

Special Commission of Inquiry into Healthcare Funding

Submission Number:

Name:

Clinical Excellence Commission 31/10/2023

18

Date Received:

Clinical Excellence Commission Submission to the Special Commission of Inquiry into Healthcare Funding

October 2023



Acronyms

ACSQHC	Australian Commission on Safety and Quality in Health Care
AIHW	Australian Institute of Health and Welfare
CEC	Clinical Excellence Commission
HAC	Hospital-acquired complication
HAI	Healthcare-associated infection
ICU	Intensive care unit
LHD	Local Health District
NSQHS	National Safety and Quality Health Service
NSW	New South Wales
OECD	Organisation for Economic Co-operation and Development
QIDS	Quality Improvement Data System
SAER	Serious Adverse Event Review
SHN	Specialty Health Network
TGA	Therapeutic Goods Administration
WHO	World Health Organization

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Relevant Terms of Reference

The Clinical Excellence Commission's submission to the Special Commission of Inquiry into Healthcare Funding relates to the following Terms of Reference:

- A. The funding of health services provided in NSW and how the funding can most effectively support the safe delivery of high quality, timely, equitable and accessible patient-centred care and health services to the people of NSW, now and into the future;
- B. The existing governance and accountability structure of NSW Health, including:
 - i. the balance between central oversight and locally devolved decision making (including the current operating model of Local Health Districts);
 - ii. the engagement and involvement of local communities in health service development and delivery;
 - iii. how governance structures can support efficient implementation of state-wide reform programs and a balance of system and local level needs and priorities;
 - iv. the impact of privatisation and outsourcing on the delivery of health services and health outcomes to the people of NSW;
 - how governance structures can support a sustainable workforce and delivery of high quality, timely, equitable and accessible patient-centered care to improve the health of the NSW population;
- D. Strategies available to NSW Health to address escalating costs, limit wastage, minimise overservicing and identify gaps or areas of improvement in financial management and proposed recommendations to enhance accountability and efficiency;
- F. The current capacity and capability of the NSW Health workforce to meet the current needs of patients and staff, and its sustainability to meet future demands and deliver efficient, equitable and effective health services, including:
 - i. the distribution of health workers in NSW;
 - ii. an examination of existing skills shortages;
 - iii. evaluating financial and non-financial factors impacting on the retention and attraction of staff;
 - iv. existing employment standards;
 - v. the role and scope of workforce accreditation and registration;
 - vi. the skill mix, distribution and scope of practice of the health workforce;
 - vii. the use of locums, Visiting Medical Officers, agency staff and other temporary staff arrangements;
 - viii. the relationship between NSW Health agencies and medical practitioners;
 - ix. opportunities for an expanded scope of practice for paramedics, community and allied health workers, nurses and/or midwives;
 - x. the role of multi-disciplinary community health services in meeting current and future demand and reducing pressure on the hospital system;
 - xi. opportunities and quality of care outcomes in maintaining direct employment arrangements with health workers;



H. New models of care and technical and clinical innovations to improve health outcomes for the people of NSW, including but not limited to technical and clinical innovation, changes to scope of practice, workforce innovation, and funding innovation.



CLINICAL EXCELLENCE COMMISSION

Submission highlights

- The Clinical Excellence Commission (CEC) is the lead agency for patient safety in the NSW Health system serving a unique role as a pillar organisation. The CEC has a track record of success in making improvements in patient safety and quality that are spread across NSW.
- About 1 in 10 patients are harmed in healthcare settings. Hospital-acquired complications are largely preventable and can negatively impact a person's recovery, prolong their hospital stay, and consume scarce healthcare resources.
- Patient harm and adverse events can undermine confidence and trust in the public health system and can have lasting consequences on a person's health outcomes and quality of life.
- Healthcare staff can be negatively impacted from patient harm and adverse events and can experience distress and trauma consequently. This affects wellbeing and can contribute to burnout.
- Prevention of patient harm requires an understanding of the human factors, clinical risks and system factors that contribute to harm events. Safety and quality data provide key insights into areas of excellence, areas to investigate and areas needing improvement. This supports learning and reduces waste by focusing improvement efforts judiciously. Healthcare staff and managers at all levels, as well as consumers and Board members, need skills and knowledge in safety and quality to be equipped to lead positive safety cultures and improve performance.
- Investing in patient safety to reduce the risk of harm will achieve long term returns for NSW Health. A safer healthcare system will support the sustainable delivery of safe, high quality, timely, equitable and accessible patient-centred care and health services to the people of NSW, now and into the future.
- New models of care and technical and clinical innovations will have patient safety implications. In any large-scale projects in health, such as the introduction of the Single Digital Patient Record, the CEC will play a key role in patient safety governance and assurance.
- With all the changes that will occur in the NSW Health over the coming years, greater investment in patient safety is needed in terms of assurance and access to trusted, expert guidance for the system. The CEC is uniquely placed to deliver benefits.



