongoing success and the refocussing of priority areas has led to increasing requests for support from our partners within the system, most particularly the Local Health Districts and the Ministry of Health. Despite this increased workload, the Clinical Excellence Commission delivered against the key performance indicators as detailed in our Service Compact with the Secretary of the Ministry.

On behalf of the Board, I commend the leadership of Chief Executive Carrie Marr and her executive team, and thank the staff of the Clinical Excellence Commission for their ongoing commitment, as we work toward creating a NSW health system that provides the safest and highest quality care for every patient.

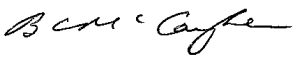
Absolutely critical to this success has been the collaboration with clinicians, managers, consumers and carers across the breadth of the system.

In this report, we showcase some of their successes in implementing some of our programmes, as well as highlighting local quality improvement initiatives that have enhanced the care for patients across the State.

Delivering quality health care remains one of the top priorities for the Secretary and the Ministry of Health and we know that our work is not over until preventable clinical harm and less than optimal care do not exist anywhere in our system.

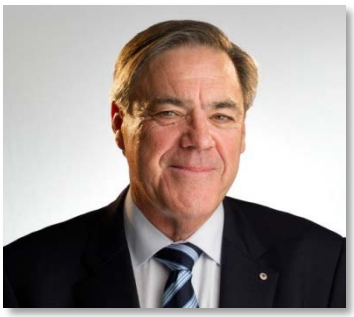
To achieve these laudable aims, our continued constructive engagement with the clinicians and managers in the system, in partnership with the consumers and carers, is of paramount importance.

I commend this report to you.



A/Prof Brian McCaughan AM

Board Chair,



From the Chief Executive

Each year the NSW Health system is trusted to deliver high-quality care to the State's 7.7 million residents. As the experts in patient safety and clinical quality our role is not just to oversee already excellent systems but to identify areas to improve.

It remains our belief that everyone in health care has a role in ensuring safe, reliable care and we should also be focused on striving for constant improvement.

At the Clinical Excellence Commission, we embrace the opportunity to explore all manner of health improvement pursuits and we are privileged to find ourselves working with a cohort of likeminded professionals who share a passion for serving the community and ensuring patients experience care that is safe, reliable and constantly improving.

Realising improvements across a health system relies on partnerships. It is a testament to the ongoing commitment of the NSW Health workforce that the patient safety and clinical quality programs and improvement support offered by us are warmly embraced across local health districts, specialty health networks and on hospital wards.

These partnerships and over-riding cooperative spirit, provide the crucial foundation that allows us to support improvements in the experience of care for our patients, their families, and our communities.

Safe, reliable care also requires a commitment to creating the capacity, capability and culture to improve outcomes for patients and their families.

In 2017, in collaboration with the University of NSW, the Clinical Excellence Commission received the Medical Journal of Australia's National Prize for Excellence in Medical Research for the article "SEPSIS KILLS: early intervention saves lives". We were proud to accept this award but remained mindful that it is shared with every health worker in our hospitals and health services.

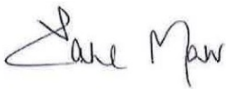
These positive outcomes are the shared achievements of our many partners - clinicians, allied health professionals, patients, families, local health districts, health administrators and specialty health networks. Their unwavering dedication and tireless efforts ensure patients in NSW receive care in one of the world's safest health systems.

Over the past twelve months we worked to refine our core program of work. We will always be actively involved in the response to emerging patient safety issues but this year we have started to shift our emphasis from projects to strategic programs. This subtle change will bring a greater balance to our role in clinical governance and quality improvement.

My hope is that as people read these pages they reflect on the capability, passion and commitment to safety and quality across the NSW health workforce.

Finally, I extend my sincere thanks to the staff at the Clinical Excellence Commission for their dedication and achievements over the past 12 months. I am extremely proud of the work that we, as a team, delivered in helping to improve the quality of health care for patients in NSW and look forward to pursuing new goals with you in 2018.

Thank you.



Carrie Marr

Chief Executive

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Patient Safety Improvement Support

Building Capability in Health Care

Patient Safety

PATIENT SAFETY IMPROVEMENT SUPPORT

165 **SITE VISITS**
supporting LHDs and SHNs

85 **PATIENT SAFETY**
resources, brochures & publications released

10,255 PATIENTS
participated in the 2016 Pressure Injury Point Prevalence Survey

131 Gold Standard Hand Hygiene Auditors trained at 9 LHD workshops led by CEC

120 **RESPONSES TO REQUESTS**
for expert advice on preventing healthcare associated infections

FIFTY THREE NSW HOSPITALS
registered for the CEC's Online Medication Safety Self Assessment Tool

Working together on patient and family escalation of care

In 2017, the Clinical Excellence Commission launched a new patient safety video to inform the public about patient and family escalation of care. The Day family generously agreed to share their story about personal tragedy in the hope that no other family has the same experience as them.

In 2013, baby Kyran Day was taken to hospital, weak and vomiting. He was diagnosed with gastroenteritis. Thirty hours later, he was pronounced dead. His death was preventable.

The Coroner's report stated that "Kyran died as a result of failure to detect the ileocaecal intussusception with malrotation of the bowel (*a condition where the bowel falls in on itself*) and respond to his condition in a sufficient and timely manner".

While in hospital, Kyran's parents repeatedly tried to raise concerns with staff.

In memory of Kyran Day

April – October 2013

"Having your child in that condition and having no one listen to you when you know something is seriously wrong, I have never felt so alone in my life," said Kyran's mother, Naomi.

Despite losing their son in such devastating circumstances, the Day family have been working in partnership with the Clinical Excellence Commission's REACH program, to create a video describing their experience, which was launched at the Patient Experience Symposium in April 2017.

The REACH program began in 2013 and encourages patients, carers and families to raise their hands if they are concerned that something is seriously wrong. It recognises that patients and families understand what is normal for them, and therefore are the best ones to judge if their condition is getting worse.

The Day family will continue to work with the Clinical Excellence Commission to ensure that the voices of patients and families are heard in all facilities across NSW.

Electronic risk assessment tool launched to prevent blood clots

Venous Thromboembolism (VTE) is a significant cause of morbidity and mortality, despite being a largely preventable event through a risk assessment and management process. Internationally, standardised approaches to VTE prevention which utilise electronic solutions have been effective in improving management processes and reducing rates of hospital-associated VTE.

Collaborating with eHealth NSW, the Clinical Excellence Commission developed an adult inpatient electronic VTE risk assessment tool in the electronic medical record (eMR) to standardise the risk assessment process and provide clinical decision support for the management of VTE risk.

