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CHAIR'S FOREWORD



Last year, I reflected on the well-earned reputation and track record the Clinical Excellence Commission had gained from ten years of leading quality and safety in the NSW health system, and on new directions that had been endorsed by the Board to guide future activities.

Twelve months on, I am pleased to report that the Clinical Excellence Commission continues to build on this reputation. A new Chief Executive, Ms Carrie Marr, a new three-year strategic plan and a structural realignment will ensure delivery of strategic focus areas and priority initiatives over the next year.

Over the last financial year the Clinical Excellence Commission continued to meet its core clinical governance functions related to incident review and reporting, policy development and implementation, and clinical standards. At the same time, it continued to facilitate and lead improvements in key clinical areas by developing and implementing initiatives directed to specific clinical priorities, as well as broader training programs aimed at enhancing clinicians' quality improvement capabilities.

The year has been another busy and productive one for the Board. In April, we farewelled three members – Robyn Kruk, Gabriel Shannon and Carol Pollock, all of whom have made a long-standing commitment and contribution to the Clinical Excellence Commission.

Their combined clinical, corporate and community knowledge was significant in helping the Clinical Excellence Commission reach its current level.

After an active recruitment process, we welcomed three new members in June 2016 – Jacqueline Close, Laila Hallam and Jenny Symons. All have been active in the Health and I am confident they will make a valuable addition to our Board members

At the executive level, in addition to welcoming a new Chief Executive during the year, the organisation farewelled Deputy CEO, Dr Peter Kennedy.

The farewell from Clinical Excellence Commission staff, which I and a number of Board members attended, was a fitting tribute for someone who has had such a significant impact and influence on the quality and safety agenda in NSW and more broadly.

Personnel changes at the board and executive level aside, all of us working with the Clinical Excellence Commission know that it is the patients and clinicians in the NSW health system that sit at the heart of the our work.

While the Clinical Excellence Commission's staff and activities may change, our commitment to improving patient safety and clinical quality will not.

We know that our work is not over until preventable clinical harm and less than optimal care do not exist anywhere in our system.

On behalf of the Board, thank you to everyone working with and supporting the Clinical Excellence Commission in improving safety and quality in the NSW health system.

We look forward to continuing to work with you to improve the experience of all those who entrust themselves to us for safe, quality clinical care.

A/Prof Brian McCaughan AM

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Board Chair

Clinical Excellence Commission

CHIEF EXECUTIVE'S FOREWORD



The end of the financial year marks a significant milestone, not just for the Clinical Excellence Commission, but for me as its 'new' Chief Executive. It is hard to believe that a year has gone so quickly. With my experience in the northern hemisphere, I can say with confidence that the work which the Clinical Excellence Commission is leading and facilitating is at the forefront of work being progressed in other quality and safety organisations around the world.

Much of this is attributable to having a staff which is dedicated and skilled in quality improvement and clinical governance. What cannot be underestimated however, are the strong partnerships which the Clinical Excellence Commission has within and outside the NSW health system.

It is this collaborative approach that defines, drives and enables the Clinical Excellence Commission, Local Health Districts & Speciality Health Networks to make improvements across NSW health. The Clinical Excellence Commission Strategic Plan 2015-18 builds on the organisation's track record, while placing the Clinical Excellence Commission in a strong position to respond to emerging challenges and opportunities.

The plan outlines strategic objectives and initiatives, with four key areas of focus:

- Building system excellence together;
- · Quality improvement capability and capacity;
- Knowledge-based system improvement;
- Organisational excellence.

The first half of 2016 has been dedicated to progressing internal structural and operational reforms to support the delivery of the focus areas.

To ensure our initiatives remain relevant and appropriate to daily clinical practice, Clinical Excellence Commission staff continue to have a physical presence in local health districts, specialty health networks and health facilities.

We regularly include the input of clinicians and consumers in our committees, report and policy development and strategic planning, and bring staff from various districts together to foster networking and system-wide change.

Ensuring our work is in line with best practice and latest developments, the year has also seen the Clinical Excellence Commission engaging actively with old and new partners at local, national and international levels, to network and collaborate on improvement initiatives.

The following pages provide a snapshot of the many activities and achievements of the Clinical Excellence Commission over the last financial year.

In capturing this work, our aim is to showcase the Clinical Excellence Commission and, more importantly, acknowledge and thank the many clinicians and partners who work with us on a daily basis to improve care. Without them, we would not be able to make the contribution to the NSW health system we strive for every day.

With the 2015-16 financial year now behind us, the Clinical Excellence Commission is well-positioned and looking forward to a busy and productive 2016-17 year. In addition to a new-look website that we hope will engage and better inform our stakeholders, we recently released a Clinician's Guide to Quality and Safety, providing a simple,

introductory guide to clinical practice improvement. This will be followed by an advanced guide in early 2017.

Over the next 12 months we will continue to emphasise the importance of safe and reliable systems, focusing on how we can better improve the experience of care for our patients, their families and our communities.

Ms Carrie Marr Chief Executive

BUILDING SYSTEMS EXCELLENCE TOGETHER



BUILDING SYSTEMS EXCELLENCE TOGETHER

Sustainable, responsible, safe and appropriate use of blood products

The Clinical Excellence is committed to supporting the sustainable, responsible, safe and appropriate use of blood products throughout NSW public hospitals and has been supporting local health districts to optimise use and reduce unnecessary wastage of blood and blood products through the Blood Watch program.

This has included facilitating education sessions, as well as developing audit tools for facilities to use to monitor the uptake of patient blood management strategies.

