Targeting zero

Supporting the Victorian hospital system to eliminate avoidable harm and strengthen quality of care

Report of the Review of Hospital Safety and Quality Assurance in Victoria

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The review panel consisted of:

- Dr Stephen Duckett, Director, Health Program, Grattan Institute (chair)
- Ms Maree Cuddihy, Chief Executive Officer, Kyneton District Health Service
- Associate Professor Harvey Newnham, Clinical Program Director of Emergency and Acute Medicine and Director of General Medicine, Alfred Health.

Ms Kym Peake
Secretary
Department of Health and Human Services

Review of Hospital Safety and Quality Assurance in Victoria

Dear Ms Peake,

Thank you for inviting me to chair the panel to review the Department of Health and Human Services' governance of quality and safety in Victorian hospitals. I am pleased to submit the report of the review on behalf of the review panel. The report is in two parts: this executive summary and the main report.

This report has looked at the way the department manages one of the most pressing challenges in healthcare: the fact that, in all modern health systems, patients frequently suffer avoidable harm while receiving care.

No one should accept avoidable harm as an inevitable and ineradicable feature of healthcare, and few do. Around the world, and in many Australian states, system managers are partnering with clinicians in a concerted effort to lift the safety and quality of care, and protect patients better.

In Victoria many health services are working tirelessly to do the same. But to a large extent they are doing so with inadequate support from the department, whose approach to safety and quality does not carry the level of attention, investment and priority that the issue requires. The department has inadequate overarching governance and oversight of safety and quality, and is doing too little to lift the capacity of the Victorian health system to improve quality and safety.

The inconsistent approach to safety and quality among health services does not necessarily mean that overall safety and quality outcomes in Victorian hospitals are poor or significantly different from those of other jurisdictions. However, the department does not have sufficient data or oversight to be sure of this, or to provide necessary assurance to government or the community that all hospitals are consistently providing high-quality, safe and continuously improving care.

While many Victorian health services have achieved laudable safety and quality improvements in various areas of clinical practice, the department has not made these improvements commonplace. As a result the Victorian hospital system is full of isolated success stories that are not shared across hospitals, and that the majority of patients do not benefit from.

In many cases the problems with oversight of safety and quality performance in Victoria are the result of budget cuts over the years that have gutted many departmental functions. While the cuts were portrayed as improving government efficiency, the decline in the department's ability to perform its core functions was lost to public view.

As other states have steadily developed their systems' capacities for continuous improvement in the safety and quality of care, Victoria has been left behind, relying mostly on the quality of local governance systems that, although often effective, lack consistency and transparency.

This must change. The department needs a significant shift in focus, and significant investment. Just as the problems in the governance of safety and quality have developed over a number of years, addressing those problems will take time. Many of our recommendations can be implemented quickly (say over 12 months) but others will require legislative or other changes that may take up to three years.

Other reports raising these issues over the past decade have not led to the required change, and there is a risk this review will be no different. The review panel believes the change agenda we have set is not amenable to a 'tick and flick' approach in the department.

In addition to the support of the Minister, the healthcare system and the community, these reforms will require strong leadership from you and your executive team.

Many staff in the department and many managers and professionals in the health system recognise the need for change, and indeed have agitated for it. Victorians, too, understand the costs of unsafe care and the benefits of reform. Importantly, the Minister has named safety and quality her first priority.

It is the responsibility of everyone working in the health system – from the Minister through to the people working at the frontlines of care – to understand and learn from the tragedy at Djerriwarrh Health Services. It is my strong hope that these lessons will be transformed into action, and that we will strengthen the hospital system to deliver consistently safe and continuously improving care for all Victorians.

Stephen Duckett
Chair
Review of hospital safety and quality assurance in Victoria

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Executive summary

Background

1. In March 2015 the Department of Health and Human Services ('the department') was notified by the Consultative Council on Obstetric and Paediatric Mortality and Morbidity (CCOPMM) of a cluster of perinatal deaths that had occurred at Djerriwarrh Health Services ('Djerriwarrh') during 2013 and 2014.[1]

2. An expert review into the deaths was subsequently undertaken by a senior obstetrician, Professor Euan Wallace. Professor Wallace identified that seven of the deaths were avoidable or potentially avoidable, with many of them involving common and recurring deficiencies in care.[2] The review identified that the health service had inadequate clinical governance and was not monitoring and responding to adverse clinical outcomes in a timely manner.[3]

3. The Secretary to the department requested the Australian Commission on Safety and Quality in Health Care (ACSQHC) to conduct an independent review into the department's actions in detecting, responding to and managing perinatal deaths at Djerriwarrh both before and after the notification from CCOPMM in March 2015, and to examine the department's capacity to detect and appropriately respond to emerging critical issues in the public health system.[4]

4. ACSQHC found that the department's response to the notification from CCOPMM in 2015 was appropriate,[5] and that its response to each of a number of early warning signs from Djerriwarrh over 2013 and 2014 was proportional and appropriate. A possible exception to this is the department's response to concerns raised in early 2014 about the safety of Djerriwarrh's obstetric service by the Australian Nursing and Midwifery Federation. Here ACSQHC considered the department's response could, with the benefit of hindsight and the availability of better information, have been more thorough.[6]

5. In evaluating the department's capacity to detect and appropriately respond to emerging critical issues in the public health system, ACSQHC identified significant issues. It found that with respect to Djerriwarrh, the department's processes were not capable of detecting significant deficiencies in clinical governance,[7] that it lacked a robust capacity to undertake routine surveillance of serious clinical events (other than sentinel events), and that it lacked a robust capacity to appropriately respond to the incident reports it receives.[8]

6. At the request of the Minister for Health, the department commissioned this review. The panel was asked to review the department's current systems for governance and assurance of quality and safety in hospitals. Where systems were found to be inadequate, the panel was asked to provide advice about how these systems might be improved to achieve best practice.

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1   In addition to the seven potentially avoidable deaths in 2013 and 2014, a review of stillbirths and newborn deaths at Djerriwarrh Health Services going back to 2001 has recently been completed, with additional open disclosures and conciliation currently underway.
2   Wallace (2015), pp. 11–13
3   Ibid., p. 3
4   Picone (2015), p. 4
5   Ibid., p. 10
6   Ibid., p. 4
7   Ibid., p. 14
8   Ibid., p. 15

The scope of this review

1. This review's terms of reference were expansive. The review was charged with examining whether the department has adequate systems for safety and quality assurance in place and (where systems were found to be inadequate) recommending how they might be improved to achieve contemporary best practice, as seen within other jurisdictions and internationally.

2. We were to assess the department's systems for all in-hospital care, including mental healthcare, in both the public and private sectors.

3. In particular, we were asked to consider governance issues pertaining to the following issues:

   - how the department should ensure that all boards of public health services and public hospitals are capable of providing appropriate local governance of safety and quality

   - what systems the department should have in place to ensure robust monitoring of safety and quality at the hospital and health service levels including its approach to monitoring clinical governance at health services and its performance management framework to monitor clinical safety and quality in local health services

   - what information about safety and quality should be reported to the department, and how the department should use that information including through public reporting

   - whether the scope of the reporting to the department should be differently configured in public health services as compared with public hospitals, and what the scope of reporting for private hospitals should be.

   We considered these along with information flow issues pertaining to:

   - the role of the department in monitoring safety and quality in Victoria's public hospital sector

   - the type of information that should be available to boards and chief executive officers to assist in local monitoring of quality and safety

   - the implementation of the Victorian Health Incident Management System (VHIMS) improvement project

   - the relationships and information flows between the department and various other bodies with responsibility for the quality of care

   - the relationship and information flows between the department and private hospitals regarding quality and safety.

   We also examined clinical engagement and leadership issues pertaining to:

   - the best approach for providing clinical leadership, advice and support to the new Chief Medical Officer that will strengthen the department's oversight of quality and safety systems

   - strategies to optimise the department's response capacity and engagement in promoting an improvement culture among management and clinicians

   - how the department should participate in and provide leadership to the safety and quality agenda, particularly in improvement, including through enhanced clinical engagement.

4. Our terms of reference note that some public hospitals are too small to have dedicated comprehensive safety and quality teams or clinical expertise in board members; many only have limited access to medical administration expertise. This is in some respects an anomalous feature of the Victorian system, which has a very large number of unremunerated independent boards for very small public hospitals in rural areas. We have not commented on the optimality of this model but rather have focused on recommending ways to strengthen it so the community can be assured of the same safety and quality of care in small rural services as in larger regional and metropolitan services.

5. A patient's experience of care critically depends on the quality of their interaction with the clinical team. So too more broadly, does the overall safety and quality of the Victorian health system depend on clinicians, managers, boards and the oversight of the department. This report's focus was governance of safety and quality of care in Victoria by the latter. We did not assess the governance of safety and quality *within* hospitals, except as it was affected by the overall system governance issues. Similarly, our recommendations focus on what the *department* can do to strengthen care. As we show, it can do a lot. Ultimately, however, it is those at the front lines of care that are best positioned to drive a system-wide transformation. Change of this kind needs to engage clinicians and be embraced by them.

The review team

1. The review panel consisted of:

   - Dr Stephen Duckett, Director, Health Program, Grattan Institute (chair)
   - Ms Maree Cuddihy, Chief Executive Officer, Kyneton District Health Service
   - Associate Professor Harvey Newnham, Clinical Program Director of Emergency and Acute Medicine and Director of General Medicine, Alfred Health.

2. The panel was supported by two full-time staff seconded to the review for its duration: Danielle Romanes, a senior associate at Grattan Institute, who served as the review's lead writer, researcher and project coordinator, and Jonathan Prescott, acting manager of Safety Programs in the department, who ran the review's consultation process and provided research and logistical support. Elsa Lapiz in the department's System Intelligence and Analytics branch worked intensively over several months to develop the analytics for this report. The review was only able to achieve its task because of the dedication, diligence, hard work and skills of Danielle, Jonathan and Elsa.

3. We were also assisted by a number of part-time staff who helped with research, editing and organising: Leah Ginnivan, Priyanka Banerjee and Tom Crowley.

Our consultation process

1. Consultation with the sector and community was at the centre of this review. In the three months available we conducted more than 50 hours of interviews with senior stakeholders working in various branches of government, hospitals, non-profit organisations, private industry and academia.

2. We held five workshops involving 320 consumers, hospital board members, CEOs, leading clinicians, directors of nursing and medical services and other hospital staff. Dr Duckett presented our developing ideas to two conferences, one hospital board retreat and two groups of mid-career students at Deakin and La Trobe universities.

3. We consulted with Australian and international leaders in patient safety, many of whom reviewed and provided feedback on draft sections of this report.

4. We sought feedback from the broader health sector and community through an article in *MJA Insight* and a discussion paper published on the department's website. We received 91 public submissions responding to this discussion paper. The submissions have shaped our recommendations and are quoted extensively throughout the report.

5. Submissions made to the review, except those lodged confidentially, have been made available online at <https://www2.health.vic.gov.au/hospitals-and-health-services/quality-safety-service/hospital-safety-and-quality-review> and are listed, along with those consulted, in Appendix 2.

Summary of findings

1. Across all modern health systems, and despite concerted efforts, avoidable patient harm and variability in care occurs that no one should be prepared to accept. Avoidable patient harm means that patients suffered not through their illness or a lack of knowledge about treatment, but because of ineffective systems to keep them safe while receiving care. Variability of care indicates that valuable knowledge is not being shared and implemented widely, so that many patients are receiving care that diverges from best practice.

2. Australian research suggests that around one in every 10 patients suffers a complication of care during their hospital stay, with half of those complications avoidable. Most complications only have a minor impact on patients, but a significant minority end in permanent disability and death.[9]

3. These complications are devastating for patients and families and significantly increase the cost of care across the system. All hospitals should be reducing them as a matter of priority. But doing so is not straightforward. For any health service, the challenge of achieving best practice in safety and quality is immense and requires grappling with clinical autonomy and patient variability. Decision making is all the more difficult because many of the costs of poor care don't fall on the decision-maker (the hospital) but on patients, their families, other hospitals and the taxpayer more broadly. They can also be hidden, both within hospitals and from patients.

4. Further, complications are rarely the result of individual incompetence or malice. Rather, they arise within complex, high-pressure environments where mistakes easily occur and patients are often already frail and at risk of deteriorating. This inherent risk and complexity is why all hospitals need strong processes to minimise the risk and consequences of human error – and to ensure that when things do go wrong, problems are reported, reviewed and addressed. It is also why hospitals need strong oversight and support by system managers like the department. System managers can protect patients from serious failures in local safety and quality systems by monitoring hospital outcomes for signs of unsafe or low-quality care and by ensuring that hospitals take swift and appropriate action to address deficiencies. System managers can also support hospitals to strengthen the safety and quality of their care by using their vantage point and economies of scale to coordinate, encourage and facilitate improvement efforts across the system.

5. The review panel evaluated the way that the department, firstly, oversees the Victorian hospital system to ensure that it provides consistently safe, high quality care; and secondly, the way it supports hospitals to efficiently and effectively strengthen care. It found that the department is not adequately performing either role.

6. The panel found that the department's oversight of hospitals is inadequate. It does not have the information it needs to assure the Minister and the public that all hospitals are providing consistently safe and high-quality care. For example, it does not have a functional incident management system for hospital staff to report

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9   Wilson, *et al.* (1995)

patient harm. It has over-relied on accreditation when the evidence suggests that is not justifiable. It makes far too little use of the routine data at its disposal to monitor patient outcomes and investigate red flags suggesting poor care. Its expert committees are fragmented and many are not resourced to detect problems in a timely manner or to follow up to stop them happening again.

7. The department's overarching governance of hospitals is also inadequate. In the public sector, the department expects hospital boards to ensure care is safe and continuously improving. However, it does too little to ensure that all boards are equipped to exercise this function effectively in the first place. In the private sector, where the department's responsibilities for assuring safety and quality is roughly equivalent, the department relies to an even greater extent on local governance, and conducts no routine monitoring of patient outcomes or serious incidents. In both sectors, the department could and should be doing much more to ensure that hospitals do not provide care when it is outside their capability to do so safely.

8. Finally, the department's support of hospitals to discharge their responsibilities with respect to safety and quality improvement has been inadequate. There have been fragmented efforts to support improvement but no continuous approach or sustained investment. Hospitals are often left to create their own approach to safety and quality improvement, leading to duplication of work and variation in quality. The department could be doing much more to encourage and facilitate hospitals to learn from each other and to ensure that ideas and innovations from one hospital spread to others.

9. Our review is not the first to identify these problems. Since 2005 the Victorian Auditor-General's Office has conducted three performance audits on patient safety. The most recent found that the department is not effectively providing leadership or oversight of patient safety, is failing to adequately perform important statewide functions and is not prioritising patient safety. Some of the systematic failures noted in its 2016 audit were first identified over a decade ago in the 2005 audit.

10. The department has suffered a significant loss of capacity in recent years, in some cases creating or exacerbating these problems. Many dedicated departmental staff have called for change but lacked the authority or resources to achieve it. Budget cuts and staffing caps have gutted many departmental functions. The department has become increasingly reliant on external consultancies when the work would have been done better, and more cost-effectively, had the department retained capacity to deliver it in-house. A recent capability review noted the department has struggled to retain talent, so that capable leaders are thinly spread. It found a lack of long-term strategic planning and widespread stakeholder concerns that complacency has caused Victoria's position as Australia's leading health system to come into question.

11. The recommendations we have made are designed to change all this. Victoria should be seen as a leader in safety and quality. Our recommendations are broad, across the 10 major themes outlined below. We are confident that all are achievable and affordable. They will help to ensure all Victorians get the best of care. Many aspects of the report can be implemented quickly (within 12 months), some others may take up to three years.

Summary of recommendations

1. **Safety and quality improvement must be a core goal of the department and health system**. To achieve this, we have recommended that:

   - the Secretary and Minister each make clear public statements about the very high value they place on safety and quality
   - the Minister seeks to amend the *Health Services Act 1988* to ensure the Act's objectives reflect this ambition and expectation
   - the Secretary makes a clear public statement about the role of the department in the oversight of the health system and her statutory functions
   - the Secretary establishes a specialist Office for Safety and Quality Improvement (OSQI) with responsibility for coordinating the efforts of clinical networks and relevant consultative councils and programs to drive system-wide improvement in safety and quality
   - the department's clinical networks set clear and measurable statewide safety and quality improvement goals, with the department publicly reporting on the system's progress against them
   - the department sets clear expectations for boards of all hospitals to have safety and quality as a core focus, with all boards setting and reporting on their progress against local improvement goals
   - the department adopts national pricing reforms to strengthen executive focus on reducing hospital-acquired complications
   - the department develops a detailed plan and timeline for implementing this report's recommendations, and reports on progress against it to the Minister on a quarterly basis, with the Victorian Auditor-General's Office conducting an audit of implementation by 2020.

2. **All boards must be highly skilled, independent and effective**. To achieve this, we have recommended that:

   - the Minister pursues legislative change to extend public health service term-limit requirements and other appointment processes to public hospital boards
   - the Minister establishes a Board Appointments Advisory Commission with responsibility for ensuring there is an adequate mix of skills (including substantive clinical governance and consumer representation) on every public hospital and health service board
   - the Board Appointments Advisory Commission ensures board skill adequacy by evaluating applicants against an objective and transparent skills assessment framework, by requiring clinical governance training and ongoing development for board directors, by recommending that the Minister supply short-term delegates to boards where the skill mix is inadequate, and by recommending board amalgamation where long-term adequacy of skills cannot be achieved.

3. **All hospitals should be held to account for improving safety and quality of care, regardless of their size or sector**. To achieve this, we have recommended that:

   - the Minister pursues legislative change to extend the statutory obligations for safety and quality in public health services to public hospitals
   - the department monitors sentinel events and a common set of broader safety and quality performance indicators across public and private hospitals
   - the Minister pursues legislative change to ensure an appropriate level of regulation for private services that are currently unregistered but provide care that carries a risk to patient safety.

4. **The flow of information in the health system must ensure deficiencies in care are identified and focus attention on opportunities for improvement**. To achieve this, we have recommended that:

   - the government establishes the Victorian Health Performance Authority – an independent specialist safety and quality reporting body with responsibility for managing the department's health data collections, developing the quality of clinical performance indicators, and improving access to clinical data by clinicians, boards, departmental staff and academic researchers
   - the department develops a next-generation incident reporting policy and incident management system that significantly reduces the reporting burden for health workers while facilitating improved identification, follow-up and learning from serious patient safety incidents
   - the department makes better use of routine data, registries and complaints data to facilitate and expedite identification and investigation of potential deficiencies in care
   - the department streamlines its safety committees to improve information flows between hospitals, committees and the department, reduce duplication of functions, and ensure effective and improvement-focused follow-up of identified deficiencies in care
   - the department invests in modern data management systems by expediting the development of a statewide patient identifier and the transition to electronic patient record systems in hospitals
   - the Minister establishes a statutory Duty of Candour requiring any person harmed while receiving care to be informed and apologised to
   - the department strengthens requirements for boards to report on harm, improvement plans and progress against them in annual quality reports
   - the department works to improve voluntary reporting, including by monitoring hospital culture surveys to ensure that staff do not face barriers to reporting, discussing and addressing patient safety risks
   - there be stronger obligations for clinical registries to report serious deficiencies in care once they are detected.

5. **All hospitals should have access to independent clinical expertise to help identify deficiencies in care and focus attention on opportunities for improvement.** To achieve this, we have recommended that:

   - the department reinstates Limited Adverse Occurrence Screening so that all smaller hospitals have access to reliable and independent information on safety and quality performance
   - all small hospitals develop ongoing partnerships with larger health services to ensure they receive adequate expert support for case audit and other clinical governance activities in all their major clinical streams
   - larger health services consider initiating a cycle of regular external reviews of all their clinical units to maintain a focus on continuously improving performance
   - all health services be required to recruit an independent expert to sit on their root cause analysis panel when investigating a sentinel event.

6. **Risk should be managed across the system so that hospitals only offer care that is within their capabilities, with high-risk care concentrated in the centres where it is safest.** To achieve this, we have recommended that:

   - for all major areas of hospital clinical practice, the department develops and monitors compliance against capability frameworks delineating, for each hospital, which patients and treatments it has the capability to safely care for
   - the clinical networks identify those procedures or treatments for which there is evidence of a material volume–outcome relationship, and the department acts to concentrate delivery of these public and private hospitals' 'minimum volume' procedures and treatments within a designated set of 'high-volume' centres.

7. **There must be robust assessment of clinical governance and hospital safety and quality performance in the department**. To achieve this, we have recommended that:

   - the department reduces reliance on hospital accreditation while working through national processes to evolve the accreditation process to a more rigorous one
   - the department overhauls its performance assessment framework to ensure there is robust monitoring of safety and quality of care, incorporating risk assessment of hospital governance, as well as culture and patient outcomes
   - the department pursues legislative change to make strong performance in safety and quality a standalone requirement of health services rather than something that can be traded off against performance under access and financial dimensions of performance
   - the department establishes a formal panel of clinical reviewers who can be called on to undertake clinical reviews where indicated in the revised safety and quality monitoring framework.

8. **Mental health services must be adequately funded to allow delivery of timely, safe and high-quality care**. To achieve this, we have recommended that:

   - the department ensures there is robust reporting and public discussion regarding indicators pertaining to safety, quality and pressure on mental health services
   - the department develops a forensic mental health infrastructure sub-plan with a clear timeline to expand medium-security forensic bed capacity and to address other needs including those of adolescent and high-security patients.

9. **Clinical leaders must be engaged to strengthen, direct and lead efforts to improve safety and quality of care**. To achieve this, we have recommended that:

   - the department establishes a Victorian Clinical Council to obtain the collective advice of clinicians on strategic issues
   - the department rebuilds the clinical networks to lead safety and quality improvement work, with the network activities and priorities coordinated by the newly formed OSQI and each network accountable for improve statewide safety and quality outcomes on relevant dimensions of hospital care
   - the department invests in system-wide clinical leadership by establishing, in partnership with Better Care Victoria, a clinician leadership training strategy that incorporates training in contemporary quality improvement methods for all leaders of significant clinical departments
   - the clinical networks work to reduce clinical practice variation in all hospitals, including by developing or sharing best practice protocols for common use
   - the CEO of OSQI should have authority to issue best-practice guidelines and protocols on the advice of the clinical networks and the clinical council, and clinicians should be held accountable locally for their appropriate application.

10. **The system must have a stronger focus on improving patients' experience of care**. To achieve this, we have recommended that:

    - the department holds hospitals accountable for managing care transitions, providing professional interpreter services when required and monitoring progress against goals set by the hospital for continuous improvement of the patient experience
    - the department works with the Health Services Commissioner to identify hospitals that are underperforming on dimensions of patient experience including management of complaints
    - the OSQI adopts improvement of patient engagement and patient experience as a priority improvement goal for the hospital system.

Structural reform recommendations

This report contains a number of recommendations involving the establishment of new organisational structures and the rationalisation of others. These structural changes are set out below.

Establishment of an Office for Safety and Quality Improvement

1. An Office for Safety and Quality Improvement (OSQI) should be established to drive statewide quality improvement in partnership with clinical leaders. The OSQI would incorporate the department's entire Quality and Safety branch and functions from the Cancer, Clinical Networks and Specialty Services branch (clinical networks), the Health Service Programs branch's Acute Programs (development of capability frameworks) and the Perinatal and Clinical Councils Units (all activities).

2. The OSQI would work closely with the newly established Victorian Health Performance Authority (see below), Better Care Victoria, the department's Performance and System Design branch and the Victorian Health Services Commissioner. It would develop close and collaborative relationships with interjurisdictional centres for quality improvement (such as New South Wales' Clinical Excellence Commission) in Australia and abroad.

3. The OSQI would be headed by a full-time CEO reporting directly to the Secretary. The CEO would have deep expertise in safety and quality improvement, significant previous responsibility for clinical governance and a demonstrated record of success in delivering quality improvement in senior health management.

4. The CEO would lead the department's clinical engagement, with a permanent seat on a newly established Victorian Clinical Council (see below), and should report to Victorians annually on the sector's progress against the improvement goals pursued by the clinical networks. The CEO should have authority to issue best-practice guidelines and protocols on the advice of the clinical networks and the clinical council, and to mandate compliance with them.

5. The Chief Medical Officer, Chief Nurse and Chief Allied Health Officer would sit within the OSQI, contributing to the office's work across all its domains and advising on strategic direction.

Establishment of a Victorian Health Performance Authority

1. A Victorian Health Performance Authority (VHPA) should be established as a specialist analytics and performance reporting body independent from the department with its own statutory base to fulfil this role. The VHPA's back office functions should still be provided by the department.

2. The VHPA should be an end-to-end data manager, working from collection to publication. It should assume the current responsibilities of the department for management of hospital routine datasets (for example, the Victorian Admitted Episode Dataset, of which it should provide a cleaned, authoritative dataset to the department monthly) while the department retains direct, real-time access to the data. Clinical registries funded by the department should be required, as a condition of funding, to provide their data to the VHPA.

3. The VHPA's responsibilities should flow across measurement of patient care and outcomes for three key purposes:[10] public reporting, oversight and clinical improvement. The VHPA should work closely with and support clinical networks, the department more broadly, and health information analysts in hospitals. It should publish all of its model specifications and code on its website so that analysts working within hospitals can efficiently replicate the work and build on it. It should also develop links between hospital analysts in order to facilitate collaboration, mutual training and information sharing. It should provide the clinical networks with easy access to information to understand patterns of adverse outcomes and patient harm.

4. The networks should be able to nominate clinical quality measures for the VHPA to develop, with a focus on measures that show high variability to identify targets for concentrated specialty-wide improvement and benchmarking work. In other respects, the VHPA should have a high degree of independence in setting its own work programs.

5. The VHPA should form close relationships and research collaborations with other health analytic research centres, including the Bureau of Health Information in New South Wales, and academic health science centres in Victoria.

10 In this report we only discuss the VHPA's role relating to safety and quality. The department should consider a broader role for it publishing comparative data on access and efficiency as well.

Establishment of a Board Appointments Advisory Commission

1. The Minister should create an independent commission (the 'Board Appointments Advisory Commission') to advise on appropriately skilled directors to appoint to public hospital and public health service boards.

2. The commission would assume responsibility for managing the entire board appointments process, including the recruitment processes currently managed by rural boards, and for ensuring there is adequate diversity and an adequate mix of skills represented on every board at all times, with expectations of ongoing professional development to be undertaken.

3. The commission would work closely with existing boards in both the recruitment process and on an ongoing basis. Board chairs should advise the commission of perceived gaps in board skills, nominate appointees to meet them, and provide assessments of current board member skills as part of the appointment (and reappointment) process.

4. Where the commission is unable to ensure an adequate skill mix for a board through the appointment process, it would advise the Minister to appoint a maximum of two delegates for up to one year until suitably qualified candidates are appointed or existing directors are adequately trained. If the hospital remains unable to attract an adequate level of skills to meet the skills requirement, the commission would notify the Secretary of that fact so that consideration may be given to amalgamating the board with another service.

Establishment of a Victorian Clinical Council

1. A Victorian Clinical Council should be established to support the department's clinical engagement and to provide a forum where the department can obtain the collective advice of clinicians on strategic issues.

2. The clinical council should consist of about 60 people, with broad representation across specialties and clinical professions, inclusion of consumer members, and an appropriate balance of rural and metropolitan workforce. The clinical council should include the chairs of the clinical networks as ex-officio members and a significant proportion of the membership should be drawn from the clinical networks. The CEO of the OSQI, the Chief Medical Officer, the Chief Nurse, the Chief Allied Health Officer and at least four skilled consumer representatives should have seats on the council.

3. A council executive (including a chair and deputy chair) should be elected by the council, with the initial chair appointed by the department. The clinical council should meet three to four times a year, with an agenda that contains a mix of council-selected issues and department-selected issues. Issues for consideration should be sought from the department, from the chairs of clinical networks and from councillors.

4. To ensure accountability from the department, the Secretary or her delegate should make a report at each session of the council on whether the recommendations are endorsed, the reasons for this, and their plans and progress on implementing them. Secretariat support should be provided by the department.

Rationalisation of patient safety committees and consultative councils

1. We have recommended that the **Mortality Expert Review Panel** be dissolved, with its oversight functions streamlined and moved into departmental performance management (with any required audit conducted by the department's clinical review panel) and its improvement functions taken up by the OSQI and clinical networks.

2. We have recommended that the **Clinical Incident Review Panel** be dissolved, with its oversight functions streamlined and moved into departmental performance management and its improvement functions taken up by the OSQI and the clinical networks.

3. We have recommended that the **Healthcare Associated Infection Advisory Committee** be dissolved, with its functions and resources absorbed by a new infections and infectious disease clinical network.

4. We have recommended that the **Patient Safety Advisory Committee** be dissolved, with its functions absorbed by the VHPA and its improvement functions absorbed by the OSQI and Better Care Victoria.

5. We have recommended that the **Ministerial Advisory Committee on Surgery**, the **Victorian Surgical Consultative Council** be dissolved, with their oversight functions taken up by the Victorian Audit of Surgical Mortality and departmental performance management and their improvement functions taken up by a newly formed clinical network for surgery. Consideration should be given to whether the **Victorian Consultative Council for Anaesthetic Morbidity and Mortality** should also be dissolved.

Table of recommendations

Theme	Recommendation	Applicable to private hospitals?
Making safety and quality improvement a core goal of the department and health system.	**1.1** That: **1.1.1** the department develop a detailed plan and timeline for implementation of this report's recommendations, and report progress against it to the Minister on a quarterly basis **1.1.2** the Victorian Auditor-General's Office conducts its next audit of patient safety by 1 July 2020.	–
	1.2 That: **1.2.1.** the Secretary and the Minister each make a clear statement about the very high importance assigned to safety and quality of care **1.2.2.** the Minister seeks to amend the Health Services Act to update the objectives of the Act relating to safety and quality of care.	–
	1.3 That: **1.3.1.** by the end of 2017, the department has set and published statewide improvement goals, developed by the clinical networks, for: • reducing the incidence of high-impact, high-preventability complications • improving statewide performance on specific readmissions, complications, length of stay and mortality, as measured using the statistical process control indicators • reducing stillbirths, perinatal mortality and intrapartum brain injuries • improving patient experience, prioritising domains of experience where consumer ratings are not already uniformly positive, as measured by the Victorian Healthcare Experience Survey. **1.3.2.** each of these goals be clear and measurable, with a defined timeline for achieving them. **1.3.3** these goals be published on the department's website, with progress against them updated as part of the proposed annual safety and quality report (see Recommendation 4.3.5).	–
Ensuring all boards are highly skilled, independent and effective.	**2.1** That the Health Services Act be amended to: • extend the current board and CEO obligations for safety and quality for public health services to public hospitals • extend the current term-limit requirements and other appointment processes used for public health services to public hospitals. To the extent practicable, this change should be implemented ahead of legislative change so that no person would be reappointed to a public hospital board for a term that would lead to their total tenure on the board exceeding nine years. The only exception to this rule may be where the entire board would be turned over within three years, in which case one person in each round of appointments could be extended to a longer term.	No

Theme	Recommendation		Applicable to private hospitals?
Ensuring all boards are highly skilled, independent and effective (cont.).	2.2	In addition to having the necessary board-level skill and knowledge requirements, any person recommended for appointment to a board under section 65T(3)(a) of the Health Services Act – 'able to reflect the perspectives of users of health services' – must have evidence of: • personal experience as a patient or family/carer of a patient of the health service • ongoing involvement, preferably via both formal and informal structures, with health consumers in order to gain and maintain a broad community perspective. Either prior to appointment, or as part of their development plan to be completed in the first year of their role, those appointed under section 65T(3)(a) must also be able to demonstrate skills and experience (or appropriate training) in community advocacy on health as well as knowledge of what issues are broadly most important to patients and families.	No
	2.3	That:	No
	2.3.1.	the Health Services Act be amended to include a requirement that at least one member of every public hospital board have contemporary knowledge of clinical practice and who is at least 'somewhat experienced' in clinical governance, as defined by the board skills rubric set out in this report.	
	2.3.2	no person appointed to a board have an appointment as a clinician, or be employed, at the same hospital or health service.	
	2.4	That:	No
	2.4.1.	the Minister creates an independent commission (the 'Board Appointments Advisory Commission') to advise on appropriately skilled directors to appoint to public hospital and public health service boards (in making its recommendations, the commission should rank applicants in order of priority, including applicants not recommended, based on an assessment of skill levels)	
	2.4.2.	the commission assumes responsibility for the entire board appointments process, including the recruitment processes currently managed by rural boards	
	2.4.3.	the commission develops clear guidelines defining the expertise and experience needed to be skilled in each domain, along a five- or six-point scale	
	2.4.4.	the commission be charged with recommending a mix of appointments, which would ensure these skills are adequately represented on every board at all times, and for expectations of ongoing professional development to be undertaken	
	2.4.5.	the commission work closely with board chairs on an ongoing basis. Board chairs should advise the commission of perceived gaps in board skills, nominate potential appointees to meet them, provide assessments of current board member skills as part of the appointment (and reappointment) process and be consulted by the advisory commission on the commission's assessment of skill gaps	

Theme	Recommendation		Applicable to private hospitals?
Ensuring all boards are highly skilled, independent and effective (cont.).	2.4.6.	where skills are lacking in people nominating for board appointments, the commission advises the Minister to appoint a maximum of two delegates for up to one year until suitably qualified candidates are appointed or existing directors are adequately trained	No
	2.4.7.	the commission considers the desirability of recommending at least one person from outside the immediate local area when making recommendations about appointments to rural hospital boards and for interstate appointees with appropriate governance skills when making recommendations about specialist hospital boards	
	2.4.8.	if the hospital is unable to attract an adequate level of skills to meet the skills requirement, the commission notifies the Secretary of that fact and consideration be given to amalgamating it with another service	
	2.4.9.	the criteria for amalgamations in the Health Services Act be amended to include whether the amalgamation would lead to more effective governance of safety and quality	
	2.4.10.	the commission ensures its recommendations would lead to appropriate diversity on boards, including by ensuring that at least half of all recommendations for appointment are women (where the composition of a board does not reflect the diversity of a community, the commission must seek actively to recruit and train culturally and linguistically diverse board appointees, with recruitment of indigenous board members a priority)	
	2.4.11.	the commission be staffed commensurate with its responsibilities to review board appointments across all Victorian health service boards	
	2.4.12.	consideration be given to staggering the appointment date of board appointments (currently almost all date from 1 July) to smooth the workload for the commission.	
	2.5	2.5.1. That to be eligible for reappointment, all current and future board members must undergo a practical and local one-day induction program in clinical governance, risk management and organisational culture, with two half-day follow-up workshops.	No
		2.5.2. As part of their regular self-assessment processes, boards must review the development needs of their members and develop strategies to meet them.	
		2.5.3. New board members must undertake the clinical induction program within 12 months of appointment.	
Improving the flow of information in the health system to facilitate identification of deficiencies in care and focus attention on opportunities for improvement.	2.6	That the proposed Victorian Health Performance Authority produces a safety and quality analytics report for large hospital boards on a monthly basis, for smaller hospital boards at least quarterly, and for private hospitals at an appropriate interval based on their size.	Yes

Theme	Recommendation		Applicable to private hospitals?
Using independent clinical expertise to help identify deficiencies in care and focus attention on opportunities for improvement.	2.7	That the department reinstates and funds the Limited Adverse Occurrence Screening program for rural hospitals, and investigate ways to increase its effectiveness and reduce its cost.	No
	2.8	That:	Yes
	2.8.1.	all smaller hospitals demonstrate to the department, by 1 July 2017, that they have negotiated formal agreements to involve external specialists in clinical governance processes for each of their main areas of activity, including morbidity and mortality review	
	2.8.2.	the department drafts a 'best practice' template for these agreements, which incorporates explicit minimum standards for these agreements	
	2.8.3.	where a small public hospital is unable to demonstrate that clinical governance of all of its main areas of clinical activity are supported by an external partner, the department pair them with a regional or metropolitan partner	
	2.8.4.	summary outcomes of the various clinical audits must be reported to governance committees of each hospital on a regular basis.	
	2.8.5.	larger hospitals (or their staff) will need to be appropriately remunerated for this support and so block funding for smaller hospitals may need to be adjusted for this purpose.	
Improving the flow of information in the health system to facilitate identification of deficiencies in care and focus attention on opportunities for improvement.	2.9	That the Minister invites the Australian Health Practitioner Regulation Agency to work with the National Boards to develop clear guidance, linked to the existing 'codes of practice', for registered professionals working in governance roles.	–
Making safety and quality improvement a core goal of the department and health system.	2.10	That the department sets clear expectations that boards of all hospitals:	Yes
		• have safety and quality as a substantial agenda item at every meeting	
		• have a statement of ambition for achieving excellence in care, and set clear, measurable goals and timelines for achieving that ambition	
		• hold CEOs to account for actions taken to improve care after safety incidents occur, including by ensuring that recommendations from reviews and root cause analyses are implemented.	