The tool was developed under the guidance of the Clinical Excellence Commission's VTE Expert Advisory Group and Blacktown Hospital was engaged to become the pilot site. Key stakeholders engaged during the pilot included the Western Sydney Local Health District's VTE Expert Advisory Group, department heads, managers, nursing, medical and allied health staff, the eMR team, and the Local Health District's Clinical Governance Unit.

There were two phases in the development, pilot and evaluation of the tool - user acceptance testing in a controlled environment, and live piloting at Blacktown Hospital.

This involved close collaboration with relevant stakeholders throughout the duration of the project, designing the evaluation methodology, analysing data collected during the pilot phase, compiling a report summarising findings from the evaluation, making recommendations for enhancements to the build, and developing resources to support implementation.

A multidisciplinary project team was also formed during the latter half of the pilot to improve the usage of the tool. Members of this team - particularly the junior medical officers - were engaged as change agents to promote the tool through peer influence.

The evaluation highlighted the tool's potential in supporting VTE prevention efforts, as well as opportunities for improving its usability and integration within workflow. Other key learnings included an improved understanding of implementation and training requirements for electronic health solutions.

The tool has been enhanced based on findings from the evaluation, and is now available for Statewide use.

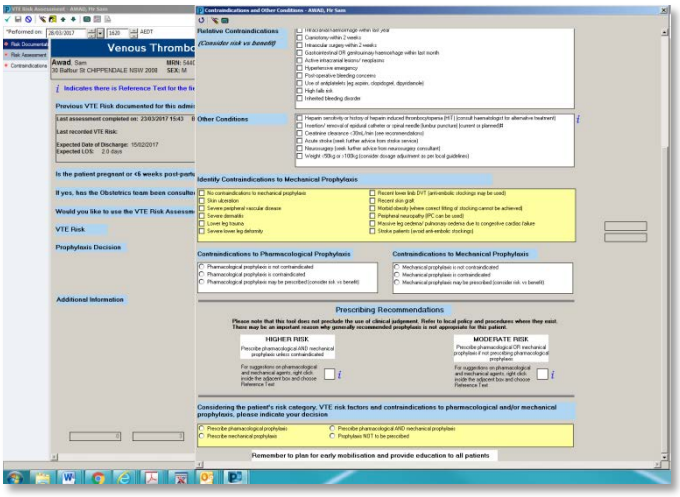


Image: A screenshot of the VTE Risk Assessment Tool in the electronic medical record.

Safe mobilisation tools help patients and staff to reduce falls

A patient fall can lead to serious injury, with significant implications for the patient and their family, the clinical area and organisational funding. Many falls are largely preventable.

Review of Incident Information Management System (IIMS) data involving falls shows that most falls in hospital occur at the bedside and in the bathroom, and are associated with patients mobilising.

To support staff to drive improvements in providing safe care when mobilising patients, a Statewide Safe Mobilisation Working Group was established by the Clinical Excellence Commission's Falls Prevention program. With permission from South Eastern Sydney Local Health District, a guide on standardised mobilisation terminology, led by Falls Co-ordinator and Physiotherapist, Jamie Hallen, has been adapted for Statewide distribution.

Jo Melinz is also a member of the Safe Mobilisation Working Group, and a physiotherapist at Coffs Harbour Health Campus. She has a particular interest in older people and improving their mobility. Jo worked with the Clinical Excellence Commission in the development of a poster on the safe mobilisation terminology and further resources that help to guide staff to '*Give it a go! A guide to safe mobilisation*'.

These resources developed by the Safe Mobilisation Working Group will support the enhancement of staff skills in ensuring that patients can safely mobilise. This is a key improvement strategy in the *Leading Better Value Care - Falls in Hospital* initiative.

In addition to developing resources to prevent falls in hospitals, the Clinical Excellence Commission's Falls Prevention Statewide Community Working Group developed an education resource to guide staff working in community settings to undertake balance and strength tests with patients and clients.

Andrew Wong, a physiotherapist at the Coffs Harbour Health Campus, volunteered to work with the Clinical Excellence Commission and the Integrated Multi Media Unit at the Mid North Coast Local Health District to develop video education resources for staff. Filming was completed on site in the rehabilitation unit at Coffs Harbour Health Campus, and the videos were used as part of the *2017 April Falls Day promotion*.

The balance and strength videos are available on the Clinical Excellence Commission's YouTube channel and from www.cec.health.nsw.gov.au.

New Paediatric Network focuses on safe, reliable care for children

In 2016, the Clinical Excellence Commission undertook a review of the existing Paediatric Safety and Quality Committee to create a robust network across the State.

Completed toward the end of 2016, the Paediatric Network was established to create strong links between local health districts, specialty health networks and pillars responsible for providing safe and reliable care to children and their families presenting to hospitals across NSW.

The Network membership reflects professionals with high level expertise, experience and delegation within acute paediatric service provision and specialities across NSW health facilities. It is co-chaired by the Chief Paediatrician of NSW and the Director of the Paediatric Patient Safety Program at the Clinical Excellence Commission.

An initial review of incidents reported in IIMS resulting in harm to children 0-16 years of age identified key areas for improvement. These included recognition and response to the deteriorating patient and management of children with acute behavioural disturbance.

In collaboration with clinical experts across the State the Network has been responsible for the development and delivery of a number of tools and resources to support clinicians in improving paediatric patient safety.

Furthermore, following collaboration with experts in paediatric mental health, the Network created a one-page flyer bringing together the key relevant resources in assisting frontline clinicians in working with children with acute behavioural disturbances.

The Network has also overseen the development and pilot of a Paediatric Morbidity and Mortality toolkit in nine sites, as well as the development of a Safety Huddle Toolkit to assist clinicians in establishing shared decision making for every patient and escalate care in the event of deterioration of a patient's condition.

To further support paediatric patient safety, the Clinical Excellence Commission published eight '*Paediatric Watch - Lessons from the Frontline'* newsletters. These simple one-page documents take learnings from de-identified critical incidents and highlight opportunities to improve care for children and young people.

Responding to the risk of serious cardiac surgical site infections

In July 2016, *Mycobacterium chimaera* - a slow growing and rare bacteria that causes serious and potentially fatal surgical site infections - was identified in a number of patients overseas. The reported cases involved patients who had had cardiac surgery. Investigations linked infections with contaminated heater-cooler devices used in cardiac bypass surgery.

While the risk of becoming infected is extremely low, there is evidence that in instances where one infection is identified in a hospital, the risk is higher.