Application of initiatives, such as preoperative anaemia management and single-use transfusion policies has resulted in a 17.4 per cent reduction in the issue of red blood cells across NSW.

The Clinical Excellence Commission is a member of the NSW Blood and Blood Products Wastage Working Group. The Group includes representatives from the NSW Ministry of Health, NSW Health Pathology, Australian Red Cross Blood Service and all public and private pathology providers across NSW.

The Group has developed a targeted blood and blood product wastage reduction action plan applicable to all NSW health care providers, which includes a detailed review of blood product wastage data every two months. Services at risk of becoming, or are non-compliant with wastage benchmarks are identified and receive support to implement wastage reduction strategies.

Since May 2015, the mean percentage discard has been 3.22 per cent, demonstrating a significant reduction in discard of red cells in NSW hospitals, and equating to a saving of \$2.6M across NSW health facilities.

\$2.6M

Savings equivalent from better utilisation of blood products

Safe use of high-risk medicines

High-risk medicines are medicines that have a high risk of causing injury or harm if they are misused or used in error. Error rates with these medications are not necessarily higher than with any other medicines, but when problems occur, the consequences can be more significant.

The High-Risk Medicines Management Policy (PD2015_029) published in August 2015 outlines the requirements for safe management and use of high-risk medicines within NSW Health facilities.

The Clinical Excellence Commission's High-Risk Medicine Program has developed resources to support clinicians to use high-risk medicines safely and effectively and to assist NSW Health facilities implement the policy requirements.

Reducing patient harm from medication errors

Medicines are a vital part of treatment for most patients admitted to hospital. Medicines can have great benefits, but their use can also be associated with harm. Around 20,000 incidents involving medication are reported each year with some causing significant patient harm.

In 2015, the Clinical Excellence Commission undertook an extensive review and consultation on the Medication Safety Self Assessment® (MSSA) for Australian Hospitals, with an updated Self Assessment Tool published in December 2015.

As part of the review process, a range of health professionals from around Australia provided input into the development of the tool to ensure it remains relevant and useful in the Australian context.

Hospitals that use this comprehensive resource are able to assess the safety of medication practices in their facility, identify opportunities for improvement, and take actions to enhance their medication safety systems.

Since December 2015, more than 200 Australian hospitals (90 from NSW) have registered for the new version of the MSSA.

NSW Falls Prevention Program: integrating and collaborating

Identifying the key clinical risks for patients, such as falls, level of cognition, pressure injury, and malnutrition, is an important aspect of patient safety.

In 2015, the Clinical Excellence Commission, through the NSW Falls Prevention Program and Pressure Injury Prevention Program initiated discussions with eHealth NSW and the Agency for Clinical Innovation's Aged Health Network to develop an integrated patient admission form in the electronic medical record (eMR 2 B+). Key clinical risks are now identified in the system. For example, a patient who has a high risk of a fall is flagged in the eMR and an alert for referral to appropriate multidisciplinary team member is triggered.

This collaborative effort to integrate risk screen tools in the eMR has simplified the patient admission process and reduced the time to complete documentation. The integrated patient admission form is being made available to local health districts as eHealth progresses its role out of eMR 2 B+ across the state. Planning for the development of a comprehensive care plan in eMR has commenced with a release expected during 2017.

Australian hospitals registered for the Medication Safety Self Assessment®

Quality Audit Reporting System supports health facilities to improve care

The Clinical Excellence Commission's Quality Audit Reporting System (QARS) has been developed in response to requests from local health districts to assist with clinical audits, including the National Safety and Quality Health Service Standards.

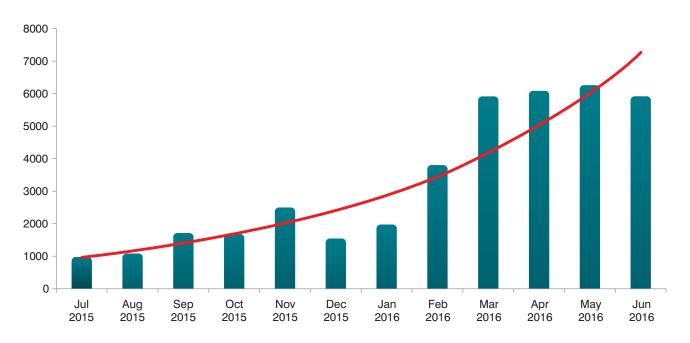
The System is responsive and has been set up to work on desktop and laptop computers, mobile tablets, and smart phone devices, allowing staff to complete the surveys with minimal to no paperwork. It also allows displaying real-time audit results and reports.

Local health districts and specialty health networks have full control of their own users and data with respect to privacy and security.

QARS is now being used by most local health districts and specialty health networks, with 41,824 clinical audits being completed in the system during 2015-16.

41,824 Clinical audits completed in the QARS database

Figure: Audits by month entered into the QARS Database



New data indicators support improvement in quality care

eChartbook continues to provide timely, and accurate data for health services, identifying opportunities to improve quality and safety in health care. With an average of 692 visits per month, the eChartbook has had over 16,000 visits since its launch in 2013.

During 2015-16, the Clinical Excellence Commission used feedback from stakeholders to improve the relevance, timeliness and usefulness of data presented in the eChartbook portal. Community access and Health System alerting has also been improved.

During the period, three new indicators; potentially preventable hospitalisations, potentially avoidable deaths and discharge against medical advice in Aboriginal population, were developed.