Theme	Recommendation		Applicable to private hospitals?
Holding all hospitals to account for improving safety and quality of care, regardless of size and sector.	2.11	That:	Yes
		2.11.1. the department monitors a common set of performance indicators across all hospitals	
		2.11.2. private hospitals be subject to the same public reporting requirements as public hospitals	
		2.11.3. the department requires all private hospitals to report sentinel events to the department, if necessary through regulation	
		2.11.4. the Minister seeks to revise the Health Services Act to broaden the definition of 'day procedure centre'. Revisions should also be made to the Health Services (Private Hospitals and Day Procedure Centres) Regulations 2013 to include tiered registration thresholds and reporting requirements for services.	
		2.11.5. the Minister seeks to revise the Mental Health Act to ensure that the level of oversight of electroconvulsive treatment provided in the private sector is equivalent to that provided in the public sector.	
Managing risk in the system to ensure that hospitals only offer care that is within their capabilities, with high-risk care concentrated in the centres where it is safest.	2.12	That:	Yes
		2.12.1. within one year, the department has assigned International Classification of Diseases diagnosis and procedure codes to its existing capability frameworks, be monitoring adherence to them (across public and private hospitals) and sharing information on adherence with hospitals and boards.	
		2.12.2. within three years, the department has expanded its capability frameworks to cover all major areas of hospital clinical practice, be monitoring adherence to them (across public and private hospitals) and sharing information on adherence with hospitals and boards.	
		2.12.3. where the department allows hospitals to self-assess capability and select their own service level, it must seek and verify evidence that they have done so accurately and appropriately.	
		2.12.4. if a hospital ceases to comply with the requirements of its designated service level, it must notify the department immediately.	
		2.12.5 the Victorian Health Performance Authority, when established, provides a six-monthly report to all hospitals and the department on adherence to relevant capability frameworks.	
	2.13	That:	Yes
		2.13.1. clinical networks identify those procedures or treatments for which there is evidence of a material volume–outcome relationship (the 'materiality' threshold may be different for metropolitan and regional centres)	
		2.13.2. the department designate which public and private hospitals may admit patients for 'minimum volume' procedures and treatments	

Theme	Recommendation	Applicable to private hospitals?
Managing risk in the system to ensure that hospitals only offer care that is within their capabilities, with high-risk care concentrated in the centres where it is safest (cont.)	2.13.3. the Secretary issue a direction under section 42(1)(d) of the Health Services Act to public hospitals to effect this designation (public hospitals not designated for specified treatments should not be eligible to receive payment for those procedures or treatments) 2.13.4. 'minimum volume' procedures and treatments be designated as specific types of care for private hospitals so that only designated hospitals are licensed to admit patients in those categories 2.13.5. for all procedures, the department require both public and private hospitals to record the responsible proceduralist's identification number in their submission to the Victorian Admitted Episodes Dataset.	Yes
Improving the flow of information in the health system to facilitate identification of deficiencies in care and focus attention on opportunities for improvement.	That: 2.14.1. low rates of agreement with the questions 'My suggestions about patient safety would be acted upon if I expressed them to my manager' and 'I am encouraged by my colleagues to report any patient safety concerns I may have' in the People Matters Survey be used as an indicator of a poor reporting culture in a public hospital (see Recommendation 3.3) 2.14.2. public hospital boards, in their next Statement of priorities, be required to commit to develop and implement plans to educate staff about obligations to report 2.14.3. where clinical registries detect serious deficiencies in care in the course of their research they must uphold their professional responsibility to notify the Australian Health Practitioner Regulation Agency.	2.14.1 and 2, not applicable; 2.14.3 applies to private hospitals
	2.15 That the department works with the Australian Health Practitioner Regulation Agency and the Health Services Commissioner to devise a strategy for improving rates of voluntary reporting of concerns by health professionals.	–
Making safety and quality improvement a core goal of the department and health system.	2.16 That as part of the release strategy for this report, the Secretary takes the opportunity to make a clear public statement about the role of the department in the oversight of the health system and her statutory functions. Such a statement should highlight the three components of governance: • system leadership and support by the department • democratic accountability (through transparency and performance management) • devolution to enable local innovation and responsive management. Devolution should not be presented as an end in itself, nor as a justification for leaving health services to manage without any support from the department.	–

Theme	Recommendation		Applicable to private hospitals?
Ensuring robust assessment of clinical governance and hospital safety and quality performance	3.1	That the department raises with the Australian Commission on Safety and Quality in Health Care and in appropriate national forums an alternative approach to monitoring adherence to national standards involving a combination of standard visits and unscheduled, targeted inspections to assess particular standards.	–
	3.2	That:	Yes
		3.2.1. the department establishes a panel of clinical reviewers across a range of disciplines, together with people skilled in clinical governance, who can be called on to undertake clinical reviews where indicated in the revised safety and quality monitoring framework.	
		3.2.2. the members of the panel receive explicit training in review methods.	
		3.2.3. the panel meets annually to receive feedback from other panel members about review experiences.	
		3.2.4. the department supports the panel through documentation of lessons learned from reviews.	
	3.3	That the department completely overhauls its approach to monitoring hospital patient safety and quality performance to a system that involves:	Yes (other than 3.3.6)
		3.3.1. a regular, documented risk assessment about the hospital's patient safety culture and governance risks	
		3.3.2. providing hospital data to hospitals against a comprehensive range of primarily outcome indicators	
		3.3.3. a new graduated system of oversight that incorporates assessment of culture and governance risks, and primarily supports hospitals to improve care rather than being punitive	
		3.3.4. for hospitals with a good safety culture and low assessed governance risks, redefining good performance by a hospital as the hospital taking steps to address any issues identified by the outcome indicators rather than a poor outcome by itself	
		3.3.5. providing enhanced support, in partnership with OSQI, to hospitals where this is warranted because of safety culture or governance risks, or persistently poor outcomes, with the potential to escalate intervention up to and including recommending leadership change in persistently poorly performing hospitals	
		3.3.6. in the case of public hospitals, that safety and quality outcomes be removed from the standard departmental performance assessment scoring system, with interventions for safety and quality outcomes being triggered under the new safety and quality framework independently of performance on budget or access measures. The safety and quality framework should sit separate from but alongside the budget and access performance monitoring framework.	

Theme	Recommendation		Applicable to private hospitals?
Ensuring robust assessment of clinical governance and hospital safety and quality performance (cont.).	3.3.6. (cont.)	Reflecting this change in approach, the department should take steps to ensure that staff responsible for public hospital performance management and private hospital regulation are appropriately skilled to support hospitals with performance improvement. In particular, these staff should be trained in improvement science. The department should also work closely with the Health Services Commissioner to ensure that reporting and cultural issues detected by the Commissioner are incorporated into departmental risk assessment.	Yes (other than 3.3.6)
	3.4	That departmental monitoring of safety and quality includes monitoring against a comprehensive range of outcome indicators using hospital routine data and data from clinical registries.	Yes
	3.5	That:	Yes
	3.5.1.	the department seeks to hold hospitals to account for outcome indicators in lieu of process indicators wherever the indicator of interest can be more reliably monitored using the former	
	3.5.2.	the current cleaning standards process indicator be discontinued and be replaced with comparable outcome indicators such as patient-reported hospital cleanliness.	
Improving the flow of information in the health system to facilitate identification of deficiencies in care and focus attention on opportunities for improvement.	3.6	That:	–
	3.6.1	in consultation with health services and discussion with other jurisdictions, the department develop a transparent and evidence-based incident management policy clearly specifying what it aims to achieve through incident reporting in Victoria and how it will achieve those aims, including through: • central oversight of hospital progress in investigating and addressing root causes of high-severity incidents (ISR 1s) • central analysis of incident report text and data to support safety improvement • development or adjustment of departmental policies and improvement programs to mitigate recurrent risks detected through incident reports	
	3.6.2	the policy prioritises reporting of incidents that had or risked having severe impacts on patients while minimising the time cost of reporting for hospital staff and focusing efforts on investigation and remediation of risks rather than detailed reporting of incidents	
	3.6.3	the policy specifies the level of resources the department will commit to analysis of incident reports, and its plan for using the lessons of incident reports to support safety and quality improvement in hospitals	
	3.6.4	once this policy has been developed, the department use a transparent and competitive process to procure an incident reporting system capable of supporting the policy.	

Theme	Recommendation		Applicable to private hospitals?
Improving the flow of information in the health system to facilitate identification of deficiencies in care and focus attention on opportunities for improvement. (cont.)	3.7	That:	Yes
		3.7.1. the funding contracts for clinical quality registries funded by the department be renegotiated to provide: • an explicit requirement for all performance metrics to be provided to hospital chief executives (or their designated nominee) and to the department at the same time as they are fed back to clinical units • for registries that have been in existence for more than a decade, a full dataset of registry data to the department (the new Victorian Health Performance Authority when established) at least annually to allow matching to, and incorporation in, the relevant routine dataset (the data provided should have the names of individual clinicians removed)	
		3.7.2. the new Victorian Health Performance Authority publishes metrics derived from clinical registries in its quarterly public report	
		3.7.3. clinical networks consider whether participation in relevant registry collections be mandated for public and private hospitals	
		3.7.4. the department raises at the appropriate national forum that the Commonwealth Department of Health (or other national funding bodies) changes national funding contracts to ensure nationally funded registries meet the same requirements.	
	3.8	That:	Yes
		3.8.1 the department develops a compact with each of AHPRA, the Health Services Commissioner and the Mental Health Services Commissioner that sets out clear governance arrangements and two-way responsibilities for sharing information about clinicians and other registered and unregistered practitioners, who are being investigated so that the department can alert hospitals where relevant	
		3.8.2 the department shares its current structural, cultural and outcome risk assessments of all hospitals with AHPRA, the Health Services Commissioner, the Mental Health Services Commissioner and the Victorian Managed Insurance Authority.	
		3.8.3 the Australian Health Practitioner Regulation Agency (AHPRA), the Health Services Commissioner and the Mental Health Services Commissioner calculate scores predicting the risk of clinicians receiving future complaints (further analysis should be done to enable calculation of combined predictive scores using pooled data and taking into account relative weightings)	
		3.8.4 the department provide information about likely future risk of complaints to public and private hospitals and facilities when there is at least a 40 per cent chance of another complaint	
		3.8.5 the department undertake or commission further analysis to enable calculation of combined complaint predictive scores using pooled data from AHPRA, the Health Services Commissioner, the Mental Health Services Commissioner, and the Victorian Managed Insurance Authority	

Theme	Recommendation		Applicable to private hospitals?
Improving the flow of information in the health system to facilitate identification of deficiencies in care and focus attention on opportunities for improvement. (cont.)	3.8.6	the department recommend such legislative changes as are necessary to allow collection of this information and provision of the PRONE score.	Yes
	3.8.7	the Minister raises in the appropriate national forum the desirability of ensuring this flow of information. In particular, the Minister should raise the possibility of amending registration requirements to require practitioners to inform AHPRA of their employers and places at which they practice, and for AHPRA to have the power to inform employers and places of practice of changes to a practitioner's registration status.	
3.9	That:		Yes
	3.9.1	the provisions of the Public Health and Wellbeing Act relating to the Consultative Council on Obstetric and Perinatal Morbidity and Mortality be amended to allow the council:	
		• to issue practice guidelines relevant to its findings and work	
		• audit compliance against those guidelines in all hospitals and advise the department where it has found noncompliance	
		• where the council finds that preventable harm involving mortality or severe morbidity has occurred, immediately provide the department with information on the type of incident, the name of the health service concerned, and the status of the investigation and subsequent improvement work	
	3.9.2	the council be involved in reviewing deaths of children subject to child protection orders, and be appropriately resourced to do so.	
3.10	That:		–
	3.10.1.	the contract with the Royal Australasian College of Surgeons for the conduct of the Victorian Audit of Surgical Mortality (VASM) be renegotiated to expand the coverage of VASM to include anaesthetic deaths, subject to appropriate involvement of anaesthetists, and when preventable mortality or serious morbidity occurs, for VASM to provide a report to the relevant health service (and the department) with its recommendations for strengthening care.	
	3.10.2.	the department provide VASM with data to enable it to calculate rates of surgical and anaesthetic deaths in all hospitals	
	3.10.3	the department discuss with the Royal Australasian College of Surgeons the desirability of VASM providing the department with the responsible clinician's specialty, place(s) of employment, and investigation status (for example, whether the health service has received advice from VASM yet).	

Theme	Recommendation		Applicable to private hospitals?
Improving the flow of information in the health system to facilitate identification of deficiencies in care and focus attention on opportunities for improvement. (cont.)	3.11	That:	–
		3.11.1. the department dissolves the Clinical Incident Review Panel, with CIRP's compliance functions absorbed by the department and its improvement functions absorbed by OSQI	
		3.11.2. the department requires all hospitals to:	
		• demonstrate they have at least one independent expert on their sentinel event root cause analysis panel	
		• identify the individual responsible for ensuring the panel's recommendations are implemented	
		• provide evidence that they have implemented their panel's recommendations	
		3.11.3. the department uses its discretion to appoint additional experts to panels and audits the implementation of improvement recommendations	
		3.11.4. OSQI use relevant information arising from sentinel event review to promote statewide learnings, and support hospitals with improvement work when requested to do so by the department.	
	3.12	That the department:	–
		3.12.1. dissolves the Mortality Expert Review Panel and ceases to investigate hospital-standardised mortality rates	
		3.12.2. focuses instead on condition- and treatment-specific mortality outliers, which would be detected and supported under the new performance management framework	
		3.12.3. redirects the Mortality Expert Review Panel's resources into OSQI.	
	3.13	That the Patient Safety Advisory Committee be dissolved, with its responsibility for trend analysis re-assigned to VHPA and its responsibilities for system-wide innovation and improvement reassigned to OSQI.	–
	3.14	That the Victorian Health Performance Authority:	–
		3.14.1. provides an easy-to-use webpage to identify data holdings and data definitions	
		3.14.2. within three years provides more online access to data holdings, including linked data holdings	
		3.14.3. works with researchers and consumer groups to develop protocols for access to linked data to facilitate evaluation and research projects.	
		3.14.4. works with researchers and consumer groups to develop protocols for access to linked data to facilitate evaluation and research projects.	
	3.15	That the department ensure that the Mental Health Annual Report includes indicators of access to and pressure on services (including Forensicare services), and safety and quality outcomes including adverse events, and is used as the basis of a broader discussion with the community on safety and quality in mental health services.	No

Theme	Recommendation		Applicable to private hospitals?
Ensuring that mental health services are adequately funded to provide safe and high quality care.	3.16	That:	–
		3.16.1. as part of the current development of a mental health infrastructure plan, the department develops a forensic mental health infrastructure sub-plan to address other needs including additional high-security beds and a specialist adolescent inpatient unit to meet the needs of young people	
		3.16.2. the forensic mental health infrastructure plan includes a clear timeline to implement the Victorian Law Reform Commission's recommendation to expand medium-security forensic bed capacity.	
	4.1	Victoria's funding model for public hospitals should mirror the national funding model incentives for safety and quality (including readmissions) to be adopted from 1 July 2017.	No
Making safety and quality improvement a core goal of the department and health system.	4.2	The department should adopt the goal of reducing clinical practice variation in all hospitals, with change led by the clinical networks.	Yes
		4.2.1. The clinical networks should identify best practice in their relevant specialty areas, develop strategies to share best practice and support hospitals and clinicians to implement best practice.	
		4.2.2. The department should provide best practice root cause analysis and morbidity and mortality review protocols and expect or mandate adherence to them across hospitals.	
		4.2.3. The department should ensure the clinical protocols of top-performing hospitals (on relevant indicators) are highlighted on the department's document sharing system, PROMPT.	
		4.2.4. Where all hospitals are required to have a new protocol in place (for example, in response to a public health emergency), the department should commission a specialist clinical unit to develop a single protocol with an implementation guide for common use across hospitals.	
Engaging with clinical leaders to strengthen, direct and lead efforts to improve safety and quality of care.	4.3	The government should form an Office of Safety and Quality Improvement (OSQI) within the department, incorporating activities of the Quality and Safety branch, the Clinical Networks, Cancer and Specialty Programs branch, and the Acute Programs, and Perinatal and Clinical Councils Unit from the Health Service Programs branch.	–
		4.3.2. The OSQI should coordinate the quality improvement work of the bodies it incorporates, and support their work by recruiting a pool of specialist staff dedicated to analysing available data, researching contemporary evidence on best practice and distilling it for the relevant bodies, and supporting them to adopt, adapt and develop rigorous quality improvement programs and processes to be implemented in hospitals.	
		4.3.3. A chief executive officer (CEO) should be recruited to lead the OSQI. The CEO should be seen as a leader by other clinicians, with deep expertise in safety and quality improvement, significant previous responsibility for clinical governance and a demonstrated record of success in delivering quality improvement in senior health management.	

Theme	Recommendation		Applicable to private hospitals?
Engaging with clinical leaders to strengthen, direct and lead efforts to improve safety and quality of care (cont.)		4.3.4. The CEO should lead the department's clinical engagement and ensure the department's understanding of the sector is informed by feedback from clinical leaders as well as hospital managers.	–
		4.3.5. The CEO should report annually on strategies being pursued by the clinical networks for, as well as progress on, system-wide improvement on the key quality and safety indicators.	
		4.3.6. The CEO should have authority to inspect and audit hospitals and to issue best-practice guidelines and protocols on the advice of the clinical networks and the clinical council.	
		4.3.7. The Chief Medical Officer, Chief Nurse and Chief Allied Health Officer should report to the CEO, and be responsible for supporting the OSQI's work and advising on strategic direction.	
		4.3.8. The CEO should report directly to the Secretary.	
Making safety and quality improvement a core goal of the department and health system.	4.4	4.4.1. The department, in conjunction with Better Care Victoria, should develop a clinician leadership training strategy that incorporates training in contemporary quality improvement methods.	Yes
		4.4.2. The training program should have intakes on a regular basis.	
		4.4.3. Hospitals and health services should ensure all leaders of significant clinical departments have completed the program or a similar program within six months of their appointment.	
Engaging with clinical leaders to strengthen, direct and lead efforts to improve safety and quality of care.	4.5	That larger hospitals consider initiating a program of regular external reviews of clinical units.	Yes
Using independent clinical expertise to help identify deficiencies in care and focus attention on opportunities for improvement.	4.6	4.6.1. That the department establishes a Victorian Clinical Council to provide a forum whereby the department can obtain the collective advice of clinicians on strategic issues.	–
		4.6.2. Councillors should be drawn from the ranks of practising clinicians, to serve in a non-representative capacity. A significant proportion (more than two-thirds) of the membership of the council should be drawn from the clinical networks. A Council Executive (including a chair and deputy chair) should be elected by the council, with the initial chair appointed by the department. Issues for consideration should be sought from the department, chairs of clinical networks, and from councillors.	
		4.6.3. All clinical network chairs should be members of the council, as should be the chief executive officer of the Office of Safety and Quality Improvement, the Chief Medical Officer, the Chief Nurse and the Chief Allied Health Officer. At least four skilled consumer representatives should have seats on the council.	

Theme	Recommendation	Applicable to private hospitals?
Using independent clinical expertise to help identify deficiencies in care and focus attention on opportunities for improvement (cont.)	4.6.4. To ensure accountability from the department, the Secretary or her delegate should make a report at each session of the council on whether the recommendations are endorsed, the reasons for this, and their plans and progress on implementing them. 4.6.5. Secretariat support should be provided by the department.	–
Engaging with clinical leaders to strengthen, direct and lead efforts to improve safety and quality of care.	4.7 That the department's Chief Medical Officer and Chief Nurse each hold a quarterly discussion forum with the major private hospital groups' Chief Medical Officers and Directors of Nursing, respectively.	–
	4.8 That: 4.8.1. the department revitalise the clinical networks. Each should be focused on a single objective: to improve outcomes of hospital care. 4.8.2. the OSQI develop a strategic plan for coordinating interdisciplinary improvement work to be published before 1 July 2017, with the strategic plan incorporating infection and infectious disease, mental health, surgery and general medicine . Work in these areas should begin as soon as possible. 4.8.3. each network be charged with improving the overall performance across all hospitals (public and private) on relevant indicators from the statewide safety and quality analytics report by reducing variation on quality indicators and lowering incidence on safety indicators. 4.8.4. networks report to the chief executive officer of the Office of Safety and Quality Improvement annually on progress against their improvement objectives. 4.8.5. networks have staffing appropriate to their new role, including data-analytic support. There should be provision, in the first few years of the new network role, for 'data advisers' to support access to the new data portal. 4.8.6. the work of the Ministerial Advisory Committee on Surgery and the Surgical Consultative Council be absorbed into a new surgery network, consideration also be given to absorbing the Victorian Consultative Council for Anaesthetic Morbidity and Mortality into the surgery network. The work of the Healthcare Associated Infection Committee be absorbed by a newly formed infection and infectious disease network. 4.8.7. the department ensure staff and chairs of networks have training in contemporary improvement methods. 4.8.8. the network chairs meet quarterly to share experiences, identify any common priorities and ensure critical opportunities for improvement are being pursued. 4.8.9. every network have at least two consumer representatives with personal experience relevant to the network's focus, who meet the requirements for being able to reflect the perspective of health system users set out in Recommendation 2.2. 4.8.10. the department develop a strategy to involve clinical networks and Primary Healthcare Networks in creating evidence-based best practice care paths for implementation across Victoria.	Yes

Theme	Recommendation	Applicable to private hospitals?
Engaging with clinical leaders to strengthen, direct and lead efforts to improve safety and quality of care. (cont.)	4.9 Government should legislate to establish a Victorian Health Performance Authority, independent from the department to: 4.9.1. provide the public with hospital safety and quality performance data on a quarterly basis that covers all safety and quality indicators against which hospitals are monitored, for both public and private hospitals; the names of hospitals should be identified 4.9.2. provide the department and all hospitals with a report detailing hospital performance against safety and quality indicators; this report should be updated on a monthly basis 4.9.3. support the clinical networks to refine and develop new measures to monitor safety and quality 4.9.4. provide the clinincal networks and hospitals with an interactive data portal that enables users to explore patient outcomes and patient journeys in their hospital, and compare their outcomes with other hospitals' outcomes 4.9.5. support the networks and hospitals to use the portal by providing data advisors 4.9.6. provide a small analytic team (four or five staff) to support the clinical networks (this is in addition to administrative staff to support networks) 4.9.7. provide data analytic support under contract to the department by seconding staff where appropriate 4.9.8. collect data from hospitals and other entities and manage health sector data holdings, providing the department with real time direct access to the data as well as an authoritative data extract to the department on a regular (for example, monthly) basis.	Yes
Improving the flow of information in the health system to facilitate identification of deficiencies in care and focus attention on opportunities for improvement.	4.10 The Victorian Health Performance Authority (VHPA) should establish a project to collect and report on patient-reported outcome measures (PROMs) using validated questionnaires. Initially this program might cover the same procedures for which data are collected in England. The VHPA should develop a business case to Better Care Victoria for initial funding of this work. Over time, PROMs should cover an increasing proportion of Victorian hospital activity and cover both public and private hospital activity.	Yes
	4.11 The Victorian Health Performance Authority, when established, should review the Healthcare Experience Survey to improve its use and potentially the efficiency of its collection.	No
	4.12 Clinical networks should develop clinically relevant process indicators for use in local improvement work.	Yes
Engaging with clinical leaders to strengthen, direct and lead efforts to improve safety and quality of care.	4.13 4.13.1. The department should support Victorian public hospitals to expedite their transition from paper-based to electronic patient record (EPR) systems developed to support clinical decision making and data analytic capability, which have proven benefits for safety and quality of care. 4.13.2. The department should adopt a goal of ensuring that, by 2021, all major hospitals have a fully electronic health record that enables interchange of information with other hospitals. 4.13.3. The department should implement a statewide unique patient identifier before 1 July 2017.	No

Theme	Recommendation		Applicable to private hospitals?
Improving the flow of information in the health system to facilitate identification of deficiencies in care and focus attention on opportunities for improvement.	4.14	4.14.1. The Victorian Health Performance Authority should: • ensure all public hospitals have access to local safety and quality data through an interactive portal • evaluate the costs and benefits of commercially procuring a portal versus developing one internally. 4.14.2. The chosen portal must be methodologically transparent, clinically credible and comprehensive, easily used, and allow clinicians to drill down into data, working from hospital-level outcomes to disaggregated information at the unit, clinician and patient levels. 4.14.3. There must be flexibility to adapt the portal overtime in response to user feedback. 4.14.4. The Victorian Health Performance Authority, working with the clinical networks, should ensure that clinical and management staff in hospitals are appropriately trained and supported to use the portal.	No
	5.1	That the guidelines for the public hospital annual board quality reports be changed so they are simply required to: 5.1.1. disclose the number of sentinel events and adverse events with an incident severity rating of one or two that have occurred in the previous year 5.1.2. describe the actions taken by the health service to prevent the recurrence of a similar event 5.1.3. include the results of the indicators in the most recent board quality report provided by VHPA/the department 5.1.4. include commentary on those results, including where steps being taken to improve the care being provided by the health service 5.1.5. include information on the three patient experience priorities and the steps being taken to address those issues (see Recommendation 5.7).	No
	5.2	That: 5.2.1. the Victorian Health Performance Authority publishes all safety and quality performance information that is clinically credible, has been carefully checked, and does not pose a risk to patient privacy. The published indicators should include: • all the indicators included in the proposed board safety and quality report • an update-to-date tally of each hospital's sentinel events, noting how long it has been since the last event occurred and including a link to information about actions the hospital is taking in response to the sentinel events • results from the Victorian Healthcare Experience Survey. 5.2.2. the department adapts the National Health Services' 'Open and Honest' report template for Victorian hospitals. 5.2.3 the Minister extends these requirements to private hospitals, through legislation if necessary.	Yes

Theme	Recommendation		Applicable to private hospitals?
Improving the flow of information in the health system to facilitate identification of deficiencies in care and focus attention on opportunities for improvement (cont.).	5.3	That a statutory Duty of Candour be introduced that requires all hospitals to ensure that any person harmed while receiving care is informed of this fact and apologised to by an appropriately trained professional in a manner consistent with the national Open Disclosure Framework.	Yes
	5.4	That:	No
	5.4.1.	the department works with the Victorian Public Sector Commission to improve measurement of safety culture, including by refining the survey methodology, collecting unit identifiers where appropriate and significantly increasing participation rates in the People Matter Survey	
	5.4.2.	the department will treat low rates of agreement with the People Matter Survey's hospital safety culture questions as a serious performance concern and address it with the hospital accordingly.	
	5.5	That the department monitors the bullying questions in the People Matter Survey as part of its routine monitoring of safety and quality in public hospitals and incorporate the results into its assessment of health service risk.	No
	5.6	That the government refers the issue of the feasibility of extending no-fault medical insurance to all healthcare injuries not currently planned to be covered by the National Disability Insurance Scheme or the National Injury Insurance Scheme to the Legal and Social Issues Committee of the Legislative Council for investigation.	Yes
	5.7	That the department uses the Transitions Index, which measures the patient experience of the way a hospital manages care transitions, as its headline measure of patient experience rather than the 'overall' indicator for patient experience.	No
	5.7.1.		
	5.7.2.	That from the 2016 *Statement of priorities* onwards, health services be required to identify three specific priorities for improving the patient experience of care. These would then become key performance indicators in their *Statement of priorities*.	
		• These key performance indicators should be revised biannually to reflect new areas for improvement in patient experience.	
		• The priorities should be informed by the most recent Victorian Patient Experience Survey and the priority setting process should involve consultation with consumers.	
Focussing the system on improving patients' experience of care.	5.8	5.8.1. That the department monitors the Victorian Healthcare Experience Survey to ensure all public hospitals are providing interpreter services to patients who require them.	No
	5.8.2.	That when the Victorian Healthcare Experience Survey shows a hospital may not be complying with its requirement to provide accredited interpreter services to patients who need them, the department treats this as a serious performance issue and manage it accordingly.	
	5.8.3.	Hospitals must ensure all clinicians are aware of their ability and obligation to request professional interpreter services when required.	

Theme	Recommendation		Applicable to private hospitals?
Focussing the system on improving patients' experience of care (cont.)	5.9	That:	Yes
	5.9.1.	the Office of the Health Services Commissioner (OHSC) monitors the effectiveness of complaints handling by all hospitals and report on individual health service providers' compliance with complaints handling standards to the department's Performance and System Design branch	
	5.9.2.	poor handling of complaints detected by the OHSC be considered as a cultural risk by the department and managed accordingly	
	5.9.3.	the OHSC reports on trends, innovations and best practice in complaints handling by health services to the Office for Safety and Quality Improvement, which should use this information to support improvement in patient engagement across all hospitals	
	5.9.4.	the department requires all hospitals to have an identified person who is responsible for addressing patient concerns and who is visible and accessible to patients. In smaller hospitals it may be appropriate for the person in this role to be appointed jointly across a few hospitals. The contact details for the identified person should be readily accessible (including on the hospital's website) and consumers must be able to meet with them in person within a week of initial contact.	
	5.10	That the OSQI adopt patient engagement and patient experience as a priority improvement goal for the hospital system.	–

Preface

Victorians are rightfully proud of their public health system. Each year, there are more than 1.6 million[10] admissions to public hospitals, where highly competent and dedicated clinicians deliver quality care at no direct cost to the patient.[11] Our system of educating medical staff is highly regarded, and Victoria is home to world-leading research institutes that work with major hospitals to solve challenging health problems.

While the average performance of Victorian hospitals is good and there are many pockets of excellence in the system, it also has weaknesses. Harm is common in Victorian hospitals, as it is in most hospital systems around the world. Every year, over 300,000 hospital admissions in Victoria involve an 'adverse event'.[12] These adverse events include hospital-acquired infections (for instance, from a healthcare worker failing to wash their hands properly before a procedure), injuries (for example, from a patient falling while in hospital) or medication errors (for instance, an unclear form leading to administration of the wrong dosage). In many cases, the impact is relatively minor, increasing a patient's discomfort or extending their stay by a day or two. But in some cases, the consequences are tragic – resulting in permanent disability or death.

Policymakers should never forget or stop working to reduce the devastating impact of serious adverse events on patients and their families. The injury or death of a patient who was harmed through medical care creates immense pain and distress. Alongside psychological costs, financial difficulties and a loss of faith in the healthcare system, families and loved ones must bear the loss of years of a potentially shared future.

Adverse events are not always avoidable, and they are rarely the result of individual incompetence or malice. Rather, they arise within complex, busy, high-pressure environments where well-intentioned professionals are caring for patients who are already sick and at risk of deteriorating. The inherent complexity and risk in care is why all health organisations need strong mechanisms to prevent, detect and address adverse events, and to improve their baseline level of care.

Sometimes these local mechanisms fail badly, with disastrous consequences for patients. Yet in systems like Victoria, where hospitals are responsible for managing quality and safety, the complexity of care makes it difficult to determine whether local mechanisms are working. For this reason, bodies responsible for monitoring the system, like the Victorian Department of Health and Human Services, need strong oversight of healthcare providers so they can see serious failures emerging and step in to protect patients.

System managers can help hospitals to prevent harm, as well as detecting it. They have a vantage point that allows them to act as system leaders, using their resources to help hospitals benchmark against each other, share the lessons of top performers and international research, strengthen the incentives for hospital executives to prioritise and invest in safe care, and drive improvement in overall safety and quality of care over time.

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10   Data based on total number of hospital separations at Victorian public hospitals in 2015. The total includes all Victorian hospitals reporting activity to the Victorian Admitted Episodes Dataset (VAED).

11   Unless otherwise stated, we use the term 'public hospitals' to include both 'public hospitals' (smaller rural hospitals) and 'public health services' (the larger metropolitan and regional hospitals). We use the term 'all hospitals' to mean public and private hospitals.

12   Defined as a diagnosis that developed *after the* patient was admitted to hospital.

Unfortunately, the department is not currently fulfilling either the role of system manager or system leader well. Its processes for detecting potential quality and safety problems are fragmented and of little use to clinicians. It is doing far too little to lead and support clinical improvement, instead leaving Victoria's 86 health services to individually reinvent processes for strengthening safety and quality.

Clinicians and chief executives cannot provide the best possible care without a strong system that gives them the right information, resources and incentives to do so. Excellence in care cannot become widespread when the department does not identify local innovations and improvements and spread them across all hospitals. Care cannot reflect international best practice when the latter is evolving at a pace that no clinician can match, and when the department is not helping them to keep up by monitoring, distilling and disseminating new evidence.

Victoria should strive to be at the forefront of healthcare in Australia and internationally. Many prerequisites for high-quality and safe care are already in place here. However, it cannot occur in the absence of central oversight, leadership and support. For our hospitals to get there, the department must back them with deep ambition for excellence and expertise to support improvement. The department has fallen behind on both fronts. This review aims to develop an understanding of the current status of hospital quality and safety in Victorian hospitals, how we got here, and what we can do to improve.

The stimulus for this review

In 2013 and 2014, seven babies died from avoidable and potentially avoidable deficiencies in care at Bacchus Marsh Hospital. These deficiencies were not detected or addressed until 2015.[13] Subsequent reviews found the responsible health service, Djerriwarrh Health Services ('Djerriwarrh'), failed to respond appropriately to a number of safety breaches, complaints and warning signs about the poor quality of obstetric care provided at the hospital.[14]

The tragedy has been a wake-up call for Victorians. The public and the media have rightly asked why the hospital's management and board did not prevent or address the problems, and why the government did not find out about them until it was far too late.

Despite a national system of professional regulation for healthcare practitioners and a national system of hospital accreditation intended to ensure hospitals maintain specified standards of internal systems and processes; and despite local oversight by an independent board and by the Department of Health and Human Services, the tragedies at Djerriwarrh still unfolded without intervention. Consequently, some are concerned that if serious failures in safety and quality of care could occur in one hospital over a long period of time without government knowledge, they could be occurring in any number of other hospitals.

13   In addition to the seven potentially avoidable deaths in 2013 and 2014, a review of stillbirths and newborn deaths at Djerriwarrh Health Services going back to 2001 has recently been completed, with additional open disclosures currently underway.
14   Throughout this report, we use 'Djerriwarrh Health Services' to refer to the board governing Bacchus Marsh Hospital (which also governs Melton Hospital). 'Bacchus Marsh Hospital' is the hospital campus where the avoidable deaths took place.

The scope of this review

The Minister for Health has drawn a line in the sand under the events at Djerriwarrh. At her request, the Department of Health and Human Services commissioned this review of its systems for assurance of hospital quality and safety in Victoria. The review panel was charged with identifying these systems' underlying weaknesses and drawing up a blueprint for the future. The review panel consisted of:

- Dr Stephen Duckett, Director, Health Program, Grattan Institute (chair)
- Ms Maree Cuddihy, Chief Executive Officer, Kyneton District Health Service
- Associate Professor Harvey Newnham, Clinical Program Director of Emergency and Acute Medicine and Director of General Medicine, Alfred Health.

The panel was supported by two full-time staff seconded to the review for its duration: Danielle Romanes, a senior associate at Grattan Institute, who served as the review's lead writer, researcher and project coordinator, and Jonathan Prescott, acting manager of Safety Programs in the department, who ran the review's consultation process and provided research and logistical support. Elsa Lapiz in the department's System Intelligence and Analytics branch worked intensively over several months to develop the analytics for this report. The review was only able to achieve its task because of the dedication, diligence, hard work and skills of Danielle, Jonathan and Elsa.