A specific brand of heater-cooler device was linked to the infections with reports suggesting this device was contaminated at time of manufacture. Following bacterial contamination of the water within the device, there is the potential for the device to transmit bacteria through the air during cardiac surgery and infect patients.

Testing of the machines in use in NSW public hospitals identified four hospitals - two within South Eastern Sydney Local Health District - contaminated with the bacteria. These devices were immediately removed from service. However, due to the bacteria's slow growing nature, infections can present up to five years after the initial exposure.

In December 2016, South Eastern Sydney Local Health District wrote to all affected patients to inform them that there was a possibility that they had undergone surgery with one of the contaminated machines, and the rare possibility that they may develop an associated infection. Patients were advised to contact their GP or cardiologist if they were concerned or exhibiting signs of ongoing mild infection-like illness.

To support the letter to patients, South Eastern Sydney Local Health District set up a hotline to provide advice to patients and healthcare professionals.

In January 2017, the first identified case in NSW was linked to one of these facilities.

In March 2017, the Clinical Excellence Commission worked with the Local Health District to place an alert on the electronic medical record flagging the potential for infection of 'at-high-risk' patients and to trigger prompt investigation, to ensure early identification of *M. Chimaera,* should the patient present with symptoms of infection.

The Clinical Excellence Commission was able to provide expert infectious diseases advice to support decision making. This included advice on testing machines, input into the decision to inform patients, advice on the wording of the letter to patients, and support for enquiries from patients and health care professionals seeking further information.

Placing an alert on patient records was reasonably straight forward for patients within South Eastern Sydney Local Health District; however placing an alert for patients residing in other locations across NSW was more problematic.

The Clinical Excellence Commission was able to provide the link between local health districts to ensure all patient records were flagged, that all possible strategies were implemented to notify at-risk patients, and to ensure that any future or ongoing risk for these patients is recognised early.

Scholar sets sights on improving response to superbugs

The Clinical Excellence Commission's Healthcare Associated Infections project officer, Amy Bisson, is investigating ways to coordinate planned responses to multi-drug resistant organisms for NSW patients after being named a 2017 HARC Scholar by the Sax Institute.

HARC (Hospital Alliance for Research Collaboration) is a collaboration between the Sax Institute and the Clinical Excellence Commission, the Agency for Clinical Innovation, the Cancer Institute NSW and the Bureau of Health Information. It aims to build the NSW health system's capacity to close evidence-practice gaps by fostering the use of research evidence in policies and programs. This year, scholars all had a focus on reducing unwanted clinical variation.

Amy has an interest in the emerging threat posed by prominent superbug carbapenemase-producing *Enterobacteriaceae* (CPE) which is posing significant challenges internationally.

Having previously worked as a nurse, Amy said she was well aware of the frontline impact of the spread of multi-drug resistant bacteria. While Australia had not seen the same numbers of CPE infections as some other countries, it was recognised as a public health priority, with the first Australian hospital outbreak documented in 2012 and the number of cases rising since.

"It is the last line of antibiotic treatment after other options have failed, and that is why it is so critical," she said. "Infections are often in very sick patients, and the mortality rate is very high. In the 2012 Australian outbreak our mortality rate was 40 per cent which, while very high, compares favourably with international areas where rates are closer to 50 or 60 per cent."

Photo: 2017 HARC Scholar and CEC Healthcare Associated Infections project officer, Amy Bisson.

Amy will use the scholarship to travel to Melbourne, Switzerland and the United Kingdom to study strategies that are proven to bring about change in practices, education, communication and quality improvement.

She said she hoped the information she gathered would help inform the Clinical Excellence Commission's development of guidelines, outbreak plans and tools to reduce unwarranted clinical variation and patient harm when responding to multi-drug resistant organisms.

"Ultimately, we're looking to bring quality procedures to NSW hospitals so they have coordinated approaches based on the best international evidence when responding to any future superbug outbreaks."

Improving iron deficiency management in the NSW Riverina

Murrumbidgee Local Health District has an increasing number of patients being admitted to acute facilities for management of their iron deficiency and anaemia. A significant incidence was also noted among Aboriginal clients.

Clinical management within the hospital setting has been based on lengthy iron infusions, which are costly, reduce access to acute beds, and have significant impacts on patients and carers.

A clinical redesign project, led by Kristen Brown, Clinical Nurse Consultant Transfusion Medicine, was undertaken as a collaborative process between Corowa Health Service, in partnership with the local medical centre, community pharmacy, and patients and carers.

Within a newly-developed model of care, patients receive tailored health information and engage in a discussion with their GP at the time of consent and have the option to be referred to the community setting for a rapid iron replacement. The option for rapid infusion in the community takes less than half an hour, and does not require acute admission to hospital.

The Clinical Excellence Commission supported the initiative by assisting with Patient Blood Management auditing (which identified iron deficiency management as an issue that needed to be addressed), providing research articles and best-practice guidelines, and facilitating contact with other entities offering community-based management of iron deficiency to promote knowledge-sharing.

Staff from the Clinical Excellence Commission's Blood Watch program were also consulted during the development of procedures, and clinical support was provided by the Blood Watch program's Clinical Advisor.

Photo: Corowa Health Service
(Image courtesy of Murrumbidgee Local Health District).

In addition, the Clinical Excellence Commission's Blood Watch Rural Transfusion Roadshow provided education to nursing and medical staff within the Local Health District, raising awareness of iron deficiency, anaemia management and current best practice initiatives.

Iron deficiency management can be effectively managed utilising a fully integrated approach in the community setting to ensure the best outcomes for the patient, carers and health care services.

The project developed and implemented a cost effective, patient centred approach to iron deficiency management that is evidence-based and best practice, and is able to be offered locally to patients to reduce the imposts of travel and hospital admission.

This initiative has the potential for significant cost savings, while meeting the clinical and personal needs of patients, and has strengthened the partnership between hospitals and primary care providers.

Supporting Sydney Local Health District to prevent pressure injuries

Pressure injuries are a serious health care complication, with significant implications for the patient and their family, the clinical area and organisational funding. Many hospital-acquired pressure injuries are largely preventable.

The Clinical Excellence Commission leads a Statewide pressure injury prevention project, which is supported by representatives from each local health district and specialty health network to develop resources and provide assistance with local implementation initiatives.

Michelle Barakat-Johnson is a Pressure Injury Prevention and Management District Lead Clinical Nurse Consultant and is Sydney Local Health District's pressure injury representative. She has extensive experience in skin integrity, wound and pressure injury prevention and management, and has worked in complex and chronic care for 18 years. She is a PhD Candidate and lecturer at the University of Sydney.

In 2014, Sydney Local Health District identified that there was a substantial increase in the rate of hospital acquired pressure injuries over a five-year period, despite implementation of preventative strategies.