Background

About the Clinical Excellence Commission

Patient safety and quality can be summarised as "the right care, in the right place, at the right time and cost" (<u>ACSQHC, 2023a</u>). Every patient has the right to receive safe and high quality health care that meets national standards, and be cared for in an environment that is safe and makes them feel safe (<u>ACSQHC, 2020</u>). In Australia, patient safety can be defined as "prevention of error and adverse effects associated with health care" (<u>ACSQHC, 2023a</u>).

The Clinical Excellence Commission (CEC) is a board-governed statutory health corporation, responsible for leading safety and quality improvement in NSW Health. It was established in 2004 to reduce adverse events in public hospitals, support improvements in transparency and review of these events and promote improved clinical care, safety and quality in health services across NSW. In its first five years, the CEC bridged the gaps between managers and clinicians through the development of clinical practice improvement projects, demonstrated its independence in reporting risks and vulnerabilities in patient care and gained the trust and respect of clinicians working in NSW Health. Initial programs of work focused on blood product governance, hand hygiene, central line associated blood infections in intensive care units, establishment of surgical and anaesthetic mortality reviews, a Clinical Leadership Program and a Quality Systems Assessment process. These were followed by programs focused on publicly reported safety and quality data (prior to the creation of the Bureau of Health Information), deteriorating patients, sepsis, and clinical practice improvement training.

A strengthened centralised role in patient safety

The Special Commission of Inquiry into Acute Care Services in NSW Public Hospitals was conducted in 2008 by Commissioner Peter Garling, following several incidents which cast doubt in the mind of the public on the safety of public hospitals in NSW, and whether quality was something that patients and their families were entitled to expect. From this review, the CEC became one of four pillar agencies in the NSW public health system providing specialist services and support to frontline health teams in hospitals and care settings. The CEC emerged with a strengthened role and greater authority in patient safety and is now responsible for over 30 statewide policies related to clinical quality and safety and is charged with continuous development of policy and strategy for further patient safety improvements. The CEC's Ministerial Determination of Functions is included in Appendix A.

The introduction of the National Safety and Quality Health Service (NSQHS) Standards in 2011 changed the governance of patient safety and quality across NSW and nationally (<u>ACSQHC</u>, <u>2023b</u>). The NSQHS Standards "provide a quality assurance mechanism that tests whether relevant systems are in place to ensure that expected standards of safety and quality are met" (<u>ACSQHC</u>, <u>2023b</u>). All Australian hospitals and day procedure services are required to apply the NSQHS Standards. The CEC has a key role in supporting NSW public hospitals to implement and meet the NSQHS Standards. The organisation's role extends to health services in NSW that are fully or partly government funded. Private health facilities commonly use CEC resources and guidance to support safety and quality.

Early success in making care safer

The CEC is arguably best known for the *Between the Flags* and *SEPSIS KILLS* programs, which have changed the way patients with acute deterioration and sepsis are identified, managed and monitored in the NSW public health system. *Between the Flags* is a two-tier rapid response system designed to assist clinicians to recognise when patients are deteriorating and to respond





appropriately when they do. Standardised calling criteria are used to trigger a clinical review or a rapid response. Following the introduction of *Between the Flags* in 2010, the cardiac arrest rate per 1000 acute separations declined 42% from 1.04 in August to December 2010, to 0.60 in January to June 2015 (Pain, et al., 2017). The rate of rapid response calls per 1000 acute separations increased from 18.36 in August to December 2010, to 43.32 in January to June 2015 (Pain, et al., 2017). In the three years following implementation, there was a fall in intensive care unit (ICU) mortality, hospital mortality, predicted risk of death and mean length of ICU stay for patients that were admitted to an ICU following a rapid response call (<u>Bhonagiri et al., 2021</u>).

Sepsis is a life-threatening condition which arises when the body's response to an infection damages its own tissues and organs. Sepsis is among the most common causes of death in hospitalised patients. The CEC *SEPSIS KILLS* program promotes intervention within an hour of recognition of sepsis, including taking of blood cultures, measuring serum lactate levels, administration of intravenous antibiotics, and fluid resuscitation. Following the introduction of the sepsis pathway in emergency departments across NSW public hospitals, the proportion of patients receiving intravenous antibiotics within 60 minutes of triage increased from 29.3% in 2009–2011 to 52.2% in 2013 (Burrell et al., 2016). There was a decrease in mortality from 19.3% in 2009–2011 to 14.1% in 2013; there was also a significant decline in time in intensive care and total length of stay (Burrell et al., 2016). The CEC subsequently developed specialised sepsis pathways for paediatric, maternal and newborn patient populations. The sepsis pathways align with the relevant *Between the Flags* Standard Observation Charts and support clinicians to 'Recognise, Resuscitate and Refer' initial sepsis management.

Blood transfusion, while very safe, is associated with adverse outcomes including increased morbidity, mortality and length of stay. In 2006, the launched a systematic intervention called Blood Watch (BW) aiming to reduce inappropriate red cell transfusions in all NSW hospitals in the elective surgical setting using collaborative improvement methods (Harrison et al., 2015). A total of 21 change strategies were trialled by BW teams between 2006 and 2008. To evaluate the effectiveness of the program, linked data over 5 years (2004-2009) were analysed. Results of the analysis estimated 12 225 units of red blood cells transfusion might be avoided between July 2008 and June 2009, a 27.4% reduction of the amount if no intervention had happened, i.e. 12 225 of 44 564 units (Harrison et al., 2015). Reductions were consistent across five elective surgical groups (Harrison et al., 2015). Such a reduction was associated with annual cost-savings of over \$8.5 million (Harrison et al., 2015).