We were also assisted by a number of part-time staff who helped with research, editing and organising: Leah Ginnivan, Priyanka Banerjee and Tom Crowley.

This report's focus was governance of safety and quality of care in Victoria by the department. We did not assess the governance of safety and quality *within* hospitals, except as it was affected by the overall system governance issues.

Similarly, our recommendations focus on what the *department* can do to strengthen care. As we show, it can do a lot. Ultimately, however, it is those at the front lines of care that are best positioned to drive a system-wide transformation. Change of this kind needs to engage clinicians and be embraced by them.

While many of our recommendations apply to both public and private hospitals, the report's greater focus is on the public system where the department and government have a greater involvement in governance (e.g. through the appointment of members of boards).

The panel has responded to the formal request for advice contained in the review's terms of reference, which can be found at Appendix 1 of this document.

We defined quality as *care that is safe, effective and patient-centred*. Safety, defined as *freedom from harm when receiving medical care*, is the most critical aspect of quality, and is the main focus of this review. We examined the role of the department in monitoring the safety and quality of all patients in both public and private hospitals, and provide advice on ways to strengthen system oversight and clinical improvement cultures. We use the term 'clinical governance' to refer to the systems and processes that health services need to have in place to be accountable to the community for ensuring that care is safe, effective, patient-centred and continuously improving. Where we found quality and safety monitoring systems to be inadequate, we have outlined how they might be brought in line with contemporary best practice.

Our aim is to recommend changes so that:

- the department ensures hospitals are monitoring and improving the quality of care they provide
- the department strengthens its own oversight of hospital safety and quality in order to detect and investigate early warning signs suggesting potential failures of clinical governance
- the community can verify that system and hospital governance arrangements identify and rectify defects in care, and continuously improve the processes and outcomes of care
- health workers welcome the department as a partner in improving quality and safety of care
- the culture of the department and health services will prioritise patient safety and continuous improvement of care.

This is the panel's final report. It contains our assessment of the problems in the department's safety and quality assurance and our recommendations for change.

We believe an audacious goal for improvement is needed and have therefore proposed 'targeting zero' for avoidable in-hospital harm. That is, we believe all members of the sector should be striving to ensure no preventable harm occurs. The community expects no less, and it is clear that clinicians wish to work towards this goal. We have set out practical steps for the department and the health sector to work towards 'targeting zero' and, importantly, to measure progress.

Wherever possible, we have avoided recommending expensive reforms. In most cases, we have recommended legislative and organisational changes that will ensure better use of *existing* resources. However, we have not hesitated to recommend spending where it is needed and likely to deliver significant improvements in care. Lives are precious.

Investing in safety is also worthwhile on economic grounds. Reducible harm costs the system at every turn through longer and more expensive hospital stays, readmissions, ongoing treatment and care requirements, and insurance payouts. As hospital quality expert Don Berwick noted, improving quality is a pathway to financial sustainability.[15]

One urgently needed investment is in mental healthcare in acute and forensic facilities, where safety and quality has deteriorated alongside systemic funding restrictions. Over the past 20 years Victoria has gone from the state with the highest mental health spending per capita to the lowest. Increased demand for services over this period has been underfunded, resulting in restrictions on access and lowered quality in acute care. Consequently, there are now many more people who have untreated mental health needs and are at risk of harming themselves and others.

15   Berwick (2016)

Further investment must also be made in strengthening governance of Victoria's small rural health services. These services play a very important role in keeping people close to their families in times of illness and vulnerability. They can also be life-saving. When people living in our rural towns are critically injured these services are the difference between a short trip to a local hospital providing urgent care and a long uncertain drive to a regional hospital.

It must be recognised that this commitment to rural, locally managed services comes with trade-offs. It is expensive to govern 86 health services well, and a resource-constrained department has managed the trade-off through an increasingly narrow interpretation of its role and responsibilities for health services. At the time of the perinatal deaths, there was a false assumption that the resources, expertise and accountability for safe and continuously improving care existed already in every health service, who therefore required neither support nor vigorous oversight. This is not acceptable. Members of the community should be able to seek treatment in any of our hospitals, secure in the knowledge that systems are in place to ensure that care is as safe as possible.

No person has the power to undo the terrible events at Djerriwarrh Health Services, or to restore the young lives that were lost there. Nor can any system completely remove the risk inherent in healthcare. But a much safer health system for Victorians is achievable. Our consultation with clinicians, regulators and administrators across the hospital system revealed a deep commitment to patient safety and significant will to achieve excellence. This report's broad scope reflects the depth of the Minister's ambition for improving the safety and quality of care in Victoria. What is needed now is support and investment from government and leadership and commitment from the department to make this possible.

Report of the Review of Hospital Safety and Quality Assurance in Victoria
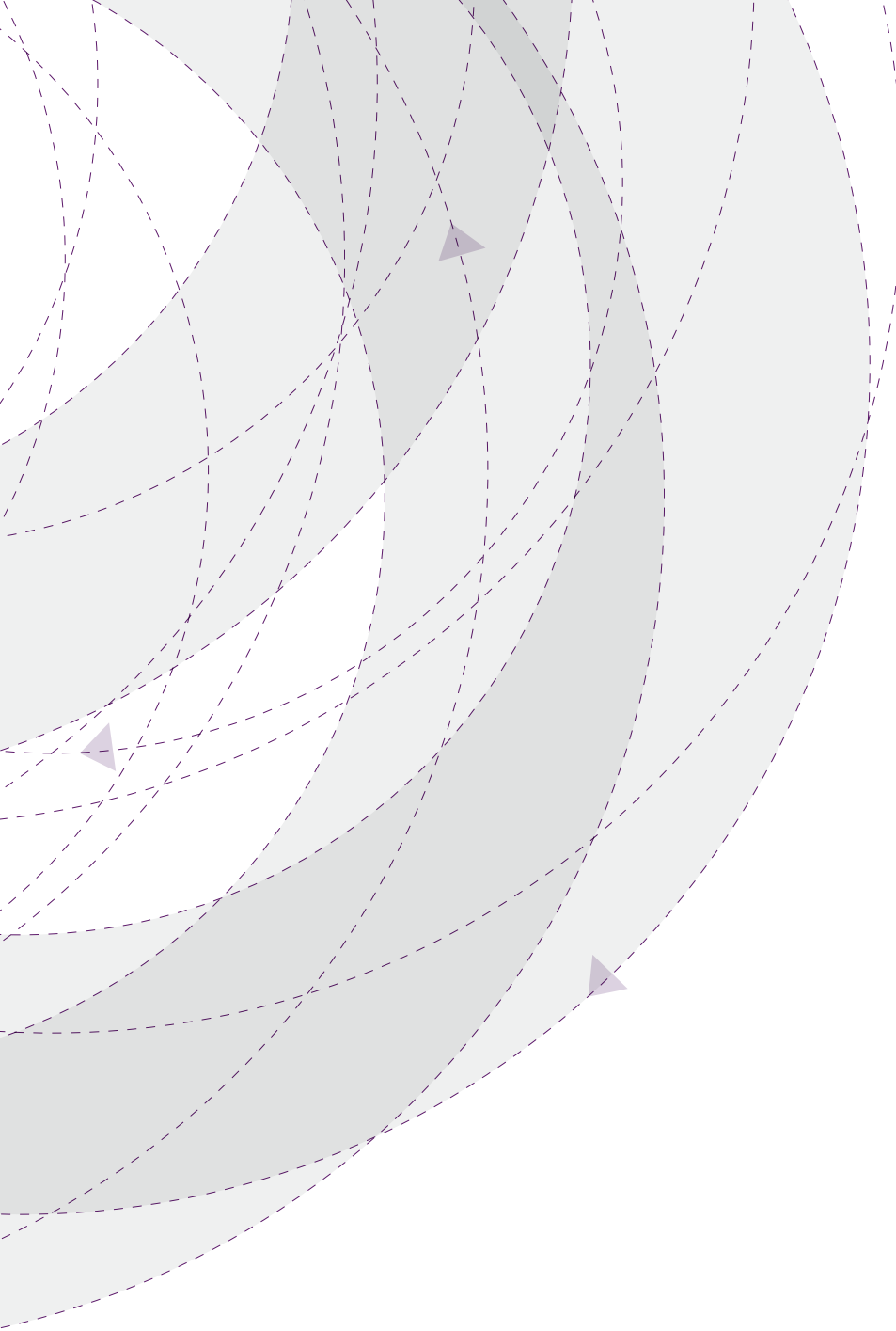
Chapter 1: Victoria's long patient safety journey

Twenty years ago a landmark study revealed the enormous risk patients were taking, often unknowingly, when they entered Australian hospitals.[16] One in 10 hospital admissions involved a complication of care. The majority resulted in no harm or only temporary harm, but one in seven of these complications caused permanent disability, and one in 20 complications resulted in the patient's death. Though treatment always comes with some risk, a detailed analysis of the cases found that over half of the complications were preventable.

That study was meant to be a call to action for clinicians and health system managers. With the scale of the problem so clearly demonstrated, many hoped the health sector would turn to the task of understanding the complex causes of safety incidents, and work aggressively to mitigate them.

But progress was slow. Ten years after the release of the study, the authors observed that it was impossible to state with confidence that patients were any safer than they had been a decade earlier.[17] Safety scandals continued across Australia,[18] exposing systemic weaknesses in hospital oversight and governance. Governments seemed reluctant to invest in overhauling their safety governance until after a major disaster had been uncovered in one of their own hospitals. Clinical governance systems developed along separate paths in the different states.[19]

Still, since that initial Quality in Australian Health Care Study, a stronger focus on safety has emerged across the states and territories. In 2004 state and territory health ministers agreed that each state should have an incident reporting system in place, incorporating incident monitoring, investigation and analysis, and steps taken to improve safety.[20] From 2007 all states have reported publicly on their most severe avoidable complications.[21] Most states have also adopted open disclosure of severe avoidable harm to patients, along with surveys of patient experience and greater monitoring of mortality and unplanned readmissions. Some states have begun to use their routine data to monitor complication rates, allowing them to give hospitals feedback on their relative performance and to identify and intervene in hospitals with persistently poor performance. The safety frameworks that have emerged use monitoring to identify opportunities for learning and improvement, rather than singling out individuals for blame.

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16   Wilson, *et al*. (1995)
17   'Ten years on can we confidently state that health care is safer for patients? Unfortunately, the answer is no.' Wilson and Van Der Weyden (2005), pp. 260–261
18   Including scandals at Campbelltown and Camden hospitals of the Macarthur Health Service in Sydney's southwest in 2003, at Bundaberg in 2005, at Bega in 2008, at Canberra Hospital in 2000, at King Edward Memorial in Western Australia in 1999, and at the Royal Melbourne Hospital in 2002.
19   Spigelman and Rendalls (2015), pp. 56-73
20   Stavropoulou, *et al*. (2015), p. 828 Australian Council for Safety and Quality in Health Care (2005), p. 11. Many states had established incident reporting systems previously, with varying coverage of these issues. The agreement did not specify how data should be collected or used.
21   Sentinel events were reported first through the Australian Institute for Health and Welfare's 'Sentinel events in Australian public hospitals' series, then through the Australian Commission on Safety and Quality's 'Windows into safety and quality' series, and now through the Productivity Commission's annual 'Report on Government Services'.

But worrying gaps in monitoring still persist. Information on safety can be fragmented across multiple organisations, meaning that a global view of a deteriorating safety environment can be slow to emerge. Despite their immense sentinel value, routine data and complaints data are underutilised for monitoring and predicting harm. Instead, most states monitor only a narrow range of safety indicators, and over-rely on individual incident reports rather than analysing trends.[22] As a result, many health departments in Australia do not know the true rate of complications in their hospitals, how safety varies across the different hospitals they oversee, or whether safety is improving over time. They mostly lack the information required to identify concentrated risks to patient safety, and even the knowledge of whether their existing safety policies are working.

Accompanying these gaps in external performance monitoring are gaps in internal quality improvement strategies. Because of the lack of comparative data on safety, hospitals in many states do not know how their safety outcomes compare with their peers. As a result, they may not know when their performance is unusually poor. This is especially the case for smaller hospitals, which are generally left out of benchmarking exercises and may lack the expertise and resources needed to perform comprehensive internal case reviews on their own. Overall, there is a continued reliance on boards, a weak accreditation process and a tendency to view issues on a case-by-case basis rather than an analysis of broader trends. This provides a fragmented system of oversight, further weakened in some cases by a hierarchical culture that inhibits collegiality and collective problem solving.

This is the context in which the tragedies at Djerriwarrh unfolded. Between 2013 and 2014, seven babies suffered deaths that could have been avoided were it not for a confluence of lethal gaps in staff capabilities, risk management and clinical governance. If red flags contained separately in clinician complaints, routine data and external mortality reviews had been linked, intervention might have occurred much earlier. Similarly, if information provided to the Consultative Council on Obstetrics and Perinatal Morbidity and Mortality, or outcomes of earlier investigations had been made available earlier, deaths may have been prevented. But as it was, years passed before the problem was exposed and the department was able to respond.

This is knowledge that the families of the lost infants, and those responsible for oversight of the hospital, must live with.

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22   Stavropoulou, *et al.* (2015), pp. 826–866

Djerriwarrh Health Services is a symptom of broader problems

> When [organisations] do acknowledge crises, they may address them as one-off catastrophic events to be dealt with and forgotten before moving on. This fails to recognise what crises really are and makes the organisation susceptible to further catastrophic failures. Crises are often an extreme manifestation, precipitated by force of circumstance or misfortune at the time, of underlying problems within an organisation that create the latent conditions in which a crisis can arise... Viewed in this light, crises also provide real opportunities for organisations to reflect, learn, develop and grow.[23]
>
> **Blair Sadler and Kevin Stewart, The Health Foundation (U.K.)**

> Djerriwarrh Health Services was not special. It had fundamental flaws in governance that could happen anywhere.
>
> **Andrew Freeman, CEO of Djerriwarrh Health Services (appointed October 2015)**

We believe that the factors that led to the undetected cluster of avoidable deaths at Djerriwarrh are not isolated to that health service. While clusters of avoidable deaths are rare events that are unlikely to be occurring elsewhere in the system, harm is –as in all hospital systems – commonplace and the mechanisms in place to prevent harm and improve care are not uniformly strong. Departmental oversight is weak across the system, and local oversight is weak in a number of hospitals and smaller hospitals in particular.

Complications from care are widespread

Complications of care are far from rare in our hospitals. Every year, more than 300,000 patients suffer a complication in Victorian hospitals,[24] with more than 600,000 complications in total (see Table 1).[25] At least 70,000 of these patients suffer a preventable complication such as malnutrition or pressure ulcers.[26] Every year there are also around 250 surgical deaths in which issues with clinical management contribute[27] and around 20 neonatal deaths in which inadequate care contribute.[28]

Table 1: Incidence of all hospital-acquired diagnoses in Victorian hospitals, 2014–15

Total separations	Public	Private	All
... with a hospital-acquired diagnosis	220,047	84,672	304,719
... without a hospital-acquired diagnosis	1,402,551	927,254	2,329,805
All	1,622,598	1,011,926	2,634,524

Source: Analysis of Victorian Admitted Episode Dataset undertaken for this review

23   Sadler and Stewart (2015), p. 12
24   Analysis of incidence of all hospital-acquired diagnoses in public and private Victorian hospitals in 2014–15. The hospital routine dataset (VAED) collects information on the diagnoses the patient had on admission and those that arose during the course of the patient's stay in hospital. We have used the term 'complication' here as a shorthand for the latter diagnoses.
25   Based on analysis of the incidence of all hospital-acquired diagnoses classified by CHADx major class in public and private Victorian hospitals in 2014–15.
26   Based on analysis of the incidence of all Australian Commission on Safety and Quality in Health Care-identified 'priority complications' in public and private Victorian hospitals in 2014–15. Australian Commission on Safety and Quality in Health Care (2016a)
27   See Beiles (2014), p. 52
28   The Consultative Council on Obstetric and Paediatric Mortality and Morbidity (2014), p. 163

Victorian hospitals are certainly not the only ones in the world, or even Australia, where patients suffer harm and complications. A lack of comparable data makes it difficult to compare rates of complications in Victoria against other Australian states,[29] but landmark reviews performed in other countries have also found very high rates of harm,[30] with a seminal United States study reporting that medical errors caused more deaths than motor vehicle accidents, breast cancer, or workplace injuries.[31]

Where Victoria clearly differs from other jurisdictions is in the department's leadership and resourcing of safety and quality, which for years has reflected less focus on driving down avoidable harm and improving quality of care. This has also been reflected in significant resource reductions within the department as a result of public sector budget cuts. The diluted focus on safety and quality has developed in spite of the efforts of many dedicated departmental staff who have called for change but lacked the authority or resources to achieve it.

This review found the department has not been fully exercising its leadership of the system to drive improvement, or to create economies of scale in centralised data analysis, performance benchmarking and common improvement resources. There has not been a deliberate diminution of commitment to a high-quality system, but rather a lack of focus on safety and quality and a false assumption that health services will just take care of it. This is not the case. While health services have made progress in strengthening their quality and safety,[32] in the absence of departmental leadership, quality will remain highly variable, and even the best hospitals will be far from the forefront of international practice.

These deficiencies in leadership and management are felt more acutely in some areas of the health system. It has been 13 years since the Victorian Institute of Forensic Mental Health identified that demand for forensic psychiatric beds had outstripped availability, leaving prisoners with serious mental illness untreated and at increased risk of self-harm, suicide, violence to staff, exacerbation of their illness in the prison environment and reoffending after being released. Since then, the problem has worsened and concerns have continued to be raised, but without redress.[33]

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29 Victoria does not appear to have higher rates of sentinel events (complications that should never occur) than other Australian jurisdictions, although the data are not particularly comparable (see Steering Committee for the Review of Government Service Provision (2015a), tables 11A.89–11A.97), and a recent audit raised concerns about potentially widespread under-reporting. VAGO 2016 patient safety audit, p. xi.

30 Baker, et al. (2004) Davis, et al. (2002) Vincent, et al. (2001)

31 Institute of Medicine (2000)

32 'At all of the audited health services, there are indications that progress has been made towards a positive safety culture.' Victorian Auditor-General's Office (2016b), p. 3

33 The hospital's 116-bed capacity was originally based on information available in the early 1990s regarding the requirement for forensic mental health beds and relied on the Department of Justice's forecast that the prisoner population would peak at 2,500 before descending. As at January 2014, the prison population had reached 5,857. Victorian Ombudsman (2014a), p. 119

You have to be willing to acknowledge your problems before you can remedy them. If I were to characterise the state of public and private hospital care in the state of Victoria, I'd have to say that this first step is lacking. Both the public and private hospital systems and the government regulators who oversee them are in a state of denial with regard to the level of harm being caused to the public by inadequate attention to quality and safety deficiencies.[34]

- Paul Levy, former president and CEO of Beth Israel Deaconess Medical Centre in Boston, Massachusetts; Deakin University, Thinker in Residence, 2016

As other states have been building governance capacity and quality and safety, Victoria has lagged behind. Staffing caps, fluctuations in governmental support for priorities and the fracturing of responsibilities across branches have undermined the effectiveness of departmental support. Even after it doubled safety and quality staffing after the deaths at Djerriwarrh were uncovered, the department still employs a fraction of the resources used in comparable states to monitor rates of harm in hospitals and support clinical improvement. The department's Quality and Safety branch had 14 full-time equivalent staff before the Djerriwarrh tragedy unfolded, and staffing has subsequently been increased to 24 staff, compared with 82 in New South Wales' Clinical Excellence Commission.[35]

Meanwhile, the department has left all of Victoria's 86 health services to design their own systems for strengthening safety. With little central support, many services have struggled, with very limited access to performance benchmarking by the department. Left without the capacity to analyse and compare their performance with their peers, the next best option may be participation in commercial services, which are both voluntary and costly.[36]

Hospital care in Victoria is characterised by pockets of excellence, not consistent excellence

During our consultations we heard stories about excellent practice in some hospitals. Some of our specialist hospitals aspire to be the world's best and benchmark their outcomes internationally. Many clinicians in Victoria have international reputations for their research and clinical innovation. The leadership of many hospitals reflects a deep commitment to patient-centred care.

Our weakness is that we do not strive anywhere near hard enough to make this excellence commonplace.

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34 Levy (2016)
35 The Clinical Excellence Commission's access to and use of data is also very different. All of its staff are responsible for reviewing data relating to their program areas, with nine staff dedicated to analysing incident and mortality data. By contrast, in Victoria there has never been more than one person managing incident data and none have been dedicated to analysing the data, due to its poor functionality. Mortality data, which is more straightforward to analyse, is handled outside the branch. A full list of the CEC's safety and quality activities, contrasted with the department's, are contained in Appendix 4.
36 Only 14 public health services have access to the 'Dr Foster' package, while 17 services (with significant overlap) participate in the Health Roundtable.

Reflecting this, the available comparative data on Victoria's performance show a mixed picture on safety. The most recent national data show that, compared with New South Wales (the most similar comparator), Victoria is stronger on some quality indicators (such as adverse effects of drugs) and weaker on others (such as surgical misadventures).[37] Similarly, the most recent available data shows that Victoria does better than some states in hospital accreditation, and worse than others.[38]

Unlike the situation for efficiency – where Victorian hospitals are unequivocally the most efficient – the quality picture is one that shows clear potential for improvement on a number of fronts.

Further, we believe that Victoria's improvement goals should ultimately be determined not by comparative performance but by a commitment to patients. Few patients would consider their avoidable complication to be acceptable if the risk of it occurring was marginally lower than in another state. What would matter to them – or us if we were those patients – is that it could have been prevented.

For this reason, we have followed the Victorian Transport Accident Commission's 'towards zero' goal for avoidable harm. There is no virtue in benchmarking to a substandard norm when it comes to safety – in hospitals as on roads. Lives are precious. The department's policies and ambitions for safety and quality of care should reflect this.

Clinicians and hospitals can't access critical information

Information is the lifeblood of a continuously improving hospital system, and it is not flowing in Victoria. Much essential data are not collected, not used, or not made available in a convenient form, limiting hospitals' and clinicians' ability to use information to identify opportunities for improvement and strengthen care.

For instance, though data are routinely collected on preventable surgical and perinatal deaths, the department – and often, hospitals – do not access this information. There is no standardised collection of patient reported outcomes – data which tell you how much a patient's pain and functionality improved after treatment – data which are now routinely collected and published in England for a number of conditions.[39] Only a fraction of in-hospital complications are centrally monitored and fed back to hospitals. Neither hospital managers nor the department know the full number of complaints against individual practitioners, even though complaints are a strong predictor of future issues with a clinician.

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37   Steering Committee for the Review of Government Service Provision (2015b). The data used for these comparisons comes from the national routine datasets. Some of the differences may be the result of coding differences between states, although the mixed results probably mean this cannot explain all the differences.

38   In 2015, 89 per cent of Victorian hospitals met all required actions on initial assessment during accreditation, which is more than the 21 per cent in South Australia and 79 per cent in New South Wales, but fewer than the 100 per cent in Queensland.

39   These are known as Patient Reported Outcome Measures. These have been collected by all providers of NHS-funded care since April 2009.
    NHS England (2016c)

These issues stem from fragmented custodianship of data across the system combined with underuse of existing data. For example, the Victorian Managed Insurance Authority has been unable to secure the patient safety information it needs to fully support health services with risk management.[40] Widespread use of paper-based rather than electronic record systems and the absence of a unique patient identifier mean that it is difficult to track patient journeys across the system, or to analyse care using the rich information in patient records. Failure to fully use the detailed information on hospital-acquired complications in routine datasets has meant that the department has missed cases of underperformance.

The department has immature systems for monitoring safety and quality

There is not an effective framework for monitoring safety and quality. There are some indicators and the sentinel event program, however the timeliness and effectiveness of these programs are limited.

The Royal Women's Hospital

Departmental staff acknowledge that performance meetings, until the last few years, concerned themselves primarily with budget and activity data. More recently, the department has broadened the scope of these meetings to include patient care and governance issues, although the data available [...] is limited and would provide little basis for the department to probe governance issues.

The Australian Commission on Safety and Quality in Health Care[41]

The department's performance monitoring framework is not designed to detect catastrophic failings of the kind that occurred at Djerriwarrh Health Services. In fact, Djerriwarrh received excellent performance assessment scores and was successfully accredited on two occasions over a period in which it had catastrophic failings in care and clinical governance.

An independent review found that at Djerriwarrh, the department's processes were not capable of detecting significant deficiencies in clinical governance, that the department lacked a robust capacity to undertake routine surveillance of serious clinical events other than sentinel events, and that it lacked a robust capacity to respond appropriately to the incident reports it does receive.[42]

We conducted a broader review into the department's systems for all hospitals (not just Djerriwarrh Health Services) and came to the same conclusion.

40   Victorian Auditor-General's Office (2016b), p. xi
41   Picone and Pehm (2015)
42   Ibid., p 14-15.

The department has immature systems both for routine monitoring and more occasional investigation of serious harm. Despite the immense volume and diversity of types of harm in the system, monitoring is focused on a small number of safety indicators,[43] often with limited clinical usefulness.[44] The department is now nine years behind leading states in using routine data to monitor hospitals' complication rates.[45] It is eight years behind its own commitment to establish a mechanism for auditing clinical governance within health services.[46] The last state in Australia to implement a statewide incident reporting system,[47] Victoria's system is plagued with design and implementation issues that make it almost useless for analysing statewide trends in patient safety. To date, the 400,000 incident reports sitting in the system have never been systematically analysed.

Meanwhile, reviews of preventable mortality and severe morbidity are undertaken by expert bodies who operate outside the department, do not routinely share information with it and often do not inform and investigate unsafe practitioners when they are identified. Their case review processes investigate individual incidents rather than trends – limiting their usefulness as a means of improving safety. At Djerriwarrh, the deaths were picked up by an external consultative council two years after the cluster of avoidable deaths began. The council's review processes were not designed to detect the cluster and likely would have missed it were it not for the serendipitous fact that one member happened to sit on both the stillbirth review committee and the perinatal mortality review committee, and eventually noticed the volume of preventable mortality cases for the hospital and the similarities between them. This system is obviously inadequate.

A dysfunctional incident reporting system means that potentially useful information about recurrent safety breaches is often unreported, misclassified or lost before it reaches the department. The limited number and validity of relevant performance indicators means that hospitals cannot be held to account on broader and more meaningful aspects of safety and quality. An inability to utilise and integrate hospital data fully means that the department is failing to fulfil its key role as system manager in aggregating, integrating and analysing information on safety, with the result that patients suffer the consequences.

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43 The King's Fund describes them as 'very high-level, very limited'. Ham and Timmins (2015), p. 26. This review's terms of reference recognises that the performance monitoring system is not yet a mature one. It is not clear why this is the case when it needn't be, or why sufficient progress on a recognised problem has not occurred.

44 For example, the hospital standardised mortality rates it monitors have doubtful validity and reliability. Bottle*, et al.* (2011) Lilford and Pronovost (2010) Mohammed*, et al.* (2009) Scott*, et al.* (2011) Shojania and Forster (2008)

45 Queensland has been using statistical process control techniques to monitor trends in patient outcomes for selected indicators since 2006. Duckett*, et al.* (2007), pp. 571–575

46 As Picone and Pehm (2015) note, 'The department issued the Victorian Clinical Governance Framework in 2008... noting that the department will develop an audit mechanism for clinical governance within health services. It does not appear that an audit mechanism had been developed nor have any audits occurred.', p 14.

47 Victorian Auditor-General's Office (2008)

Some boards lack the capacity to monitor their hospital's safety and quality

The failings at Djerriwarrh Health Services are considered the responsibility of its board, which has since been dissolved. We do not dispute that this is where responsibility resided. However, we question the extent to which effective ministerial appointment processes and department oversight existed *in the first place* to ensure that the board had and was exercising the skills, information and expertise necessary to uphold its governance responsibilities. After all, the directors of Djerriwarrh Health Services were recruited through the same process, and received the same amount of support, as directors on any other public hospital board. We raise this not to extend blame, but rather to highlight the likelihood that the same capacity problems currently exist on a number of other hospital boards.

Djerriwarrh Health Services had an avoidable failure of governance

The tragedy that occurred at Djerriwarrh cannot be followed by a business-as-usual approach to safety and quality. Many of the department's failures that are outlined in this report have been raised in three independent performance audits over the past decade but have still not been adequately addressed.[48] As the Auditor-General noted in his most recent report:

> The audit found that there have been systemic failures by [the department], indicating a lack of effective leadership and oversight... Some of these issues were identified over 10 years ago in our 2005 audit ... [The department] is not giving sufficient priority to patient safety. In doing so, it is failing to adequately protect the safety of hospital patients.[49]

Instead, the department has instigated further reviews, commissioning expensive consultancies and services, and establishing various kinds of expert committees that ultimately result in little tangible benefit for patients.

A fundamental shift must now occur in the department's approach to safety and quality. The focus on safety and quality in the department needs to be elevated in every way – organisationally, in ambition, in terms of performance monitoring and support to health services, but above all, in terms of action.

The steps the department has taken so far are encouraging. Once it became aware of the cluster of deaths, the department acted immediately to support the Djerriwarrh Health Service to protect patient safety, investigated the deaths, and supported the Health Service to engage in open disclosure with the affected families. It also sought an external review of its own conduct and made the report public quickly after it was received. Such openness and transparency in dealing with failures of care is crucial. It allows us to identify what went wrong and what must be done differently in future.

48   Victorian Auditor-General's Office (2005) Victorian Auditor-General's Office (2008) Victorian Auditor-General's Office (2015a)
49   Victorian Auditor-General's Office (2016b), p. vii

The department must now take every measure necessary to ensure, as quickly as possible, that gaps in its oversight and support of hospital safety are filled. Victoria should consider this an opportunity to redefine best practice in Australia and abroad, drawing on the hard-won lessons of other jurisdictions.

All our health services must rise to the challenge. None can afford to disregard the lessons of Djerriwarrh. All have room for improvement. All should look to the best hospital systems in the world, which are never complacent about quality but rather are constantly striving to build and improve upon past success.

The way forward

The rest of this report sets out a blueprint for improved safety and quality in Victorian hospitals. In Chapters 2 and 3 we focus on hospital governance and oversight, and recommend ways to strengthen the safety nets in place to protect patients from catastrophic failings in care. In Chapters 4 and 5 we have focused on reforms that will rebuild the system's overall capacity for excellence through continuous improvement and a culture of candour and transparency regarding care.

This dual focus is important. In the wake of hospital disasters, there is often a tendency to focus exclusively on policies to strengthen detection and inspection of problems. Such policies are legitimate and, in Victoria's case, sorely needed. But it is important to recognise that prevention is as least as important as detection. Better departmental support for all hospitals to continuously improve their safety and quality of care will save lives in future.

Behind our recommendations are the following core principles, which steered our thinking and arose from our observations of what is missing, the evidence on what works and feedback from stakeholders on what is needed.[50]

First, **efficiency will be maximised by prioritising safety and quality**. There is nothing more inefficient than for a patient to become sicker through receiving care. The department must cease to rest on its laurels as the overseer of Australia's lowest-cost hospitals and instead pursue *true* efficiency of care. This means investing in continuous improvement and ensuring that hospitals are effectively held to account for safety and quality as they are for finances and access.

Second, **a rigorous approach to improvement must underpin change**. In the wake of this review, the department must avoid the temptation to *do* something rather than *achieve* something with no regard to waste or opportunity cost. Instead, all of the improvement work it funds must be selected on the basis of evidence. Where a project is new or experimental, the framework underpinning it must involve measurable goals, monitoring of impact and iteration on the basis of that impact.

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50   Adapted from Berwick's 'Era 3 for Medicine and Healthcare'. Berwick (2016)

Third, **measurement must be meaningful**. Hospital care is extraordinarily complex and the department's measurement of safety and quality must reflect this. At the same time, the department must avoid measurement for the sake of it. It should pursue meaningful measurement by investing in data quality and refining its overall mix of measures over time. Further, it must ensure – by providing interactive tools, granular data and statistical training – that the data it collects meaningfully improves the ability of frontline staff to deliver excellent care.

Fourth, **the system must develop a culture of candour**. In order to restore the community's trust in the Victorian hospital system, the department must take significant steps to improve transparency at every level of the hospital system. This can only be achieved through greater public reporting of outcomes data and support for a just culture in hospitals. From patients through to the Minister, every individual must be encouraged to ask questions and speak candidly about problems without fear of retribution or being ignored. Improvement simply cannot occur without open and honest conversations about the opportunities for it.

Fifth, **the hospital system must be patient-centred**. The department and Victoria's hospitals exist to serve patients. But throughout this review, we have repeatedly seen patient interests and safety in particular taking a backseat to other, lesser aims in system management. Further, it is clear that effective engagement is widely seen as an optional extra for hospitals, rather than a core strategic priority at every level of the system. This is unacceptable and must change. The department must model an expectation of patient-centred services and hold hospitals to account for delivering them.

In espousing these principles, we acknowledge that they are already at work in some hospitals, in some clinical departments and indeed in parts of the department. We saw them reflected in the ideas and constructive criticisms of hundreds of people who engaged with the review through public submissions, consultations, conferences and workshops. Yet these principles need to be shared across all actors in the Victorian public hospital system. This requires them to be embedded in the culture and design of the department and hospital system, and not overwhelmed by other pressures. It is for this reason that we have adopted them as a guiding frame.

The recommendations set out in this report are not utopian. Some were made in Victorian Auditor-General reports more than a decade ago. Most are already in place in other comparable jurisdictions in Australia and overseas; implementing them would bring Victoria in line with practices that have been in place for years in other states.

However, we recognise that the recommendations are ambitious in light of capacity and cultural issues in the department, and particularly in light of the department's previous record in following through on commitments it has made in response to reports much like this one. A fundamental reorientation of the department's role in driving quality improvement, and a fundamental rebuilding of its capacity to deliver effective support to hospitals, is required. An overview of our recommendations for this is summarised below.

To ensure our recommendations are implemented properly and within a reasonable timeframe, we propose that the department develop a detailed plan and timeline for implementation of this report's recommendations, and report progress against it to the Minister on a quarterly basis. The Victorian Auditor-General should also perform a further audit at the three-year point.

Recommendation 1.1:

That:

1.1.1.   the department develop a detailed plan and timeline for implementation of this report's recommendations, and report progress against it to the Minister on a quarterly basis

1.1.2.   the Victorian Auditor-General's Office conducts its next audit of patient safety by 1 July 2020.

Good quality starts with leadership

Leadership is essential to quality and safety. The extensive literature on quality and safety in healthcare demonstrates that boards and hospital executives must prioritise, pursue and assure high-quality care, setting an example for all staff. The National Safety and Quality Health Service Standards operationalise this by making 'Governance for Safety and Quality in Health Service Organisations' the first standard, setting the framework for all others.

The *Health Services Act 1988* (Vic) also accords quality a priority place. Section 9 of the Act, which specifies the objectives of the Act, lists as the first objective ensuring that 'health services provided by health care agencies are of a high quality'.

A theme of this report is the importance of the department exercising 'system leadership'. That should start with a clear and unequivocal statement about the importance of safety and quality and the commitment of the Minister and the Secretary to the pursuit of excellence in safety and quality.

That phrasing of the objectives in the Health Services Act is now almost 30 years old and should be updated to reflect greater clarity of ambition and expectations. We suggest a new phrasing might be along the following lines:

'Health services provided by healthcare agencies are patient-centred, appropriate and aspire to the highest quality of care and services.'

Recommendation 1.2:

That:

1.2.1.   the Secretary and the Minister each make a clear statement about the very high importance assigned to safety and quality of care

1.2.2.   the Minister seeks to amend the Health Services Act to update the objectives of the Act relating to safety and quality of care.

This report contains many legislative reform recommendations, reflecting the need for broader modernisation of the Health Services Act. The Act reflects a different era of healthcare, when the science of safety improvement was still a nascent field. The Minister should consider this review a broader opportunity to bring the Act into the 21st century, and to strengthen its ambition and clarity of expectations for delivery of safe and high-quality care.

The department must rebuild its capacity for excellence

In order to detect and prevent serious failings in care better, and drive system-wide quality improvement, the department needs to develop its safety and quality improvement capabilities significantly and ensure they are supported by high-quality clinical analytics, a process for rigorously assessing and then funding improvement proposals, and clinical engagement to guide policy development and support implementation.