The eChartbook now has 30 clinical indicators that help health professionals identify and act on opportunities for improving processes and outcomes.

eChartbook visits since 2013



WORK OF CLINICIANS RECOGNISED INTERNATIONALLY

The Global Sepsis Alliance and World Sepsis Day Organization have recognised the excellent work of clinicians in NSW public hospital emergency departments and inpatient wards with a Global Sepsis Award for the Clinical Excellence Commission's SEPSIS KILLS program.

The award honours organisations that have made important contributions to reduce the death toll from sepsis by initiating or endorsing excellent sepsis initiatives and programs.

CLINICAL EXCELLENCE COMMISSION

QUALITY IMPROVEMENT CAPABILITY AND CAPACITY



QUALITY IMPROVEMENT CAPABILITY AND CAPACITY

Australia's first roundtable for emerging leaders in patient safety

It is vital that the next generation of health leaders has a commitment to patient safety. In April 2016, the Clinical Excellence Commission conducted Australia's first Roundtable in Patient Safety. Twenty-seven emerging health leaders were selected from across the Nation to participate in the Roundtable. They were chosen for their leadership potential and their determination to make a difference to patient care.

They comprised senior medical students, as well as early career nurses and junior doctors. This mixture provided an opportunity for them to work together in finding safer ways to improve health care.

The Roundtable was based on the successful Telluride model initiated by Dr David Mayer, and was supported by Avant Mutual Group and the NSW Health Division of Midwifery and Nursing.

Together with faculty from the USA (including Dr Mayer) and Australia, scholars spent 4 days at Sydney's iconic Quarantine Station discussing the value of open, honest communication, the barriers that exist to achieving this and solutions to reduce harm to patients.

By working with these young people, faculty at the Roundtable had a glimpse into the future of safety and quality improvement in health care.

At the end of the Roundtable, each scholar made a pledge to do one thing differently in the future. Follow up has shown that the pledges are being carried out. One senior medical student from Sydney is introducing a brief "safety moment" at the beginning of tutorials. Another young doctor and nurse have teamed together to have "a moment for safety" at all Grand Rounds presentations.

The Roundtable exceeded expectations. One scholar, a nurse from NSW said "Now I have the tools and confidence to speak up when I see a problem that effects patient safety... and I will".

Building clinical leadership capacity

Strategies for sustainable patient safety and system improvement are dependent on strong clinical leadership capabilities.

'Clinical Leadership' occurs at all levels of patient care and refers to the process of leading a set of activities that improve the delivery of safe clinical care, and the set of attributes required to lead a team, unit, stream or cluster.

The Clinical Excellence Commission delivers several education programs to build capacity and capability across NSW Health, including the Clinical Leadership Program and the Clinical Practice Improvement Program.

As at February 2016, over 380 NSW health staff had participated in workshops on how to use driver diagrams to support quality improvement projects.

The Clinical Leadership Program (CLP) is now in its tenth year and the demand for Program remains strong. Since 2007, a total of 634 participants have enrolled in the Executive CLP and 1,908 into Foundational CLP (total of 2,542 participants).

2542 Graduates from CEC's Clinical Leadership Programs

Supporting innovations to reduce falls

A competition was conducted in conjunction with the Clinical Excellence Commission's April Falls 2016 Campaign to help identify good practice in preventing falls in local health districts. Two initiatives were selected to present at the NSW Falls Prevention Network Forum held on 20 May 2016.

Medical Ward 5, Gosford Hospital, Central Coast LHD (Jane-Maree Hunter, NUM and Jan Crawley, RN) – Falls reduced from 10 falls per 1000 patient bed days to 3 falls per 1000 bed days (March 2015-April 2016).

The strategy included establishing a 4-bed room for high fall risk patients, close to the nurses' station and in an area of high visibility. Staff members are allocated solely to this room on all shifts at all times. Music therapy and diversional therapy were introduced which has had a settling effect on many patients. The Clinical Excellence Commission's TOP 5 program and hourly rounding was implemented for all patients in the room.

The ward also introduced a monthly falls map which shows where each fall has occurred. These falls are then discussed with staff at ward meetings and strategies are brainstormed to reduce future falls occurring. Relatives are encouraged to sit with patients and to notify staff when they are leaving.

Pambula Hospital, Southern NSW (Susan Berry) – Falls per month have decreased from 3.5 to 1.3 falls per month (2015-2016). The strategy introduced nursing care hourly rounding (pain, personal care, placement of possessions and positioning),

multidisciplinary team rounding, AIN training to provide 1 on 1 care for particular high risk falls patients and Post Fall Safety Huddles to prevent further falls by appropriate individualised intervention.

NSW hand hygiene leading the way

The Hand Hygiene program at the Clinical Excellence Commission has worked closely with local health districts and specialty health networks to train 155 staff in 12 facilities across 9 local health districts and specialty health networks as Gold Standard Auditors. Quality improvement projects, barriers and innovations for safer quality care through improved hand hygiene have been discussed and the hand hygiene performance of NSW clinicians continues to lead all other Australian states.

Most recent hand hygiene data for the period from April to June 2016 shows NSW has an overall hand hygiene compliance rate of 84.9 per cent, compared to the National figure of 83.9 per cent. This NSW figure is the highest compliance rate since the National Hand Hygiene Initiative was introduced in 2009.

84.9

NSW hand hygiene compliance rate – the highest result achieved in Australia so far.



BLOOD TRANSFUSION BROCHURE GAINS AWARD

The Clinical Excellence Commission received a NSW Multicultural Health Communications Award for its brochure.