The *Blood Watch*, *Between the Flags* and *SEPSIS KILLS* initiatives were managed with small, centralised teams at the CEC, connected with nominated leads in NSW public hospitals and/or NSW local health districts (LHDs)/speciality health networks (SHNs). The CEC was able to facilitate and coordinate state-wide change by identifying common needs across NSW health services, developing standardised resources (aligned with relevant policies) with expert advice and input, and promoting change using quality improvement methodology.

Strategic priorities and key achievements

The CEC vision for 2021-2024, '<u>safety is everyone's business</u>,' is at the centre of our everyday work and is reflected through four strategic priorities which continue to inform the CEC's direction forward as we look to build a culture where safety is at the forefront of all our thinking and, more importantly, our everyday actions.

The CEC's strategic priorities are:

• **Embedded safety systems:** A safety model where the whole care system is strategically enabled through governance, partnerships, roles and responsibilities, and capability and capacity.



- Safety culture with accountability: The whole care system including patients, clinical and support staff, management and boards, are equipped to lead positive safety cultures and improve performance in all settings.
- **Safety intelligence:** Triangulated data, connected technologies and real-time insights enable a predictive and proactive approach to safety.
- Safety priorities and programs: Targeting patient populations and key focus areas with programs, tools, resources, and safety expertise, while maintaining flexibility and agility to respond to urgent needs.

The CEC Strategic Plan on a Page is included in Appendix B. Elements of a safety system model, including accountability leadership and culture, safety governance, and safety and improvement capability are illustrated in Appendix C. Safety improvement requires a deep and broad understanding of quality improvement; this guides leaders to understand when a change in patient safety and quality indicators signal a potential issue (as opposed to common cause variation), when a change idea results in significant improvement, and how to monitor for unintended consequences (Shah, 2019). The CEC system goals of mature safety systems, improved capability and reduced preventable harm are underpinned by an understanding of quality improvement and a learning mindset.

The CEC's strategic priorities guide the work of the organisation and the structure, along with the CEC's determination of functions. The CEC continues to achieve and have impact; recent key successes from 2022-23 are included in Table 1.



CLINICAL EXCELLENCE

The CEC established the nation's first near real-time maternity intelligence system. Weekly updated data from all public birthing facilities are aggregated and available through the QIDS MatIQ platform to provide insights into the safety and quality of maternity care.

The CEC facilitated two state-wide Maternity Leaders Forums and four NSW Paediatric Leaders Safety and Quality Forums, collectively engaging more than 160 senior medical, midwifery and nursing clinicians to foster stronger safety systems and leadership within each maternity service and paediatric unit.

The CEC redesigned the infection prevention and control response and escalation framework for managing infections across healthcare facilities. This responded to the changing landscape, outlining new alert levels to determine measures for preventing and managing acute respiratory infections.

For its Safety Culture Framework, the CEC led a Symposium on Restorative Just Learning Culture and workshops on Introductory Restorative Skills with 130 participants from 15 LHD/SHNs. The CEC published a Guide to Co-developing Restorative Just Learning Culture.

The CEC risk-assessed 828 issues notified by Therapeutic Goods Administration (778) and other agencies, including medical devices (627), medicines (123) and biological agents (78), with an increase in Class I notifications (17 system-wide critical responses, 47 safety alert broadcasts).

The CEC established the Medical Device Governance Program to the coordinate the implementation of the Therapeutic Goods Administration (TGA) Medical Device Reforms with other NSW Health agencies and identified stakeholders to improve patient safety for medical devices.

The CEC developed comprehensive training and eLearning modules for staff involved in Serious Adverse Event Reviews to support new NSW Health investigating and reporting requirements. Nearly 500 staff engaged in Serious Adverse Event Review (SAER) fundamentals, methodologies, and team leader workshops.

The CEC supported LHDs/SHNs with transitioning to the new NSW Medicines Formulary for medicines initiated in hospitals. The formulary governs the procurement and use of pharmaceuticals to support optimum clinical governance, better value health care and improved patient outcomes.

The CEC created and implemented a suite of resources to support reflective practice and staff wellbeing. Reflecting on one's work is integral to the safety and quality of healthcare. Reflective practice transforms the human experience of caring.

The CEC developed the Safety and Quality Essentials Pathway evaluation plan and conducted the first Partnership Survey with 19 NSW Health entities. The plan guides measurement of the impact and value of the pathway in strengthening safety system capability.





The problem

The global burden and cost of patient harm

Despite greater awareness of patient safety and a better understanding of how and why incidents occur in hospitals, patient harm remains a global concern. The World Health Organization estimates "around 1 in every 10 patients is harmed in health care and more than 3 million deaths occur annually due to unsafe care" (<u>WHO, 2023</u>). It also estimates that more than 50% of harm is preventable (<u>WHO, 2023</u>). Common sources of patient harm include healthcare associated infections and sepsis, medication errors, blood clots, patient falls (<u>WHO, 2023</u>).