A new institution to lead quality and safety improvement

The department should elevate safety and quality. It should create an Office for Safety and Quality Improvement (OSQI). The OSQI's core responsibility should be to drive statewide quality improvement in partnership with clinical leaders. Reflecting the importance of its role, the OSQI should be resourced to recruit leaders with deep expertise in quality improvement, and to expand staffing in order to support clinical improvement work. The OSQI's role in driving quality improvement is set out in detail in Chapter 4.

The OSQI would work closely with the Victorian Health Performance Authority (discussed below), Better Care Victoria, the department's Performance and System Design branch and the Victorian Health Services Commissioner. It would develop close and collaborative relationships with like centres for quality improvement (such as New South Wales' Clinical Excellence Commission) in Australia and abroad, be an active participant in national efforts in safety and quality, and support the clinical networks to link into other jurisdictional and national safety and quality initiatives relevant to their improvement priorities.

The OSQI would incorporate the entire Quality and Safety branch and functions from the Clinical Networks, Cancer and Specialty Programs branch (clinical networks) and the Health Service Programs branch's Acute Programs (development of capability frameworks) and Perinatal and Clinical Councils Units (all activities). It would be headed by a chief executive officer, who would report directly to the Secretary. The Chief Medical Officer, Chief Nurse and Chief Allied Health Officer would sit within the office, contributing to the office's work across all its domains and advising on strategic direction.

Use of analytics to drive improvement

The government must develop a specialist health reporting and analytics body – the Victorian Health Performance Authority, which would manage all the department's health data collections. This body would have three key responsibilities. First, it would monitor hospital performance indicators, and feed that information to the department performance monitoring division and to boards. This role is discussed in detail in Chapters 2 and 3. Second, it would use its datasets to identify statewide trends and opportunities in quality and safety, and then feed that information to the OSQI, which would develop policy for quality improvement. Third, it would support transparency in the hospital system by significantly increasing the amount and quality of publicly available hospital performance data. These roles are discussed in Chapter 4.

Independent assessment and funding of improvement work

The OSQI must work closely with the newly established innovation fund of Better Care Victoria. One of Better Care Victoria's core priorities is quality improvement, and it is developing capacity for rigorous evaluation of project proposals. As such, it presents an opportunity to fund pivotal improvement work with an independence that will force greater rigor into departmental priority setting. This role is discussed in Chapter 4.

Clinical expertise to guide policy development and support implementation

The OSQI's improvement work must be aligned with clinical priorities and be delivered in partnership with clinical leaders. For this reason, we have recommended that the OSQI include the clinical networks. The latter must be rebuilt and repurposed to carry out priority clinical improvement work in Victorian hospitals, with significant support and direction from the OSQI.

The OSQI should also engage with the clinical leaders on broader safety and quality policy development. For this reason we have recommended the establishment of a Victorian Clinical Council, which would meet regularly and have responsibility for considering overarching clinical issues of statewide importance (as opposed to specialty-specific issues, which the networks would advise the OSQI on). These roles are discussed in detail in Chapter 4.

Our recommendations

This report contains a large number of recommendations for using this rebuilt capacity to improve detection of risks to patient safety and to lift system-wide performance to prevent them recurring.

In Chapter 2 we set out recommendations for improving **governance** of hospitals so the public can be confident that all hospitals – big and small, public and private – are delivering safe care.

In Chapter 3 we recommend ways to strengthen **oversight** of care by the department so that warning signs are detected and acted on in a timely manner.

In Chapter 4 we lay out a framework for fostering and supporting a culture of continuous **improvement** and clinical excellence in the health sector, including by engaging and empowering clinicians in reform.

In Chapter 5 we recommend developing a culture of **candour** within the health sector through a significant increase in transparency around hospital outcomes and improvement work, and the fostering of just cultures in hospitals so that open and honest conversations about opportunities for improvement can be had.

With each recommendation we have included a maximum expected timeline so that the department's progress can be evaluated in one year and in three years' time.

Setting accountable goals for improvement

Health systems that are committed to improvement set clear and measurable goals and are transparent in reporting their progress.[51] Going forward, the department should do the same.

In this report, we have recommended the department:

- invests in reducing highly preventable, high-impact complications, and in improving statewide performance on key measures of quality (rates of specific readmissions, complications, length of stay and mortality)
- strengthens the power of specialist auditing bodies for surgical and perinatal mortality and morbidity to support improvement in hospitals where severe avoidable harm has occurred
- develops stricter accountability for hospitals to improve patients' experience of care.

These investments are focused in areas where there is often significant room for improvement in care and/or where unaddressed deficiencies in care have a high financial toll[52] and devastating impacts on patients and their families.

51   For example, in 2008 the NHS Scotland commenced the Scottish Patient Safety Programme, mandated by the government, with the aim of reducing mortality in Scotland's hospitals by 15 per cent in five years through quality improvement. Haraden and Leitch (2011) This goal was subsequently revised to a stretch goal of 20 per cent by the end of 2015. Figures published to the quarter ended December 2014 show mortality had fallen by 16.1 per cent. The Scottish Government (2015) As we discuss in Chapter 4, the English Secretary of State for Health has announced a national ambition for the NHS to halve the rates of stillbirths, neonatal and maternal deaths and intrapartum brain injuries by 2030, with a 20 per cent reduction by 2020. O'Connor (2016)
52   VMIA stats on cost impact (30 per cent of payouts).

As this report's preface established, we believe an audacious goal for improvement is needed in Victoria and have therefore proposed 'targeting zero' for avoidable in-hospital harm. To make progress against these goals quantifiable (and therefore for the department to be accountable for progress), we propose that the department develops goals for improvement in these key areas and publicly reports progress against them.

We have not specified the quantum of desired improvement against these goals, nor the feasible timeline for achieving it. The department should do this through consultation with the new clinical networks and their consumer representatives, along with the Victorian Audit of Surgical Mortality and the Consultative Council on Obstetric and Paediatric Mortality and Morbidity. These bodies or the Victorian Clinical Council may also propose additional goals, which the department should accept. Once the department has set its targets and timeline, we propose the following.

Recommendation 1.3:

That:

1.3.1.   by the end of 2017, the department has set and published statewide improvement goals, developed by the clinical networks, for:
- reducing the incidence of high-impact, high-preventability complications
- improving statewide performance on specific readmissions, complications, length of stay and mortality, as measured using the statistical process control indicators
- reducing stillbirths, perinatal mortality and intrapartum brain injuries
- improving patient experience, prioritising domains of experience where consumer ratings are not already uniformly positive, as measured by the Victorian Healthcare Experience Survey.

1.3.2.   each of these goals be clear and measurable, with a defined timeline for achieving them.

1.3.3.   these goals be published on the department's website, with progress against them updated as part of the proposed annual safety and quality report (see Recommendation 4.3.5).

Chapter 2: Better hospital governance

All members of the public should be confident of receiving safe care, regardless of their condition and regardless of whether they are being treated in a big, small, public, forensic or private health service. However, current systems of governance do not reflect this principle. Instead, we have much weaker legislative requirements for oversight of safety and quality in small hospitals versus large hospitals, and in practice, the way that oversight mechanisms are implemented in private versus public hospitals is very different.

To deliver high-quality care, healthcare teams need effective system support. In turn, this means hospitals need to invest in continuously improving care, including monitoring quality and acting if care is found to be below standard or improvement is stagnant. The legislation should be amended to create shared responsibilities between the department, hospital boards and hospital chief executive officers (CEOs) that states that the department and the hospital board are responsible for ensuring that safety systems are in place, and the job of the CEO is to implement those systems and to keep the board informed about the service's quality of care.

In this chapter, we assess the systems governing hospital safety and quality in Victoria. We show that crucially important parts of this system – scrutiny of hospital safety and quality by boards in the public sector, and scrutiny of hospital safety and quality by the department in the private sector – are not working as they should be.

Accountability and responsibility for safety and quality in Victoria's hospital system

When things go seriously wrong at a hospital or health service, the public holds the Minister for Health accountable. This is appropriate: the Minister is the final point of accountability in the health system. The Minister must answer to the people of Victoria and their elected representatives in parliament.

For practical reasons, ministers can delegate their day-to-day responsibilities for oversight of hospitals to the state's health department. The department's role is to serve as the Minister's eyes and ears – and arms and legs. It is responsible for oversight of the hospital system, and quickly notifying the Minister of emerging problems, and supporting the Minister to take remedial action if required.

This responsibility should be enshrined in legislation. However, the *Health Services Act 1998 (Vic)* states only that before making any decision about funding any public hospital or health service, or registering a private hospital, the Secretary to the department must first give consideration to the arrangements made or to be made for monitoring and improving the quality of services provided.[53]

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53   *Health Services Act 1988.*

Hospital boards also have a crucial role in safety and quality.[54] Boards help set the tone of an organisation's corporate culture.[55] They can set priorities for safety and quality alongside financial management, and hold the CEO and other staff accountable. They can signal the priority they place on safety and quality by the time allocated at board meetings, diligence in questions asked and their supervision practices generally. Boards can access and use quality and safety information such as medical negligence claims and investigations by the Australian Health Practitioner Regulation Agency and determine when these signal underlying problems.

In the case of larger public hospitals, these corporate governance functions are reinforced in legislation. Under the Health Services Act, the board must ensure the hospital has effective and accountable systems in place to manage risk, and to monitor and improve the quality and effectiveness of health services provided.[56] The board must ensure the hospital is continuously striving to improve the quality of the health services it provides, and that any problems identified in the quality or effectiveness of these services are addressed in a timely manner.[57] These legislative responsibilities do not apply to smaller hospital boards but tend to be expected of them in practice.

Having parallel responsibilities between the department and boards could serve an important purpose. Hospitals are extraordinarily complex organisations, and no oversight system is perfect. Two oversight systems for hospital safety would mean that if the first fails to pick up a problem, the second would be there to catch it. In this way, patients would be better protected from major system failures.

But as the problems at Djerriwarrh demonstrated, the current division of responsibility for oversight of the system has not worked nearly as well as it could. When there are gaps in both board governance and oversight and departmental monitoring of the system, and those gaps align, serious failures in care can slip through.

Strengthening hospital boards

A board which does not have sufficient understanding of health services and contemporary public health challenges becomes very dependent on the CEO, and often does not know the right questions to ask. In effect the normal balance of responsibilities between board and CEO become distorted, which is a very poor outcome... good governance at the board level is critical for avoidance of issues such as poor clinical care, inappropriate organisational culture (for example, bullying & harassment) and incompetent financial management.

Mary Malone
Former Chair and Board Member

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54 We are using the term 'hospital boards' to include public health service boards and the boards responsible for private hospitals.
55 We are drawing on the 'Tricker model' of corporate governance see Hilmer and Tricker (1994)
56 s 65S (2)(d)(iv)-(v), *Health Services Act 1988*.
57 s 65S (2)(d)(v)-(vi), *Health Services Act 1988*.

At Djerriwarrh Health Services, catastrophic failures in clinical governance occurred at all levels of the organisation, including the hospital board. This review has found that the former board of Djerriwarrh may not be the only board among the 86 in Victoria that has struggled to identify and address problems in a timely way. There are weaknesses in the appointment process for boards across Victoria. For instance, board appointees and applicants are asked to self-assess their own competencies, but they can only answer 'yes' or 'no' to whether they are competent in a particular area. This is a simplistic approach that can disguise significant weaknesses. At Djerriwarrh, four of the hospital's nine board directors assessed themselves as being skilled in clinical governance.

Another reason that Djerriwarrh's board is unlikely to have been an anomaly is that Djerriwarrh Health Services is a moderately sized and resourced service, located on the metropolitan fringe with a large population from which to draw board members. This meant the health service had much greater potential for effective board governance than smaller public hospitals in Victoria, which are 'not of a sufficient size to have dedicated comprehensive safety and quality teams, clinical expertise in board members and often also only have limited access to medical administration expertise.'[58] Despite Djerriwarrh's comparative access to potentially skilled board members, it lacked an independent clinician on the board, which is likely to have impeded the board's understanding of clinical issues.

> I accept that one half of the board needs consumers, accountants, lawyers, farmers, local people etc. But without clinical capital, a board is unable to see real time issues and cannot affect or influence real time clinical safety outcomes.
>
> **Submission from a hospital chief medical officer**

> I am aware that some board chairs have little – if any – in depth understanding of the clinical or financial governance requirements and leave all to the CEO.
>
> **Chair of a rural health board in Victoria**

The gulf between the expectations of boards and boards' capacity is a well-known problem. Weaknesses in board governance have been present at a number of international and Australian hospitals with high-profile failures in care,[59] including Bristol Royal Infirmary[60] and Mid Staffordshire NHS Foundation Trust in England,[61] King Edward

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58 As the terms of reference for this review note (see Appendix 1).

59 It should be noted that major failings in hospital safety and quality have also occurred in systems with more centralised control of hospitals. For example, the safety scandal at Bundaberg Base Hospital developed under Queensland's system of hierarchical control – albeit to a large extent without central knowledge.

60 An inquiry into the very high rate of deaths and adverse outcomes of children undergoing cardiac surgery at the hospital found that its board lacked an effective means of monitoring the CEO or the care provided at the hospital. As the board chair noted, 'There was no tradition or culture in [the trust] that the Board or the committees of the Board should be involved ... I thought that was something that was wrong. I thought the Board should have some knowledge of statistical outcomes [of care], but there was a tightrope to be trod to find a way of easing it into place.' Kennedy (2001), p. 5

61 An inquiry attributed the excess mortality and appalling standards of care at Stafford Hospital primarily to serious failures on the part of the relevant Trust board. Francis (2013), p. 3

Memorial Hospital in Western Australia,[62] and Canberra Hospital in the Australian Capital Territory.[63]

In Victoria recent academic research has highlighted significant gaps in the knowledge and activities of many public health boards, and rural and regional boards in particular.[64] Despite significant improvements in the work of health service boards over the preceding decade,[65] research published in 2013 and 2014 showed that one in five Victorian boards still did not have quality performance as a standing item on meeting agendas[66] and half did not offer formal training on quality – even though 90 per cent of surveyed board members indicated that additional training in quality and safety would be useful.[67] This research also revealed significant information problems in Victorian boards. Half of the boards did not benchmark their service's quality performance against external comparators, but nevertheless almost every respondent believed that the overall quality of care their service delivered was as good as, or better than, the typical Victorian health service.[68]

Throughout our consultations we heard consistently that gaps in capacity are greatest for rural hospital boards. This is very concerning, since these boards oversee delivery of services to communities with often elevated levels of health need[69] in lower and therefore riskier volumes,[70] and with a high reliance on part-time and overseas-trained medical staff.[71] Further, they oversee hospitals that often struggle to recruit medical staff and as a result face much greater difficulties in managing them. Our consultation found that, in many places, both full-time and part-time doctors are resistant to attempts to influence their practice.[72]

62 An inquiry into adverse outcomes at this hospital found the hospital board had no oversight of safety and quality of care. Mclean and Walsh (2003), p. 18

63 At this hospital a clinician approached a board member with serious concerns about unnecessarily adverse outcomes resulting from various forms of neurosurgery and no formal attempt to investigate the allegations ensued. Faunce, *et al.* (2004), p. 113

64 See, for example, Bismark, *et al.* (2014).

65 Bismark and Studdert (2013), p. 3

66 Bismark, *et al.* (2013)

67 Ibid.

68 Ibid.

69 Rural and remote communities tend to have significantly poorer access to primary care. This can mean that illnesses which could otherwise be prevented or treated early on in general practices can progress untreated. One way this manifests is in higher levels of potentially preventable hospitalisations in these area. Duckett and Breadon (2013)

70 Chowdhury, *et al.* (2007) Halm, *et al.* (2002) Reames, *et al.* (2014b)

71 Internationally trained medical graduates have been important for the Australian medical workforce. However, they face many challenges and may not be well supported in addressing these, especially when they are working in regional and remote areas. These challenges may include language and communication issues, adjusting to the way medicine is practised in Australia (including unfamiliar protocols and regulations), and a different patient population health profile. Dywili, *et al.* (2012) Perhaps as a result of these issues, as well as differences in training, IMGs are more likely to have complaints made against them, and for these complaints to be upheld. Elkin (2015) IMGs have reported they are poorly inducted into an Australian context. Dywili, *et al.* (2012) Nair and Parvathy (2012) Organisations that train and employ IMGs need to understand the implications of these issues and have mechanisms to help IMGs adjust to life and medical practice in Australia. Training organisations need to ensure that clinicians are aware of the communication issues facing IMGs and equip them with the skills and tools to deal with the problems that may arise. Pilotto, *et al.* (2007)

72 This issue was also raised in a study in 2004. See Kenny and Duckett (2004), p. 10

In such circumstances a skilled, assertive and independent board is more important than ever. Yet rural and regional health services face difficulties in recruiting and retaining effective board members. First, it is difficult to identify strong candidates who have no conflicts of interest and are willing to serve in an unremunerated position.[73] Maintaining independence after recruitment is all the more difficult, given the absence of term limits on board directors of small hospitals, and the significant information and expertise asymmetries between CEOs and medical staff and the board. Additionally, in smaller towns, there are inevitable social connections between hospital staff and board members that may challenge the capacity of the latter to manage personnel issues effectively when they arise.

We also heard in our consultations that many boards did not see their responsibilities for clinical governance as being on a par with their financial responsibility. No board member today would think that oversight of budget performance is something that can be delegated to a finance committee or left up to board members with financial qualifications.[74] However, some board members apparently believe that they do not have to apply the same diligence to clinical governance, as if clinical quality was not the core business of the hospital.

Safety and quality issues may not be routinely discussed at board meetings. In some cases, safety and quality issues are seen as 'medical business' better left in the hands of the director of medical services (or the director of nursing in smaller hospitals), and may not scrutinise a 'quality report' prepared with the same rigour as a financial report. All of these behaviours are an abrogation of the board's responsibility to hold the hospital executive to account for the safety and quality of care that it provides.

Despite these many challenges, Victoria's health system governance arrangements still rely heavily on these boards to ensure our hospitals are providing safe and high-quality care. As such, there is a clear need to strengthen them.

Consistent with the literature on boards and their impact on safety and quality, this review found that gaps in board skills, information and oversight are a key priority for strengthening governance of patient safety in hospitals.[75] We recommend addressing these gaps through a more rigorous ministerial appointment process and better support to boards by the department, involving improved information provision, training and clarification of role requirements. We also recommend extending the current legislative requirements for safety and quality in large health services to all hospitals so that patients can expect a common high standard of care.

Harmonising board responsibilities

As we have argued above, hospital board responsibilities are significant. The board carries legal responsibility for the safety and quality of care delivered in the hospital, with implementation of its policies through the CEO.

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73 Bismark and Studdert (2013), p. 5
74 Australia, F. C. o. (2011)
75 Millar, *et al.* (2013)

The degree to which these responsibilities are formalised varies across hospitals of different sizes and sectors. For example, the *Health Services Act* explicitly states that the boards of large hospitals must monitor the health service to ensure:

- effective and accountable systems are in place to monitor and improve the quality and effectiveness of health services provided by the service
- any problems identified with the quality or effectiveness of the health services provided are addressed in a timely manner
- the health service continuously strives to improve the quality of the health services it provides and to foster innovation (s. 655(2)(d)).

These requirements do not apply to smaller health services.[76] Smaller hospitals are also not required to form board quality subcommittees[77] or to limit their directors' terms to nine years, as larger health services' boards are.[78] It is unclear why smaller hospitals should not be held to the same standards as large hospitals. Patients should be able to expect the same minimum safety and quality regardless of where they seek care, and legislative requirements provide a partial mechanism of ensuring this.

Term limits also serve an important use in ensuring the board remains independent and has continuous internal renewal. While the existence of a board quality committee does not guarantee good clinical governance, the evidence suggests it is associated with better quality performance.[79] Further, it sends an important signal that the organisation has a formal process for ensuring quality and safety are considered on a regular basis at the highest level.

The current processes for board appointments for public hospitals and public health services differ, with public (smaller) hospitals having greater responsibility to interview and prioritise applicants than public health services (larger hospitals). The process followed for public health services is more independent of local interests and allows consideration of relative merit of appointees across a range of boards simultaneously. An independent process helps to ensure boards are more diverse, both culturally and in their backgrounds, reducing the likelihood of 'group think' on the board.

Boards of rural hospitals may benefit from having an external, comparative view from someone who does not reside in the immediate catchment of the hospital. This may be someone from a major regional centre or another town not served by the hospital. Similarly, specialist hospitals may benefit from an interstate appointee who can challenge the hospital to think more broadly. In both cases, the value of such an 'external' would be enhanced if they had previous hospital board experience.

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76   Similar requirements apply to private hospitals as part of the criteria for registration, s 83(1)(i)-(j), *Health Services Act 1988*.

77   While the Act is silent on the need for board quality committees in public hospitals (smaller hospitals), most have them anyway. In 2015 seven hospitals did not have a quality committee, but several had analogous safety and quality activities at board level.

78   See ss 65U(2), 65S(2)(j), *Health Services Act 1988*.

79   Jiang*, et al.* (2012), pp. 144–153

Where there are gaps between the statutory requirements of boards and their capacity to meet them, the department should support them to bridge this gap. Health service governance is incredibly complex,[80] and only becoming more so.

> **Recommendation 2.1:**
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> That the Health Services Act be amended to:
>
> - extend the current board and CEO obligations for safety and quality for public health services to public hospitals
> - extend the current term-limit requirements and other appointment processes used for public health services to public hospitals.
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> To the extent practicable, this change should be implemented ahead of legislative change so that no person would be reappointed to a public hospital board for a term that would lead to their total tenure on the board exceeding nine years. The only exception to this rule may be where the entire board would be turned over within three years, in which case one person in each round of appointments could be extended to a longer term.

A more rigorous board appointment process

In principle, there are processes designed to ensure an adequate mix of skills on each board, including clinical, legal and financial skills, as well as health service user perspectives. However, there is a perception in the sector that the appointment process is not sufficiently robust,[81] and there is broad consensus that not enough is done to ensure that every hospital board contains an adequate level of relevant skills and expertise.[82]

One way to address these problems is through recruitment.

Recruitment of skilled consumer representatives

Currently the boards of public health services must include a person 'who is able to reflect the perspectives of users of health services' (s. 65T(3)(a)). Bringing a patient perspective to the board table can be a good way of getting the board to focus on safety and quality issues. But this only works if the person bringing the 'user perspective' is able to do this – because of their training, experience or their ability to tap into the views of patients in general. The 'user perspective' does not come from having once sat in a hospital emergency department.

As Table 2 shows, a recent survey of Victoria's boards found remarkably disparate attitudes and actions towards patient perspectives, indicating a large gap between expectations on boards and their ability to meet them.[83] The survey found that 'while some health service boards had high aspirations and clear plans for improving patient experience, others remained sluggish or even cynically resistant to change'.

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80   In Australia, the Forster Review of Queensland's health services reported concerns regarding 'the inability of boards to properly understand or influence the growing complexities of health service delivery requirements'. Forster (2005), p. 70
81   Ham and Timmins (2015), p. 43
82   This was very apparent in our consultation process.
83   Bismark, *et al.* (2014)

Only 51 per cent of boards had created a strategy for communicating with patients and families. Further, 17 per cent did not have goals for patient experience, and 11 per cent did not involve consumers, carers or community groups in their strategic planning work. The study suggested that 'addressing these deficiencies will require careful attention to boards' training needs', as well as a review of the incentives encouraging 'capable and patient-focused directors to apply for such roles.'[84]

Table 2: Attitudes and activities of board members towards improving patient experience, with illustrative quotations

		Attitude	
		Negative	Positive
Activity	More	'Consumer participation is a bit tokenish. We have a few consumers come and listen to a presentation on how terrific the hospital is. It doesn't make much difference.' (Board member, metro)	'The patient is the most important person. Them and their family. So everything revolves around that.' (Quality chair, regional)
	Less	'We have a volunteers group but we don't meet with them and we don't have a consumer advisor on our board. We had a subcommittee, but it hasn't met.' (Board member, regional)	'We know this [model of care] is right, that it is effective and provides the best service for the client, but it's not how we are going to be funded and we do have a financial imperative.' (Quality manager, regional)

Source: Bismark et al. (2014)

Although one commonly hears the refrain 'we are all users of healthcare', not all can speak with an authentic patient voice. Strengthening the patient voice in healthcare needs to start with strengthening the patient voice on the board, and this means developing clearer guidance about what attributes people appointed as bringing a 'user perspective' should have.

> Two key areas that need to be improved are finding and encouraging consumers to step up for such forums and providing training to enhance consumers' ability to contribute... The same depth of thought and resourcing that goes into developing the capacity of health providers needs also to go into developing the capacity of health consumers for all forms of participation.

Mary Draper, Board Director, Austin Health

84   Ibid.

An important theme that emerges in these recommendations is that consumer involvement in governance should be meaningful rather than tokenistic. This means that a significant number of patients should be appointed to any board committee, and their quality and safety committee in particular. A 'critical mass' of patient representatives is necessary to ensure clinical governance is truly patient-centred and representative of those for whom it exists. The Department should commit to developing this critical mass, with a focus on recruit of consumer representatives and appropriate training for them to participate fully and actively.

Recommendation 2.2:

In addition to having the necessary board-level skill and knowledge requirements, any person recommended for appointment to a board under section 65T(3)(a) of the Health Services Act – 'able to reflect the perspectives of users of health services' – must have evidence of:

- personal experience as a patient or family/carer of a patient of the health service
- ongoing involvement, preferably via both formal and informal structures, with health consumers in order to gain and maintain a broad community perspective.

Either prior to appointment, or as part of their development plan to be completed in the first year of their role, those appointed under section 65T(3)(a) must also be able to demonstrate skills and experience (or appropriate training) in community advocacy on health as well as knowledge of what issues are broadly most important to patients and families.

Recruitment of clinicians

Work must be put into bridging the clinician/business divide. I suggest an expectation of having a minimum percentage of practising doctors on boards and among executives… This is best practice… The number of doctors on boards directly correlates to quality on shop floor.

Diana Badcock, Director, Bendigo Health Emergency

Although clinicians are not the sole guardians of quality and safety, and are certainly not the only ones who can speak authoritatively on clinical governance issues, they too bring important experience to the board table.

There is now some evidence about the value of clinicians on boards. A study of the impact of doctors on boards in the United Kingdom National Health Service found that 'even a small increase in the number of doctors on boards (10%)' has a positive impact on clinical outcomes[85] as well as financial performance.[86] More clinical participation on boards also had a positive impact on patient experience.[87]

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85 Veronesi, *et al.* (2013) Veronesi, *et al.* (2015)
86 Veronesi, *et al.* (2014) This paper also analyses the impact of non-medical clinicians on financial performance and finds a positive but weaker relationship than found for medical clinicians.
87 Veronesi, *et al.* (2015)

We believe the legislative requirement for 'user perspective' should be paralleled by a requirement for at least one board member to be a person currently registered as a health professional, with experience in clinical governance.[88] This person should not be an employee of, or practising in, the health service. This would strengthen the ability of boards to have informed and independent discussions about safety and quality issues.

> **Recommendation 2.3:**
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> That:
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> 2.3.1. the Health Services Act be amended to include a requirement that at least one member of every public hospital board have contemporary knowledge of clinical practice and who is at least 'somewhat experienced' in clinical governance, as defined by the board skills rubric set out in this report.
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> 2.3.2. no person appointed to a board have an appointment as a clinician, or be employed, at the same hospital or health service.

Ensuring an adequate mix of skills

A single clinician, however skilled, is not enough. The board, collectively, needs to have an adequate mix of skills, including clinical governance skills.

The current approach of a dichotomous, un-referenced, self-assessment of skills is woefully inadequate and at least five years behind the more nuanced assessment used for private sector boards.

The King's Fund's recent review of the Victorian hospital system recommended the creation of an independent appointments commission to remove the perception of politicised appointments and increase the focus on ensuring an adequate skill mix on boards.[89] We think this a good idea. In the first instance such a commission could be advisory to the Minister. This would not require legislative change.

In order to facilitate and make transparent what an 'adequate' skill mix means, we recommend that a proposed Board Appointments Advisory Commission be responsible for developing a skills rubric that uses a five- or six-point scale to assess the *depth* of skills and experience (rather than a simple yes/no question assessing the existence of them). It should incorporate examples of what level of expertise and experience it would consider equivalent to being unskilled, relatively skilled and an expert in each domain of board expertise.[90] An example of what such a skills rubric for clinical governance might look like is provided in Table 3. These are referenced against Standard 1 (Governance for Safety and Quality in Health Service Organisations) of the National Safety and Quality Health Service (NSQHS) Standards of the Australian Commission on Safety and Quality in Health Care.

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88 Importantly, being a clinician is not sufficient in this regard. Just as consumers need to have appropriate skills in other domains, so too should clinicians.
89 Ham and Timmins (2015)
90 The other levels can be inferred.

Table 3: Possible skills rubric against which clinical governance could be assessed

0	Not experienced	No experience in areas covered by Standard 1. For example, has worked as a clinician outside hospitals but with no experience in clinical governance; or is not a clinician and has no clinical governance experience.
1	Somewhat experienced (basic)	Somewhat experienced in areas covered by Standard 1. This could be demonstrated by membership of a board safety and quality committee for more than two years, or as a clinician with experience in monitoring and measuring quality of care of other clinicians as part of a previous role.
2	Reasonably experienced (medium)	
3	Considerably experienced (intermediate)	Considerable experience in areas covered by Standard 1. This might be demonstrated by chairing the board safety and quality committee for more than three years, or being a senior clinician with accountability for divisional quality and safety monitoring and performance.
4	Significantly experienced (advanced)	
5	Extensively experienced (expert)	Extensive experience in areas covered by Standard 1 such as in designing a governance system to monitor, review and evaluate all aspects of organisational performance. This could be demonstrated by having taken a lead role in designing the clinical governance system in another organisation.

Boards could be expected to attain a certain minimum number of points in each skill set domain (for example, 10 in clinical governance and finance, five in other areas), as well as having at least one person skilled at level three or above in key areas (including clinical governance). Boards should set and review their skills requirement each year, both in terms of total points in any one domain, and whether any domain needs to have at least one person rated as 'considerably experienced' or above.

The Board Appointments Advisory Commission should outline its minimum expectations of continuing professional development for board members, and should seek evidence that this has happened as part of the reappointment process.

All current board members and board applicants should self-assess against the skills rubric. The board (or the board chair) should also assess all members' skills against the rubric and provide this to the proposed commission. Boards or board chairs should also advise the commission of perceived gaps in the board's skill mix.[91] The commission should use the resulting information to ensure future recommended appointments are sufficiently qualified to uphold their legislative responsibilities, and that existing boards collectively contain the mix of skills necessary to uphold their legislative responsibilities.

Where the application and board nomination process does not result in enough qualified candidates to deliver adequate coverage of skills on a board, the commission should advise the Minister to appoint one or two appropriately qualified delegates to the board for a maximum of one year.[92] These delegates might be drawn from senior staff or clinicians at a nearby regional hospital or from Melbourne.

There is a real question as to whether every board in Victoria will be able to meet reasonable levels of skills in every necessary domain. This is especially the case in boards serving smaller communities. In no circumstances should the principle of local autonomy take precedence over patient safety, and this should be reflected in the criteria for amalgamation.

Where the Board Appointments Advisory Commission has been unable to recommend appropriate members to meet the skill mix requirements over two consecutive years, other than through a ministerial delegate process, the commission should recommend to the Secretary that consideration be given to amalgamating the service with one that has a fully capable board.

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91 For example, a board contemplating a major rebuilding program may wish to change its skill mix to include a person with a higher level of skills in this area.

92 As the Minister's responsibilities are currently defined in the Health Services Act. In determining if an appointment of a delegate under subsection (1) will assist the board to improve the performance of the public hospital, the Minister must have regard to: (a) the financial performance of the public hospital; (b) the safety and quality of the health services provided by the public hospital; and (c) whether the public hospital is complying with the health service agreement to which it is a party. s 65S (2)(d)(v)-(vi), *Health Services Act 1988*.

Recommendation 2.4:

That:

2.4.1. the Minister creates an independent commission (the 'Board Appointments Advisory Commission') to advise on appropriately skilled directors to appoint to public hospital and public health service boards (in making its recommendations, the commission should rank applicants in order of priority, including applicants not recommended, based on an assessment of skill levels)

2.4.2. the commission assumes responsibility for the entire board appointments process, including the recruitment processes currently managed by rural boards

2.4.3. the commission develops clear guidelines defining the expertise and experience needed to be skilled in each domain, along a five- or six-point scale

2.4.4. the commission be charged with recommending a mix of appointments, which would ensure these skills are adequately represented on every board at all times, and for expectations of ongoing professional development to be undertaken

2.4.5. the commission work closely with board chairs on an ongoing basis. Board chairs should advise the commission of perceived gaps in board skills, nominate potential appointees to meet them, provide assessments of current board member skills as part of the appointment (and reappointment) process and be consulted by the advisory commission on the commission's assessment of skill gaps

2.4.6. where skills are lacking in people nominating for board appointments, the commission advises the Minister to appoint a maximum of two delegates for up to one year until suitably qualified candidates are appointed or existing directors are adequately trained

2.4.7. the commission considers the desirability of recommending at least one person from outside the immediate local area when making recommendations about appointments to rural hospital boards and for interstate appointees with appropriate governance skills when making recommendations about specialist hospital boards

2.4.8. if the hospital is unable to attract an adequate level of skills to meet the skills requirement, the commission notifies the Secretary of that fact and consideration be given to amalgamating it with another service

2.4.9. the criteria for amalgamations in the Health Services Act be amended to include whether the amalgamation would lead to more effective governance of safety and quality

2.4.10. the commission ensures its recommendations would lead to appropriate diversity on boards, including by ensuring that at least half of all recommendations for appointment are women (where the composition of a board does not reflect the diversity of a community, the commission must seek actively to recruit and train culturally and linguistically diverse board appointees, with recruitment of indigenous board members a priority)

Recommendation 2.4: (cont.)

2.4.11.   the commission be staffed commensurate with its responsibilities to review board appointments across all Victorian health service boards

2.4.12.   consideration be given to staggering the appointment date of board appointments (currently almost all date from 1 July) to smooth the workload for the commission.

Clinical governance training for boards

There is often a lack of understanding at Board level of the obligation of the governing body to lead management of quality and safety. By contrast, the requirement that the Board delivers a satisfactory financial result is well understood and dwelt upon, with well-resourced, complex and expert systems providing financial management information.

Graeme Houghton, Adjunct Associate Professor, School of Public Health, La Trobe University

There is a clear and well-recognised need for board members to undertake explicit training in clinical governance. Further, during our consultation period we found considerable preparedness from board members to undertake such training. Many boards now expect their members to complete the Australian Institute of Company Directors' Company Directors course or a similar program, and pay for them to complete these courses. These general courses do not include training in clinical governance.

We recommend that the Board Appointments Advisory Commission (and the department in the interim) be responsible for ensuring that all future and current board members undergo a one-day induction program in clinical governance, with two half-day follow-up workshops. Experienced board members should be able to request an exemption from this requirement, although all should find the program useful regardless of experience.

The program should give board members a sound understanding of what their clinical governance responsibilities are in relation to the CEO and hospital, and practical training in what effective exercise of these responsibilities look like. Given the time impost, these workshops must be local, especially for public hospitals in remote areas.

Such a program would also provide opportunities for board members from different hospitals to interact with their colleagues. It was apparent during our consultations that such initiatives would be welcomed by board members, especially in rural Victoria.

Recommendation 2.5:

2.5.1 That to be eligible for reappointment, all current and future board members must undergo a practical and local one-day induction program in clinical governance, risk management and organisational culture, with two half-day follow-up workshops.

2.5.2. As part of their regular self-assessment processes, boards must review the development needs of their members and develop strategies to meet them.

2.5.3. New board members must undertake the clinical induction program within 12 months of appointment.

Better information provision for boards

It may be blatantly obvious, but the Board members also need regular updates on the extent of services provided at the health service they are a member of. The annual report is one of the only documents produced by the health service that details the full extent of the programs provided. Boards need more than this. They need info on the level of services, complexity and risks associated with each service provided. The department also needs to be aware of this. Once Boards know what to expect, they can hold poor CEOs like us more accountable.