A study investigating all aspects of pressure injury prevention and management commenced in 2015 to examine the factors that were contributing to the increase on hospital-acquired pressure injuries despite the implementation of evidence-based preventative strategies, and to understand the causative factors in the Local Health District.

This study investigated the relationship between pressure injury development, nursing practice, nurse, patient and carer knowledge, reporting systems and documentation.

Steps included a prospective analysis of hospital-acquired pressure injuries reported in the Incident Information Management System (IIMS) and real time patient assessment; examination of incontinence and skin conditions; an audit of pressure injury prevention devices including cost analysis; nursing knowledge survey; audit of quality improvement activities; nursing, patient and family interviews, and a review of clinical documentation.

It was identified that there was a large error in diagnosing and reporting pressure injuries - primarily moisture lesions. The Clinical Excellence Commission assisted the Local Health District by developing and testing the pressure injury point prevalence audit in the Clinical Excellence Commission's Quality Audit Reporting System (QARS), which included questions on incontinence-associated dermatitis.

"We are excited to be working closely with the CEC and to be using the pressure injury point prevalence audit in QARS in 2017. The CEC has provided great support in the development and testing and we are looking forward to future work specifically to analyse prevalence data and generate a report" said Michelle.

"I really look forward to the pressure injury meetings at the CEC to collaborate with the other representatives. The meetings are an extremely valuable forum to share opinions, information, and current research and learn about LHD initiatives."

Improving the recognition and treatment of patients with sepsis

St Vincent's Hospital Emergency Department has achieved outstanding results in recognising and treating sepsis since implementation of the Clinical Excellence Commission's *SEPSIS KILLS* program in 2011. In addition to patients coming through the Emergency Department, the hospital also treats oncology, renal and transplant patients who all have a high risk of developing sepsis.

To emulate the success in recognising and treating sepsis in their Emergency Department, the *SEPSIS KILLS* program was implemented hospital-wide in November 2016, coinciding with Antibiotic Awareness Week.

To support the implementation, the Clinical Excellence Commission provided advice on approaches, developed local resources, assisted in consultation with key stakeholders, and shared learnings from other hospitals.

The Clinical Excellence Commission also supported baseline data audits, presentations and forums with clinicians, Heads of Department and the Executive team.

Sepsis awareness was raised through communiques and education provided by nursing and medical champions. The Clinical Excellence Commission's sepsis pathways, antibiotic and blood culture guidelines were introduced to the wards as part of the education process. In addition, the antibiotic guidelines were hyperlinked within the electronic medication system for easy reference by clinicians.

The Hospital now has a standardised approach to sepsis recognition and treatment. Patients with sepsis are managed as a medical emergency with timely administration of intravenous fluids and appropriate antibiotics, diagnostic testing and follow-up.

BUILDING CAPABILITY IN QUALITY IMPROVEMENT

1305 PARTICIPANTS in patient safety and quality improvement webinars run by CEC

16 NEW QI TOOLS with **18,551 VIEWS** since release in November 2016

311 STAFF enrolled in our Executive & Foundational Clinical Leadership Programs

4 Open Disclosure Workshops
2 Patient Safety Manager Forums
50 RCA team leaders trained

QUALITY IMPROVEMENT education workshops and events delivered by CEC staff

WITH **3236** ATTENDEES

Hunter New England takes *Excellence* to the next level

Hunter New England Local Health District is a unique organisation within the NSW health system, geographically reaching from the major centre of Newcastle, through rural and remote NSW towards the Queensland border. It is the only local health district that has both tertiary referral facilities and networks of remote multi-purpose services.

The Local Health District has a well established strategic improvement framework, known as *'Excellence'*, which was developed following a local investment in Studer methodology. In 2016-17, the senior leadership team decided to take the *'Excellence'* framework to the next level.

The Local Health District worked with the Clinical Excellence Commission to adapt the Organisational Safety Improvement Matrix (OSIM) process - a workshop designed to generate a set of shared priorities for building local capability for improvement - to meet their local needs.

A representative slice of the Local Health District came together in February 2017 for the OSIM workshop, where several organisational capability building priorities were agreed upon by the participants.

A critical point of success was the strong executive support. Chief Executive, Michael Dirienzo, opened the workshop and was also an active participant in the group activities at an equal level with the participating team members.

Further, the Director Clinical Governance, Melissa O'Brien, has since worked with local leaders to integrate the agreed priorities into the 2017-18 Operational Plan. This will enhance the way the Local Health District's improvement framework aligns methodology, tools, resources, support and capability development with the needs of teams leading improvement work.

Both organisations have remained in close contact, debriefing on the workshop and process. The facilitators at Hunter New England have provided extremely useful feedback which was incorporated into later workshops with other local health districts and specialty health networks.

The organisations have also agreed to work together on a number of change initiatives, which align with the priorities identified in the workshop.

Using data to drive improvement at Nyngan Health Service

Nyngan Health Service is a multi-purpose service with 65 staff located in the Western NSW Local Health District. The service has 28 residential aged care beds, eight dementia-specific beds, six acute care beds and a two-bed emergency department.

In August 2016, the Service organised a workshop to identify locally appropriate improvement priorities. Twenty-five staff – both clinical and non-clinical - from across the Service participated in the workshop.

To support the workshop, the Clinical Excellence Commission provided a safety climate survey tool for staff to complete, as well as reviewing the data from the 2016 People Matter Survey, the Local Safety Culture Survey, and the outcomes from the Western NSW Living Quality and Safety Self-Assessment.

As part of the workshop, the Clinical Excellence Commission team presented the data to staff and facilitated conversation to identify improvement priorities. The Service identified communication, food services and quality, and staffing as the three priority areas for action.

The workshop was positively evaluated. All staff agreed the information was relevant to their role, that they were given the opportunity to participate, and that the goals were patient-focused.

Since the workshop, the Service has introduced daily safety huddles which include staff from across work areas. They have also adjusted shift hours in the hostel area enabling time for clinical communication, as well as release time for staff to attend education sessions and meetings.

A collaborative approach has delivered a patient-focused menu which is nutritious, tasty, attractive and convenient, and access to a nutritionist is now available via Telehealth.

Photo: Nyngan Health Service
(Image courtesy of Western NSW Local Health District).