A General Guide to Blood Transfusion: Information for Patients and Families. The brochure is being used with permission as far away as Canada and Mexico.



POSTER GETS TOP PRIZE AT CONFERENCE

The Clinical Excellence Commission in collaboration with the Agency for Clinical Innovation, were awarded best poster at the Australian Vascular Access Society for their submission

A Collaborative Approach to Reducing Incidence of Vascular Air Embolus and Central Venous Access Devices in New South Wales.

CLINICAL EXCELLENCE COMMISSION

KNOWLEDGE-BASED SYSTEMS IMPROVEMENT



KNOWLEDGE-BASED SYSTEMS IMPROVEMENT

Challenging traditional barriers to reduce diagnostic errors

Diagnostic error is emerging as a significant patient safety issue, with literature reporting that approximately one in every 10 diagnoses is wrong.

Decision making in diagnosis is a complex task that requires sound clinical reasoning skills. Breakdowns in the diagnostic process commonly occur in the data synthesis and decision making steps. A combination of cognitive and system factors are thought to impact decision making capability.

In 2015-16, the Clinical Excellence Commission has piloted a Red Team Blue Team Challenge as a means to reduce diagnostic error. During a Red Team Blue Team Challenge, team members are allocated to a red team or blue team role. The aim is to challenge decision making and traditional hierarchical barriers in a safe learning environment and designates clinicians to approach diagnostic decision-making from an alternative position.

Ground rules ensure a safe environment. A scripted start and finish reminds clinicians it is the diagnosis being challenged, not the individual, and prompts are provided that encourage the red team to consider possible alternative diagnoses, question the relevance of investigations, and rule out the worst case scenario. This process also allows juniors to develop skills in assertiveness, whilst protecting them from the potential negative consequences of questioning more senior clinicians.

The Clinical Excellence Commission has worked collaboratively with a clinical unit in Campbelltown Hospital, South Western Sydney Local Health District to pilot the Red Team Blue Team Challenge. Evaluation included staff satisfaction and patient outcomes in a pilot series of 18 patients over a 3-month period. Clinicians report an improved understanding of senior clinician thinking, a greater sense of team decision making, and an optimised environment for learning.

Three patients had their initial diagnosis changed as a result of Red Team Blue Team Challenge.

As part of the pilot program, the Clinical Excellence Commission worked in partnership with HETI, to produce a series of videos that will support the promotion of the Red Team Blue Team Challenge and will act as a foundation for training across NSW health facilities from 2016-17.

Empowering patients, families and carers to reduce diagnostic errors

A separate project to reduce diagnostic error was undertaken with Murrumbidgee Local Health District, as part of the Clinical Excellence Commission Clinical Leadership Program. It involved raising awareness among staff of the potential for diagnostic error and encouraging greater involvement of patients in the diagnostic process.

The six-month project included the staff of the Emergency Department at Griffith Hospital, patients, their families and carers, and the MLHD Clinical Governance Unit, with support from the Clinical Excellence Commission's *Partnering with Patients* program staff.

New patient safety initiatives launched – the CAUTI Improvement Program and the Diagnostic Error Improvement Program

The initiative encouraged patients to ask questions of clinical staff and medical officers were encouraged to listen to their patients' concerns. Evaluation of the project has indicated certain symptoms are more likely to cause delays or misdiagnosis, and that diagnostic errors can be avoided through improved communication between the patient and medical staff. Further evaluation (local audit of clinical records) has been recommended to review the documentation of the diagnostic process where there were delays or errors.

Pre-insertion decision support tool helps prevent CAUTI infections

Urinary catheterisation is a common clinical procedure. Despite the benefits of catheter use, there is always a risk that a patient with a catheter may get a urinary tract infection (CAUTI) because of the device.

During 2015, the Clinical Excellence Commission developed and released a suite of resources to help reduce infections and improve care for patients who have a catheter during their hospital stay. One of the key resources was the pre-insertion decision support tool, which was developed to help clinicians check for an appropriate indication, select the most appropriate catheter and further questions to confirm their choice. This tool is one of the first of its kind, anywhere in the world.

The launch of the resources followed strong support for the tools during their pilot phase in 18 NSW hospitals since 2014. The pilot sites tested the tools to ensure they were practical and effective in a variety of acute clinical settings. The resources also assist health care facilities to meet the requirements of the NSW Health Guidelines for adult urethral catheterisation for acute care settings, as well as the National Safety and Quality Health Service (NSQHS) Standards.

In February 2016, the Clinical Excellence Commission formally launched the CAUTI Improvement Project with the launch attended by one hundred delegates from across NSW, representing metropolitan, regional and rural facilities. It was targeted at quality improvement advisors and clinical staff from high catheter use units (emergency, intensive care, general surgical, general medical, aged care geriatrics).

2

End of Life Program: Last Days of Life Toolkit

A key function of the Clinical Excellence Commission's End of Life program is to develop tools and resources that support clinicians' safe practice in caring for patients and their families and carers at the end of their life.

In June 2015, the Clinical Excellence Commission undertook a project to develop a Last Days of Life toolkit. The aim was to provide clinicians with tools to ensure that all dying patients are recognised early, receive optimal symptom control, have social, spiritual and cultural needs addressed, and bereavement support for families and carers occurs.

Four working parties, made up of 71 expert clinicians from all relevant disciplines as well consumer advisors, were convened to review current practice and literature and make recommendations for tool development.

There are 20 resources in the toolkit, which are consistent with NSW Health policy and national requirements, as well as national and international best practice.