Peter Abraham, CEO, Kyabram District Health Service

In order for a board to exercise effective oversight over its hospital and hold their CEO to account, it needs robust information on hospital performance.

A 2012 survey of Victorian boards found a curious phenomenon: virtually all respondents believed that the overall safety and quality of care[93] delivered at their health service was as good as, or better than, the typical Victorian health service (see Figure 1).[94] This mathematical impossibility, known as the 'Lake Wobegon Effect', suggests that many hospitals did not actually know how the safety and quality of their care compared with other hospitals' performance.[95]

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93 As measured by the following criteria: overall quality of healthcare; safe and skilled workforce; experience or satisfaction of patients and families with healthcare; and identifying, managing or reporting healthcare incidents.

94 Bismark*, et al.* (2013)

95 At the fictional Lake Wobegon, 'all the women are strong, all the men are good looking, and all the children are above average'.

Figure 1: Most Victorian hospital boards think they are better than average
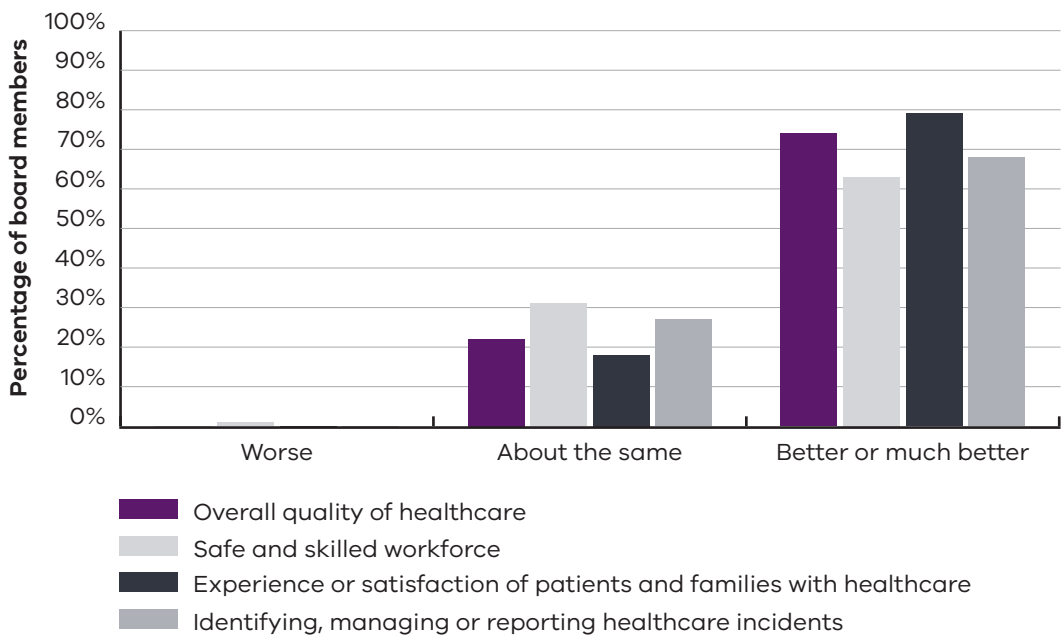
Source: Bismark, Walter, et al. (2013)

Since 2012 access to benchmarked performance information has improved for some hospitals. The Australian Commission on Safety and Quality in Health Care has developed a list of Core Hospital-based Outcome Indicators, which are reported to health services by the department every three months. Further, a limited number of hospitals can analyse their relative performance on select mortality and readmission indicators through a Dr Foster intelligence tool called Quality Investigator.[96] Finally, all hospitals have access to the annual, statewide hospital dataset for Victoria, which they could potentially use for benchmarking their own outcomes against peers'.

However, it is unclear how many hospitals use data in this way, or how well they do it. Providing a dataset without analytic support or codes is wasteful, since it forces each hospital to invent its own analytical strategy, and reliance on raw data provision is also an abrogation of the central responsibility to help hospitals identify where things are going wrong.

A recent independent review of the Victorian hospital system suggested that 'increased transparency on safety and quality would also provide boards with the information they need to discharge their responsibilities', suggesting that boards do *not* already have the necessary information.[97]

96   Dr Foster is a healthcare analytics and benchmarking firm. Quality Investigator is an interactive tool based on routinely collected data. The tool enables hospitals to analyse their performance on risk-adjusted quality measures and drill down to patients' individual records to understand the factors driving outlier results. The department currently only funds access to Dr Foster for 14 hospitals.
97   Ham and Timmins (2015), p. 4

Small hospitals remain unlikely to have sufficient useful information on relative performance.[98] None have access to Dr Foster, and few belong to Health Roundtable,[99] an independent organisation that sells[100] de-identified analytics to participating hospitals on their relative rates of certain safety indicators, such as common post-procedural complications. They do not receive benchmarked feedback on infection rates from the department, and results on many of the Core Hospital-based Outcome Indicators[101] can be difficult to interpret, since both the numerator (unexpected readmissions or mortality) and denominator (patients in given diagnosis-related groups) for these are usually small. In the case of the hospital-standardised mortality ratio, the indicator inadequately adjusts for risk,[102] has been shown not to be associated with avoidable mortality[103] and is difficult to act on given the multiple potential causes for variations in rates. A recent *British Medical Journal* editorial concluded that 'the evidence is mounting that there may be no future for summary mortality rates'.[104]

The end result is the hospitals that need the most support in terms of external benchmarking and comparative data have the least access to it. Little further support is given to these hospitals to compensate for the information gaps.

This situation is in contrast to New South Wales, which provides an interactive 'portal' to allow hospitals (and clinicians) direct access to data to facilitate comparisons of the efficiency and quality of care,[105] and Queensland, which provides extensive trend data to hospitals.

The department should improve information provision in three key ways: regular, accessible and comprehensive analytics reports for all hospital boards; support for case audit in rural and regional hospitals; and better access to data. We discuss the first two ways here, with data access discussed at length in Chapter 3.

Clear and comprehensive safety and quality analytics for boards

The Victorian Health Performance Authority (VHPA) should provide all hospital boards with a regular analytics report that has broad coverage of safety and quality, encompassing risk management, processes and outcomes, and that covers the spectrum of harm from highly preventable to potentially reducible. This would ensure

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98   Specialist hospitals may also lack benchmarked feedback on performance because they rarely have within-state comparators, and differences in coding practices between states can reduce comparability.

99   Roundtable (2016). Of the 86 public hospitals in Victoria, 11 public health services (typically large metropolitan hospitals) and four regional and rural services belong to Health Roundtable, none of which are small services. A further two denominational services and one private hospital also belong.

100   The cost ranges from $12,000 to $36,000 per year, with monthly data for 30 within-hospital users costing $3,000 per month, and quarterly data for 10 within-hospital users costing $1,000 per month. The Health Roundtable (2016)

101   The set of indicators were developed by the Australian Commission on Safety and Quality in Health Care and in 2009 were endorsed by health ministers as a group of indicators that should be routinely monitored by hospitals.

102   This indicator does not exclude palliative care as an additional diagnosis based on the principle that a problem may exist if a patient is admitted for acute care (regardless of whether or not they also received palliative care) and they subsequently die in hospital, and that further detailed investigation is required.

103   Hogan, *et al.* (2015), p. 351

104   Doran, *et al.* Ibid., p. 351

105   Damato (2015)

every board has a minimum threshold of independent information on hospital safety and quality, and is monitoring it on a regular basis. The results should serve as a starting point for discussions at the board safety and quality committee about safety and quality progress, immediate risks and priorities, and future improvement work.

Approximately 70 additional quality and safety indicators are proposed (see Appendix 3). The indicators proposed for use in the report draw on indicator development in Queensland and nationally. The main additions we are proposing to supplement indicators already in use in Victoria are trend data on key indicators presented as statistical process control charts as used in Queensland and data on the Australian Commission on Safety and Quality in Health Care's 'high priority complications'. The latter group of indicators will be a particularly helpful development for smaller hospitals, as they currently have few useful indicators.

Some hospitals may already be using these or similar indicators from Health Roundtable, or Dr Foster. What we are proposing here is that all hospitals have access to these indicators, which will show relative performance to other hospitals or the state average, as well as how the hospital is tracking against its own previous performance. Feedback we received during our consultations indicated that many boards wanted to obtain additional benchmarking information.

Such a report should have its key takeaways distilled on the first page, with information relevant to their hospital's core business and comprehensible to any board member, regardless of their clinical or statistical background. The department should generate this report for boards and provide the statistical code to hospitals, freeing their health information managers up to focus on drilling down into the data and to understand what is driving results.

Generating such a report is not difficult and does not require an expensive external contract. To demonstrate this, we created an example of what such a report might look like for a hospital from the department's existing data. This report can be found at Appendix 5 and is also available at <https://www2.health.vic.gov.au/hospitals-and-healthservices/quality-safety-service/hospital-safety-and-quality-review>. The first page of the report is provided in Figure 2.

The VHPA should use the proposed indicators as a starting point but continuously monitor, refine and add to the mix of indicators to ensure they remain fit for purpose and consistent with best practice in other jurisdictions. In particular it should consider indicators under development by New South Wales' Bureau of Health Information[106] and by the Australian Commission on Safety and Quality in Health Care. It should also contribute to other jurisdictional and national initiatives in safety and quality measurement and analytics.

106   Bureau of Health Information (2015) Roberts, et al. (2008)

Figure 2: First page of example board safety and quality analytics report

Indicator set	Performance relative to benchmark	Local progress
Comparative quality indicators (VLADs)	● Far below target on 1 ● Below target on 5 ● Near target on 20 ● Exceeding target on 4 ● Far exceeding target on 3	● Deterioration in 3 ● No change in 25 ● Improvement in 5
'Targeting zero' safety indicators (ACSQHC hospital-acquired complications)	● Far below target on 1 ● Below target on 1 ● Near target on 10 ● Far exceeding target on 2	● No change in 12 ● Improvement in 3
'At zero' sentinel events and ISR 1 incidents	● Two ISR-1 incidents ● Zero sentinel events	● Deterioration in ISR 1s ● No change in SEs
Maternity indicators	● Below target on 2 ● Near target on 3 ● Exceeding target on 1	● No change in 3 ● Improvement in 2
Capability framework compliance	● Far below target on 1 ● Near target on 1	● Deterioration in 1 ● Improvement in 1
Safety culture	● Near target on 5 ● Exceeding target on 3	● No change in 6 ● Improvement in 2
Patient experience	● Below target on 1 ● Near target on 3	● Deterioration in 1 ● No change in 3
Death in low-vol. DRGs	● Near target	● No change
Mental health indicators	● Near target on 2 ● Exceeding target on 1	● No change in 2 ● Improvement in 1
Aged care indicators	● Below target on 1 ● Near target on 4	● Deterioration in 1 ● No change in 4
Infection control indicators	● Near target on 3 ● Exceeding target on 2	● No change in 4 ● Improvement in 1
Overall performance	● Far off target on **4** ● Below target on **10** ● Near target on **53** ● Exceeding target on **11** ● Far exceeding target on **5**	● Deterioration in **7** ● No change in **61** ● Improvement in **15**

Notes: For indicators where performance is measured against peers (e.g. VLADs), "far off/exceeding target" = high/low outlier, whereas for indicators where performance is measured to a standard benchmark (e.g. hand hygiene), "far off/exceeding target" means a substantial and significant difference between the hospital's performance and the standard. Chapters 3 discuss the patient outcome performance indicators in greater detail and Chapters 2 and 5 discuss the culture and experience indicators in greater detail. Any ISR 1 incidents or sentinel events are considered off target; zero is considered the target. Currently capability frameworks are only available for maternity; this presumes an additional framework (e.g. for surgery).

Generating the majority of the data for the first report involved about two months of work – most of which was done by a single statistician – and will not need to be repeated. The analysis could be reproduced for hospitals on a regular basis with relatively little further investment. We recommend that a newly formed VHPA (discussed in Chapter 4 of this report) have responsibility for doing so.

> **Recommendation 2.6:**
>
> That the proposed Victorian Health Performance Authority produces a safety and quality analytics report for large hospital boards on a monthly basis, for smaller hospital boards at least quarterly, and for private hospitals at an appropriate interval based on their size.

Reinstating limited adverse occurrence screening in small hospitals

While our safety and quality analytics report will include useful information for small services, including information on risk management and potentially preventable complications, for broader quality indicators it will not be able to provide the same level of information, with the same level of certainty, as for large hospitals.

Accurately benchmarking hospital performance over small patient numbers is inevitably difficult. However, it is not something that small hospitals should do without. These hospitals require external feedback, even more than large hospitals, given they have fewer internal resources for review and are less likely (at least currently) to have safety and quality expertise on their boards.

Where statistical processes are unreliable, case audit and feedback should be used to substitute for benchmarking rather than variance analysis. This is, of course, much easier to do in small hospitals than large ones, and in some ways the information is superior (although more costly to obtain) given the resulting information can normally assign causality and/or preventability.

Case review of complications in small hospitals

To support review of complications, the department should resurrect its former program for Limited Adverse Occurrence Screening (LAOS) for rural hospitals. This was a quality improvement program in which rural general practitioners peer reviewed cases, looking for adverse occurrences and recommending ways to prevent their recurrence. This process, which ran from 2001 to 2012, is a proven[107] and popular tool[108] for reducing complications in patients. An internal evaluation in 2011–12 reported that general

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107 At a rural base hospital in Horsham between July 1991 and June 1994, 1,465 records were screened positive for one or more criteria, and an adverse patient occurrence was confirmed in 155. 88 cases, which were determined to be minor or not preventable and further action (mostly by changes to hospital policies) was recommended for the remaining 67. Over the three years, the number of adverse occurrences fell from 69 (1.35 per cent of all patient discharges in the first year) to 33 (0.58 per cent of all patient discharges in the third year) ($p < 0.0001$) and there was no significant change in severity. Wolff (1996)

108 In 2005 the department reviewed the LAOS program and found that more than 90 per cent of stakeholders interviewed thought it should continue and that it had improved patient safety in small rural health services. Department of Health (2012), p. 5. Positive statements regarding LAOS came up a number of times at our workshop for rural and regional health services, and in submissions to the review. For example, a rural hospital board's president submitted that 'Re-using the former LAOS system of reporting events would be one simple effective adjunct to monitoring patient safety'.

practitioner visiting medical officers (VMOs) found the program valuable and that it provided them with a way to engage in quality improvement activities. Further, the literature supported the activity of occurrence screening when coordinated locally by the health service and integrated into the health service's clinical governance system.

However, the program was discontinued on the department's recommendation. It reported that there was a 'lack of shared vision' for the program and it was not well integrated into local clinical risk management systems.[109] Further, it was very expensive. In 2010–11 the program was funded to the value of $746,742, resulting 145 inpatient medical records being found positive for an adverse event or educational opportunity.[110]

We believe these findings support the case for *evolving* the program, not dissolving it. A few tweaks would have significantly improved its impact and cost-effectiveness. For example, the department could have worked with clinicians and quality managers to develop a shared vision for the program and ensure it was integrated into local systems. To reduce the cost of the program, the department's analysts could have located the health service and record numbers of all cases that involved an adverse event in the Victorian Admitted Episodes Dataset, and supplied the list to the reviewer group (rather than having doctors manually screening *all* medical records for adverse events). While less comprehensive, such an approach would have been significantly cheaper and focused attention on the highest impact events.

When LAOS was dissolved, nothing was put in place to replace it. As a result, rural hospitals went from having a middlingly effective program for monitoring and addressing adverse events to receiving very little effective external feedback at all.[111]

The department should reinstate and reform collaborative record reviews to promote learning and improvement in response to adverse events in rural hospitals. The reviewer groups should be expanded to draw in experts from Victoria's regional and metropolitan hospitals. However, external experts should remain a minority in every reviewer group. The aim of the program should remain engagement of regional clinicians and VMOs in particular. As the department's 2006–07 LAOS annual report notes, 'A key strength of the LAOS program is that the reviewers and panel members are GPs who work in a similar environment, and are best placed to draw out learning opportunities and recommendations within the context of the resources available.'[112]

> **Recommendation 2.7:**
>
> That the department reinstates and funds the Limited Adverse Occurrence Screening program for rural hospitals, and investigate ways to increase its effectiveness and reduce its cost.

109 Ibid., p. 3
110 Ibid., p. 31
111 The smaller hospitals often treat too few patients to receive meaningful feedback through benchmarking on the department's standard key performance indicators.
112 Department of Human Services (2007), p. 18

No hospital is an island entire of itself

Optimal healthcare for individual patients requires collaboration and can rarely be delivered by a single practitioner, or in one discrete area or facility. Health services ... cannot act as individual entities but as part of a health care system. A health service that acts in isolation from the system and believes they can manage their patients without the need of external support underpins the tragedy of the events and what has followed at [Djerriwarrh]. Expertise, assistance, and resources were less than 40 minutes away.

Dr John Ballard, Administrator, Djerriwarrh Health Services

All hospitals are part of a larger system of healthcare. The differences between hospitals – including the skills and experience of staff, patient profile and hospital connections to the community and the rest of the system – means hospitals can learn from each other.

This is true for all hospitals, and especially true for small hospitals. Small hospitals are a vital part of the Victorian health system, allowing people in rural communities to stay close to their homes and families while receiving care and saving lives in emergency settings. Yet smaller services like Djerriwarrh are the least likely to have all of the resources, time and expertise to support best practice in every aspect of care. Indeed as Box 1 shows, a key problem at Djerriwarrh was that it lacked a strong process and independent expertise to support morbidity and mortality review.

It is crucial that the department support these hospitals closely, and support them to learn from other services to deliver safe, high-quality care. Small hospitals need ongoing arrangements with peers and larger services to ensure they receive adequate support in all their major clinical streams of their service provision. At present, these arrangements are loose and variable. There is no formal expectation that hospitals adopt them, and too little support from the department to facilitate their development.

Box 1: Inadequate specialist morbidity and mortality review at Djerriwarrh Health Services

Clinical audit is an indispensable core component of modern clinical governance. Hospitals must have strong audit processes to detect and address deficiencies in care when they occur. Djerriwarrh Health Services did not have strong processes. It lacked a formal expert and multidisciplinary process for perinatal mortality and morbidity review.[113] This led to erroneous findings about avoidable perinatal deaths and inadequate recommendations for preventing their recurrence.

Many, but not all, the 11 perinatal deaths and stillbirths between 2013 and 2015 at Djerriwarrh were subject to local clinical review as they occurred.[114] Subsequent independent review in 2015 found that in the eight cases where review was undertaken, five reviews were inadequate.[115] One provided inadequate recommendations and four made incorrect findings about deficiencies in care or avoidability of deaths.[116]

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113 Wallace (2015), p. 3
114 Ibid., p. 11
115 Professor Euan Wallace is the co-head (Department of Obstetrics and Gynaecology) of The Ritchie Centre at MIMR-PHI Institute of Medical Research and the Carl Wood Professor and head of department of Obstetrics and Gynaecology at Monash University.
116 Wallace (2015), pp. 11–13. An additional review involving expert root cause analysis made recommendations that were never implemented

When small hospitals lack external support, they tend to over-rely on their directors of nursing (DONs) and directors of medical services (DMSs). For example, rural hospitals normally appropriately rely on their DMS or DON to *manage* clinical audit processes, but some go further and expect theirs to also provide appropriate *clinical* advice to every audit. This is not typically good practice because DMSs are medical administrators and are not usually active clinicians (and never an expert in every clinical specialty).[117] Likewise, DONs bring generalist clinical skills not expert knowledge of every specialty.

A better system would ensure that DONs and DMSs in every small hospital are supported by appropriate external expertise and resources. For example, clinical audit in rural hospitals could be supported by a network of clinical specialists who can give specific advice in their area of expertise.[118]

Having access to expert clinicians from outside a hospital to support case audit and other clinical governance activities would support the hospital's continuous improvement. It would have the broader benefit for clinicians of reducing professional isolation, which is a risk to safety and quality of care in its own right and not uncommon in rural areas, where peer scrutiny is often lacking and practitioners can easily become disconnected from contemporary best practice.

Clinical partnerships between small hospitals and larger partners

To meet this need, we propose that clinical governance in small hospitals involve a requirement for clinical partnerships across all the core clinical business areas of the hospital. This would typically cover some combination of urgent care, surgery, maternity/perinatal services, aged care and other services where appropriate.

We propose that the department require every small hospital, for each of its major clinical service areas, to develop a memorandum of understanding with another (larger and better-resourced) hospital detailing, for that service area:

- its referral protocols for transferring to a higher level of care (up-transfer)
- its protocol for cooperation on morbidity and mortality review, with an expectation that processes be standardised between the two services[119]
- its processes for data collection, which again must be the same between the hospitals
- its processes for working through disagreements, with clear appointment of responsibility for work and final decisions
- the process of intervention to be followed if a concerning trend or incident arises, including timeframes for response or remediation
- terms of reference for audit
- any confidentiality agreements required.

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117 Some DMSs may not be qualified medical administrators, which adds a further issue in terms of lack of skills in safety and quality systems.
118 With the DMS coordinating the process.
119 Standardised processes for case audit creates a more focused review process, resulting in more accessible findings, and increasing the utility of case reviews for clinicians as well as executives. Higginson, *et al.* (2012)

Where feasible, hospitals could also choose to include provisions for joint development. For example, a large hospital could support a small hospital by running joint training sessions and employing members of the smaller hospital's staff on a part-time basis (for example, one day per week) to support continuity of skill development and avoid professional isolation.

> Bendigo Hospital currently supports the Echuca Regional Health Emergency Department (ED) through the provision of an emergency physician on a monthly basis, who provides specialist input into their clinical audit. This visit is also combined with the opportunity to teach and provide guidance and mentoring to the Echuca Regional Health ED physicians. The partnership also involves a telemedicine support service from Bendigo Hospital ED to the Echuca Regional Health ED, along with a three-monthly rotation of a Bendigo ED Registrar to the Echuca ED.
>
> **Australasian College for Emergency Medicine submission**

It should be the responsibility of the hospital to demonstrate that it has established these memoranda of understanding. The department should facilitate their development by drafting a best-practice example for each clinical service area.

Some hospitals may wish to have all of their clinical service partnership agreements with a single hospital such as the regional hospital in the case of rural health services and a nearby metropolitan hospital for peri-urban services. Clinical department heads could be the 'point person' for independent advice to all associated local hospitals. This would bring that expertise and an independent perspective to the smaller hospitals and may also have the advantage of strengthening referral linkages.

Alternatively, hospitals could negotiate their own arrangements to access specialist expertise based on patient flows or pre-existing linkages.

Each of these approaches has merit and could be used to ensure appropriate external advice and guidance. For this reason, we have not made a recommendation on the specific model that should be used by hospitals. While the partnerships should be mandatory, hospitals should have autonomy in their choice of partner.

In parallel with this 'clinical partnership' approach, there might also be region-wide opportunities for sharing experiences and benchmarking. Although the Primary Healthcare Networks (PHNs) are still new, and cover wide areas, given their focus on primary care and the key role of general practitioners in small hospitals, PHNs might be interested in adopting a role in facilitating improvement in small hospitals in their regions.

Summary outcomes of the various clinical audits should be reported to governance committees of each hospital on a regular basis.

Recommendation 2.8:

That:

2.8.1. all smaller hospitals demonstrate to the department, by 1 July 2017, that they have negotiated formal agreements to involve external specialists in clinical governance processes for each of their main areas of activity, including morbidity and mortality review

2.8.2. the department drafts a 'best practice' template for these agreements, which incorporates explicit minimum standards for these agreements

2.8.3. where a small public hospital is unable to demonstrate that clinical governance of all of its main areas of clinical activity are supported by an external partner, the department pair them with a regional or metropolitan partner

2.8.4. summary outcomes of the various clinical audits must be reported to governance committees of each hospital on a regular basis

2.8.5. larger hospitals (or their staff) will need to be appropriately remunerated for this support and so block funding for smaller hospitals may need to be adjusted for this purpose.

Strengthening accountability of health professionals

Clinicians occupy positions of considerable prestige, autonomy and trust in the community. With this comes significant professional and personal responsibility.[120] For this reason their roles are circumscribed and their responsibilities defined by their professional board (which sets the conditions of their registration), their specialist medical college (which sets continuing education and maintenance of standards requirements) in the case of medical clinicians, and their employer (through employment contracts and credentialing, definition of scope of practice, clinical audit and quality assurance process requirements).[121] Hospitals are in turn accountable for complying with the NSQHS Standards, which make it crystal clear that all hospitals, large and small, must have credentialing and performance appraisal systems in place for medical staff.[122]

While these systems and processes for defining responsibility and accountability are extensive, in practice they are not always upheld. Some medical leaders appear unclear about their accountability for unsafe care that is not provided directly by them, but which they oversee. Second, some small rural services are struggling to appropriately manage the performance of clinicians who pose a risk to patient safety, but are difficult to replace, and on whom the hospital depends.

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120 DLA Phillips Fox (2009), p. 1
121 Ibid., p. 2
122 Standard 1.10.1 requires that a 'system is in place to define and regularly review the scope of practice for the clinical workforce'. Standard 1.11.1 requires that a 'valid and reliable performance review process is in place for the clinical workforce'.

Clarifying the accountability of clinical executives

Every hospital needs to have clinical leaders with clearly defined responsibility for regular review of patient safety and quality data, encompassing both routine monitoring, incidents and complaints. In rural health services this person is often the DON or the DMS.

When these data reveal a risk to patient safety, people in these roles have a professional duty to act to protect patients. In particular, if they discover a registered health practitioner is placing patients at risk through a significant departure from accepted professional standards,[123] they must report them to the Australian Health Practitioner Regulation Agency (AHPRA).

The events at Djerriwarrh highlight the fact this responsibility needs to be made clear to all professionals in these roles. At Djerriwarrh, substandard care continued for years while medical leaders were either unaware (and so were not reviewing safety and quality of care) or failed to report it.

Although the definition of practice used by AHPRA encompasses professionals working in governance roles, such as DONs or DMSs, the responsibilities of professionals working in this aspect of practice need to be clarified. A potential starting point is the guidance provided to professionals concerned with patient safety in the United Kingdom.[124]

Identifying this as a professional responsibility, which could potentially lead to an AHPRA investigation, will strengthen the professional's hand in stimulating local action where a CEO or board may be unwilling to confront a powerful or longstanding professional. It would also validate the professional in a clinical governance role in reporting the practitioner to AHPRA where appropriate.

Recommendation 2.9:

That the Minister invites the Australian Health Practitioner Regulation Agency to work with the National Boards to develop clear guidance, linked to the existing 'codes of practice', for registered professionals working in governance roles.

123 Australian Health Practitioner Regulation Agency (2016a)

124 General Medical Council (2012). The professional responsibilities of professionals involved in clinical governance has been a matter of careful scrutiny in the United Kingdom ever since the tragic events at the Bristol Royal Infirmary. Between 1991 and 1995, 30–35 children under the age of one year died from open-heart surgery at the hospital, a significantly higher mortality rate than elsewhere in England. These tragic events were attributed to widespread organisational, systemic and communication failures. A culture of secrecy and victimisation meant frontline staff concealed near-misses and other indicators of subsequent failure from primary decision-makers, and where any concerns were voiced, managers dismissed these warnings and instead attributed blame to those frontline staff as being troublemakers. There was no system in place to monitor the actions of senior managers, and many of the senior professionals and paediatric cardiac surgeons were incompetent, with no mechanism to identify and correct this incompetence. Lack of communication between all levels translated into poor teamwork that did not meet the interests of patients. Alaszewski (2002)

Support for rural boards in managing health professionals

> Overwhelmingly the key issue in regards to clinical governance is the ongoing lack of engagement of Visiting Medical Officers (VMOs).
>
> **Marlies Eicher and Vicki Poxon, Board Chair and CEO, Boort District Health Service**

Throughout the course of this review we heard from an enormous number of people about the obstacles to quality and safety improvement that are inherent in relying on part-time clinicians (VMOs).[125] Forty per cent of submissions from rural and regional services raised this issue.

VMOs work between a number of services and their remuneration (which is often on a fee-for-service basis) is perceived to cover only clinical service provision. By contrast, full-time staff typically have 30 per cent of their remunerated hours set aside for undertaking quality, research and administrative activities. This has given rise to challenges engaging part-time VMOs in local quality and safety processes and improvement work. This is difficult in metropolitan public hospitals because VMOs can always move to the private sector where safety and quality requirements are often much lighter.

> If your medical base is VMOs then the further issue is that the level of accountability is minimal compared to salaried medical staff.
>
> **Debra Hailes, Consumer Liaison Officer**

Performance management of all staff, including visiting medical staff, is a key role of management and is required by the NSQHS Standards. The department has issued guidance to assist hospitals in this regard.[126]

Good performance management should reduce the likelihood of serious performance issues arising.

In large public health services, an uncooperative clinician can usually be replaced. By contrast, in small rural hospitals a VMO is often the only provider of a given service and can choose to withdraw the service rather than submit to hospital management or disciplinary processes. This puts hospital CEOs and boards in a very difficult position, as loss of a key service like surgery or obstetrics would entail a loss of a valued service for the local community in addition to the significant revenue shortfall for the hospital. They have to weigh up the consequences of this against the risks of continuing to employ a clinician who is not complying with safety and quality processes or whose practices are poor. The right decision in these circumstances is to put patient safety first, and to help the hospital adjust.

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125   VMOs are very common in rural hospitals where they are typically local general practitioners remunerated by the hospital on a fee-for-service basis. VMOs also practise in larger metropolitan hospitals where they are typically specialists remunerated either on a sessional (part-time) or fee-for-service basis.
126   Partnering for performance tools can be found at Department of Health (2010)

> Visiting Medical Officers in small hospitals have more power than CEOs and Boards because they can withdraw services. In some cases this means that the hospitals can't remain open. For example in one hospital, a VMO threatened to leave if a mortality and morbidity structure was initiated. The structure did not progress. CEOs and Boards of small hospitals have almost no control over the procedures that are performed, even if they are not safe.
>
> **Anonymous submission**

> There's an imbalance of power … The further out you go, the harder it is to replace staff. Smaller towns' hospital boards can be held to ransom by their doctors.
>
> **Rural hospital CEO**

Weaker boards may be swayed by circumstances that favour accommodating the problem clinician, for example, in cases where loss of a service would mean the community would have to travel much further for emergency care. In other cases circumstances may favour dismissing a clinician or removing them temporarily from the hospital for further training, but sociological factors inhibit it. For example, in a small town the CEO, board members and clinicians will all be prominent members of the community with social (if not familial) connections. Further, there can be very strong community pressure on a board to keep a service open at all costs.

> Small and geographically remote services struggle to recruit competent clinicians to provide all the services that their communities and political representatives expect. While it is rarely said, their guiding principle is still often that any doctor is better than no doctor.
>
> **Graeme Houghton, Adjunct Associate Professor, School of Public Health, La Trobe University**

Throughout this report we have made a number of recommendations that are intended to reduce these risks. For example:

- Harmonising public reporting and performance monitoring across public and private hospitals will reduce (but not resolve) the discrepancy in emphasis on safety and quality across sectors (see Recommendation 2.11).
- Implementing and monitoring adherence to capability frameworks and minimum volume thresholds may help pre-empt inappropriate clinical risk taking (see Recommendations 2.12 and 2.13).
- Expanding monitoring of safety and quality indicators, greater performance reporting to boards and a requirement that rural hospitals participate in external review of all major clinical service streams may lead to earlier external detection of poor clinical outcomes and greater accountability for quality and safety versus financial performance (see Recommendations 2.6, 2.8, 2.10 and 3.3).
- Strengthening the rigour and independence of board appointment processes, investing in clinical governance training for board members, and strengthening reporting cultures may clarify the seriousness of clinical governance responsibilities of boards, CEOs, DMSs, DONs and hospital staff where they may have otherwise been unclear (see Recommendations 2.3-2.5, 2.9, and 2.14-15).

At the same time, we recognise that these changes will be insufficient in some cases. When a hospital board fears they will lose a clinical service if they dismiss a clinician they know to be underperforming, they still have a responsibility to protect public safety – regardless of resources and location. They must do all they can to confidently and sensitively manage the situation.

The department should always be alert to the risk of this not happening. It should be closely monitoring hospitals for warning signs, and when they appear, it should not assume that they will inevitably be dealt with appropriately at the local level.

Hospitals should also be able to approach the department with evidence of the problem and expect support to come to a solution. In cases where appropriate managerial processes have been followed and the clinical service is in other respects safe, the department should issue a guarantee that, when the hospital dismisses the practitioner in question, it will overlook any coming revenue shortfall and help the hospital meet the additional cost of hiring a locum until a permanent solution can be found.

Clear performance expectations for boards

The skills, work and leadership of boards matter. International research shows that when boards are actively engaged in their hospital's quality agenda, the hospital is more likely to have quality improvement programs in place, and more likely to be performing better on a number of indicators.[127] Higher rated boards are associated with more effective management, which is associated with higher quality care.[128] In particular, boards that pay more attention to quality of care and use clinical quality metrics more effectively tend to have managers that perform better at monitoring quality performance, setting targets and managing operations.[129]

Boards also have an important role to play in setting the tone for organisational culture. A recent, large-scale study of boards in the United Kingdom's National Health Service found there was a significant relationship between a board's governance activities and competencies, and whether staff felt safe raising concerns about patient safety issues and were confident that their organisation would address them.[130] This suggests an important role for boards in encouraging internal whistleblowing, and thereby guarding against catastrophic failures in care.[131] This role is important, given that the bulk of Australia's major hospital safety scandals have been brought to light through whistleblower action,[132] and that greater internal and external attention to the concerns raised by nursing and midwifery staff at Djerriwarrh would have led to much earlier discovery of the service's problems.

127 Jha and Epstein (2010) and Jiang, *et al.* (2009) have suggested more active boards are correlated with lower mortality rates. However, it is unclear how much this is a matter of better hospitals being able to recruit better boards.
128 Tsai, *et al.* (2015)
129 Ibid.
130 Mannion, *et al.* (2016), p. xxviii
131 Ibid., p. xxviii
132 Faunce and Bolsin (2004);

The recommendations we have outlined in this chapter will significantly strengthen the capacity of hospital boards to uphold their responsibilities for clinical governance, foster continuous improvement and hold CEOs to account for safety and quality of care. This strengthened capacity should be reflected in board activities.

The department should expect:

- safety and quality to be the first item on the agenda of every board meeting, involving discussion of patient stories as well as performance data
- evidence that every board has an ambition of excellence that goes far beyond merely achieving accreditation, with clear, measurable goals and timelines associated with achieving that ambition
- boards ensuring that improvement follows harm by holding the CEO to account for following up and implementing recommendations from safety reviews (including root cause analyses)
- meaningful engagement with patient experience data and consumer representatives at board meetings (as addressed in Recommendation 2.2)
- boards to seek and use qualitative data to assess patient safety culture (such as structured 'executive walk-arounds')[133]
- boards to be committed to strengthening their hospital's safety culture, including by monitoring staff experience data and tackling bullying (as addressed in Recommendation 2.14).

Recommendation 2.10:

That the department sets clear expectations that boards of all hospitals:

- have safety and quality as a substantial agenda item at every meeting
- have a statement of ambition for achieving excellence in care, and set clear, measurable goals and timelines for achieving that ambition
- hold CEOs to account for actions taken to improve care after safety incidents occur, including by ensuring that recommendations from reviews and root cause analyses are implemented.

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133   Mannion, *et al.* (2015) Millar, *et al.* (2015)

Strengthening the department's role in hospital governance

Boards can make an important difference to the quality of management in hospitals. However, they are far from an infallible means of oversight.[134] Thus even with a more rigorous board appointment process, there will still be a continuing departmental role in supporting boards and helping to build their capacity for effective oversight.

This section discusses how the department can strengthen its oversight of hospital governance. We discuss how the department might reconsider its interpretation of the 'devolved governance' model in light of its legislative responsibilities, and ability to support local decision making. Chapter 3 then provides an in-depth assessment of the department's oversight model and recommends ways to strengthen it.