Improving care for the dying with the Last Days of Life Toolkit

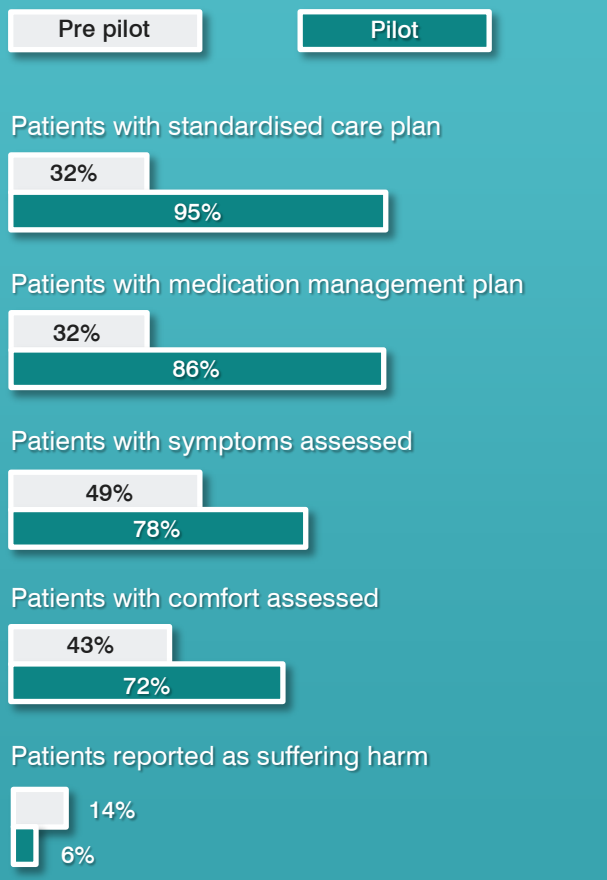
To improve and support the care of the dying patient, the Clinical Excellence Commission, in collaboration with clinicians and consumer advisors, developed a Last Days of Life toolkit.

The toolkit was piloted between September and December 2016. Twenty hospitals ranging from small rural facilities staffed by General Practitioner Visiting Medical Officers, to large urban specialist tertiary referral centres, were involved. Nine sites entered data during the pilot.

The main finding was that when dying patients were cared for using a standardised approach, a higher percentage of their care was more structured, with symptoms and comfort assessed routinely and medications given within a best practice model. In addition, there was a decrease in the harm to patients.

The toolkit was released in May 2017 and available from www.cec.health.nsw.gov.au

Results from the Pilot



West Wyalong Hospital improves comfort for dying patients

West Wyalong Hospital is a 22 bed acute facility with three Emergency Department beds. It provides health services, including palliative care, to the township of West Wyalong and several nearby satellite towns with a combined population of approximately 7000 people.

The staff had identified that although there were various symptom observation charts for palliative patients, such as the Patient Comfort Observation Chart, there were no formal pathways to follow after the identification of alterations in comfort levels. This resulted in inconsistencies in the level of care provided for palliative patients.

After hearing about the Last Days of Life Pilot Program, the staff at West Wyalong felt this would be an excellent way to improve the level of care delivered to palliative patients by ensuring that declines in their comfort level were identified and addressed accordingly.

By participating in the pilot, staff were able to adopt a formal management plan for their palliative patients, which involved recognising the dying patient and monitoring their level of comfort and symptoms every four hours via the use of a colour-coded comfort observation and symptom assessment chart. Staff would then refer to the Medication Management Guides for assistance in determining appropriate pharmaceutical and non-pharmaceutical interventions.

Staff were supported by the Clinical Excellence Commission through a pre-pilot onsite visit and education session; the provision of resource documents and regular teleconferences.

Staff from the Clinical Excellence Commission provided ongoing support, including recommendations as to how to facilitate a smooth transition for medical staff towards the use of a formal management plan for palliative patients.

Shannon Evans, the Clinical Nurse Educator at West Wyalong Hospital, commented that “Our dying patients are quickly recognised, their level of comfort is closely monitored and interventions are initiated according to their decline.”

“West Wyalong Hospital has made vast improvements in the way our palliative patients are managed and their comfort level is assessed as a result of the program.”

The Last Days of Life Pilot Program was so well received at the Hospital, that staff have continued to use the resources and sustain the improvements in care for their patients.

User-friendly audit system a success on the Central Coast

The Clinical Excellence Commission's Quality Audit Reporting System (QARS) was piloted in the Central Coast Local Health District between October and December 2015. It has been implemented in stages since January 2016 across inpatient, outpatient and community settings.

Clare Karibika, the Patient Safety and Quality Consultant from the Local Health District, notes "there was initially some concern at implementing a new database when so many other electronic record systems were being introduced simultaneously; however the intuitive nature of the system has seen the majority of staff needing only minimal training."

"Feedback from staff has been that the system is very user-friendly with centralised functionality and accessible on any computer or tablet across various sites. The fact that reports are readily available and easy to create is a bonus for unit meetings and peak quality committees."

Since 2016, over 6,800 audits have been completed across the Local Health District, using over 60 different questionnaires. Audits are scheduled within the system according to individual divisional or service audit calendars, and audits for quality improvement projects are set up within the system when a need is identified. Exception reporting also occurs within the various tiers of the Local Health District's Quality and Safety Committee.

"Although the key function of audits is often seen as a requirement for accreditation against the National Safety and Quality Health Service Standards, the key driver actually becomes the improvement required, not just the collection of data"

The centralised nature of the system also allows review of this data for comparison audits, and important data is not lost if an improvement champion moves on. These initiatives may then be either adapted or sustained over time and data is available for use as accreditation evidence when appropriate.

"The information collected from patient experience is often critical in adapting or fine-tuning services or processes to meet the needs of our consumers and the community. Staff are also enjoying the opportunity to give relevant and timely feedback on issues they see as needing improvement" said Clare.

Does a clinical leadership program make a difference?

Strategies for sustainable patient safety and system improvement depend on strong clinical leadership. The value of investing in clinical leadership programs is widely recognised, but less widely evaluated.

For ten years, the Clinical Excellence Commission has been running two clinical leadership programs. The Foundational Program is aimed at middle clinicians and managers. It uses a practice development framework and is delivered by facilitators employed in the local health districts and specialty health networks. The Executive Program is aimed at senior clinician managers and is delivered by experts who have worked extensively in health care leadership, communication and professional development.

Both programs aim to improve patient safety and clinical quality through enhanced leadership practices. Participants undertake and complete an improvement project. Since 2007, 630 participants have undertaken the Executive Program and 1,900 have completed the Foundational Program.

In July 2016, an electronic survey was sent to over 1100 participants who enrolled in either Program between 2010 and July 2014. Fifty four per cent of participants completed the survey.

The evaluation revealed that 94 per cent completed their projects, with 57 per cent stating that conducting the project was extremely useful in their leadership journey. Sixty three per cent of participants had gone on to use the improvement methodology again, with 33 per cent having been involved in three or more projects since graduating from the course.