The toolkit includes:

- Tools to assist the recognition of the dying patient and development of individualised management plans
- Guidelines for initiation and escalation of medications
- Tools to prompt communication; and
- Tools to support accelerated transfer to die at home

They have been designed for use by generalist clinicians caring for dying patients in all inpatient hospital settings and are not intended to replace local Palliative Care guidelines or advice given by Specialist Palliative Care clinicians.

The tools are being piloted from July 2016 in metropolitan and rural generalist settings, following on from the successful consultation process in 2015-16.

20

New End of Life care tools developed with input from over 70 expert clinicians and consumer representatives

The right medicine every time

Medication reconciliation is the process of comparing a patient's medication orders to all of the medicines the patient has been taking to avoid unintended changes.

Unintended changes to patients' medicines can occur when a patient transfers between and within health care settings. Approximately 30 per cent of unintended changes have the potential to cause harm.

In August 2015, a Medication Reconciliation Workshop was hosted for 70 participants; they included a mix of pharmacists, nurses, doctors and patient safety managers from across the State.

The workshop coincided with the establishment of Statewide Medication Reconciliation Program leads, as well as the release of tools and resources to assist with the implementation of standardised medication reconciliation processes.

The workshop provided opportunities for local health districts and specialty health networks to share their current medication reconciliation activity, hear implementation success stories and workshop an improvement plan.

New patient safety toolkits launched: The Medication Reconciliation Toolkit and the 5 x 5 Antimicrobial

Audit Toolkit

Central to the workshop was the development of a local implementation plan. Participants were encouraged to think about areas for quality improvement in their services and possible actions to facilitate that work.

Since the workshop, participants have continued to collaborate and are working to incorporate medication reconciliation into everyday practice.

Forum encourages sharing of learning and initiatives in Antimicrobial Stewardship

The Clinical Excellence Commission held an antimicrobial stewardship (AMS) forum on 4 September 2015 at the Mint, Sydney.

The forum was held to share information and lessons learned regarding AMS at national, state and local levels, and provided healthcare professionals interested in AMS with an opportunity to meet one another and network.

The event also launched the 5x5 Antimicrobial Audit, which is a targeted audit, intervention and feedback activity developed by the Clinical Excellence Commission and piloted by 15 NSW facilities during 2014-15.

The program for this event covered a wide variety of topics including national and state initiatives for AMS, methods for monitoring antimicrobial usage, factors which influence antimicrobial prescribing and the future of AMS within the context of electronic medication management.

Presenters at the forum included Prof John Turnidge from the Australian Commission on Safety and Quality in Health Care; Dr Rod James from the National Centre for Antimicrobial Stewardship (NCAS) at the Peter Doherty Institute; and pharmacists, physicians and infection control practitioners from St George Hospital, Manning Base Hospital, Bankstown Lidcombe Hospital, Shoalhaven Hospitals Group, Bathurst Health Service, Bega Valley Health Service, St Vincent's Hospital Sydney and Prince of Wales Hospital.

The most recent National Antimicrobial Prescribing Survey (NAPS) results for NSW hospitals were presented by Dr James at the forum. The data illus trated a focus for future improvement work in AMS, using the 5x5 Antimicrobial Audit and NAPS as tools to feedback useful prescribing indicators to clinicians and managers.

Point prevalence surveys underpin pressure injury prevention across NSW

The rate of hospital and health service acquired pressure injuries are recognised as an indicator of the quality of care provided. While many local health districts and speciality health networks undertake point prevalence surveys, there is no standardisation of questions across the state.

The Clinical Excellence Commission has worked collaboratively with representatives from local health districts and speciality health networks to develop the minimum Pressure Injury point prevalence survey dataset requirements within the Quality Audit Reporting System (QARS).

This body of work is helping to standardise the data collected across the State, enabling benchmarking and underpinning a regular Statewide report identifying opportunities for improvement. The data will also help to measure the impact of clinical improvement initiatives that reduce or prevent pressure injuries.

Working closely with Illawarra Shoalhaven LHD, the data set was initial piloted in November 2015 in the QARS system. The updated data set was tested twice at Royal Prince Alfred Hospital in April and May 2016. The QARS data set and supporting guide will be available for use from July 2016.

The Clinical Excellence Commission will be supporting the Far West Local Health District to undertake their first pressure injury point prevalence survey using the QARS data set, in September 2016.

Stopping clots, saving lives

Venous Thromboembolism (VTE), commonly referred to as a blood clot, is a leading cause of preventable death in Australia, with hospitalisation being a major risk factor for the development of VTE.

The VTE Prevention Program was established in 2014 to reduce the incidence of hospital-associated venous thromboembolism (VTE) in NSW public hospitals by ensuring that all patients are assessed for VTE risk and provided appropriate prophylaxis.

Following the launch of the VTE Prevention Program, the Clinical Excellence Commission has been supporting local implementation through regular engagement with the VTE Program Leads from each district.

An inaugural meeting for the Program Leads was held in September 2015, which provided an opportunity to learn about current VTE prevention activity across NSW and share in discussions about challenges and solutions to implementation. Subsequent teleconference meetings for VTE Program Leads have been convened to continue supporting implementation.

In 2015-16, the program commenced work on reducing the risk for patient groups at high-risk of developing a VTE that are not admitted to hospital. Maternity patients and patients discharged from the Emergency Department with lower limb immobilisation are two such patient groups.