Strengthening oversight of private hospitals

The department has broadly similar considerations that it must take into account when making decisions about public and private hospitals[135] including considerations about safety and quality. However, the way the department approaches considerations of safety and quality is very different for each hospital sector.

One core difference is the balance between monitoring and more active investigation in private and public hospitals. The public hospital regulators monitor key performance indicators (KPIs) and core mortality and readmissions indicators from a distance. They tend not to see patient complaints other than a small proportion made directly to government, rarely inspect hospitals, and review only the summary of accreditation reports. By contrast, the private hospital regulators make minimal use of KPIs and irregularly review core mortality and readmissions indicators. However, they have full access to complaints made directly to the department,[136] inspect hospitals every two years (and more frequently if there is any cause for concern)[137] and review the full accreditation report for every hospital irrespective of the result. In these respects, the department likely knows more about safety in private hospitals than in its own public hospitals.

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134 For example, a major study of National Health Service boards found that while boards made a significant difference to the willingness of staff to come forward with concerns, the study not find any statistically significant relationship between board attributes and processes and any patient safety outcome measures. Mannion, *et al.* (2016)

135 Before funding a public health service, the Secretary must consider for the arrangements in place or to be put in place for a number of different purposes, including monitoring and improving the quality of health services provided. Similarly, before registering a private health service the Secretary must consider whether appropriate arrangements have been or will be made for a number of different purposes, including evaluating, monitoring and improving the quality of health services provided by the establishment. s. 83(1)(j) *Health Services Act 1988*. Until recently, oversight of private hospitals sat outside the hospital performance monitoring division in the department, and private hospitals were not subject to the department's safety and quality performance monitoring framework. Now, the private hospital regulation unit is housed within the hospital performance division but maintains a relatively distinct approach to oversight.

136 Although it has a similar risk of not learning of AHPRA investigations as the public hospital regulators.

137 Since 2014 the department has implemented a risk-based regulatory approach to inspections, which has resulted in some hospitals being inspected more regularly than every two years and some others less frequently depending on identified risk.

Another core difference is the expectations of hospitals regarding participation in improvement activities. For private hospitals (but not public hospitals), reporting of sentinel events and submission of root cause analyses for review is voluntary only. They cannot submit incident reports to the Victorian Health Incident Management System (VHIMS) dataset. Private hospitals also have less access to benchmarking resources, other than those provided within their own corporate entity.

Finally, in some cases the department lacks powers to oversee use of treatments that may pose a risk to patient safety. This includes use of electroconvulsive treatment, which is regulated in public but not private services under the Mental Health Act (2004),[138] and surgical procedures in low-volume practices that are not required to be registered.

A risky approach

> The department has paid little attention to private hospitals over recent years, preferring a deregulated, arms-length approach. Accordingly skills and knowledge of private hospitals and how they work have declined, though over the last year or two the department officials responsible for liaising with private hospitals have done an excellent job with scarce resources... Very limited performance information is received as present, and what we do receive is often more than 12 months old.
>
> **Dr Michael Walsh, Chief Executive, Cabrini**

Some private hospitals may have very sophisticated safety and quality systems, but there is wide variation and little regulatory enforcement of minimum standards beyond the accreditation process. Private hospitals have not been mapped against the capability frameworks specifying appropriate risk management, although this will occur soon for maternity and perinatal services. Some private hospitals belong to national networks, which can do internal benchmarking but many do not, and only one private hospital in Victoria participates in Health Roundtable benchmarking.

Responsibility for oversight of the 171 private hospitals falls upon 7.1 people (FTE) in the department, and several of these people have other responsibilities. There are no analysts in the Private Hospital branch and they have limited access to analytic resources elsewhere in the department, so under current arrangements this team would only be able to make limited use of more data.

Private hospitals mostly specialise in elective rather than emergency procedures but we did not find a statistically significant difference between the crude rate of hospital-acquired diagnoses for patients who stayed overnight in private versus public hospitals.[139]

138 Electroconvulsive treatment (ECT) is a medical procedure that is used to treat a range of mental illnesses. The treatment induces controlled seizures in the person by placing small electrodes at specific locations on the head. ECT is generally very safe and effective, but comes with risks and is generally only used in life-threatening situations (because of the rapid results) or when other forms of treatment have failed. BetterHealth Channel (2016)
139 Hospitals with 10 or more overnight separations, $t = 1.84$, $df = 213$, $p = 0.067$.

This may be due to a range of structural factors that *increase* risk in private hospitals. This includes the fact that, in the private sector, clinicians tend to work across a large number of hospitals with very different processes, and where the hospital executive has very limited authority over the clinicians working in the hospital.

Further, a large number of Victoria's private hospitals are small-scale day procedure centres that have neither the economies of scale nor the departmental oversight to ensure contemporary best practice in safety and quality. For example, a forthcoming review of national accreditation highlighted that small day procedure services particularly struggled to find the resources to implement the NSQHS Standards that all hospitals are required to meet under the national accreditation scheme.[140] Given these risks, adherence to risk management frameworks (see Box 2) and patient outcomes in day procedure centres should be carefully monitored.

Finally, a large number of additional practices are not registered and therefore not subject to the same oversight, or held to the same standards for safety and quality of care, as private *or* public hospitals. This is because the Health Services Act only requires practices to be registered if their 'major activity' is the provision of prescribed health services. Hence, practices where 'surgery' is not a major activity are not required to be registered. This ignores the fact that low volumes of surgery can in fact be riskier than high volumes. Further, it means that practices providing invasive procedures under general anaesthesia (such as liposuction and breast augmentation/reduction) are doing so with minimal external scrutiny or oversight.

Box 2: Unsafe practices can occur at day procedure centres

In 2014 the South Australian Coroner held an inquest into the deaths of two people who died following elective surgical procedures in a small private hospital that had no overnight medical staff on site and limited ability to deal with serious postoperative complications if they emerged.[141]

In both cases the coroner questioned the decision of the surgeons to operate on high-risk patients who, in light of the hospital's capability, were not suitable for admission. Inappropriate preadmission procedures were identified as a major contributing factor in the deaths, as anaesthetic staff were under pressure to make risk and suitability assessments just prior to the patients being taken to theatre.

The coroner also highlighted the importance of disclosing any financial interest a clinician might have in operating at a particular hospital. The coroner expressed concern that the decision of both surgeons to operate at that particular day hospital may have been influenced by the financial benefit they received as either a director and/or shareholder of the hospital. The case highlighted the need for medical practitioners to clearly disclose financial interests to patients and to prioritise patient safety above any such interest.

140 Australian Commission on Safety and Quality in Health Care (2016c), p. 7
141 Findings of the South Australian Coroner's Court (2014) Coroner's Court of South Australia (2014)

A stronger approach

Given that the department should hold hospitals to the same high standard irrespective of their sector, these disparities in approach are not logical. For example, either the accreditation reports contain useful information worth reviewing or they do not; and either sentinel event reporting is a worthwhile exercise or it is not.

We recommend that the department lift the standard of regulation in both sectors, and improve economies of scale in regulation, by reviewing the approaches of each branch and harmonising them wherever it is advantageous to do so. It should then produce for the Minister a report explaining where expectations and oversight will continue to differ, and the reason for this.

At a minimum, the department should start providing its Private Hospitals branch and private hospitals with timely access to data, including the safety and quality report. This should be a responsibility of the VHPA when it is established (see Chapter 4). Private hospitals should also be required to report all sentinel events to the department.

The department should track performance on these data and use it to inform its assessment of private hospitals during the registration and review process. It should engage private hospitals in regular discussion about their improvement priorities based on these data. It could do so in a relatively informal way, or could develop and pilot a modified Statement of Priorities to form the basis of these discussions.

The department should ensure the branch is adequately staffed to analyse and act on this data and hold these discussions.

The department should also pursue legislative change to improve oversight of private centres where required. This should include reform of the Mental Health Act to ensure that the level of oversight of electroconvulsive treatment in the private sector is equivalent to that provided in the public sector. It should also include revision of the Health Services Act to enable adequate regulation of unregistered centres providing surgery.

Changes to the latter Act should primarily broaden the definition of 'day procedure centre' so that unregulated businesses that currently perform medical procedures are properly regulated. Revisions to the Health Services (Private Hospitals and Day Procedure Centres) Regulations 2013 should also be made in order to provide tiered registration thresholds and reporting requirements for services. For example, thresholds could be based on levels of sedation or anaesthesia given in each centre, considering the particular risks to patient safety associated with increasing levels of anaesthesia.

Recommendation 2.11:

That:

2.11.1. the department monitors a common set of performance indicators across all hospitals

2.11.2. private hospitals be subject to the same public reporting requirements as public hospitals

2.11.3. the department requires all private hospitals to report sentinel events to the department, if necessary through regulation

2.11.4. the Minister seeks to revise the Health Services Act to broaden the definition of 'day procedure centre'. Revisions should also be made to the Health Services (Private Hospitals and Day Procedure Centres) Regulations 2013 to include tiered registration thresholds and reporting requirements for services

2.11.5. the Minister seeks to revise the Mental Health Act to ensure that the level of oversight of electroconvulsive treatment provided in the private sector is equivalent to that provided in the public sector.

Strengthening oversight of risk management

Resourcing varies enormously across Victorian hospitals. Some hospitals have the specialist staff and resources needed to manage all kinds of patients safely, but most have to manage their patient admission processes carefully to ensure they only treat those they have the capacity to treat safely, and transfer those they can't.

There is wide variation in risk management

In public hospitals, capability frameworks generally describe the scope of practice and resources needed to provide care at a designated level in some clinical areas. In essence, they tell each hospital which patients they should be transferring rather than treating.

The department has developed capability frameworks for trauma care, maternity and newborn services and subacute services but to date has not had a consistent approach for assessing and monitoring adherence to these frameworks. For example, the maternity services capability framework was released in 2010, but adherence is not routinely monitored by the department. Additionally, there are few parallel frameworks for other services, which is concerning given that safety and quality of care is heavily dependent on whether the resources and expertise on hand are appropriate considering the complexity of the patient.[142] Also, Victoria has a very large number of small hospitals, with many of them providing low volumes of maternity and surgical care. During this review, senior stakeholders raised concerns about the safety of these services.[143]

Further, in some cases, hospitals have been left to make their own assessment about capability and choose their own service level. Sometimes these assessments may be inaccurate, with the hospital overestimating its ability to deliver complex services.

142 An example of this is the volume–outcome relationship in surgery, where complex care for high-risk patients has been repeatedly found to be much safer in hospitals where both the treating surgeon and the surgical team have performed a minimum volume of the relevant surgery in the recent past. Chowdhury, et al. (2007) Halm, *et al.* (2002) Reames, *et al.* (2014b)

143 In addition, a recent independent review of the Victorian health system noted that "some tiny rural hospitals still provide surgery through visiting medical officers who fly or drive in, and some still provide surgery of a seriousness that must raise questions around the safety of such procedures." Ham and Timmins (2015) , p 22.

As the department's capability framework for Victorian maternity and newborn services states, complications may occur in any pregnancy at any time, with certain conditions individually or cumulatively placing mothers and babies at heightened risk of morbidity and mortality. Hospitals thus have to carefully monitor and manage these risks, and consult with or refer patients to specialist clinicians or facilities to ensure that the identified risk is managed appropriately.

Figure 3 shows that there is a level of patient complexity even in medium or lower-risk maternity services. In the Level 3 maternity services depicted, around ten per cent of deliveries involved complications that would normally be outside the hospital's scope of practice. This may be of concern, given the low expected prevalence of the conditions in question. While in most cases it is likely that the hospitals have adhered appropriately to their capability frameworks, there is also clearly a risk of non-adherence, which warrants ongoing monitoring. In particular, there should be scrutiny of the rate of referrals and transfers among complex deliveries, rather than all deliveries.

Figure 3: Prevalence of complex deliveries in Level 3 maternity services

■ Level 3 public maternity services
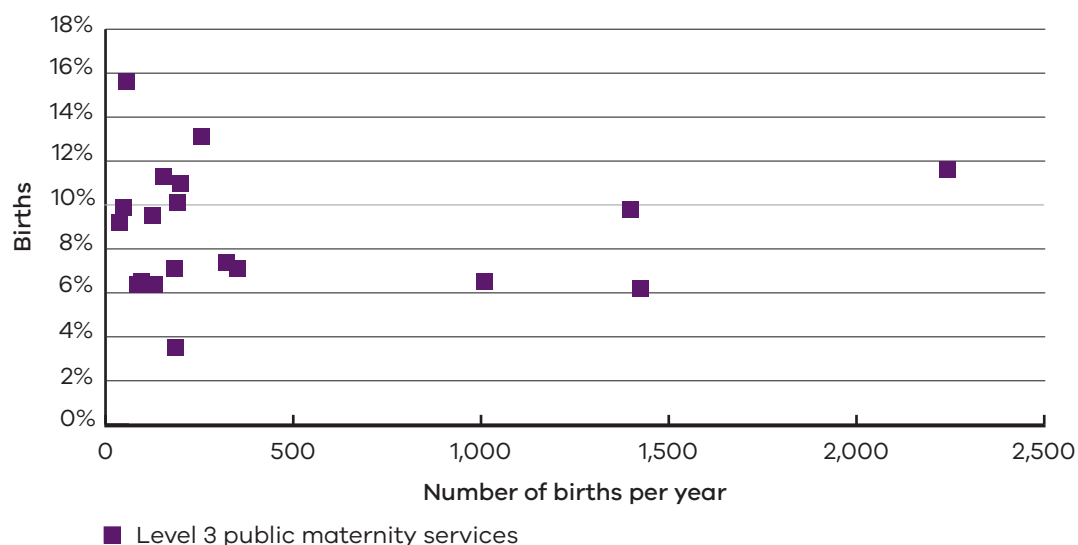
Source: Victorian Perinatal Data Collection (2012 and 2013).

Notes: Births with one or more of the following conditions that would have been present at booking in and that would not generally be managed at a level 3 service. Women with vaginal breech birth, placenta praevia, oligohydramnios, gestational diabetes mellitus treated with insulin or pre-gestational diabetes, RH isoimmunisation, pre-eclampsia, shortened cervix, cervical suture, BMI>40, multiple births, fetal growth restriction <5th centile. This data includes unplanned births at the health service.

If risk management in services is not routinely monitored the Department may miss out on information with potentially high sentinel value.[144] For example, a hospital that has unusually high rates of complex deliveries may be struggling to transfer patients in a timely way, either because of problems locally or in the receiving hospital. It could also mean there are problems with oversight of risks by hospital management. Without this monitoring, the department would likely only learn about unsafe care through retrospective review of avoidable mortality and morbidity.[145]

144 For example, the department was unaware that Djerriwarrh Health Services was operating outside its obstetric capability framework in taking complex and premature deliveries outside its scope of practice until it was alerted to the fact by the Australian Nursing and Midwifery Federation in 2014.
145 Even then, the department may not see morbidity and mortality reviews. It could be alerted by complaints, but only if these came directly or via the Minister, rather than to the Health Services Commissioner.

Circumscribe and monitor clinical service delineation

The current level of devolution of service delineation is not appropriate and creates perverse incentives. Low-capacity hospitals have strong incentives for providing high-risk services, given that the department is more likely to respond to adverse financial performance than adverse patient outcomes. This perverse incentive has been reinforced, ironically, by rural hospital's strong accountability to local communities, which expect local access to maternity services and surgery.

To address these flaws, the department should begin by developing capability frameworks that cover all the major domains of hospital practice to inform risk assessments, applying them to both public and private hospitals, and monitoring adherence to them on an ongoing basis using its multiple data sources (including routine data). There should be a clear expectation of adherence to the capability frameworks, with the onus on hospitals to justify non-adherence. The department should share its framework adherence data with boards and hospitals, and raise ongoing under-adherence with them. These may stem from structural issues, where the hospital could use departmental assistance, such as transfer arrangements to regional hospitals.

> In many jurisdictions around the world specialised services have been rationalised where there is a concentration of expertise and enough throughput to ensure a high quality and efficient service. Diluting this out across the state/sector may not be helpful.
>
> **Professor Stephen Holt, Director of Nephrology, The Royal Melbourne Hospital**

Recommendation 2.12:

That:

2.12.1. within one year, the department has assigned International Classification of Diseases diagnosis and procedure codes to its existing capability frameworks, be monitoring adherence to them (across public and private hospitals) and sharing information on adherence with hospitals and boards.

2.12.2. within three years, the department has expanded its capability frameworks to cover all major areas of hospital clinical practice, be monitoring adherence to them (across public and private hospitals) and sharing information on adherence with hospitals and boards.

2.12.3. where the department allows hospitals to self-assess capability and select their own service level, it must seek and verify evidence that they have done so accurately and appropriately.

2.12.4. if a hospital ceases to comply with the requirements of its designated service level, it must notify the department immediately.

2.12.5. the Victorian Health Performance Authority, when established, provides a six-monthly report to all hospitals and the department on adherence to relevant capability frameworks.

The relationship between volumes and outcome

An extensive body of research shows that hospitals performing above a threshold volume of a given treatment have better patient outcomes for that treatment, although the impact varies between specialties and procedures.[146] For example, as Box 3 shows, international research has found a significant relationship between the volume of a procedure for patients with pancreatic cancer (pancreaticoduodenectomy) performed in a hospital, and outcomes for those patients. In Victoria the 150 surgeries of this type performed each year are spread across more than 20 hospitals. This does not reflect the best interest of patients.

Box 3: In some cases low volumes of procedures may not be in the best interests of patients

A Whipple procedure (also known as a pancreaticoduodenectomy) is a high-risk invasive surgery performed primarily on patients with pancreatic cancer. This type of procedure is associated with high morbidity and mortality rates and has been described as one of the most difficult gastroenterological procedures to perform. A recent systematic review reported the surgery's in-hospital mortality[147] rate to be between 2.1 per cent and 10.3 per cent.[148]

Because Whipple procedures are so complex and risky, they require a very high level of expertise and experience from the operating surgeon and team. Not unexpectedly, recent international research has found that hospitals teams that perform higher volumes of this surgery have lower mortality rates than those hospitals that do lower volumes,[149] although there is still some clinical debate about the merits of referral to low-volume centres.[150]

Some countries, such as the Netherlands, have responded to this evidence by concentrating provision of the procedure in a small number of hospitals that must perform a minimum volume of the surgery every year to continue providing it.[151] As Figure 4 shows, Victoria does not have this approach. Despite the evidence on best practice, Whipple procedures remain dispersed across 24 different hospitals (12 public and 12 private) in Victoria, with only four hospitals performing on average more than 10 procedures per year.[152] The majority are below the international safe volume threshold.

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146 Chang and Klitzner (2002) Halm, *et al.* (2002) Jacinth and Zelmer (2005) Lee, *et al.* (2015) Mesman, *et al.* (2015) Sheikh (2003)
147 Studies included both in-hospitality mortality rates and 30-day mortality.
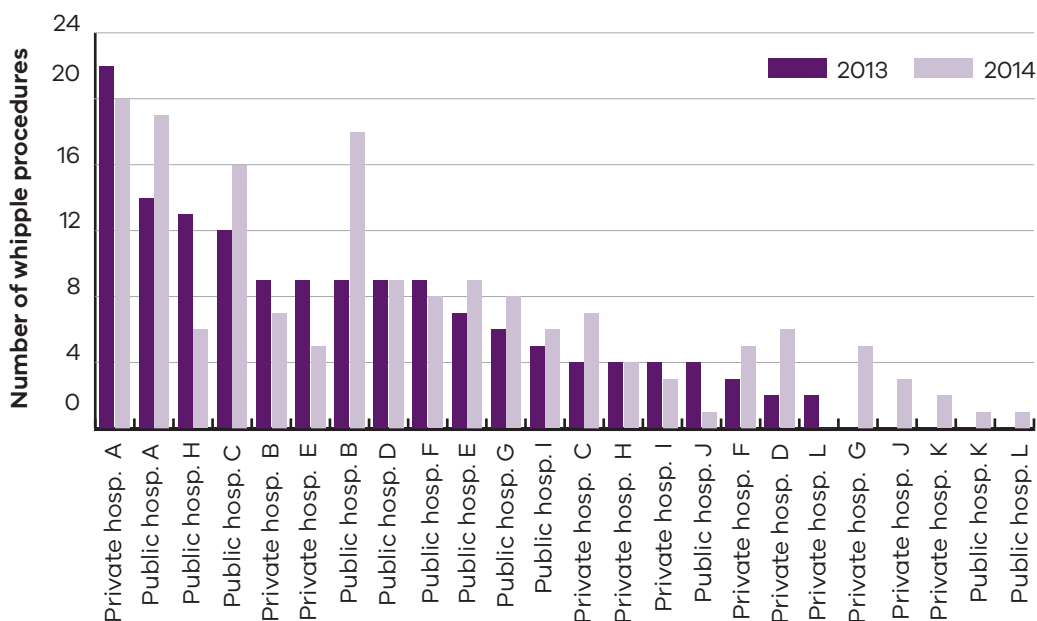148 Hata, et al. (2015)
149 Ibid.
150 Merrill, et al. (2016)
151 de Wilde, et al. (2012)
152 Data were extracted from the VAED between 2009 and 2014

Figure 4: Many hospitals are performing very low volumes of whipple procedures

The volume–outcome relationship has been persistent over time, and ranges from about a 10 per cent to a 200 per cent higher mortality rate in low-volume compared with high-volume centres, depending on the procedure.[153] The greater the difference in outcomes for low- and high-volume hospitals, the greater will be the overall improvement in outcomes from centralisation.[154]

Importantly, concentration of services may be more important and easier to achieve in Melbourne than in rural and regional centres. For example, of the 20 hospitals that performed fewer than 10 Whipple procedures in 2014, only four were located outside metropolitan Melbourne.

Concentration and access

On the face of it, concentrating services in high-volume centres seems an obvious way to improve overall quality, but clinical outcome isn't the only aspect of quality that patients value.[155] Local access is important, and a number of studies have shown that patients make trade-offs between the distance they (or their families) have to travel to get care, and better outcomes. The factors influencing distance that patients are prepared to travel include the nature of the risk (for example, mortality compared with morbidity) and the extent of the difference in the outcomes.[156] The volume–outcome trade-off for regional and rural services thus also needs to take into account an outcome–access trade-off.[157]

153 Reames*, et al.* (2014a)
154 Urbach*, et al.* (2003)
155 Victoor*, et al.* (2012)
156 Finlayson*, et al.* (1999) Landau*, et al.* (2013) Shackley*, et al.* (2001)
157 Glance*, et al.* (2007) Hentschker and Mennicken (2015)

Where there is evidence that outcomes of a given procedure are substantially poorer when performed by a surgeon and/or in a hospital below a given annual volume threshold, the department, on the advice of the relevant clinical network, should designate 'safe centres' for the procedure and support redirection of patients towards those centres. It should prohibit and cease to fund the procedure outside those centres.[158]

In determining whether or not to identify a procedure or treatment as appropriate for centralisation, the clinical network should give consideration to the strength of the relationship between volumes and outcomes (if the volume effect is small). Appropriate local access (especially in rural areas) may outweigh the benefits of centralisation. Decisions should always be for the overall benefit of the community, taking all aspects of quality into account.

There is also evidence of a volume–outcome relationship for individual surgeons.[159] Over time, the department should develop the capacity to apply these volume threshold requirements to individual surgeons and other proceduralists. An important first step for this will be requiring all hospitals to record the proceduralist identification number in the routine dataset, which will allow tracking of volume over time.

Recommendation 2.13:

That:

2.13.1. clinical networks identify those procedures or treatments for which there is evidence of a material volume–outcome relationship (the 'materiality' threshold may be different for metropolitan and regional centres)

2.13.2. the department designate which public and private hospitals may admit patients for 'minimum volume' procedures and treatments

2.13.3. the Secretary issue a direction under section 42(1)(d) of the Health Services Act to public hospitals to effect this designation (public hospitals not designated for specified treatments should not be eligible to receive payment for those procedures or treatments)

2.13.4. 'minimum volume' procedures and treatments be designated as specific types of care for private hospitals so that only designated hospitals are licensed to admit patients in those categories

2.13.5. for all procedures, the department require both public and private hospitals to record the responsible proceduralist's identification number in their submission to the Victorian Admitted Episodes Dataset.

158   Ham and Timmins (2015)
159   McGrath, *et al.* (2005)

Reinforcing the safety net against system failures

Common causal features [of large-scale intelligence failures] are rigidities in institutional beliefs, distracting decoy phenomena, neglect of outside complaints, multiple information-handling difficulties, exacerbation of the hazards by strangers, failure to comply with regulations, and a tendency to minimize emergent danger. Such features form part of the incubation stage in a sequence of disaster development, accumulating unnoticed until a precipitating event leads to the onset of the disaster.[160]

The focus of this chapter has been on strengthening two key safeguards against serious failures in care: hospital boards and the department. We have done our best to identify weaknesses in these systems and recommend ways of fixing them. However, unanticipated risks will inevitably remain. For this reason, we recommend the department strengthen the culture of reporting in Victoria and improve protections and incentives for whistleblowers – the system's last line of defence against serious, systematic harm.

Overcoming cultural barriers to reporting

In many cases where unsafe care has continued for years, investigation has found that staff complaints were ignored, discouraged or dismissed, and internal management and regulatory oversight either did not detect the problems or saw but failed to address them.[161] In Victoria there are requirements for reporting very poor practice. The National Law requires registered health practitioners and employers of registered health practitioners to advise AHPRA or a National Board if they have formed a reasonable belief that a health practitioner has behaved in a way that constitutes notifiable conduct in relation to the practice of their profession. Notifiable conduct by registered health practitioners includes 'placing the public at risk because of a significant departure from accepted professional standards'.[162]

This legal threshold for mandatory reporting of medical professionals is high. However, any person or organisation can make a voluntary report (or 'notification') to AHPRA,[163] and indeed the majority of national notifications are voluntary.[164] Nevertheless, we heard several times during this review that poor professional practice at Djerriwarrh was a problem well known to many obstetricians, but AHPRA received only one notification about the hospital, relating to a single incident in 2013.

This suggests wider problems with the *culture* of reporting in Victoria. This is supported by AHPRA data (see Figure 5) showing that Victoria has consistently and unusually low rates of mandatory notifications compared to other jurisdictions. This suggests that either notifiable conduct is unusually rare in Victoria, or that there has historically been a weaker culture of reporting compared to other states. In its submission to this review, AHPRA noted that its year to date figures for 2015/16 suggest a trend of increasing mandatory reporting in Victoria, potentially due to increased levels of awareness brought about by high profile events such as what has occurred at Djerriwarrh and also their current work to increase awareness of reporting.
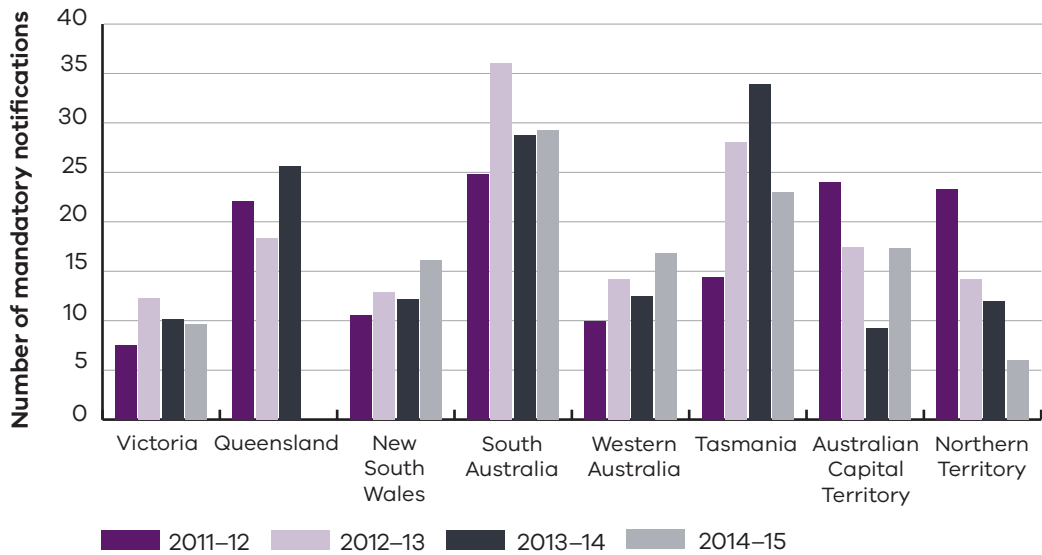
160   Turner (1976), p. 378
161   Colin-Thome (2009); Casali and Day (2010)
162   Australian Health Practitioner Regulation Agency (2016a)
163   Australian Health Practitioner Regulation Agency (2016c)
164   Australian Health Practitioner Regulation Agency (2016b)

Figure 5: Victoria has comparatively low rates of mandatory notifications to AHPRA

Source: data supplied by the Australian Health Prudential Regulation Authority.

Note: 2014/15 data for Queensland has been omitted because the data were not comparable - consultation forms used for complaints were produced by the Office of the Health Ombudsman and do not indicate whether the complaint made is a voluntary or mandatory complaint.

A strong reporting culture is critical to a safe health system. While all health workers have a professional responsibility to their patients to disclose harm and raise concerns when things are not right, there are significant practical and cultural barriers to reporting harm in healthcare. This includes: hospitals letting underperforming staff leave and work in another organisation without reporting their conduct; fragmented responsibility for identifying and addressing problems meaning that few people feel they have the 'full picture' and should act; and tendencies to ignore uncomfortable information and protect one's own position rather than create conflict.[165] These problems are exacerbated in hospitals by a hierarchical culture that discourages people from questioning practices, and where there is a tendency for specialties to deal with problems informally and in private rather than through organisational processes.

Creating a culture of improvement requires more than legal change. Clinical leaders, colleges, hospital managers, the department and AHPRA need to work together to overcome cultural barriers and instil a much stronger sense of professional duty to report even inconclusive signs of harm. Part of this is having layers of responsibility where concerns can be escalated if one level (for example, the hospital board) fails to act.

165   Walshe and Shortell (2004), pp. 107–108

Recommendation 2.14:

That:

2.14.1. low rates of agreement with the questions 'My suggestions about patient safety would be acted upon if I expressed them to my manager' and 'I am encouraged by my colleagues to report any patient safety concerns I may have' in the People Matters Survey be used as an indicator of a poor reporting culture in a public hospital (see Recommendation 3.3)

2.14.2. public hospital boards, in their next *Statement of priorities*, be required to commit to develop and implement plans to educate staff about obligations to report

2.14.3. where clinical registries detect serious deficiencies in care in the course of their research they must uphold their professional responsibility to notify the Australian Health Practitioner Regulation Agency.

A stronger institutional response to whistleblowing and notifications

When ordinary reporting fails to bring harm to the attention of hospital boards or the department, whistleblowers are the last hope. Many of Australia's major hospital safety scandals have been brought to light by whistleblowers who had to alert politicians or the media to systematic failings in hospital care directly after unsuccessful attempts to resolve the issues using existing institutional structures.[166]

Whistleblowers risk severe social and professional consequences for their actions – such as workplace ostracism, bullying, pressure to resign and overt professional demotion, transfer or reprimand – with severe consequences for their physical and mental health.[167] People who report problems can suffer. Nurses are particularly vulnerable in this respect because they are more likely to report harm[168] and are frequently involved in whistleblowing events[169] but also tend to enjoy less security of tenure. Often it is easier to replace a nurse complainant than to deal with the subject of the complaint.

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166   This included Camden and Campbelltown hospitals (New South Wales), The Canberra Hospital (Australian Capital Territory), King Edward Memorial Hospital (Western Australia) (Faunce and Bolsin (2004), p. 44) and Bundaberg Hospital (Queensland), Colin-Thome (2009).

167   Faunce and Bolsin (2004); Mannion and Davies (2015). For example, the report of the Inquiry into failings at Campbelltown and Camden Hospitals noted that 'the nurse informants have paid a high personal price for their decisions to come forward. Some are no longer working as nurses or are not working at all. Those still working at the MHS report vilification and isolation by some of their colleagues because of the criticism of the health service brought about by the investigation.' New South Wales Health Care Complaints Commission (2003) See also Bjørkelo (2013).

168   Braithwaite*, et al.* (2010)

169   Jackson*, et al.* (2014); Jackson*, et al.* (2010)

While there are strong legal protections in place for whistleblowers in Victoria, risk of punitive consequences for whistleblowers were raised as a concern by clinical leaders (including the Royal Australasian College of Surgeons) during consultation for this review.[170] The department should treat this as a serious risk. If people believe they will be risking their careers and livelihoods in raising red flags to patients, they are much less likely to come forward.

Like normal reports of avoidable harm, concerns raised in good faith through whistleblowing should be met with timely and thorough investigation. This encourages people to come forward early on, rather than to wait for incontrovertible evidence of severe, avoidable harm. It is the responsibility of hospital executives and regulators to create a safe environment to raise such concerns.

The department and AHPRA's actions in relation to the events at Djerriwarrh Health Services have done little to inspire such confidence. The department had received indications that there may have been problems at Djerriwarrh in 2013[171] and 2014[172] Similarly, AHPRA was alerted to poor obstetric practice in 2013 and took 28 months to investigate.

The department and AHPRA must rebuild the confidence of health workers and the community that reports of poor practice will be fully and promptly investigated. A stronger system of hospital oversight (discussed in Chapter 3 of this report) and a clear understanding of the department's responsibilities for it (discussed at the end of this chapter) will be critical here.

Expanded powers for the Health Services Commissioner (HSC) to investigate complaints in relation to health services will also be crucial.[173] Under legislation expected to come into effect in early 2017, the (renamed) Health Complaints Commissioner (HCC) will be able to investigate complaints made by a third party, with substantial provisions for protection of participants in investigations, and the HCC able to withhold the name of the complainant and person who received the health service in the course of any process under the Act. In this way whistle blowers should expect substantially greater protection in coming forward with concerns.

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170 In its submission to this review, the College suggested the panel recommend a review of whistle-blower protection within health institutions including public hospitals.

171 On this occasion, 'the Clinical Services Director of Women's and Children's Services at Western Health wrote to the department tendering his resignation as Chairman of a Safety and Quality Committee expressing concern about the safety and quality of maternity services in the western suburbs as a result of the 'overwhelming demand issues'. Picone and Pehm (2015) pp. 11–12.

172 The Australian Nursing and Midwifery Federation had raised concerns with the department about clinical safety risks within the maternity unit. One of these risks was the apparent practice of accepting higher risk deliveries (over the capability level of the unit). The department had discussed the issue with local management but had been assured that the issues raised were being resolved locally. In hindsight this was not the case.

173 The *Health Complaints Act 2016* will extend the powers of the HCC to initiate investigations of health services. These new powers also enable greater sharing of information with other agencies (for example, AHPRA) to identify potential issues and risks. The *Health Complaints Act 2016* received royal assent on 3 May 2016 and is expected to come into effect no later than February 1 2017.

Recommendation 2.15:

That the department works with the Australian Health Practitioner Regulation Agency and the Health Services Commissioner to devise a strategy for improving rates of voluntary reporting of concerns by health professionals.

Shared responsibility for care

> Systemic failures by [the department] – some of which were identified over a decade ago in our 2005 audit – collectively indicate that it is not effectively providing leadership or oversight of patient safety. It is failing to adequately perform important statewide functions and is not giving patient safety the priority it demands.
>
> **Victorian Auditor-General, May 2016**[174]

Devolution is an important feature of the Victorian health system. It is the model by which Victoria's hospitals are run at arm's length from the health department, by boards appointed by the Health Minister, with substantial autonomy over local operational matters.[175]

As this review's terms of reference explains:

> The principle underlying this devolved management model is that of subsidiarity, where decisions made locally are held, in general, to be superior and more responsive than could be made in alternative arrangements.[176]

For devolution to be effective, it has to be contingent on a hospital's competence and its ability to make informed decisions. This is because, while local decision making is a good thing in principle, it relies on the capability of the decision-makers and the information they have available. Weak performance assessment and local information systems, combined with rhetoric about devolution, can create a situation where no-one feels they are responsible for quality and safety.

Devolution can only work if local autonomy is on the basis of meaningful measures of performance, including safety and quality performance. As Chapter 3 shows, the department currently does not have a rigorous system for capacity, risk and performance assessment to guide decisions about the appropriate extent of local autonomy, and local decision-makers do not have the information they need for good decision making.