In addition, it revealed that the Program helped the majority of graduates to develop their leadership skills, with the majority of graduates obtaining leadership positions and continuing quality improvement projects.

Overall, participants ranked themselves as more effective leaders now than at the commencement and graduation from the Program.

Furthermore, a net promoter score of +36 from the survey indicated that graduates considered the Program worth promoting to colleagues as a good use of time and effort over the 12 month commitment.

The evaluation has also informed improvements to both programs. There is now a greater emphasis on spreading the good work from improvement projects, increasing consumer involvement in project teams and improving the use of the measurement quality tools.

Reducing theatre waiting times at The Children's Hospital at Westmead

Dr Andrea Santoro is a Paediatric Anaesthetist at The Children's Hospital at Westmead. He has a keen interest in quality and efficiency projects that bring tangible benefits for patients.

With operating theatre time being in short supply, delays in starting theatre lists represented a significant and costly problem. After some initial investigation, it became clear that delayed starts across a whole year represented hundreds of hours of lost operating time.

Given that operating theatres represent one of the most expensive resources present in a hospital, Dr Santoro decided to tackle this problem as his improvement project supported by the Executive Clinical Leadership Program.

He realised that targeting this inefficiency could yield valuable extra capacity, reduce patient waits, fasting times and the chance of case cancellation on the day of surgery and finally, reduce the overtime costs and morale-sapping effect on staff of overruns and un-rostered overtime at the end of the working day.

The project assembled a team representing a broad range of staff who work in theatres to prospectively audit and identify the main contributors to this problem. The team also analysed the process involved in getting patients and theatres ready for the commencement of surgery each day, and ways in which this could be made more efficient.

A series of interventions aimed at educating and engaging staff, streamlining work practices, and providing ongoing metrics relating to on time start performance was devised and implemented over a six-month period.

"The skills and support I received from the CEC through the Executive Clinical Leadership Program were fundamental to the success of this project. The training provided was extremely valuable and gave me a clear understanding of how to successfully design and implement the numerous aspects of a project of this size" said Dr Santoro.

Photo: Dr Andrea Santoro at the Executive Clinical Leadership Program Graduation

"The program gave me valuable insights into my own skills and strengths as well as identifying the areas I should develop further to be more effective as a leader" he said. "The course was invaluable in assisting me to identify the numerous resources and supports that were available within my own Hospital. These were of tremendous assistance throughout the project."

The project successfully improved the on-time start performance for main theatres in the morning from 62 per cent in August 2016, to 82 per cent in December 2016. The number of lists commencing late due to all causes fell by 50 per cent in absolute terms. Of note, delays caused by late arrival of staff in theatres fell by 70 per cent in absolute terms.

Project delivers earlier intervention for children with speech difficulties

Relevant research literature indicates that up to 90 per cent of children with speech and language impairments have co-morbid motor difficulties. Early identification of motor impairments enables early intervention, which can reduce or prevent learning, emotional or social problems arising later in life.

A review within the Nepean Blue Mountains Local Health District of referral rates to Occupational Therapy and Speech Pathology, showed markedly higher referrals by Speech Pathology compared to Occupational Therapy. In response, a project was implemented to review the current screening and referral pathways to Occupational Therapy.

The "See, Say, Play" project, completed as part of the 2016-17 Foundational Clinical Leadership Program, innovatively redesigned clinical practice within the Local Health District.

The project promoted partnership between parents, speech pathologists and occupational therapists to enhance the early identification of co-morbid motor delays in children under three years old who have language delays. A parent friendly motor screening tool named "Move & Play" was also developed in the absence of a pre-existing tool.

As part of the program, the Clinical Excellence Commission provided training and resources to support the design and delivery of the project. This included providing guidance and a framework for gathering a team, aligning an affinity diagram and transcribing this into a driver diagram. Project leaders also had the opportunity to refine their knowledge and skills through regular webinars that were accessible on site in real time. Once established, the driver diagram became the guiding document to which the project's actions were referenced.

Preliminary data demonstrated a threefold increase in referral rates to Occupational Therapy within our service, indicating that a previous gap in the identification of motor delays in young children existed.

Speech pathologists reported increased knowledge of Occupational Therapy and confidence to identify co-morbid motor delays, while parent feedback stated awareness of occupational therapy and emphasised the benefits of collaboration between Speech Pathology and Occupational Therapy.

Most importantly, parents were reporting that their child's motor development had increased significantly.

Scholarship inspires improvements in care for cancer patients

The Ian O'Rourke Scholarship is an annual scholarship offered by the Clinical Excellence Commission to allow participants to develop better skills in integrating evidence from research in health care quality and safety policy and programs. Under the guidance of a nominated local mentor, Scholars investigate an issue of interest, based on improving quality and safety in health care.

Molly Barnhart, a Speech Pathologist at Prince of Wales Hospital and PhD Candidate, was one of four successful applicants for the 2016 scholarship. Her study program included visits to Stanford Hospital in California and the Netherlands Cancer Institute in Amsterdam, focusing on improving safety for people who have been treated with radiotherapy and/or surgery for head and neck cancer.

“Patients who undergo radiotherapy and/or surgery often have good tumour response from the treatment. However patients post-treatment are often left with a swallowing impairment as a result of removing part of the tongue, or damaging healthy tissue and structures with radiotherapy” explains Molly.

“Those with severe problems are at risk of reliance on a feeding tube, as well as developing recurring chest infections and/or aspiration pneumonia.”

“A significant difference in service delivery and research practices I observed between Prince of Wales Hospital and overseas hospitals was the screening for swallowing impairment using instrumental assessments at specific times after radiotherapy treatment” she said.

“Although the majority of patients I observed did not have any safety issues during the assessments, a small proportion demonstrated silent aspiration in which food or drink went into their lungs without any awareness” said Molly.

“Our procedure relies on patients alerting us when their swallowing function is declining. Often by the point patients realise there is a problem, it can be too late to provide therapy due to irreversible effects of fibrosis.”

“Subsequently I am now reconsidering whether more instrumental screening assessments should be done at our centre. It would allow for early identification of patients who are experiencing swallowing problems, and possibly improve their outcomes before the swallowing impairment has progressed beyond an irreversible point” she said.

“The multidisciplinary rehabilitation program at the Netherlands Cancer Institute was another impressive service which showed the opportunity to improve quality of life and patient safety for head and neck cancer patients after treatment. The Institute has been collecting data on patient outcomes from this program, with very impressive results for patients’ quality of life and function” said Molly.