In a report on the economics of patient safety, developed for the OECD, Slawomirski and colleagues describe the financial cost of patient harm and impact on economies and on society more broadly (<u>Slawomirski et al, 2017</u>). The report states:

"The cost to patients, healthcare systems and societies is considerable. Patient harm imparts a high financial cost... Patient harm is felt in the broader economy through lost capacity and productivity of patients and their carers. It is estimated that the aggregate costs amount to trillions of dollars each year. In the political economy, the cost of safety failure includes loss of trust in the health systems, in governments and in social institutions" (Slawomirski et al, 2017).

In a subsequent report for the OECD, Slawomirski and Klazinga concluded:

- Patient harm has an estimated health burden of 64 million Disability-Adjusted Life Years a year
- The direct cost of patient harm from potentially preventable causes equates to about 8.7% of health expenditure, and is just over 1% of OECD countries' combined economic output
- The indirect economic and social burden of unsafe care is more substantial, impacting productivity and growth (Slawomirski and Klazinga, 2022).

It is relevant to consider the impact of patient harm, particularly from preventable causes, when considering healthcare funding and expenditure. This is not only relevant to future healthcare budgets, but also the overall health and wellbeing of the population, as well as productivity and economic growth.

Hospital-acquired complications in Australia

In Australia, hospital-acquired complications have been defined by the Australian Commission on Safety and Quality in Health Care and are routinely measured providing a useful benchmark to discuss the incidence and cost of preventable harm (<u>ACSQHC, 2023c</u>). A hospital-acquired complication (HAC) is "a complication that arises during a patient's hospitalisation which may have been preventable, and which can have a severe impact on both the patient and the care required" (<u>AIHW, 2023</u>).

HACs provide an important focus for improvement, as clinical risk mitigation strategies can reduce the risk of the HAC occurring (<u>ACSQHC</u>, 2023c). A HAC can also slow a patient's recovery and increase their length of stay in hospital, impacting their wellbeing, the outcome of their stay, and healthcare resource utilisation (<u>AIHW</u>, 2023a). A patient may experience more than one HAC per episode of care. The direct costs associated with a HAC may include:

- Further medical and surgical interventions (e.g., unplanned return to operating theatre)
- Additional consumables (e.g., medicines, fluids) and additional healthcare support (e.g. intensive care as opposed to a lower level of hospital care)



- Longer length of stay in hospital
- Subsequent / ongoing management associated with a disability or condition associated with the complication.

The national list of 16 HACs is included in Appendix D.

Based on 2017-18 data, the ACSQHC has estimated that HACs cost the public sector A\$4.1 billion or 8.9% of hospital expenditure (ACSQHC, 2019). The AIHW reported in 2021–22, 112,000 hospitalisations (2.1 per 100 hospitalisations) in public hospitals had at least one hospital-acquired complication, and the average length of stay for overnight hospitalisations with a HAC was 20.6 days compared to 5.0 days without a HAC (AIHW, 2023b). If these 112,000 hospitalisations had a length of stay of 5 days instead of 20.6 days, this equates to a staggering difference of 1.7 million bed days. Considering health workforce challenges, and current and anticipated future demands of the health system, efforts to reduce preventable causes of complications must be prioritised.

Hospital-acquired complications in NSW

As the lead agency for patient safety, the CEC supports NSW LHDs and SHNs to analyse, review and report on the incidence of HACs in their health services and use quality improvement methods to test and implement changes to practice to reduce HACs. This is facilitated using the CEC Quality Improvement Data System (QIDS), a data system purpose-built by the CEC to support near realtime improvement in patient safety. Data on HACs are not reported publicly in NSW. However, QIDS allows users to create dashboards containing 14 of the 16 defined HACs, and review data over time to identify trends, areas of excellence, and areas for improvement, alongside LHD/SHN and state comparators.

Healthcare-associated infection (HAI) is the most common HAC in NSW public hospitals, reported in 11.43 of 1000 separations in 2022-23¹. HAIs include multiple types of infections, for example, urinary tract infections, pneumonia (chest infections), and bloodstream infections (<u>ACSQHC</u>, <u>2023c</u>). People that experience these infections may develop sepsis and may die from these infections. In a Victorian study conducted by Fernando-Canavan and colleagues, based on 2016-17 data and published in 2021, it was estimated that a HAI adds an average cost of A\$9117 and an additional 3.5 inpatient days to a patient's admission compared to a similar admission for a patient that did not experience a HAI (<u>Fernando-Canavan et al., 2021</u>). What this means is that HAIs potentially added over A\$150 million to the cost of public hospital care in NSW and added over 58,000 bed days in 2022-23. The study was based on 2016-17 financial year costs, so in today's terms and with recent inflation, the cost could be expected to be even higher.