Even if the preconditions for effective devolution are in place, the department should have shared responsibility for hospital oversight under the Health Services Act.

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174   Victorian Auditor-General's Office (2016b), p. ix
175   Ham and Timmins (2015), p. 8
176   See Appendix 1.

Effective oversight is crucial. Hospitals are complex systems laden with risk, where harm is common; it is easy for things to go wrong. Having two sets of eyes on a hospital would mean that patients would have a much better chance of being protected from serious failures. An additional layer of oversight is all the more desirable when there are weaknesses in CEOs or in boards, which are far from infallible. When a board lacks critical expertise, information and independence, it should be supported and supplemented by the department to fulfil its statutory obligations.

> ... the devolved model of health service governance in Victoria leads in rural health services to the paradoxical situation of a complex adaptive system being governed in large part by unremunerated volunteers generally with no health background and therefore little understanding of the core business of the organisation.
>
> **Dr John M Elcock, Director Medical Services, Northeast Health Wangaratta**

Shared responsibility would also be practical because the department also has a financial responsibility for ensuring that the care every patient receives is safe and effective, and does not result in their returning to hospital. This is why the department's role under the legislation should be recast as system manager and leader, and why it should be required by legislation to do all it can to minimise harm and maximise quality.

But as this chapter's discussion of board competencies shows, this nuanced understanding of how oversight should work does not currently exist. The department is too distant from hospitals, does too little to support improvement and reduce variation in safety and quality between hospitals, and does too little to ensure the lessons of local innovation are disseminated across all hospitals.

> Clinical governance in Victoria has been presented as, and allowed to remain, passive. This is partly the result of insufficient critical thinking and energy applied to the area by [the department] over the past ten years. It appears that taking a strategic and thoughtful approach to go beyond compliance and reporting to creating high quality care for all consumers has not been on the priority list... since the mid-2000s.
>
> **Senior stakeholder**

The Victorian system has many important strengths in the hospital sector including the space it creates for local innovation, the importance it places on accountability to local communities and the exceptional hospital leadership that has emerged in our largest hospitals as a result of it.[177] We have no doubt that many hospitals are using devolved governance to its best effect.

However, while devolved governance has emphasised local initiative, it has not adequately addressed accountability and leadership.

No amount of devolution will absolve hospitals of accountability for outcomes. The system must be directly accountable to the public for these, and to the Minister and parliament. But true accountability requires a level of measurement and transparency (including public reporting) that is currently lacking in the system. We discuss ways of addressing this transparency gap in Chapter 5.

177   Ham and Timmins (2015)

The department can lead the hospital system by setting and expecting high standards of care, and supporting services to attain them. But some members of the department seem to have assumed that local empowerment must necessarily involve withholding support. Even in some cases where there has been a clear need for the department to take a more active role in supporting a health service, the principle of local autonomy has sometimes been invoked as justification for not doing so. Even since Djerriwarrh we have heard of cases where requests for help from hospitals regarding clear risks to patients were rebuffed by departmental staff as 'operational matters'.

> I am convinced that Victoria is no longer the Australian leader in safety and quality practice and policy ... It is now in my view well behind other jurisdictions in policy and practice, particularly in relation to the role of the department as system manager. The department has in my view progressively and seemingly deliberately reduced the importance of its system manager function, in particular as it relates to safety and quality of care provided in Victoria's hospitals ... [Safety and quality is] 'flying beneath the radar' until such time as a crisis occurs, as has been the case with the Bacchus Marsh issue. A central question in this must be 'why does it take a crisis like this to see meaningful action?' for safety and quality.

Grant Phelps, Deakin University School of Medicine

The department needs to *strengthen* its interest in ensuring that hospital boards are both well supported and held to account. After all, it is relying on them to make the right calls, and it has to clean up the mess if they don't. The long-term costs of unsafe and low-value care come out of the department's budget, and serious failures absorb much of its time when they occur. Devolution of accountability *should* in no way absolve the department of responsibility for its consequences.

The rest of this report looks at ways that we can make devolved governance work better for patients in Victoria. The next chapter shows how the department can improve its oversight to ensure that problems with underperformance are spotted much earlier and acted upon. Chapter 4 looks at how the department can create the conditions for excellence in overall performance by supporting clinical improvement work and engaging with clinical leaders. Chapter 5 addresses fostering a just, trusting and transparent culture in hospital care.

Recommendation 2.16:

That as part of the release strategy for this report, the Secretary takes the opportunity to make a clear public statement about the role of the department in the oversight of the health system and her statutory functions.

Such a statement should highlight the three components of governance:

- system leadership and support by the department
- democratic accountability (through transparency and performance management)
- devolution to enable local innovation and responsive management.

Devolution should not be presented as an end in itself, nor as a justification for leaving health services to manage without any support from the department.

Chapter 3: Effective oversight of safety and quality

This chapter addresses how the department can create stronger quality improvement processes by strengthening its oversight of hospitals.[178]

Currently, the department relies on a system that was incapable of detecting – let alone anticipating – catastrophic failings in clinical governance and care at Djerriwarrh Health Services. The failure of oversight and performance monitoring at Djerriwarrh Health Services was not a single, unlucky case, but instead illustrates much deeper flaws in the general model.

The department's oversight system has developed over decades, with new approaches added but few removed. Contemporary approaches to monitoring, such as using the rich data now included in routine datasets, have not been fully adopted. The result is a curious mixture of duplicated processes overly focusing on specific identifiable incidents rather than looking at overall patterns of care.

As this chapter shows, the department could and should do much more to ensure that hospitals are monitoring and improving the quality of their care. Most of the tools and information needed to do so are already available but are compartmentalised across various departmental silos. In particular, a more coherent system of expert case review panels, and a centralised point for analysis and follow-up of trends emerging from routine data, would likely have led to much earlier intervention at Djerriwarrh Health Services, potentially saving lives.

The department should develop open lines of communication with the organisations that handle complaints about health services and clinicians, and a functional incident reporting and response system.

There are many gaps in departmental oversight of the system. Our plan to create a contemporary, functioning system for oversight for safety and quality in hospitals has five components:

- an increased profile for monitoring safety and quality
- a revised system for monitoring adherence to national standards
- an incident monitoring system that works, with a streamlined system for clinical incident management
- monitoring trends, not just unusual incidents
- a coordinated system for complaints.

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178   We focus on monitoring of patient outcomes in this chapter, with discussion of accountability for patient experience in Chapter 5. We have not addressed monitoring of compliance with clinical governance as a review of this is being concurrently undertaken within the department. The review will include analysis of compliance and effectiveness of current clinical governance policy and a refresh to the *Victorian clinical governance policy framework (2008)* to strengthen clinical governance practice.

Flaws in oversight of Djerriwarrh Health Services

The perinatal deaths at Djerriwarrh Health Services between 2013 and 2014 revealed deep flaws in the overarching governance framework described in Chapter 2.

The department consistently identified Djerriwarrh as a high performer, awarding it a perfect score in its assessment at the end of 2012–13.[179] Subsequent review found it was clear that the department had no concerns about Djerriwarrh until early 2015, at which point seven avoidable or potentially avoidable deaths had already occurred.[180] When the deaths were finally detected, it wasn't by the department's performance monitoring unit, but instead by a specialist review committee[181] that had no direct responsibilities in monitoring performance.

A litany of factors contributed to these failures. For example:

- Routine departmental monitoring of hospital mortality was not designed to capture the unusually high number of perinatal deaths and stillbirths.
- The department over-relied on accreditation for quality assurance, and it ultimately proved unreliable – with auditors twice accrediting the hospital despite its weak clinical governance.
- The department lacked robust capacity to undertake routine surveillance of serious clinical events besides sentinel events,[182] which are very rare.
- A dysfunctional voluntary incident reporting system meant that information on several of the deaths was either lost or not reviewed, and that information on the other deaths was never entered in the first place.
- The relevant specialist review council was not established to monitor health services, was not looking for patterns of problems in care at hospitals, and had no capacity to review morbidity cases for potential early warning signs, nor to follow up recommendations for improvement work.

Critically, none of these factors is specific to Djerriwarrh Health Services and the clinical governance failure there. If these issues are not addressed, there is a risk that an event like Djerriwarrh could happen again without the department knowing.

The Djerriwarrh tragedy highlights not just failure of the performance monitoring framework but also failures in a range of systems, processes and cultures that precluded or hampered investigation of red flags when they arose.

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179 'In the case of Djerriwarrh Health Services no problems were identified [in performance monitoring] and its performance score was consistently very high, achieving a perfect score in the final quarter of 2012-13. It is clear from the evidence of regional staff that the department had no concerns about Djerriwarrh Health Services during 2013 and 2014.' Picone and Pehm (2015), p. 16
180 Ibid.
181 The Consultative Council on Obstetric and Paediatric Mortality and Morbidity (CCOPMM), which is discussed later in this chapter.
182 Picone and Pehm (2015), p. 5

Indications that there may have been safety and quality problems with obstetric services at Djerriwarrh[183] had been received by the department. In 2013 a leading expert in maternal quality and safety had written them a letter advising of concerns about the increasing pressure on all maternity services in the west of Melbourne. Prior to 2015 the department also knew that an obstetrician at the hospital was under investigation,[184] that the hospital had not met accreditation standards on initial survey in 2013, and that there had been a serious safety complaint about the hospital from the nursing and midwifery union.

In each case, departmental staff made enquiries with the hospital. However, though they were offered reassurances from the hospital, departmental staff did not close the loop by seeking concrete evidence of improvement. External review found that in some cases where 'little or no evidence' was provided in support of the hospital's claims, departmental staff 'did not feel they could press the issue, in some cases despite lingering concern.'[185]

In each case, staff deemed these problems to be the responsibility of the hospital. They were, indeed, 'operational' matters, but failure to follow up in a robust way indicates that the present statutory role of the department overemphasises the 'devolved' side of the governance equation, at the expense of appropriate accountability.

A review of the department's handling of the events at Djerriwarrh did conclude that once the Health Service Performance and Programs division of the department learned of the cluster of deaths at the hospital, it acted impeccably. But many will question whether this trigger point – definitive proof of multiple avoidable deaths – was the right one. A better oversight system and a more involved department would have detected them.

183 These include 'The external review of a maternity presentation transferred from Bacchus Marsh campus to a Western Health hospital and the resignation of the Clinical Services Director of Women's and Children's Services at Western Health as Chair of a Maternity Quality and Safety Committee, raising concerns about patient safety (February 2013), failure of Bacchus Marsh campus to meet certain National Safety and Quality Healthcare Standards (July 2013), and concerns raised by the Australian Nursing and Midwifery Federation (ANMF) regarding the standards of clinical care at Djerriwarrh Health Services (January 2014).' ibid., p. 4

184 'The department noted that the obstetrician concerned had been reported to AHPRA and that Djerriwarrh Health Services was responsible for reviewing his accreditation for continuing his practice in its service.' ibid., p. 11

185 Ibid., p. 16.

Gaps in performance assessment mean troubling patterns are easily missed

> Major investigations in the health sector still come about through whistleblowers, not data.

<div align="right">

Metropolitan health service board chair[186]

</div>

The department's current approach to monitoring safety and quality suffers from two major shortcomings in the way that information is currently collected and reviewed. Not enough information is collected, and the review process for information is not designed to detect patterns of underperformance.

Not enough information is captured

First, the department's approach is to monitor only a few high-level and limited performance indicators,[187] with monitoring primarily restricted to public providers. Almost no data are collected, monitored or fed back to private hospitals about their relative safety performance.

For public hospitals and health services, only a tiny portion of patient harm (including infections, mortality, and sentinel events) is captured by the department. Although every year more than 300,000 hospital admissions have some form of adverse event, fewer than 2,000 infections[188] and fewer than 60 sentinel events are recorded. This means that probably less than one per cent of complications are captured in the current system for monitoring and review. With this approach, the department has no hope of knowing the true rate at which harm occurs in hospitals, how it varies across hospitals, or whether rates are falling over time.

A large amount of information on safety and quality is collected and reviewed through case review processes outside the department's performance monitoring unit. These individual case reviews of adverse incidents are run by various departmental and other government bodies, including the mortality and incident review panels, the consultative councils and the Victorian Audit of Surgical Mortality (VASM). These processes are highly credible and can provide conclusive evidence of preventable harm. Yet the consultative councils and VASM have only recently begun to share their findings with the department, which has meant the department has in the past not been able to factor this information into its hospital risk assessments. The councils are struggling to fulfil their entire current remit, with some only reviewing a tiny portion of all cases of morbidity and mortality, and others not monitoring morbidity at all.[189] Further, there is a question about whether the approach taken by the councils for reviewing individual deaths is still the right one given advances in the ability to monitor safety and quality of care using routine data.

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186 Bismark and Studdert (2013), p. 6
187 Ham and Timmins (2015), p. 26
188 Health service data submitted to VICNISS for 2014–15 showed 1,930 reported infections. Reporting is restricted to *Clostridium difficile*, *Staphylococcus aureus* bacteraemia, central-line-associated bloodstream infections, peripheral-line-associated bloodstream infections, surgical site infections, methicillin-resistant *Staphylococcus aureus* (MRSA) (only reported by small health services) and vancomycin-resistant Enterococci (only reported by small health services).
189 The consultative councils whose disciplines are not subject to mandatory reporting requirements only monitor voluntarily reported morbidity and mortality cases and do not use the information on morbidity and mortality in the routine datasets to identify and pursue further cases.

Information review is insular rather than holistic

Individual case reviews, like those used in Victorian public hospitals, are designed to find avoidable deficiencies in care in individual cases, rather than patterns of underperformance. There is a non-binding expectation that hospitals will take corrective action to ensure that any defect in care or processes found does not recur, but there is currently no systematic way to verify this has occurred.

There is little formal follow-up of this feedback to hospitals, and feedback may not always be accepted or implemented. As a result, deficiencies in care can persist. Further, persistent deficiencies are unlikely to be detected until they manifest in a subsequent case of mortality or severe morbidity at the same hospital. Even then, the responsible body can be very slow to connect the two cases, since there is no formal framework for detecting patterns of underperformance and harm in hospitals.

To compound this insularity of review, there is no formal process for triangulating data between bodies, much less for feeding it into the departmental performance monitoring framework. As a result, agencies with varying levels of autonomy will review the mortality or morbidity information available to them without seeing relevant information housed elsewhere. Their broader risk assessment of hospitals will instead be shaped by sector-level gossip that flows in through informal discussions with peers.

The department is similarly in the dark about what these bodies are doing. It will not be automatically alerted to outlier performance on indicators collected and reviewed by other bodies. For example, clinical registries, funded directly or indirectly by the department, may identify outlier clinical practice, but the department is generally not notified. Thus while there can be serendipitous triangulation of red flags in response to individual initiatives, there is no system to guarantee that red flags are promptly triangulated and problems picked up. As a result, a global view of deteriorating safety in a clinical unit or hospital can be very slow to emerge.[190]

The absence of a formal process for communication between these bodies has made it unclear when they should report harm to the department. Previously, an excessive aversion to reporting potential problems that may turn out to be statistical aberrations ('false positives') has meant these bodies have waited for conclusive rather than concerning evidence about poor safety before alerting the department.[191] This reflects an inappropriate balance between risk of reputational damage to hospitals or clinicians and the risk of leaving patients exposed to potentially avoidable harm.

190 For example, the department received a complaint about care at Djerriwarrh in 2014 but did not know that AHPRA was investigating a complaint about one of the health service's clinicians, nor that a consultative council had found avoidable mortality in several cases at the hospital.
191 For example, CCOPMM had reviewed the entire cluster of avoidable and potentially avoidable perinatal deaths at Djerriwarrh *individually* over 2013 and 2014 but did not alert the department to it until 2015.

Box 4: Fragmentation and delay in reviewing information related to the problems at Djerriwarrh Health Services' meant the trend of poor obstetric care was slow to emerge

Information	Reviewed by:
Four incident reports pertaining to the deaths and stillbirths over 2013 and 2014.	Two reports were transmitted to the department via VHIMS but neither were subject to review.
Case reviews for all perinatal deaths and stillbirths	The Consultative Council on Obstetric and Paediatric Mortality and Morbidity (CCOPMM) received the reports, with the Stillbirth Subcommittee and Perinatal Mortality Subcommittees reviewing the individual cases. The cluster was not detected and shared with the department until 2015.
An elevated gestation-adjusted perinatal mortality ratio for the service.	This was calculated and reported to the department at a two-year lag by CCOPMM.
An obstetrician was reported for poor practice in 2013	The Australian Health Practitioner Regulation Agency (AHPRA) received the notification and reviewed it over a 28-month period.
Letter from the Clinical Services Director of Women's and Children's Services at Western Health	The department prompted enquiries about other complaints but no wider concerns about Djerriwarrh's maternity services were identified.
A complaint from the Australian Nursing and Midwifery Federation.	The department received the letter and was reassured by Djerriwarrh Health Services that matters were being addressed.
The obstetric service was operating outside its capability framework	The department was not monitoring adherence to capability frameworks.

Compounding all of these deficiencies in information sharing is the fact that the department and its supporting bodies are struggling to review even the limited data already collected in a timely manner. For example, analysis of core hospital-based outcome indicators such as mortality and readmissions rates follows the submission of source data at a three- to four-month lag – even as the same analysis is performed by the benchmarking service, Dr Foster, within two to three months. Analysis undertaken for this review showed that the department could report with a two-month lag.

Sentinel event review by the Clinical Incident Review Panel occurs on average at a seven-month lag from receipt of completed root cause analyses, which may itself take several months to complete.[192] Mortality review by some of the consultative councils can also be very slow, and review of formal complaints against clinicians by a national body (AHPRA) typically takes nine to 12 months.

192 The seven-month lag is based on average of 2013–14 and 2014–15 events reviewed by the Clinical Incident Review Panel.

The department places too much weight on accreditation

The department currently assesses safety and quality risk and measures performance in two key ways: using accreditation to evaluate safety and quality processes, and monitoring health service performance against a small number of safety and quality experience and outcome indicators. As we show, neither process is working well.

The place of accreditation

This review's terms of reference highlighted that the department has relied on accreditation in particular to assure itself that hospitals' internal governance and management mechanisms to ensure safety and quality are in place and working. We believe the experience at Djerriwarrh Health Services, and the broader literature on the accreditation process, shows that the department was mistaken in doing so.

The idea of an external organisation 'accrediting' hospitals has been around for almost a century,[193] with the method of undertaking an accreditation survey changing little over that time. An external body (in the current iteration with 'national standards', this is now the Commonwealth and state governments) sets 'standards', another external body employs people to visit hospitals to assess against those standards, and an external body then designates the hospital as 'accredited'.

This idea was implemented in Australia in the 1970s, with two major changes since then: the development and introduction of National Safety and Quality Health Service (NSQHS) Standards endorsed by health ministers in 2010, and introducing competition between accrediting organisations.

This accreditation model is now overdue for fundamental change.

> The current system of accreditation is event management. The standards have caused behavioural change but much of this is tension occurring at quality office and executive level and it is possible to achieve accreditation with minimal impact on any front line staff. There is a lack of professional auditors, with B and C grade auditors who are at best interested amateurs. The meta-regulatory system of accreditation is really a PR exercise with no teeth and little credibility despite the major expense.
>
> **Senior interstate official**

Djerriwarrh Health Services was accredited during the whole period when the avoidable deaths occurred. Indeed a favourable accreditation report was written following a survey conducted at the same time as reports were also being written about poor clinical practice at the hospital.[194]

This was a failure of the accreditation process.

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193 Duckett (1983)
194 Major safety scandals have occurred at a number of other hospitals that were accredited (albeit under reportedly less rigorous standards) at the time. This includes Bundaberg Base Hospital, King Edward Memorial Hospital, The Canberra Hospital, and Camden and Campbelltown hospitals (which were partially accredited). Faunce and Bolsin (2004)

Accreditation involves a handful of auditors assessing a health service's compliance with 256 safety and quality criteria in the space of two to five days, on a three- to four-yearly basis. The auditors assess against a mix of best practice clinical standards and minimum standards (in the governance area) and look for *documentation* of given processes and functions, not the quality and effectiveness of them. What they see depends on what the hospitals show them, and what the hospitals show them depends on their insight into what should be checked and their willingness to share it.

Hospitals may fail to disclose information to the survey team (and this is what happened during the Djerriwarrh survey), when a relationship of trust, with full disclosure and an ability to seek advice, may lead to better long-term outcomes for patients.

The system's design contains incentives that further undermine the value of the process from a patient's perspective. Hospitals pay for their own accreditation audit provider, who they select from a field of competing agencies. Their incentives are to minimise the disruption of accreditation and avoid unfavourable reports. Accreditors' incentives are to be invited back again. Neither are conducive to rigorous scrutiny of hospital quality and safety.

Instead, we have accreditation as an irregular 'event', with event management the focus rather than continuous improvement. Hospitals 'prepare for accreditation' as if things need to be different and better only for the days the surveyors are visiting the hospital. This imposes significant costs on hospitals, with a small industry of refreshing documentation in the months leading up to the visit. A recent study estimated the incremental costs of accreditation at 0.03–0.60 per cent of total hospital operating costs per year, averaged across the four-year accreditation cycle.[195]

This whole approach can breed cynicism, and the evidence supporting accreditation is often mixed, as shown in Box 5.

195   Mumford, *et al.* (2015)

Box 5: The evidence supporting accreditation is often mixed

There are many challenges associated with quantifying the impact of accreditation on hospital processes. Most studies of the impact of accreditation do not adequately consider context or cost, making it difficult to understand and compare accreditation across different hospitals or hospital systems. Some Australian studies have found that accreditation has led to changes in some aspects of hospital operation. In particular, accreditation can be used to drive process improvements and cultural change in hospitals, and to improve people management processes.[196] Some reviews find that standards have an impact on some clinical indicators and not others, with a mixed overall impact.[197] Generally, however, there is little evidence to suggest that accreditation, however well designed, can provide an adequate measure of patient safety and quality of care.

However, quality and safety *outcomes* are generally not associated with hospital accreditation scores in Australian hospitals, a finding echoed in the international literature.[198] Two studies in New South Wales found that accreditation scores from the Evaluation and Quality Improvement Program (EQuIP) were not associated with hand hygiene rates at those hospitals. Similarly infection control accreditation scores were not linked to *Staphylococcus aureus* bloodstream infection rates.[199] The authors suggested that smaller hospitals that had higher rates of hand hygiene performed more poorly on infection control accreditation because the accreditation scores partly measure leadership and research activities rather than implementation of infection control policies.[200]

A new mandatory accreditation process in Australia using the NSQHS Standards was implemented in 2013. There have been ongoing issues with implementing the standards, particularly in 'developing and maintaining consistent expectations amongst frontline clinicians regarding the aims and requirements of the reform'.[201] The coordination, management and reliability of the accreditation process has also been a concern, with the perception that surveyors generate inconsistent results.[202] One study found that while clarification of governance arrangements has aided reliability, the introduction of multiple accreditation agencies is a potential threat to reliability.[203]

An evaluation of the impact of the NSQHS Standards found that most observed impacts couldn't be directly attributed to the standards and accreditation due to the confounding impact of other programs running simultaneously. The evaluation did, however, find many positive organisational impacts, including greater staff engagement with quality and safety.[204]

196 Greenfield and Braithwaite (2008) Greenfield, et al. (2014)
197 Greenfield, et al. (2012)
198 Brubakk, et al. (2015)
199   Mumford, et al. (2015) Mumford, et al. (2014), pp. 5–6
200 Mumford, et al. (2014), pp. 5–6
201 Greenfield, et al. (2015)
202 Greenfield, et al. (2016) 66 per cent of 'survey team' members in one study agreed that surveyors are inconsistent. See also Greenfield, et al. (2015).
203 Greenfield, et al. (2015)
204 Australian Commission on Safety and Quality in Health Care (2016c)

Accreditation processes need to be strengthened

[A] bugbear of mine is hospital accreditation, which is laborious, bureaucratic and process- rather than outcome-focused. It's a self-serving industry that chews up scarce resources which could instead be devoted to actual patient care … Accreditation should be targeted, outcome focused, and undertaken at random.

**Professor Danny Liew,[205] Chair of Clinical Outcomes Research,
School of Public Health and Preventive Medicine, Monash University
Consultant Physician at Alfred Health**

The department has a statutory obligation to consider various matters, including 'arrangements made or to be made … for monitoring and improving the quality of health services' before it makes grants to a public hospital. It appears that the department has made an implicit assumption that accreditation was enough to meet this criterion. But as Box 5 shows, there is a wealth of Australian and international evidence showing that accreditation cannot be relied upon as a sole guarantee of safety and quality. This is a view common in the sector, and which has been reinforced by what happened at Djerriwarrh Health Services. The department needs a much more independent and thorough assessment of hospital safety and quality than the one that accreditation is designed to provide.

Monitoring adherence to standards

The development of the NSQHS Standards was a positive step. The standards are evidence-based, clear and cover important areas of safety and quality. It is reasonable to expect compliance with these from hospitals.

The problem arises from having a poorly designed process of monitoring whether the standards are met. Quality and safety standards should be evident every day of the year – not only when the surveyors are around – and they should be evident in clinical practice, not just on paper.

Consideration should be given to a different approach to assuring standards – including those currently being tested overseas (see Box 6).

A possible approach might involve random (or short notice) visits to hospitals to assess against particular standards. This could mean a quite different mix of surveyors, with some surveyors specialising in one standard. Hospitals could be selected for survey randomly, on advice from the state health department, or based on their risk profile as demonstrated in an analysis of routine data; for example, failure to reduce rates of the Australian Commission on Safety and Quality in Health Care's healthcare-associated infections might trigger a visit to assess adherence to Standard 3 (Preventing and Controlling Healthcare Associated Infections), or might guide the frequency of revisits to assess against this standard.

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205 Views expressed are personal, and not those of Monash University nor Alfred Health.

Box 6: Some countries employ very different approaches to hospital accreditation

The United Kingdom

The National Health Service (NHS) has a very different approach to accreditation. Rather than hospitals choosing their accreditors, all hospitals are required to register with the independent Care Quality Commission (CQC) which inspects and publicly rates all hospitals. During the registration process, hospitals are vetted to ensure they meet a range of legal and governance requirements. Prior to inspection, the CQC conducts data analysis (covering 150 indicators of quality and safety) and gathers information from service users and stakeholders. At inspections, the CQC will review a number of 'core services' they have deemed to be high risk and may review other services. The CQC can also return to perform smaller, unannounced inspections.

In these ways, the quality assurance process is not only more independent, but also much more continuous than the accreditation process in Australia, which tends to be a triennial event. The CQC process is also more highly professionalised and thorough, with its staff made up of full-time professional inspectors as well as part-time inspectors, and with much larger teams of inspectors sent to health services during inspections (for example, a very large hospital may be inspected by a team of 60 people over a week).

The CQC also has far more substantial powers to require improvement than Australian accreditors, which can only reinspect. If a hospital is performing poorly, the CQC can take a range of actions including cautioning, issuing fines, making requirement notices to set out the timeline for mandated improvements, limiting the services they are registered to perform, and prosecuting cases.[206]

Finally, the CQC has a much stronger transparency focus. It rates all hospitals on a four-point scale (from inadequate to outstanding) and publishes these ratings (along with detail on its ongoing monitoring of a service) on its website. This makes it easy for the public to access and compare information about the quality of different hospitals. The CQC also publishes the full 60 page inspection report for every hospital on its website, with the rating for each major specialty area in the hospital, explicit discussion of areas of strengthen and weakness, and instructions given to the hospital for improvement.

206 Care Quality Commission (2015)

Box 6: Some countries employ very different approaches to hospital accreditation (cont.)

Denmark

In April 2015 the Danish Ministry of Health announced that it would be phasing out its 10-year old accreditation scheme and instead focusing on approaches that would best drive continuous improvement and patient-centred care.[207]

There is some evidence that the hospital accreditation scheme was beneficial; for example, fully accredited hospitals performed moderately better on measures of mortality risk[208] and length of stay;[209] however, there was no difference on measures of acute readmission.[210] The model was felt by many staff to be unwieldy, with 570 indicators and an undue administrative burden. Hospitals complained they were 'drowning in manuals and paperwork and have no time for patients'.[211]

In announcing the decision to wind back hospital accreditation, the government argued that while accreditation helped hospitals attain minimum standards, a new approach was needed to create a culture of quality improvement or encourage hospitals to surpass minimum standards, a result in line with international experience.[212] A new model based on national targets is currently under development.[213]

The sampling process should be adjusted to ensure every hospital is assessed against at least one standard every year and against the standards for clinical governance and partnering with consumers (standards 1 and 2) at least every three years. For very small hospitals, it may still be possible to assess against multiple standards in one visit.

The accrediting agencies should be contracted by government (either state or federal) to conduct a number of assessment visits, with some agencies potentially only assessing against one standard.

Recommendation 3.1:

That the department raises with the Australian Commission on Safety and Quality in Health Care and in appropriate national forums an alternative approach to monitoring adherence to national standards involving a combination of standard visits and unscheduled, targeted inspections to assess particular standards.

207 Allcock (2015)
208 Falstie-Jensen, et al. (2015)
209 Falstie-Jensen, et al. Ibid.
210 Ibid.
211 Winkel (2015); Triantafillou (2015)
212 Allcock (2015)
213 Mossialos, et al. (2016)

The department's performance assessment framework is deeply flawed

In order to ensure that autonomy is only awarded to hospitals capable of properly exercising it, the department grades hospital performance against a number of key performance indicators (KPIs) across five domains to generate an integrated performance assessment score (see Figure 6).

Figure 6: Components of the department's 2016 performance assessment score
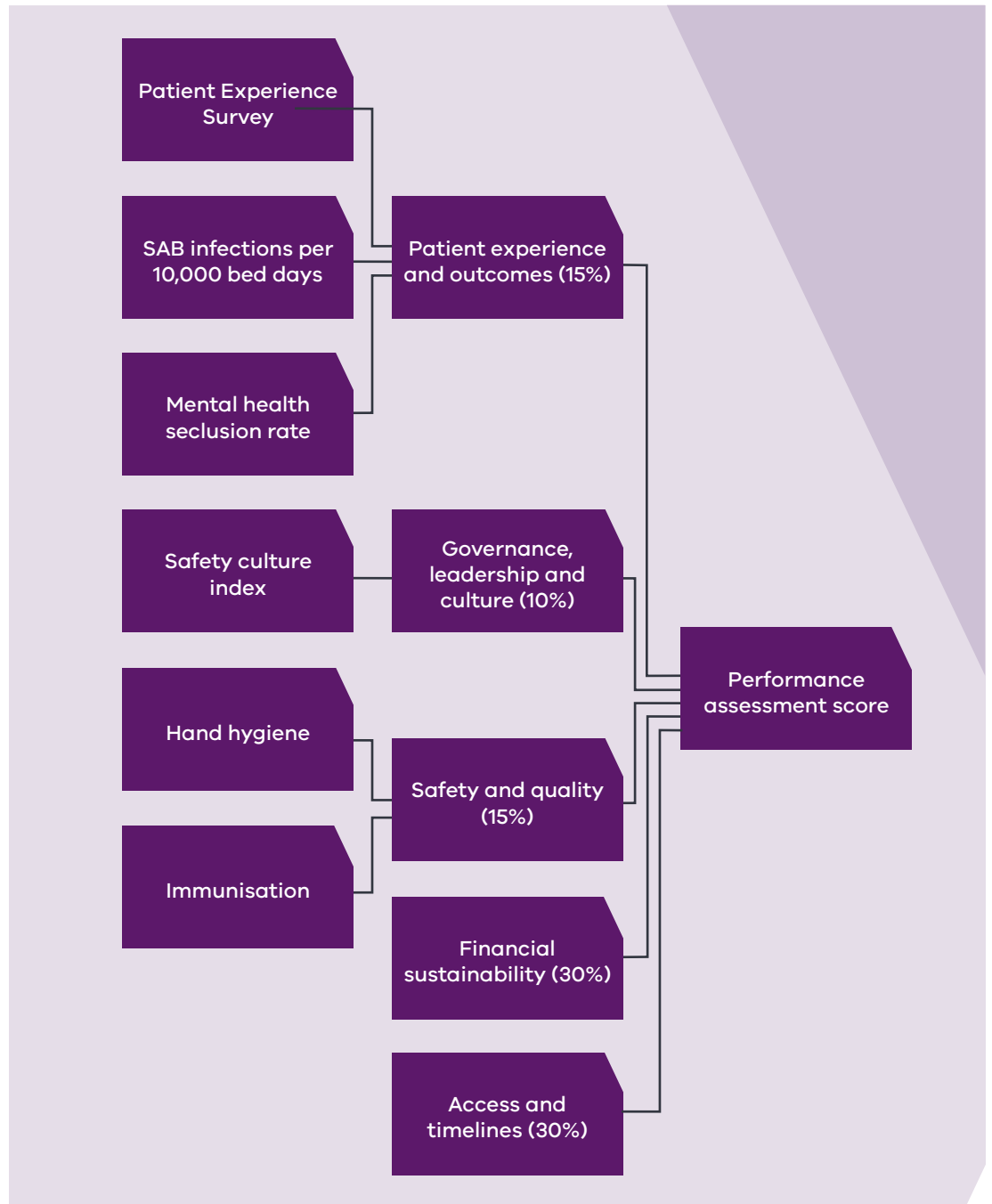
The hospital's integrated assessment score determines the level of monitoring by the department (see Table 4).

Table 4: Health service monitoring levels

Monitoring level	Performance assessment score	Implications
Standard monitoring	70–100 points	Quarterly meetings with the department to discuss performance and strategic objectives
Performance watch	50–69 points	Increased regularity of performance meetings with the department, which may include the board chair
Intensive monitoring	0–49 points	Regular meetings with the department where health services are required to provide detailed performance analysis and risk mitigation strategies

This approach is fundamentally flawed. It implies that the five dimensions are commensurable – for example, that somehow better performance on financial sustainability can offset poorer performance on the safety and quality domains.[214] Although there are three quality and safety domains, together accounting for 40 per cent of the score, those domains are only based on six indicators. This exposes the metric to gaming, with a risk that hospitals focus on the indicators included in the assessment score to the exclusion of more pressing quality and safety issues. Further, these indicators may only weakly predict a poor hospital safety environment. As a result, the department is awarding autonomy to hospitals on the basis of an inadequate and sometimes inaccurate evaluation of their performance. For example, Djerriwarrh Health Services was able to receive high safety and quality scores under the department's own performance assessment criteria in 2013 and 2014, and operate with a high level of autonomy as a result.

As mentioned above, in recent years the department has tried to intensify hospital accountability for safety and quality by doubling the weighting of safety and quality-related indicators in the performance assessment score. The problem with this approach is that if the indicators do not measure overall safety and quality accurately in the first place, then weighting them more heavily will not improve the situation.

214 In reality, serious failings in safety and quality can coincide with strong financial performance. This was the case not only at Djerriwarrh Health Services, but also at Bundaberg Base Hospital, where the hospital had a financial incentive to undertake additional activity to reduce waiting lists, so that a willingness to undertake questionably safe surgery on patients (whom other local surgeons would have declined to recommend for surgery or referred to larger centres) generated significant additional revenue for the hospital, and partly explained the lack of action on complaints against the surgeon conducting these procedures. Duckett (2014). The Francis Review of the failures in care at Stafford Hospital found that the hospital became singularly focused on finances, and that "The result was both to deprive the hospital of a proper level of nursing staff and provide a healthier picture of the situation of the financial health of the trust than the reality, healthy finances being material in the achievement of foundation trust status." Francis (2013), p 42. In a more general sense, strong financial performance and weak safety and quality may reflect a skew of capabilities on the board, including a lack of clinical governance expertise.

The aggregation of scores creates a risk that executive focus will be diverted from safety and quality more generally to the aspects of performance that are easier to measure and influence. This may have been the case at Djerriwarrh Health Services, where rapid growth in obstetric activity reflected positively on the service, even as the growth was impacting negatively but much less visibly on safety and quality. This was certainly the case at the Mid Staffordshire NHS Foundation Trust, where a focus on financial targets drove critical understaffing and a neglect of safety and quality, with fatal consequences for patients.[215]

Creating a system of oversight that works

The current performance monitoring framework for safety and quality could be enhanced. One of the limitations is that there is a significant emphasis on monitoring and managing access, activity and financial issues but somewhat less emphasis on the quality domains of safety, effectiveness, appropriateness and patient experience. In general, the data generated as part of the performance monitoring framework is considered 'data for judgement' as opposed to 'data for improvement'. It is acknowledged that it's easier to measure access and financial performance than quality.