“Developing a similar program is one goal I’d like to achieve at Prince of Wales Hospital and hope to present to other hospitals.”

On her overall experience and learning from the Scholarship, Molly comments “the Scholarship has given me an incredible opportunity to learn from the best speech pathology head and neck cancer centres in the world.”

“These centres have the advantage of resource-rich environments to provide exceptional research practices and implement evidence-based practice for improving patient safety and outcomes.”

Scholarship improves approach to medication errors in palliative care

Opioids are often prescribed and administered to palliative patients to manage their unrelieved pain or breathlessness. Any errors in opioid prescribing or administration can negatively affect palliative patients' pain and symptom management

In 2016, Nicole Heneka, a PhD Candidate through the University of Notre Dame, was one of four successful applicants for the Ian O'Rourke Scholarship in Patient Safety. Her project focused on identifying the impact of missed opioid doses in palliative care patients' cancer pain management, and developing strategies to minimise this error type, in order to improve quality and safety in palliative care services.

Nicole used the Ian O'Rourke Scholarship to attend the Practitioner in Residence Program with the Institute for Safe Medication Practices (ISMP) in Philadelphia. This scholarship enabled Nicole to take her doctoral data and work with a group of international medication safety experts to better understand the factors contributing to omitted opioid dose errors, and explore tailored strategies to reduce these errors, in Australian palliative care services.

"The placement allowed me to work with clinicians from multiple disciplines and see first-hand how they have approached and implemented patient safety initiatives generally, what worked for them, and what was not successful" said Nicole.

Participating in the ISMP placement has profoundly influenced Nicole's doctoral research program and her engagement with specialist palliative care services. It has also informed the co-design of a series of studies which explore palliative care clinicians' perception of opioid errors within their services.

"The opportunity to establish international networks and the ongoing support from the ISMP, following the placement, has been invaluable. I feel that the learnings from the placement have significantly strengthened all aspects of my PhD project and the resultant outputs, and the placement itself exceeded my expectations," said Nicole.

Nicole has since been working with palliative care specialist teams at three services in NSW to explore and implement tailored strategies targeting safe opioid delivery, based on the recommendations developed during her placement.

Photo: 2016 Ian O'Rourke Scholar, Nicole Heneka

Building the next generation of leaders in patient safety

The Clinical Excellence Commission's Academy for Emerging Leaders in Patient Safety is a four-day interactive experience, where participants explore current patient safety issues and strategies that help make a difference in improving patient care.

Based on the USA model, taught in Telluride for the last 12 years, it is targeted at early career nurses, senior medical students, pharmacists and junior doctors, and involves case studies, sharing of experiences, mutual learning and the provision of tools and techniques to implement change.

The 2017 experience ran from 31 March to 4 April in Sydney, with 30 scholars carefully chosen for their leadership potential and commitment to improve patient care.

The program is set up to be an intimate learning environment where participants engage with faculty members from the Clinical Excellence Commission, as well as health leaders from Queensland, Victoria, South Australia and the USA.

It provides a safe place where scholars and faculty can interact, exchange ideas and learn from each other. They are able to gain new insights into providing high quality, safe care, while appreciating the experience of care from the patient's (and their family's) perspective.

In addition to exploring key concepts in patient safety such as Human Factors, Open Disclosure, patients as partners in care, and the role of teamwork in safety, the Academy also helps participants to understand how open, honest and effective communication between caregivers and patients is a critical component in all aspects of healthcare.

At the end of the program, scholars are required to make a pledge on how they will improve patient safety in their role over the next year. Faculty from the Academy then follow up with each scholar over the following twelve months, providing encouragement and support.

"The future of patient safety is with the next generation of leaders," says Faculty Leader Prof Kim Oates.

"It's important that clinicians who are passionate about patient safety have their interest supported and are inspired to improve the quality and safety of healthcare, early in their career".

The experience has been highly regarded by the scholars. "I am still thinking of what an amazing few days I had at the conference. I have definitely brought back that enthusiasm and drive for improving patient safety and care to my work," said one nurse.

"I learned so much. That was honestly the best professional development learning experience I have had in my career thus far."

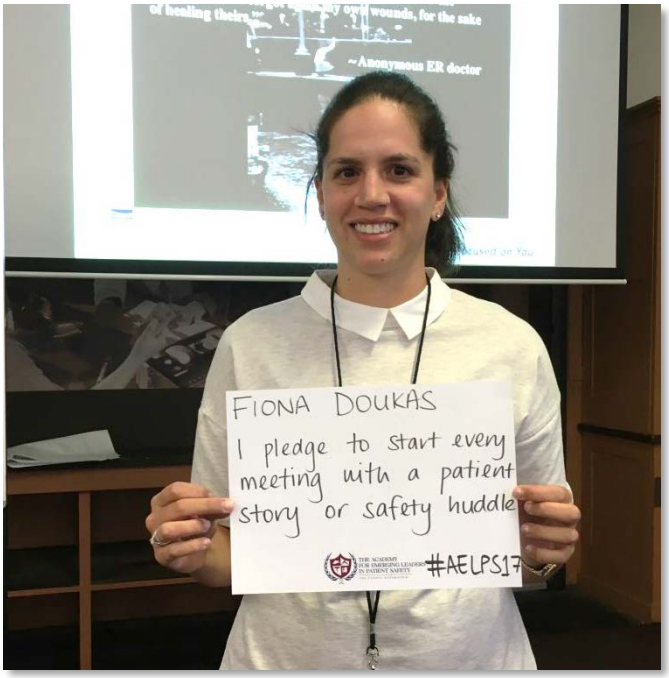


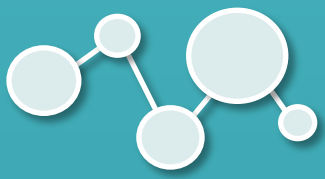
Photo: Fiona Doukas with her pledge at the Academy

PATIENT SAFETY

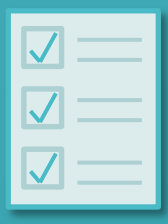
525 **ROOT CAUSE ANALYSIS REPORTS**
reviewed by RCA Committees
supported by the CEC.

2667 case reviews undertaken by
CEC's Special Committees

4 Safety Alerts
8 Paediatric Watch Newsletters
9 Medication Shortage Notices
17 Safety Notices



3 proactive patient safety reviews
done in collaboration with LHDs



2 NEW VTE TOOLS
for risk assessing patients in
Maternity and Emergency Settings

12,381 DOWNLOADS
of the CEC's *SEPSIS KILLS* Pathways

Improving the response process for serious clinical incidents

The Clinical Excellence Commission improves the quality and safety of health care in NSW by identifying statewide system gaps and informing effective strategies for statewide system improvements to clinical care.