Resources have been developed in collaboration with expert clinicians. Several hospitals across NSW are testing these resources to evaluate their use in the clinical environment.

Pressure injuries: learning from the patient story

During 2015-16, the Clinical Excellence Commission's Patient Based Care and Pressure Injury Prevention teams worked closely with Western NSW Local Health District to film a patient story for use in clinical education. The story presents the experience of a family of a patient who developed a pressure injury while in hospital.

The powerful story highlights the impact pressure injuries can have on patients and their quality of life, how each patient will have unique care needs, and emphasises how everybody has a role in preventing pressure injuries from developing.

An accompanying educational presentation was developed to support the use of the story with staff to raise awareness and support the assessment of risk to prevent pressure injury.

The video story is available on the Clinical Excellence Commission YouTube channel and is also being used by HETI to form the basis of their on-line education for pressure injury prevention.

Reducing harm from Central Venous Access Devices

A central venous access device, or CVAD, is a catheter that is inserted into the patient's heart, or into the major vein to the heart, to provide fluids, medications, or to measure the central venous pressure. Central Venous Access Devices are frequently used within NSW health care facilities.

An air embolism is an air bubble that has entered the circulation. Patient outcomes from air embolism range from no harm, to neurological impairment and death.

Venous air embolism associated with CVADs results when air enters the venous circulation and migrates to the right side of the heart and pulmonary vessels, resulting in cardiac and respiratory symptoms. In some patients, it may also result in stroke, myocardial infarction and cardiac arrest.

In 2015, the Clinical Excellence Commission published a Clinical Focus Report: "Central Venous Access Devices and Air Embolism", to heighten awareness about the preventable patient safety event of air embolism which can result at any time, from the insertion procedure until after CVAD removal.

Following a review of the literature and in collaboration with an expert clinician group, system-wide and point-of-care actions were identified to reduce the risk of air embolism from CVAD insertion and make care delivery of CVADs reliable and safe.

The report was distributed to local health districts and specialty health networks and is available on the Clinical Excellence Commission website.

Review makes anaesthetic administration even safer

During 2015, the Clinical Excellence Commission published the report, Activities of the Special Committee Investigating Deaths Under Anaesthesia, 2015, documenting the committee's audit activities and findings during that reporting period.

The report indicates that anaesthesia is very safe across NSW where more than one million individual episodes of anaesthesia are recorded annually in public and private hospitals and the reporting of anaesthesia related deaths has helped ensure the high quality and safety of anaesthetic administration.

In 2015, 401 cases were reviewed where death had occurred during, due to or within 24 hours of an anaesthetic or administration of sedative drugs for medical procedures. Potentially correctable anaesthetic factors were only detected in 22 of these cases.

The estimated mortality directly caused by the anaesthetic was less than two deaths per million population per annum. It is increasingly rare to review a case where a previously healthy patient dies from anaesthetic administration. The vast majority of patients who suffer adverse events are elderly or frail and/or have significant life threatening illness.

In 2015 the estimated mortality of anaesthetic deaths with correctable factors was 1 in 85, 106 procedures.

Monitoring Statewide patient safety

As part of the Clinical Excellence Commission's role in leading safety and quality, throughout the year the Patient Safety team at the Clinical Excellence Commission coordinated the organisation's management of data from the Incident Information Management System, Root Cause Analyses and Reportable Incident Briefs.

This work informed the development of:

- The 6-monthly public report of Statewide incident data.
- Three Patient Safety Watch reports: Central Venous Access Device (CVAD) Removal; Low Molecular Weight Heparin – Managing the Risk; and Recognising Bleeding in Patients Receiving IV Heparin.
- An education module in HETI Online that provides information to clinicians to help reduce the risk of air embolism occurring and supports safe, high quality patient care in the management of CVADs.
- A Clinical Focus Report entitled Central Venous Access Devices and Air Embolism

Safety Alert Broadcast documents (SABs) including:

SI-001/16 Increased Cases of Invasive Meningococcal Disease;

SA001/16 Product Recall Catheters with Beacon Tip Technology;

SN 002/16 Glyceryl trinitrate (GTN) tablets; and SN 004/16 Assessment and management of risk of absconding from declared mental health inpatient units.

 The report Medical Device Standardisation – Analysis of Safety and Financial outcomes 2015.

These were just some of the 89 patient safety publications, tools and resources developed by the Clinical Excellence Commission during 2015-16.

To further support staff in local health districts and specialty health networks to improve the quality and safety of care, the Clinical Excellence Commission delivered a number of patient safety workshops and training sessions, including:

- Two Statewide Root Cause Analysis (RCA) Team Leader Workshops.
- Customised RCA Training requested by districts and networks.
- Clinical Risk and Serious Incident Management Leadership Training
- Two Statewide Patient Safety Manager forums
- Two Open Disclosure Point of Care Training
- Two Open Disclosure Advisor Training Programs

Patient safety publications, tools and resources developed

Audits facilitate learning and improve surgical care

The Collaborating Hospitals' Audit of Surgical Mortality (CHASM) Committee is administered by the Clinical Excellence Commission. It reviews deaths of patients who were under the care of a surgeon, or where a surgeon had major input to care, irrespective of whether or not an operation was performed. It provides constructive feedback to surgeons and local health districts to facilitate reflective learning and improvement in surgical care.

Participation in the CHASM is now compulsory for NSW surgeons to meet the requirements of the Continuing Professional Development Program of the Royal Australian College of Surgeons (RACS). As a consequence, the CEC has noted an increased caseload and level of activity within Special Committees.