Medication complications falling within the definition of HACs include respiratory complications and/or depression related to medication, haemorrhagic (bleeding) disorder due to circulating anticoagulants (or blood thinners), movement disorders due to psychotropic medication, and serious alteration to conscious state (such as drowsiness, fainting or coma) due to psychotropic medication (<u>ACSQHC, 2019</u>). Medication complications were reported in 0.76 of 1000 separations in 2022-23 in NSW public hospitals¹. Using 2016-17 data from the study by Fernando-Canavan and colleagues, each medication complication adds an average cost of A\$9633 and an additional 3.7 inpatient days to a patient's admission (<u>Fernando-Canavan et al., 2021</u>). Without accounting for inflation and other increases in cost, this means that medication complications potentially added A\$10.5 million to the cost of public hospital care in NSW in 2022-23.

Falls resulting in fracture or intracranial injury can have devastating outcomes for patients in hospital care. Using 2016-17 data from a Victoria health service, Fernando-Canavan and colleagues reported that an inpatient fall of this nature adds A\$17,173 to the cost of hospital care (Fernando-

¹ Unpublished data





<u>Canavan et al., 2021</u>). Falls resulting in fracture or intracranial injury were reported in 0.63 per 1000 separations in 2022-23² in NSW public hospitals, potentially adding \$15.6 million to the cost of public hospital care without accounting for increases in cost over the past 6 years.

Incident reporting in NSW and contributing factors

Nearly two million people receive care in NSW public hospitals every year, where the standards of care are among the best in the world. NSW Health staff are required to report all identified clinical incidents, near misses and complaints in the state-wide incident management system. In line with the NSW Health Incident Management Policy (PD2020_047), a Serious Adverse Event Review (SAER) is required to review all Harm Score 1 and selected Harm Score 2-4 Reportable Incident Briefs. SAER reports are submitted to the Ministry of Health within 60 days of notification for all NSW public hospitals. A Clinical Harm Score 1 refers to an unexpected death or *Australian Sentinel Event*, and a Corporate Harm Score 1 refers to an unexpected death of a worker or visitor or a complete loss of service. There are four SAERs methodologies that can be used to review serious clinical incidents; further information can be found on the <u>CEC website</u>.

The CEC undertakes a review of each SAER report submitted through one of four sub-committees of the Statewide Clinical Risk Action Group. The sub-committees classify each report using a standard classification system to identify learnings and develop system improvements across the health system to prevent similar incidents occurring again. The classification system is revised as new issues and clinical practice changes are identified. The sub-committees also review and confirm Australian Sentinel Events. The CEC's standard classification system includes consideration of patient, human, and system risk factors.

During the January – June 2021 reporting period, the Clinical Management sub-committee reviewed and themed 137 SAER reports. The majority of these SAERs (88 per cent, n= 120) were confirmed as Harm Score 1, followed by Harm Score 2 (10 per cent, n=14) and Harm Score 4 (2 per cent, n=3) (<u>CEC, 2023a</u>).

The SAERs reviewed by the Clinical Management sub-committee identified the top 5 human factor elements related to:

- **Cognitive based errors**, involving the failure to understand, process or act appropriately on available information despite adequate education and knowledge. This may include following the wrong clinical pathway.
- Loss of situation awareness, which relates to the fixation on irrelevant information, poor prioritisation and planning of care
- Knowledge based errors, that are caused by gaps in staff skills or knowledge
- No human factors identified, following review of the SAER report
- Violations, relating to a departure from known rules/procedures. Examples may include acting outside of accepted standards or intentionally deviating from intended use with no intention of harm.

Clinical risk factors relate to conditions or situations that are considered a direct cause, or contributing factor, to the outcome of an incident. *Co-morbidities – physical* remains the most commonly selected risk factor in clinical management SAER reports since it was introduced to the classification system in 2018. Clinical risk factors commonly included in SAER reports include:

• **Co-morbidities – physical**, refers to the presence of two or more overlapping conditions in the same person. Examples may include diabetes, cardiovascular issues and cancer

² Unpublished data



- **Deteriorating patient failure to recognise**, where patient deterioration was not recognised
- **Deteriorating patient failure to escalate**, where the patient was deteriorating and there were delays and/or failure to escalate care
- **Confusion/Delirium**, where the patient experienced disturbances of consciousness, attention, cognition and perception that developed over a short period of time (usually hours or days) and tends to fluctuate during the course of the day.
- Deteriorating patient inappropriate/delayed response to escalation, where patient deterioration has been escalated and resulted in no action.

System factors can contribute to, and impact upon patient safety. By identifying and understanding these system factors, NSW Health can take appropriate action to address and respond through the dissemination of learnings and developing initiatives that can impact health care. During the reporting period of January – June 2021, review of clinical management SAER reports identified *Communication* and *Care Planning* as the most frequently occurring system issue affecting care provision.

Further information is available in the *Biannual Incident Report, January – June 2021*, on the CEC website (<u>CEC, 2023a</u>).

Impact of incidents on healthcare staff

An incident is an unplanned event that results in, or has the potential for, injury, damage or loss, including near misses. An incident may also be referred to as an 'adverse event'. Clinical incidents can have devastating and lasting effects on patients and their families, however they can also have adverse mental and emotional effects on healthcare staff (<u>Robertson and Long, 2018</u>). These effects can include burnout, lack of concentration, poor work performance, post-traumatic stress disorder, depression, and even suicidality (<u>Robertson and Long, 2018</u>).