This includes monitoring of the Incident Information Management System, Reportable Incident Briefs and Root Cause Analysis reports for serious incidents and emerging risks, and subsequently alerting the Chief Executive, the Ministry of Health, the Clinical Risk Action Group and the NSW health system. This information is also used in the provision of incident management support to local health districts and specialty health networks.

In 2016, the Clinical Excellence Commission, in collaboration with the Ministry of Health, undertook a broad review of the current system for responding to serious clinical incidents to identify opportunities for more effective use of resources, including potential alternative investigation methodologies.

A discussion paper, entitled *Review of the NSW Health System for Responding to Serious Clinical Incidents (including RCAs)*, was created and widely disseminated to key stakeholders.

It sought feedback on what is working well with the current system for responding to serious clinical incidents, as well as seeking to identify opportunities for improving the current processes to ensure system-wide reform.

In addition to the discussion paper, the Clinical Excellence Commission coordinated a two-day Lean Thinking Critical Incident Investigation Review workshop in January 2017. The workshop outlined and critically reviewed the escalation process from time of incident to receipt of the reportable incident brief at the Ministry of Health and members of the Clinical Risk Action Group. Invited participants, representing staff involved in the management and escalation of critical incidents, from all levels of the NSW health system attended.

Feedback from the discussion paper and workshop was collated and will inform work on draft changes to the legislation to, and underpinning, the NSW Health Incident Management policy, during 2017-18.

Developing a tailored local patient safety training curriculum

The Hunter New England Local Health District has a well-established clinical governance and patient safety team. As part of the District's 2016-17 Strategic Operational Plan, the Clinical Governance Unit reviewed the local Root Cause Analysis (RCA) and serious incident (SAC 2) investigation process.

The review recognised areas for improvement, which included more rigorous RCA investigations, greater understanding of Human Factors to facilitate more robust RCA recommendations, and greater expertise in Open Disclosure to decrease patient and family distress and complaints.

One strategy included increasing the skill of patient safety capability of the organisation. While staff have attended the Clinical Excellence Commission's RCA training, this has typically only been offered to recently recruited patient safety officers, and locally based training in RCA methodology has not been available in the recent past.

Photo: RCA training at Hunter New England Local Health District (Image courtesy of Hunter New England Local Health District).

As a result, the Local Health District's Executive Director Clinical Governance, Patient Safety Manager and Simulation Program Director worked with the Clinical Excellence Commission to design and deliver a patient safety curriculum to meet local needs.

Targeting the District's patient safety officers, the curriculum included an Open Disclosure workshop, a Human Factors workshop and a tailored two-day RCA training workshop.

Working with the Local Health District, the Clinical Excellence Commission facilitated a number of the sessions and also prepared evalutions.

The organisations continue to work together to embed this program and roll out the curriculum to other organisational leads. A train-the-trainer program is being developed in 2017-18 to support the delivery of a locally sustainable Patient Safety Program.

Workshops focus on improving communication with patients and families after a serious incident

Dr Tim McDonald is internationally recognised for his expertise in patient safety and communication skills training. He is a paediatric anaesthetist who also holds a degree in law.

The Clinical Excellence Commission coordinated a series of workshops in April 2017 focusing on communication and early investigation following a patient safety incident. The program, taught by Dr McDonald, was entitled CANDOR – Communication and Open Resolution and was originally developed in the USA

A full day CANDOR workshop was provided for senior executives and senior health service managers. It centred on dealing with the investigation and management of a serious incident, from early investigation (including the interviewing of staff), caring for the care givers involved in the incident, and reaching satisfactory resolution.

Simulation exercises with actors were a feature throughout the day.

A similar program was provided for twenty senior managers from the Hunter New England Local Health District. Both programs were well received and evaluated by participants.

Dr McDonald also facilitated a half day workshop for Directors of Clinical Governance, representatives from the Ministry of Health and the mental health sector, private health facility staff and Clinical Excellence Commission staff to look at possible options for change in the early investigation and communication processes associated with serious patient safety incidents in NSW.

Surgical learnings provide system-wide improvements in patient safety

The Collaborating Hospitals' Audit of Surgical Mortality (CHASM) is an audit program overseen by a Committee under section 20 of the *Health Administration Act 1982*. It involves the audit of deaths of patients who were under the care of a surgeon at some time during their hospital stay in NSW, regardless of whether an operation was performed.

The reporting, investigation, and improvement in the quality of care for surgical patients benefits from the input of surgical peers.

In 2016-17, 1245 surgeons participated in the Program, and in 2016, nearly 1700 case forms were returned. This number has increased by over 900 forms since 2008, in part due to the Royal Australasian College of Surgeons mandating the reporting process.

Issues in clinical management, and potentially preventable deficiencies still occur in approximately 10 per cent of reported cases, however, this percentage has been decreasing since 2008.

Professor Peter Zelas is the current Chair of the Committee and has been involved since 2008 as an assessor and committee member. He is a surgeon of long standing and also a teacher of undergraduate medical students.

In addition to providing feedback to surgeons, Peter has used insights from the program to teach students about the causes of deaths of surgical patients. This has included learnings about clinical decision making, importance of adequate pre-operative assessment, especially in the elderly, how to manage anticoagulant therapy both pre- and post-operatively, recognition of the deteriorating patient, importance of the observation chart, end of life decision making, and surgery at the end of life.

NSW Health has a long standing record of reporting and investigating patient deaths in order to improve patient safety. The Clinical Excellence Commission is working with Royal Australasian College of Surgeons to develop and implement a NSW version of the Bi-National Audit System (BAS) - an online system for reporting and assessing of deaths. This will be implemented early in 2018.

Clinicians Guide outlines the basic essentials for safety and quality

Clinicians beginning their journey in quality and safety need to be armed with the basic essentials of quality and safety science, data collection, incident monitoring and clinical practice improvement methodology if they want to improve the health system.

It is with this task in mind, that in 2016, the Clinical Excellence Commission revised the previous Clinician's Toolkit and Easy Guide to Clinical Practice Improvement booklets to provide concise but essential pointers to help improve clinical care.

This guide is targeted at frontline clinicians starting in quality and safety improvement.

The intention is to outline the foundations of quality and safety and to provide an introduction into essential quality and safety tools.

Recognising that clinicians are busy people with significant clinical demands, the concepts have deliberately been kept short and easy to read. For those wanting more in-depth information, links are provided to online resources that are widely available.

A "masters" level handbook for those senior clinicians and managers who are more experienced in quality and safety methodology is currently being developed for release during 2017-18.

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