In 2014, CHASM received 2260 notifications of surgical deaths from LHDs and completed the peer review of 1501 notified deaths. These figures contribute to a total of 14255 surgical deaths notified to CHASM and 7409 notified deaths that have resulted in a completed peer review between 2008 and 2014.

The majority of the audited deaths involved elderly patients with significant underlying health problems who had been admitted as an emergency with an acute life threatening condition, often requiring surgery.

The 2015 CHASM Case Book highlighted the importance of adequate documentation in the clinical record and referred to challenges presented by the issues of legibility, use of abbreviations, the presence and clarity of the management plan, timeliness of recording and evidencing the response to a change in a patient's condition. Documentation becomes even more significant where multiple practitioners and/or teams are involved in a patient's care, particularly in relation to opinions and decisions regarding the management plan and each individual practitioner's opinions about further care.

ORGANISATIONAL EXCELLENCE



ORGANISATIONAL EXCELLENCE

Keeping patients 'In Safe Hands'

Evidence from patient safety data highlight the universal root causes for adverse events as poor communication, lack of teamwork and lack of care coordination.

The In Safe Hands Program works with local health districts and specialty health networks in implementing tools to enhance teamwork and communication for clinical units.

An example of how this was undertaken can be demonstrated by the work done with South Western Sydney Local Health District, where all facilities have implemented the Program. To achieve this, the Clinical Excellence Commission worked directly with clinical units in developing and co-designing strategies and implementation tools such as Structured Interdisciplinary Bedside Rounds® to enhance teamwork and communication.

As at 30 June 2016, a total of 101 clinical units across NSW health facilities have implemented Structured Interdisciplinary Bedside Rounds[®]. Outcomes measured have focused on:

- Process measures
- Patient and Staff Experience
- Patient Safety

Units that have implemented the Program have generally found that these areas have improved as a result of the Program. The core aim of the Program is to ensure that clinical units provide safe, high quality patient care as a result of becoming a highly reliable team.

101 Clinical units across NSW have implemented SIBR®

Recognising and responding to deteriorating patients

Failure to recognise and appropriately manage deteriorating patients is a significant issue not only in NSW public hospitals but in hospitals and health care organisations around the world. The "Between the Flags" program is addressing this issue and supports staff across all NSW public hospitals to identify early warning signs of deterioration and provide an appropriate response.

The program uses the analogy of Surf Life Saving Australia's Lifeguards and Life Savers who keep people safe by ensuring they are under close observation and rapidly rescue them, should something go wrong.

In May 2016, the Clinical Excellence Commission hosted 115 participants from across NSW at the inaugural Deteriorating Patient Education Workshop. For the first time medical, nursing, allied health and midwifery clinical leads and educators from all local health districts and specialty networks came together to collaborate on the revision and further development of the Deteriorating Patient education resources.

The workshop gave the opportunity for participants to share their current education activity, hear success stories, and to shape the new Deteriorating Patient Education Program. Since the workshop, local health districts (LHDs) have continued to collaborate and are working with the Clinical Excellence Commission to improve the Deteriorating Patient education.

Human Factors program helps make it easier to report incidents

A commonly cited challenge to the reporting of incidents and hazards in NSW Health in the current Incident Information Management System (IIMS) is that the software is cumbersome, slow and confusing. This can result in some incidents or hazards not being reported in a timely fashion.

The Clinical Excellence Commission has provided Human Factors support to the new Information Management System (IMS+) program to help design a user-friendly reporting tool. A major component of this support involved scenario-based testing at Blacktown and John Hunter Hospitals to test and refine the design of the software to ensure it is easy to use. The Clinical Excellence Commission's Human Factors team also provided interface redesign guidance to the developer.

The usability testing procedure used for the IMS+ program is being integrated into other eHealth programs to increase usability and decrease use-errors when using safety-critical software like eMR.

Feedback drives improvements to electronic observation charts

Working in close collaboration with the Health Education and Training Institute (HETI), the Between the Flags eLearning education modules have been redeveloped by the Clinical Excellence Commission and have been released through the HETI Online learning management system in 2015. To date, over 65,000 staff have completed the Between the Flags education.

The Between the Flags observation charts have been developed in the electronic medical record and are actively used in over 100 hospitals across the state, with more scheduled for implementation in 2016-17. Following clinician feedback, an enhancements package that will improve the usability and functionality of the electronic charts for the end user will be delivered in the second half of 2016.

The Clinical Excellence Commission is working with and supporting the LHDs and facilities to refine their processes to be more efficient, patient centred and grounded in safety and quality.

Since the introduction of Between the Flags, the Rapid Response rate has increased by 136 per cent with an associated 42 per cent reduction in the cardiac arrest rate. For NSW public hospitals this reduction equates to 2488 fewer unexpected cardiac arrest calls.

Early recognition and treatment of patients with sepsis saves lives

Sepsis is a time critical medical emergency resulting from an overwhelming inflammatory response to infection. It can be difficult to recognise and delayed treatment is associated with high mortality rates, significant morbidity and high costs to the health care system.

The Clinical Excellence Commission has worked with clinicians across the state to implement the SEPSIS KILLS program in 225 healthcare facilities across NSW. Sepsis is now consistently managed as a medical emergency, in a similar way to stroke, acute coronary syndrome and trauma.

The SEPSIS KILLS pathway is used in emergency departments and inpatient wards and has greatly improved the safety and quality of care for more than 29,000 patients since the program started in 2011. The NSW data shows an improved median time to administration of first antibiotic to consistently less than 60 minutes, and in 2015, over 80 per cent of patients were administered antibiotics within 2 hours of sepsis recognition.