The negative impacts of incidents on health professionals have been well described. Healthcare workers are sometimes described as the 'second victim' in an incident and can experience distress and trauma (Wu, 2000; Quillivan et al., 2016). This commonly stems from thoughts that they are personally responsible for the patient's outcome, and that they have failed their patient, doubting their clinical knowledge and skills (Scott et al., 2010). Robertson and Long stated that physicians and other medical practitioner can feel adverse emotions such as guilt, shame, anxiety, fear and depression, and this is thought to be linked to a culture of perfectionism and individual blame in the medical discipline (Robertson and Long, 2018). In a review of medication administration errors, Mahat and colleagues described the key negative emotions that healthcare staff express when reporting medication errors as fear, disturbed, sadness and guilt (Mahat et al., 2022). The threat of litigation, and recent criminalisation of medical errors in the USA and UK for what are arguably system failures, adds to the fear, trauma and stress that healthcare staff may experience after being involved in an incident (Zangaro, et al., 2023).

With the workforce challenges that NSW Health is experiencing, and the fatigue and burnout from COVID, it is important to view efforts to reduce patient harm and improve patient safety as being as important to the wellbeing and sustainability of the health workforce as they are to patients and their families. A resilient and reliable safety culture in NSW Health is one where safety is everyone's responsibility and compassionate behaviours are evident at all levels of the system.



The future

A changing health system with evolving needs

Despite a greater awareness of the incidence and causes of patient harm, challenges remain for patient safety. As healthcare and how it is delivered evolves, new risks can emerge. Challenges include current and emerging infection risks, digitalisation, and building and maintaining a skilled health workforce where safety is recognised as everyone's business. By impacting patient safety, these challenges are also relevant to consideration of escalating costs in the health system.

The COVID pandemic highlighted the importance of infection prevention and control, and the need to build knowledge and awareness of infection risks among staff, patients and the general public. Antimicrobial resistance continues to threaten and limit the ability to treat patients infected with multi-resistant organisms. This past winter, influenza, respiratory syncytial virus (RSV) and infections caused by Group A Streptococcus have remained a concern and caused illness and hospitalisations. Healthcare staff, patient and visitor safety is paramount. Effective infection prevention and control minimises the associated cost of staff furloughing and adverse patient outcomes while maximising visitor and community safety.

The pandemic accelerated change in digital health at a time when it was already rapidly changing. An increasing number of health services are offering virtual care in a range of settings, from outpatient appointments with specialists to in-hospital services such as rural generalist services. These newer models of care require consideration of safety and quality to ensure care is optimised and any unintended consequences are identified and managed. There is increasing attention on the use of generative artificial intelligence in health and medicine, and how it can support the health workforce to work more efficiently and safely, but the space is rapidly evolving and the true impacts remain unknown. With these changes, digital safety has emerged as "the next frontier in patient safety" (Flott et al., 2021). Flott and colleagues describe the two-fold role of healthcare providers to firstly ensure the intrinsic safety of digital technologies, and secondly use digital technologies to improve safety (Flott et al., 2021). More sophisticated and less resource- intensive systems are needed to monitor incidents, identify underlying systems issues, and optimise learning.

Personalised medicine is a medical model of care that involves using therapy or treatment specifically tailored to an individual (European Commission, 2023). This might be based on the individual's genetics, their lifestyle, environment or other factors. Traditionally, medicines have been prescribed based on predicted effects for doses within a recommended dose range, so personalised medicine requires a change in the way quality, safety and efficacy of these new approaches are managed. There have been recent changes in the way medical devices are registered and monitored in Australia, with increasing responsibility placed on healthcare providers and jurisdictional health departments to implement safety systems and provide patients with more information on medical devices that are used as part of their treatment (TGA, 2023). As research and innovation drives the development of new medical devices, aligned with personalised medicine principles, this will pose additional challenges to ensure patient safety.

Building safety and quality capability in the NSW Health workforce to be able to respond to current and emerging issues will be a more sustainable strategy than traditional programmatic approaches. It also empowers health workers to identify and test changes designed for their context to improve patient safety. Both patients and staff must feel safe in health services, and it is important to not only identify, monitor and measure patient safety risks, but also use patient and staff experience measures within patient safety measurement frameworks, and engage patients, families and carers as active partners in healthcare to support safety.



A pillar of safety for our future

To support a resilient and sustainable health system, **patient safety must remain a central focus**. Effective leadership and governance of patient safety is needed, informed by high quality data and analytics, patient and health worker feedback loops, and a centralised agency such as the CEC to lead, coordinate and facilitate improvement in patient safety across the NSW health system.

The CEC is committed to continuous improvement in patient safety and health outcomes. During the COVID pandemic, the CEC demonstrated its ability to be an agile organisation, rapidly shifting its focus to quality and safety needs specific to managing COVID and its impact on NSW communities and NSW Health staff. Lesson learned in respiratory protection and infection prevention and control fundamentals were shared (<u>Dempsey et al., 2022</u>; <u>Jain et al., 2022</u>; <u>CEC, 2023b</u>).

The CEC is a trusted and an essential pillar of support to the NSW Health system. The primary role of the CEC is to lead, actively monitor and drive health system safety. It will achieve this role by:

- Embedding a NSW Health safety system model
- Providing leadership of clinical governance systems, processes and functions across NSW Health organisations
- Monitoring, predicting and responding to system safety issues
- Developing statewide safety priority initiatives
- Strategically partnering with consumers, NSW Health entities, academic institutions and industry partners to foster safe care and reduce avoidable harm.

The CEC's approach to patient safety is evolving in line with contemporary leadership and change management approaches. A less prescriptive or programmatic approach to patient safety, with a focus on empowering the NSW Health workforce to speak up, suggest changes, test innovations and learn from failure will support the development of more agile organisations that are better equipped to address complex, adaptive challenges (Bushe, 2021).

Through system-wide leadership for patient safety, identification of issues of a systemic nature, and reduction of incidents and their associated harm, the CEC's strategies provide continuous ongoing improvements, reduced harm and thus reduced cost to the NSW public health system.



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Addressing the Inquiry's Terms of Reference

In responding to the Special Commission of Inquiry's terms of reference, the CEC draws on the unique experience and lessons of its staff and organisational activities in developing, implementing and evaluating statewide patient safety initiatives within the NSW Health system.

A. The funding of health services provided in NSW and how the funding can most effectively support the safe delivery of high quality, timely, equitable and accessible patient-centred care and health services to the people of NSW, now and into the future

Patient harm has financial and economic consequences, and cost-effective strategies to reduce harm have financial and societal benefits. The CEC recommends that patient safety must continue to be enhanced, prioritised and resourced to support the ongoing delivery of safe and high quality care. Patient safety is not just the absence of preventable harm, but also providing care to patients so they feel safe, respected and involved in their care, and in workplaces where staff feel physically and psychologically safe to provide that care.

In the OECD report, *The economics of patient safety: From analysis to action*, the authors outline evidence for specific interventions that target harm at a clinical level, cross-cutting organisational strategies to reduce harm, and system-level strategies for patient safety (Slawomirski and Klazinga, 2022). The CEC is ideally placed to guide and support NSW Health to invest in patient safety strategies and priority areas, and also empower local teams to identify, prioritise and improve safety based on their local needs and context.

- B. The existing governance and accountability structure of NSW Health, including:
 - vi. the balance between central oversight and locally devolved decision making (including the current operating model of Local Health Districts);
 - vii. the engagement and involvement of local communities in health service development and delivery;
 - viii. how governance structures can support efficient implementation of state-wide reform programs and a balance of system and local level needs and priorities;
 - ix. the impact of privatisation and outsourcing on the delivery of health services and health outcomes to the people of NSW;
 - x. how governance structures can support a sustainable workforce and delivery of high quality, timely, equitable and accessible patient-centered care to improve the health of the NSW population

The CEC supports the existing governance and accountability structure of NSW Health for patient safety matters. This includes:

- A strong and centralised role for the CEC to fulfil its determination of functions, provide leadership in clinical governance, monitor, predict and respond to system safety issues affecting all of NSW Health, developing statewide safety priority initiatives, and strategically partnering with consumers and other stakeholders to support safe care and reduce avoidable harm
- An ongoing role for LHD/SHN level clinical governance units, to manage quality and safety at an organisational level, ensuring there are systems and processes in place for facilities to meet the NSQHS Standards (at minimum)



- An ongoing role for facility-level managers of quality, patient safety, patient experience, incident management and other positions that prioritise and operationalise patient safety systems
- An ongoing role for line managers and department heads to ensure a culture of safety is actively supported, patient safety risks are reported and managed, staff are given the time to complete mandatory training in safety and quality, and that there are opportunities to reflect after incidents occur.

In addition, the CEC supports a stronger role for the involvement of consumers and local communities in patient safety governance. There is opportunity to strengthen systems for receiving feedback from consumers and integrate their ideas for what makes them feel safe into care models and service delivery. Without the input of consumers and communities, health workers and health managers will continue to keep doing what they think is best for our communities, rather than coproducing safe and high quality healthcare. The latest publication from the OECD in the series on the Economics of Patient Safety specifically addresses patient engagement for patient safety (Kendir et al., 2023). This states that "low engagement of patients in their care journey is associated with higher healthcare costs" and provides seven key recommendations for enhancing patient engagement for patient safety, including building trust for safer healthcare through stronger patient and family engagement, institutionalising patient engagement for patient safety and establishing better platforms and networks for sharing experiences and good practices in patient engagement (Kendir et al., 2023).

D. Strategies available to NSW Health to address escalating costs, limit wastage, minimise overservicing and identify gaps or areas of improvement in financial management and proposed recommendations to enhance accountability and efficiency

Evidence-based strategies to support patient safety, when implemented effectively, will reduce costs associated with preventable harm. Given the costs associated with HACs outlined in this submission, and the financial penalties associated with HACs, strategies to prevent harm will reduce healthcare costs and reduce lengths of hospital stay, allowing healthcare resources to be better utilised.