A recent publication in the Medical Journal of Australia shows patient outcomes have been improved when treatment with intravenous antibiotics begins promptly using the SEPSIS KILLS pathway. The overall mortality rate from sepsis has reduced from 19.4 per cent (2009-11) to 14.1 per cent (2013) and patients are also having shorter length of stay and less time in intensive care. These gains were sustained in 2015, with mortality reducing to 13.37 per cent.

By invitation, the Clinical Excellence Commission now participates in the Global Sepsis Alliance Quality Improvement Committee and is providing significant input to international best practice development.

5.3%

The reduction in the mortality rate from sepsis between 2009 & 2013.

Supporting improvements in paediatric care in Far West New South Wales

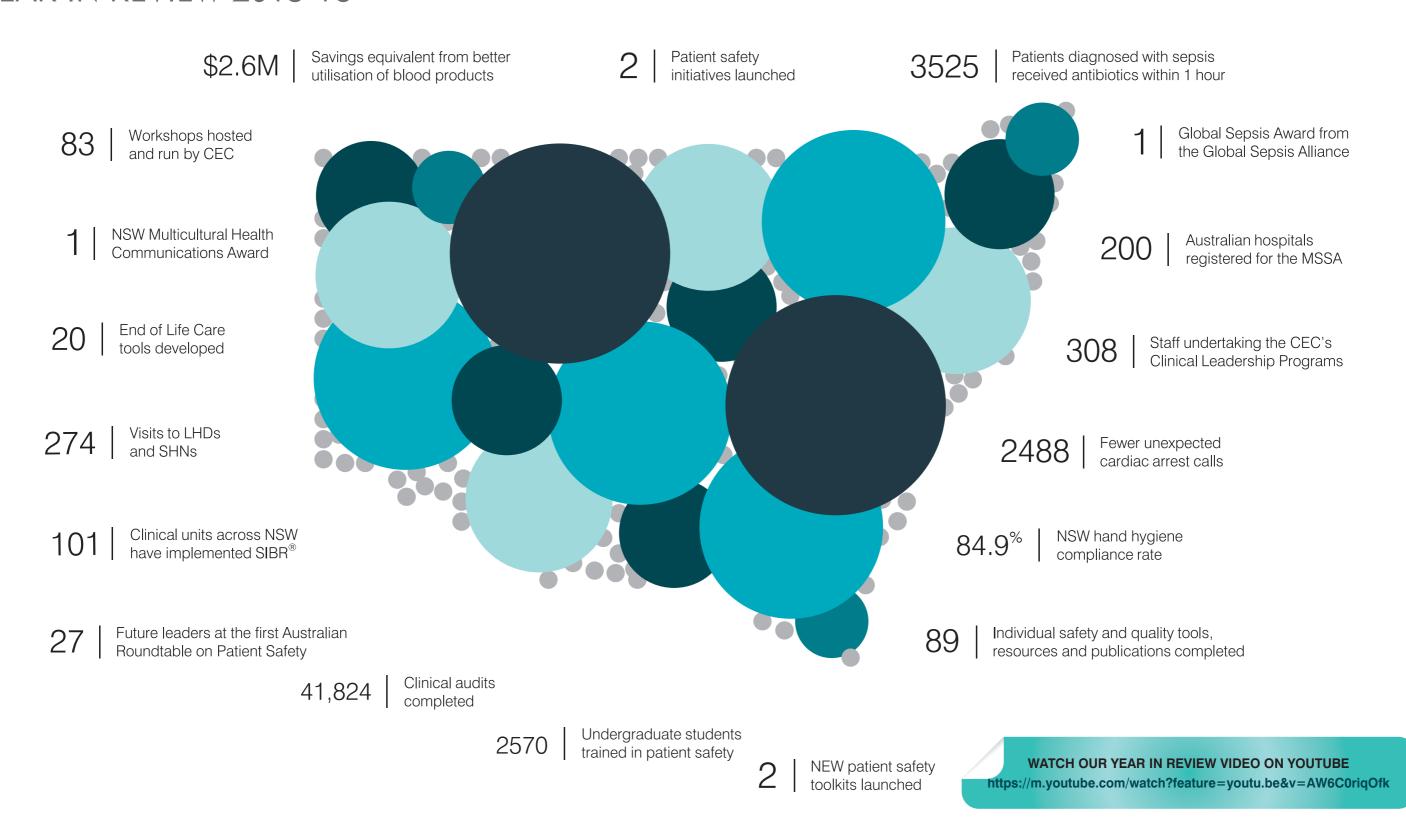
In February 2016, the Clinical Excellence Commission's Paediatric Quality Program team visited Broken Hill Health Service, Menindee Health Service and Wilcannia Multi-Purpose Service over a three-day period.

The focus of the visit was to develop an understanding of the challenges impacting health care delivery in the Local Health District, to share innovative ideas across facilities and networks and provide support for quality improvement for paediatrics.

The Clinical Excellence Commission's team also provided in-service education sessions focusing on patient safety, sepsis and leadership, held discussions with clinicians and managers from various levels and facilitated a networking session with graduates of the Clinical Leadership and Clinical Practice Improvement programs.

Following the visit, the teams from the Local Health District and the Clinical Excellence Commission developed an improvement plan outlining the planned collaboration between the organisations in working towards safer care for children in the Local Health District's facilities.

YEAR IN REVIEW 2015-16



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