F. The current capacity and capability of the NSW Health workforce to meet the current needs of patients and staff, and its sustainability to meet future demands and deliver efficient, equitable and effective health services

To meet current and future needs of patients and staff, the NSW Health workforce must better understand their shared role in healthcare safety and quality and have the tools and skills they need to fulfil their role as team member, leader and/or manager.

The CEC has developed the <u>Healthcare Safety and Quality Capabilities</u>, describing the capabilities and associated behaviours that are expected of all NSW Health employees, leaders and Board members when fulfilling their roles. The <u>Safety & Quality Essentials Pathway</u> is designed to meet the current safety and quality capability needs of everyone in NSW Health. Starting with the essentials, it also provides a path for ongoing training and career development. The capabilities have been distributed across NSW Health to support full scope of practice and teamwork across all healthcare contexts and settings. The Safety and Quality Essentials Pathway supports a more generative approach to patient safety, providing the NSW Health workforce with more general





patient safety skills and knowledge, to support application and behaviour change, so they are able to design and lead their own quality improvement initiatives focused on improving patient safety.

The CEC supports the implementation of the Safety and Quality Essentials Pathway across all NSW LHDs/SHNs and other NSW Health entities including NSW Ambulance. Faculties are being formed in each LHD and SHN to support the roll-out and delivery of the Pathway. The CEC strongly supports providing NSW Health employees with protected time and resources to facilitate and participate in the Safety and Quality Essentials Pathway programs, as well as other essential patient safety training. The CEC also welcomes the input of faculty from across the participating NSW Health entities to continuously improve Pathway programs and meet the safety and quality capability needs of the NSW Health workforce.

The CEC's 'Be a Voice for Safety' Program recognises that the delivery of safe and reliable health care in complex clinical settings is reliant on the insight and experiences gained from healthcare staff, and their voice is crucial. All staff need psychologically safe environments to provide them with the best experience of working in the system and improve patient outcomes. Some examples of the tools provided include <u>guidelines and guiding principles for Morbidity and Mortality meetings</u> or clinical review meetings. These meetings allow departments/ specialties/ facilities to review the quality of the care that is being provided to their patients. The <u>Reflective Practice workbook</u> supports the development of reflective practice skills and includes tools and tips sheets that guide the application of reflective skills in different contexts. Reflective practice can support learning, facilitate changes in professional behaviour and support a health professional's mental health and wellbeing.

H. New models of care and technical and clinical innovations to improve health outcomes for the people of NSW, including but not limited to technical and clinical innovation, changes to scope of practice, workforce innovation, and funding innovation

The CEC recognises the opportunity that new models of care and technical and clinical innovations to improve health outcomes offer to the NSW population. These innovations allow the health system to learn and continuously improve. However, with new models of care and innovations come new patient safety risks that need to be identified, monitored and mitigated. As the lead agency in the NSW Health system for patient safety, the CEC must continue to have a safety governance and assurance role in new models of care and technical and clinical innovations.

We welcome the opportunity to expand on these points and be part of roundtable discussions.





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Appendices

Appendix A: Determination of functions

Health Services Act 1997

Clinical Excellence Commission

Determination of functions of statutory health corporation

- a) To provide system wide clinical governance leadership with local health districts and specialty networks, including supporting the implementation and ongoing development of local quality systems;
- b) To develop policy and strategy related to improvements of clinical quality and safety across the NSW public health system and promote and support improvement in clinical quality and safety in public and private health services
- c) To identify, develop and disseminate information about clinical quality and safety in health care on a state wide basis, including (but not limited to):
 - i. working with the Health Education and Training Institute to develop, provide and promote training and education programs;
 - ii. identifying priorities for and promoting the conduct of research about clinical quality and safety in health care;
- d) To review adverse clinical incidents arising in the NSW public health system and develop responses to those incidents including (but not limited to)
 - i. co-ordinating responses to specific incidents with system or statewide implications; and
 - ii. providing advice to the Director General on urgent or emergent patient safety issues and staff safety issues in a clinical setting;
- e) To monitor clinical quality and safety processes and performance of public health organisations and to report to the Director General and Minister thereon;
- f) To provide the Bureau of Health Information with relevant data on clinical quality and safety performance of the public health system to support the Bureau's public reporting function;
- g) To consult broadly with public health organisations, health professionals and members of the community in performing its functions;
- h) To provide advice to the Director General and Minister for Health on issues arising out of its functions;
- i) To develop three year Strategic Plans and an Annual Work Plan, linking these activities and priorities of the Commission to the statewide directions and priorities of NSW Health and work in accordance with these plans and Service Compact agreed with the Director General.

This Determination repeals and replaces the previous determination of functions made in respect of the Commission dated 23 August 2004.



Appendix B: CEC Strategic Plan on a page





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Appendix C: Safety System Model





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Appendix D: Hospital-acquired complications (HACs)

The national list of 16 HACs includes:

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

For further information on diagnosis and inclusions, please visit: <u>https://www.safetyandquality.gov.au/our-work/indicators/hospital-acquired-complications</u>



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