The Royal Children's Hospital

In order to detect potential risks to patients and respond to them in a timely way, the department needs a system of oversight that: analyses safety and quality comprehensively; focuses attention on the outcomes that are most harmful, preventable and prevalent; combines this information with a broader assessment of risk in hospitals; and links *information* on risks with appropriate and timely *action* through monitoring problems and risks until there is strong evidence that they have been resolved.

As should be clear by now, neither accreditation nor the department's current performance monitoring framework is up to this task. A significant change in approach is required.

When it comes to quality and safety, the department should abandon both the safety and quality aspects of its performance assessment score and its approach to performance management where the assumed solution to quality and safety problems is often meetings with departmental staff, which may not result in the necessary expert advice on relevant performance issues.[216] It should also cease to aggregate quality and safety with the financial and access dimensions of performance.

215 Mid Staffordshire NHS Foundation Trust was the Trust responsible for Stafford Hospital. At Stafford Hospital "staffing cuts were made with insufficient consideration of the impact on quality and safety of care [and] finance was the overriding driving factor in the decision making process without seemingly an appreciation that better quality of care is also often the most cost effective care." Colin-Thome (2009), p 19. "Although the system as a whole seemed to pay lip service to the need not to compromise services and their quality, it is remarkable how little attention was paid to the potential impact of proposed savings on quality and safety." Francis (2013), p 42.
216 In some circumstances the performance management includes commissioning an expert clinical review.

Finally, in future, reliance should not be placed on an *overall* score on safety and quality, if this comes at the expense of detecting pockets of underperformance. Major hospital safety scandals have occurred in cases where the problem was restricted to a single service area (for example, obstetrics at Djerriwarrh Health Services, surgery at Bundaberg Base Hospital, and paediatric cardiac surgery at Bristol) and where the average performance of the hospital may not have reflected the extent of patient harm in specific areas. Waiting for performance to be poor across the *entire* hospital, on average, sets a very high threshold for intervention and in turn implies the system manager will tolerate a very high level of potential patient harm before it investigates the issue.

Incorporating risk assessment in performance management

Major inadequacies that have emerged from detailed reviews of failures of clinical governance, where there have been poor clinical and emotional outcomes for consumers, remain consistent: a closed culture (that is not open to new ideas or routine review of practices), failure of management to respond to known problems, limited and ineffective quality systems, poor communication with consumers, poor management of, and a lack of learning from, complaints and medico-legal cases, inadequate mortality and morbidity review.

Royal Children's Hospital

The point of performance assessment is to help the department make an appropriate choice about when it needs to monitor a health service more closely, and when it needs to take a more interventionist role. To do this, the department should look for and investigate any information signalling serious risks to patients where the intensity of monitoring and timing of intervention is guided by a broader assessment of the hospital's ability to resolve the problem and the risk that it will not do so. This risk assessment should incorporate the factors that we know to be recurring features of serious failings in care, incorporating risks in governance and culture along with performance risks:

- *Governance*: Does the hospital have a risk of weaknesses in clinical governance that may hinder its ability to address problems when they arise?
- *Culture*: Does the hospital culture risk that staff may be discouraged from participating in timely internal reporting and follow-up of problems?
- *Performance*: Does the hospital have outcomes that suggest risks of poor quality and safety?

Each of these risks are discussed in detail later in this chapter.

Monitoring hospitals along all three dimensions of risk allows for a much more sophisticated assessment to guide departmental action. After all, cultural and governance risks can be leading indicators of harm; monitoring them allows the department to identify vulnerabilities in governance or culture at a hospital before they start to manifest in patient outcomes. This is crucial; Djerriwarrh Health Services had many identifiable weaknesses in clinical governance before the cluster of perinatal deaths arose.

The benefit of overlaying risk assessment on performance assessment is that it allows the department to prioritise its support to hospitals. There are some forms of performance that are serious enough to warrant the department's attention in all circumstances.[217] However, we think that hospitals with strong quality cultures and governance will usually be able to investigate, address and resolve these problems on their own. They should be left to do so – provided they keep the department updated of progress and provide evidence that the problem has been fixed.

In hospitals with weaker governance or poor safety cultures, this remote oversight approach may be catastrophically inappropriate. If a hospital has weaknesses in governance, its ability to address performance problems on its own is not as strong. The department should recognise this and increase its support to the hospital. Likewise, if a hospital has problems with its safety culture, there is an increased likelihood that the problems identified will be ignored and future problems will be covered up. In neither case can the department monitor the hospital from afar and wait for performance to improve.

Table 5 sets out our recommendation for an enhanced safety and quality performance risk assessment framework. As is clear, our framework is much less concerned with grades (which may be misleading) and meetings (which should be a component, but not the core focus of performance management), and much more focused on detecting and mitigating risk to patients, and supporting hospitals to address identified problems.

217 As discussed later in this chapter, we believe such problems include sentinel events, avoidable mortality, serious avoidable morbidity, outlier performance on any dimension of safety, and stagnation or regression on improvement priorities.

Table 5: A revised performance monitoring framework for quality and safety

Performance level	Risk assessment	Implications
Standard monitoring	No serious problems in patient outcomes apparent, and the hospital has not been flagged for any governance or culture risks	Quarterly meetings with the department to discuss performance and strategic objectives for further improvement.
Risk mitigation in train	No serious problems in patient outcomes apparent *but* culture and governance risks have been detected	As above, and the health service must also provide the department with a risk mitigation strategy and keep it informed of progress on it.
Performance watch	The hospital has been flagged for serious but isolated patient outcome problems, and has no cultural or governance risks apparent	The health service must provide the department with its plan to investigate and address the patient outcome problem. The hospital must keep the department updated of evidence that the problem is being addressed and, within an appropriate timeframe, evidence that it has been resolved. Throughout this process, the department must continue to monitor the issue at least remotely, until it has seen satisfactory evidence that the problem has been resolved.
Intensive performance support and monitoring	The hospital has been flagged for either a number of patient outcome problems or an isolated patient outcome problem while governance or cultural risks are apparent	As above but, given the heightened risk of harm, the department must investigate and monitor this issue much more closely until it has been resolved. Further, it should support the hospital to undertake and sustain any changes or improvement work required.

Performance level	Risk assessment	Implications
Intensive performance support and monitoring (cont.)		This may involve the department engaging in at least one of the following: sending independent experts to review clinical practices or governance and make recommendations for improvement; asking a clinical network to support the hospital's clinicians to lift performance; linking the hospital with an appropriately selected peer and closely supporting that arrangement; requesting that a ministerial delegate be appointed to the board or that an independent clinical governance expert be appointed to the hospital's safety and quality committees; and/or engaging in close scrutiny of the hospital's data and lowering the threshold for investigating deviant performance.
Leadership review	The hospital has been flagged for *sustained* patient outcome problems, which it has failed to address with departmental support	A significant loss of autonomy for the hospital. A hospital-wide clinical audit should be conducted, with senior clinical leaders brought in to support areas of sustained weakness. The leadership of the hospital should be reviewed, with consideration given to dissolving the board and replacing key executives. Consideration should be given to merging the health service with a stronger peer.

Implicit in our recommended approach is a different trade-off between the risk of wasting time responding to a false positive, and the risk of tolerating serious and widespread harm while waiting for conclusive proof of it. Hospitals and the department will bear the costs of this increased monitoring and investigation burden, while patients will reap the benefits of it. This is appropriate. Both the department and hospitals exist to serve patients and should prioritise their safety accordingly. Over time the volume of false positives will fall as coding improves and safety and quality indicators are refined.[218] Further, fewer hospitals will have been flagged for governance and culture risks, given the recommendations we have made for strengthening the former in Chapter 2 and the latter in Chapter 5.

218   This was the experience in Queensland after Variable Life Adjusted Displays (VLADs) were introduced.

Our framework is not designed to be punitive. It is designed to help the department and hospitals detect problems early so they can work together at mitigating risk and reducing harm. The conversations that flow from this framework should centre around improvement. Reflecting this focus, the department representatives leading these conversations should be appropriately trained in clinical improvement science. In particular, they should be able to identify quality improvement efforts plans that are likely to be successful, and be able to advise health services on ways to strengthen them, as well as to identify plans with weaker recommendations or that are likely to fail and prevent them from being enacted.

Clinical audit

When the hospital reaches the stage of 'intensive performance support and monitoring' (or 'leadership review'), the department has the option of requesting a clinical audit. This is the process by which the practices used in a health system, hospital, unit or by a clinician are measured and compared with accepted professional standards or institutional targets. Again the aim of the audit is not punitive but rather to support improvement. The results of the audit are shared with the clinician, unit, hospital or health system, with the aim of bringing their practice in line with accepted clinical standards.[219]

Clinical audits are a proven tool for bringing outlier performance closer to accepted standards. A 2013 Cochrane review examined 140 randomised controlled studies of the effect of clinical audits in changing clinician behaviour, finding that audit and feedback leads to 'small but potentially important improvements in professional practice', with a median increase of 4.3 per cent across a range of desired clinical practices.[220] The study suggested that individual clinician audits may be more useful in managing underperformance and decreasing undesired practices, rather than increasing the frequency of positive practices. Since the effectiveness of clinical audit depends on performance at baseline, larger effects were found when baseline clinician performance was low to begin with.[221]

As Box 6 and Box 7 show, clinical audit is a central feature of hospital governance in England. Its national health service has systematically built up expertise in clinical audit, which has been used to support consumer choice (through the independent Care Quality Commission's auditors rating hospitals and publishing the ratings on its website) and hospital improvement.

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219 Ivers, *et al.* (2012)
220 The meta-analysis also examined impacts of clinical audit on patient outcomes, finding mixed results with low certainty. For dichotomous outcomes (12 comparisons), it found a 0.4 per cent decrease in desired outcomes (IQR −1.3 to 1.6 per cent) and for continuous outcomes (eight comparisons), the weighted median adjusted change was a 17 per cent improvement (IQR 1.5 to 17 per cent). Ibid.
221 This review also tested the difference in effects between different ways of giving feedback, though only four of 17 included studies were published after 2003. It found that clinical audits were more effective when feedback was given both verbally and in writing, as part of a regular process. Feedback from clinical audits that was given at least monthly had more of an impact than less frequent or one-off feedback. In addition, feedback was more effective when given by a manager or senior colleague, in the context of explicit targets and a plan for clinical improvement.

At present, the department lacks a systematic process for commissioning hospital audits (outside the accreditation process). If concerned about the quality and safety performance at a health service, the department may commission a review of a clinical service, but there are no clear threshold criteria to prompt this process,. The department does not have a group of reviewers that it can readily draw upon but rather approaches clinical experts on an ad hoc basis. There is no systematic attempt to strengthen the quality of reviews through training and improvement. In effect, contacted clinicians are presumed to already have all the skills needed to identify and recommend ways of rectifying problems in health services.[222]

We recommend that the department adopt a more systematic approach. When a hospital is flagged for performance issues, it should be able to draw on a pool of trained clinical reviewers to find an independent expert in either the relevant clinical stream, or in clinical governance more broadly. The clinical reviewer should be able to identify problems in care and propose practical recommendations for the hospital to follow in improving care. The department should document the lessons of that audit (in order to facilitate peer learning and collaboration) and it should monitor the progress of that hospital thereafter.

Recommendation 3.2:

That:

3.2.1.   the department establishes a panel of clinical reviewers across a range of disciplines, together with people skilled in clinical governance, who can be called on to undertake clinical reviews where indicated in the revised safety and quality monitoring framework.

3.2.2.   the members of the panel receive explicit training in review methods.

3.2.3.   the panel meets annually to receive feedback from other panel members about review experiences.

3.2.4.   the department supports the panel through documentation of lessons learned from reviews.

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222   Such an approach is in stark contrast to the NHS Care Quality Commission's approach to clinical audit, which involves both professional full-time inspectors and trained part-time inspectors to audit. Even then, CQC inspectors have missed safety issues in the past, as occurred at University Hospitals Morecambe Bay. Documenting and exploring the lessons of this failure has allowed the CQC to subsequently strengthen its approach. Behan (2015).

Box 7: Clinical audit in the NHS

Clinical audit is a major component of clinical governance in the NHS[223] and is widely used by multiple levels of health service provision, from clinics to national audits of specific types of surgeries.

A series of investigations into poor care in the NHS – such as into paediatric cardiac deaths in the Bristol Royal Infirmary and deaths at Mid Staffordshire – made recommendations about openness and transparency, the creation of national standards of care, and the publication of data about patient safety. Many of these recommendations have been progressively enacted as part of broader NHS reform that has created a foundation for clinical audits (which require both standards or targets, and accessible, relevant data to analyse).[224] National clinical audits can be conducted by the Healthcare Quality Improvement Partnership (HQIP) and, at a local level, clinical audits are supported through extensive resources made available by the National Institute for Health and Care Excellence, regional networks and a range of other organisations.[225] Generally clinical audits are seen as a process for driving quality and safety improvements, rather than simply monitoring performance.

National clinical audits and patient outcome programs

HQIP conducts a program of national clinical audits and patient outcome programs that examines the system-wide response to specific surgical, medical and mental health conditions. For instance, in 2016 it published an audit of pulmonary rehabilitation for chronic obstructive pulmonary disease (COPD) patients. It found problems with the coordination of referrals (with a third of COPD patients not being enrolled in a rehabilitation program) and follow-up, with only 40 per cent of those referred completing the program, and made several recommendations for strengthening the referral pathway.[226] Similar audits take place across many areas of health, with the participation of trusts that have identified the audit topic as particularly relevant to them.

223 The '7 pillars' used by the Commission for Healthcare Improvement to assess the performance of trusts are risk management, clinical audit, staffing and staff management, education and training, clinical effectiveness, clinical information use.
224 See Kennedy (2001) and Milburn (2002)
225 Healthcare Quality Improvement Partnership (2016a)
226 Healthcare Quality Improvement Partnership (2016c)

Box 7: Clinical audit in the NHS (cont.)

National clinical audits and patient outcome programs (cont.)

In some cases, trusts are required by law to participate in national clinical audits.[227]HQIP generally commissions expert bodies to conduct the audits; for example, a forthcoming national cardiac arrest audit is being conducted by the Intensive Care National Audit and Research Centre. HQIP recently completed a report on how to engage clinicians in national audits[228] and an 'audit of audits' across the national clinical audit and patient outcome programs.[229]

Local clinical audits

Trusts regularly conduct internal clinical audits and share findings between themselves through networks. There are 15 regional clinical audit networks in the NHS comprised of health services that meet to share their findings from clinical audits. The audit networks meet four times a year at the National Quality Improvement and Clinical Audit Network, with representatives from the NHS and HQIP.

College clinical audits

As well as participating in national clinical audits, many medical colleges have their own clinical audit process; for example, the college of general practitioners (GPs) publishes internal audits done by GPs and GP networks.[230]

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227 Healthcare Quality Improvement Partnership (2016b); Healthcare Quality Improvement Partnership (2016a). HQIP administers the Clinical Outcome Review Programmes (CORPs), which are designed to help clinicians (as well as administrators and policymakers) understand and learn from adverse events data. For instance, one CORP is beginning work on creating a database to collect information from reviews into child deaths, which are currently recorded in separate systems in England and Scotland. Trusts are required to publish a 'quality account' each year stating, among other things, which national clinical audits and CORPs they have participated in and how they will improve quality. The NHS publishes a list of strongly suggested clinical audits each year, but this is for guidance only.
228 Healthcare Quality Improvement Partnership (2016a)
229 Healthcare Quality Improvement Partnership (2014)
230 For example, see Royal College of General Practitioners (2015). Neurosurgeons are another group that is currently auditing their practice across the profession. The Society of British Neurological Surgeons (2016)

Defining and detecting risk

The following three sections discuss our proposed methods for defining and detecting governance, culture and performance risks in health services.

These methods should be taken as a starting point to be built on over time. Risk assessment is worthwhile when it allows regulators to prioritise health services that need the most attention and resources. Yet it is a difficult exercise as all hospitals are inherently laden with risk, and very poor performance in isolated parts of a hospital can be masked by relatively normal overall performance.[231] For this reason the department should develop and refine our proposed methods over time and work closely with the Victorian Managed Insurance Authority (VMIA) (see Box 8) in doing so.

Box 8: The Victorian Managed Insurance Authority has a shared commitment to improving safety and quality

The VMIA is the provider of medical indemnity insurance for Victorian public hospitals. When patients treated in these services experience physical or psychological injuries arising from the actions of public hospitals or registered health practitioners insured with VMIA while providing healthcare services that meet the criteria for legal liability, VMIA covers the health service's legal costs and expenses for defence and settlement of claims.[232]

VMIA and their appointed actuaries worked with the department to develop a model that allocates a proportion of the medical indemnity premium to each public hospital in Victoria based on their claims experience and risk exposure. The model aims to reduce the total cost of medical indemnity claims in Victoria through encouraging continuous improvement in patient safety initiatives. The seven-part model encompasses the hospital's clinical governance systems, financial sustainability, organisational culture, strategic governance, inter-agency relationship management, workforce models and information technology and communication.

The VMIA shares the department's organisational interest and commitment to reducing risk in health services, since medical indemnity claims account for the majority of its total liabilities.

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231 For example, the NHS's Care Quality Commission (CQC) uses a McKinsey & Company statistical surveillance tool called Intelligent Monitoring (IM), which generates a single trust-level 'risk score' based on around 150 statistical measures to identify the hospital trusts most at risk of providing low-quality care, and to target its inspections accordingly. A recent evaluation found the continuous risk scores generated by the tool cannot predict inspection-based quality ratings of NHS hospital trusts, and cannot distinguish the trusts performing poorly from the trusts performing well. Griffiths, *et al.* (2016) The predictive power of IM will likely improve over time as it is refined and calibrated. Nevertheless, it is quite different from the method we propose, as the IM aggregates patient outcome indicators, which we have not recommended.

232 Victorian Managed Insurance Authority (2015b)

Governance risks to patient safety

Governance risks encompass the weaknesses in a hospital's set up, staffing or leadership that exacerbate either the risk that something will go wrong in the first place, or that if it does go wrong, it won't be adequately managed.

It is standard practice for governance risks to be informally incorporated into risk assessment of hospitals. However, in Australia they are rarely formalised and combined systematically with other risk indicators, or made transparent to hospitals.[233] We propose the department assess governance risks in every hospital on an annual basis, and make this risk assessment transparent to boards. It should focus its assessment on the following factors.

- **Long executive tenure** (for example, when the CEO, board chair or director of nursing have been in their position for 10 years or more). This can lead to an elevated risk of defensiveness and groupthink. Though there is limited evidence on when tenure is too long, a review of appointments exceeding 10 years is recommended as part of good governance arrangements in other industries.[234]
- **Recent executive turnover** (for example, when the CEO, board chair or director of nursing have been in their position for less than two years). This can indicate limited corporate memory and an increased risk of missing or not adequately managing safety issues.[235]
- **Weaknesses in the board** (for example, the absence of a quality and safety committee, weak clinical or clinical governance expertise, and general inexperience across the board). These weaknesses may mean the CEO will not be effectively held to account on safety and quality matters.[236]
- **Financial problems** in the hospital can signal problems with management or with a hospital's funding, and may incentivise rapid cost cutting that can put indirect pressure on safety.[237]
- **Major capital works** underway in the hospital can disrupt processes and distract management from core business.[238]
- **Location in a community growth corridor**. This creates a risk that the hospital will experience a rapid increase in pressure on services or in activity, as described below.
- **Rapid growth in activity** across the hospital or concentrated in specific services increase the risk that staffing or safety and quality processes do not grow commensurately with the increase in activity.[239]

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233 In the NHS, by contrast, government risk assessment of a hospital trust incorporates assessment of a trust's governance. Where applicable, these risk indicators have been included in our list of governance risks. Monitor (2015)

234 See Huang (2013). The standards also recommend reviewing appointments of directors who have served for more than 10 years. ASX Corporate Governance Council (2014)

235 Duffield*, et al.* (2011)et al.</style> (2011; Monitor (2015), pp. 39–40

236 See McSherry and Pearce (2011).

237 Monitor (2015), p. 40

238 This issue was flagged by senior stakeholders in health services and government during this review. Health impact assessments of hospital redevelopments have also found increased stress to staff as well as risks to patient and staff safety due to mould and dust, potentially requiring more intensive management. See Maxwell and Peters (2007).

239 This was identified as a risk factor in the Walker Special Commission of Inquiry into Campbelltown and Camden Hospitals in New South Wales. Walker (2004)

- **Rurality**. This increases the risk along a number of dimensions, with the board less likely to be highly skilled and independent, practitioners more like to be professionally isolated, and hospital management less able to manage or discipline clinicians who are difficult to replace.[240] All of these risks are exacerbated if the hospital is not well networked with regional or nearby metropolitan hospitals for clinical support and transfers.

- **Reliance on senior medical staff who are locum or are international medical graduates (IMGs) with limited local training or experience**. Some internationally trained medical staff face challenges including adjusting to the way medicine is practised in Australia, language and communication issues, and understanding a different patient health profile. In many cases, IMGs can adjust well with proper induction and support.[241] However, some hospitals may not induct or train staff particularly well,[242] and this can result in a situation where communication, and therefore care, breaks down.

- The hospital has **'not met' any or all of the NSQHS Standards** and is awaiting re-inspection.

- **Third party reports** (including from patient groups, whistleblowers or complaints) have caused the department to be concerned about governance of the health service.[243]

None of these factors merits punitive action. However, each indicates increased risk to clinical governance and hence to patients and therefore a need for closer oversight and/or greater support, along with expedited investigation when other red flags start to occur. The annual assessment of these structural risk factors should be part of the assessment required under the *Health Services Act* before grants to health services are determined and a consideration in renewal of registration for private hospitals.[244] It should be documented and, where there are multiple indicators in play, discussed with the hospital.

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240 These issues were flagged extensively by senior stakeholders in health services and government during this review.
241 Pilotto*, et al.* (2007)
242 Dywili*, et al.* (2012) Nair and Parvathy (2012)
243 Monitor (2015), p. 40
244 See ss 18 & 89, *Health Services Act 1988*

Mitigating cultural risks to patient safety

Hospital culture is a critical element of patient safety.[245] Independent of other risk factors, negative culture within hospitals is indelibly linked to the breakdown of effective communication, collaboration and engagement with quality assurance activities.[246] However, only a small number of cultural indicators are currently feeding into departmental performance monitoring, and poor performance on them is not being flagged as a serious patient risk in its own right. We propose the department change this, and assess every hospital for the following cultural risks:

- a potentially poor incident reporting culture, as suggested by a low ratio of incident reports to comparable adverse events apparent in the routine data (for example, pressure ulcers),[247] or as detected by the Health Services Commissioner[248]
- a poor patient safety culture, as measured by low rates of agreement with any of the eight patient safety questions in the Victorian public sector 'People Matter Survey' of staff culture,[249] or as detected by the Health Services Commissioner[250]
- the presence of bullying, as measured in the People Matter Survey
- staff disengagement, as measured by high staff churn or low rates of staff participation in staff culture surveys
- limited interest in consumers and their families, as measured by poor results in the patient experience survey,[251] poor handling of complaints (see Recommendation 5.9), and a poor approach to patient-centred care detected by the Health Services Commissioner[252]

These factors indicate a weaker patient safety culture. Although there may not yet be any evidence of specific patient harm, they indicate an immediate need for investigation, closer oversight and/or greater support, and for expedited investigation when other red flags are also present. At the very least, the department should nominate one or two experts to sit on the hospital's patient safety committee until culture improves. In some circumstances it may be appropriate to appoint a ministerial delegate to the board who is skilled in clinical governance or cultural change.

245 Chapter 5 discusses culture in more depth.
246 Francis (2013)
247   McSherry and Pearce (2011)
248 The office of the Health Services Commissioner (HSC) is currently monitoring sentinel events. The Department is thus able to cross-check sentinel events reported to the hospital by health services with sentinel events detected through the HSC's processes.
249 Patient safety culture is measured through binary answers to eight questions: (1) Patient care errors are handled appropriately in my work area; (2) This health service does a good job of training new and existing staff; (3) I am encouraged by my colleagues to report any patient safety concerns I may have; (4) The culture in my work area makes it easy to learn from the errors of others; (5) Trainees in my discipline are adequately supervised; (6) My suggestions about patient safety would be acted upon if I expressed them to my manager; (7) Management is driving us to be a safety-centred organisation; and (8) I would recommend a friend or relative to be treated as a patient here. Rates of agreement with these questions is currently aggregated into a single index.
250 Investigations undertaken by the Health Services Commissioner may often flag issues relating to bullying and discouragement of open communication within health services.
251 Walshe and Shortell (2004)
252 The Health Services Commissioner assesses patient-centred care in many health services, encompassing communication (listening to consumers about pain management, effective communication of treatment including through use of translation and interpreter services), engagement (inclusion of family participation in care) and post-discharge care.

Recommendation 3.3:

That the department completely overhauls its approach to monitoring hospital patient safety and quality performance to a system that involves:

3.3.1. a regular, documented risk assessment about the hospital's patient safety culture and governance risks

3.3.2. providing hospital data to hospitals against a comprehensive range of primarily outcome indicators

3.3.3. a new graduated system of oversight that incorporates assessment of culture and governance risks, and primarily supports hospitals to improve care rather than being punitive

3.3.4. for hospitals with a good safety culture and low assessed governance risks, redefining good performance by a hospital as the hospital taking steps to address any issues identified by the outcome indicators rather than a poor outcome by itself

3.3.5. providing enhanced support, in partnership with OSQI, to hospitals where this is warranted because of safety culture or governance risks, or persistently poor outcomes, with the potential to escalate intervention up to and including recommending leadership change in persistently poorly performing hospitals

3.3.6. in the case of public hospitals, that safety and quality outcomes be removed from the standard departmental performance assessment scoring system, with interventions for safety and quality outcomes being triggered under the new safety and quality framework independently of performance on budget or access measures. The safety and quality framework should sit separate from but alongside the budget and access performance monitoring framework.

Reflecting this change in approach, the department should ensure that staff responsible for public hospital performance management and private hospital regulation are appropriately skilled to support hospitals with performance improvement. In particular, these staff should be trained in improvement science.

The department should also work closely with the Health Services Commissioner to ensure that reporting and cultural issues detected by the Commissioner are incorporated into departmental risk assessment.

Defining performance risks in patient safety

Contemporary best practice in analysing quality and safety events in an individual hospital emphasises Creating a 'just and trusting' culture that encourages openness and reporting when things go wrong. There is a parallel at the state level: what excellence looks like is that a hospital will acknowledge problems, diligently investigate them and take steps to mitigate the risk against them reoccurring. Excellence can be having no adverse events, but a more likely type of excellence is learning from when things do go awry.

Because quality and safety is extraordinarily complex, the occurrence of a specific complication is rarely prima facie evidence of poor care. In most cases, identifying poor care is complicated by the difficulty of isolating a hospital's impact on a patient from their baseline risk, which can only be imperfectly measured, especially using routine data.

For this reason, evaluating safety and quality performance involves enquiry, in which potential risks are identified through various information collection processes and then followed up through discussion with the hospital and – if necessary – investigation of its practices. The goal of this process is not to build a punitive case against the hospital, but rather to ensure the hospital is detecting and addressing its own problems, and more broadly to uncover system-wide opportunities for improvements and identify where support for improvement is needed most.

This chapter's focus is the department's role in oversight. To ensure hospitals are effectively monitoring and improving the care they provide, and to protect patients from the worst consequences of inevitable glitches in hospital oversight, the department must keep a close eye on factors that lead to poor performance in quality and safety in hospitals. In doing so it must prioritise attention and action on the forms of harm that are most common, harmful and preventable, and on hospitals whose patterns of care most strongly suggest room for improvement.

We recommend the department concern itself with all of the following risks to patient safety and quality:

- stagnation or significant regression on the hospital's rate of high-priority complications
- outlier performance on key safety and quality indicators monitored through statistical process control
- patterns of similar, serious incidents
- outlier performance identified in registry data
- a string of complaints clustered around an individual practitioner, or suggesting systematic problems with the health service
- preventable mortality and severe preventable morbidity identified through specialist review
- failure to improve on priority dimensions of patient experience (discussed in Chapter 5).

The following sections describe how the department can use this information, and how it can pull it together from the disparate sources in which it is currently collected.

Routine data should be used to monitor outcomes of care

The department should make much greater use of routine hospital data to increase its oversight of patient outcomes in Victorian hospitals. As outlined above, these data are already submitted to the department on a monthly basis by hospitals and so offer the opportunity to monitor safety indicators in a timely way,[253] without imposing additional reporting requirements on hospitals, and without requiring the department to invest in expensive new systems. Routine data cannot be used to determine conclusively how and why complications occurred, or whether they were avoidable, but can flag trends or events that are aberrant and worth investigation.[254] Some jurisdictions have already been using their routine data to monitor hospital-acquired complications for years.

The routine data's usefulness lies in the fact that the data are universal, encompassing information on every patient discharged from every public and private hospital in Victoria. They include rich information on safety, through collection of information about the patient's diagnoses on admission, and diagnoses that were new complications arising from care, and required additional treatment.

The latter happens frequently. In 2014–15 about one in every eight patients admitted to a Victorian hospital had at least one additional diagnosis or complication arise during the course of their stay. The rates were much higher for patients who stayed overnight (27 per cent) compared with same-day patients (1.2 per cent).[255] The crude rate of hospital-acquired diagnoses for patients who stayed overnight (unadjusted for complexity of patients) was slightly lower for private hospitals than for public hospitals, but the difference was not statistically significant.[256]

Table 6 uses the CHADx classification (Classification of Hospital Acquired Diagnoses)[257] to break down the kinds of complications that occurred into clinical categories.

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253   Hospitals already provide routine data to the Victorian Admitted Episodes Dataset on a monthly basis (with a 10-day lag).

254   The only way to do this with a high level of accuracy is prohibitively expensive and slow, requiring multiple reviewers combing through patient case records, which themselves may be incomplete.

255   These rates are for in-hospital rates; many complications for same-day patients only become evident after the patient is discharged.

256   Hospitals with 10 or more overnight separations, $t = 1.84$, $df = 213$, $p = 0.067$.

257   Jackson, *et al*. (2009)

Table 6: Incidence of all hospital-acquired diagnoses classified by CHADx major class, Victorian hospitals, 2014–15

Major CHADx class	Public	Private	All
01: Post-procedural complications	34,106	17,808	51,914
02: Adverse drug events	14,858	6,402	21,260
03: Accidental injuries	6,078	2,179	8,257
04: Infections	12,846	2,694	15,540
05: Cardiovascular complications	47,304	17,984	65,288
06: Respiratory complications	23,499	8,737	32,236
07: Gastrointestinal complications	36,815	19,118	55,933
08: Skin conditions	18,196	7,509	25,705
09: Genitourinary complications	27,575	9,753	37,328
10: Hospital-acquired psychiatric states	16,959	5,934	22,893
11: Early pregnancy complications	2,710	757	3,467
12: Labour and delivery complications	76,050	20,600	96,650
13: Perinatal complications	40,458	4,424	44,882
14: Haematological complications	12,994	3,970	16,964
15: Metabolic complications	45,536	10,743	56,279
16: Nervous system complications	4,245	1,429	5,674
17: Other complications	40,535	17,563	58,098
Total	**460,764**	**157,604**	**618,368**

The impact of these complications could vary from having no lasting impact on the patient to quite severe impacts, including death. Some of the complications may have been preventable with improvement in treatment protocols or systems, while others may have been a typical side effect of the treatment chosen. However, even where a complication might be expected, different hospitals may have different rates of occurrence of that side effect, suggesting that patient outcomes may be amenable to improvement through different courses of treatment and processes of care.

Assessing the reliability of routine data

Policy decisions do not wait for excellent information to become available; decisions will be taken even where 'evidence' is fragmentary and uncertain.[258]

Victorians are fortunate in having unusually reliable routine data[259] as a legacy of ongoing investment in data accuracy, the early adoption of activity-based funding,[260] and the greater prevalence of skilled health information managers working with patient records in hospitals.[261] This has translated into near-universal coding of the condition onset flag, which is crucial for safety surveillance because it allows analysts to differentiate between health conditions patients had when they were admitted to hospital, and conditions they developed in hospital.[262] It has also led to more accurate coding of patient diagnoses, strengthening identification of safety issues and validity of risk adjustment. A recent coding audit found around 93 per cent of Victorian public hospital records are free of definite errors and 91 per cent are free of probable errors.[263] Hospitals' coding practices do vary. Public hospitals tend to have more diagnoses recorded than private hospitals, partly because the former are incentivised to code in greater detail by activity-based funding.[264] More accurate diagnosis recording, especially for secondary diagnoses, improves risk adjustment, and can make an important difference to comparisons of hospital performance.[265] The addition of pathology test results to the routine data also improves risk adjustment.[266]

Poor safety cultures can discourage recording of harm,[267] so hospitals where staff feel able to diligently record complications appear, perversely, to be providing worse care. Finally, socioeconomic factors can also be an important driver of patient severity, treatment outcomes and readmissions,[268] but these are also not captured well in the routine data. This can make hospitals serving poorer communities appear to be providing worse care, when in fact they are just catering to greater need.

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258 Head (2013)
259 Michel, et al. (2011)
260 This promotes more thorough coding of comorbidities, strengthening the accuracy of risk-adjustment.
261 A 2010 study found that the proportion of health information managers with a degree or higher in Health Information Management in Australia ranges from over 60% in Victoria to less than 5% in South Australia. Australian Institute of Health and Welfare (2010)
262 In New South Wales and to a lesser extent Queensland, by contrast, a large number of hospitals still do not record the condition onset flag, making it very difficult to analyse more than a very small number of complications. Victoria has required the condition onset flag for more than 30 years; national adoption has only occurred in the last decade. See Jackson, *et al.* (2009).
263 Department of Health and Human Services (Vic) (2015). Accuracy tends to be highest for principal diagnosis (with 9 per cent of audited separations listing an inaccurate principal diagnosis) and lower for additional diagnoses (18 per cent of separations had an error), which can compromise the accuracy of risk adjustment. Victoria's coding also seems to be getting more accurate over time. The proportion of patients allocated to the wrong diagnostic group fell from around 13 per cent in the early 1990s to around 5 per cent in recent data. (Similar time-series data are not available for the other measures). Shepheard and Moore (2015)
264 About 60 per cent of separations from public hospitals are recorded in the lowest weight diagnosis-related group (DRG) in Victoria compared with 70 per cent in New South Wales. Private hospitals in Victoria also record a higher proportion in the lower resource weight DRG (70 per cent), although this may reflect case-mix variation. See Australian Institute of Health and Welfare (2015).
265 Fonarow, *et al.* (2012); Hauck, *et al.* (2012)
266 Dimick, *et al.* (2010)
267 Best, *et al.* (2002), p. 264; Stern (1997), p. 40
268 Clement, *et al.* (2013); Glance, *et al.* (2015); Hu, *et al.* (2014); Wu, *et al.* (2013)

In Chapter 4 we recommend that the department make a substantial long-term investment in developing access to high-quality clinical data for quality improvement. In the meantime, the routine data should be used, with care taken to compensate for some of its shortcomings.[269] Statistical process control charts can be used to differentiate meaningful from random variation. Algorithms can be run to eliminate identifiable coding errors.[270] Data can be adjusted, as much as possible, for variation in patient risk, so that the remaining unexplained variation in outcomes is more likely to be driven by hospital-level factors such as quality of care. Data linkage can be performed so that comorbidities not recorded in one admission can be picked up from an earlier one.

Findings can then be paired with review by coding experts to resolve data problems. Clinical expertise and on-the-ground analysis can rule out red herrings, fine-tune conclusions about exactly what is going awry, and develop meaningful recommendations about what can be fixed. In this sense the data never has the final say about what is and isn't an acceptable rate of harm. Instead, it provides a useful starting point for asking questions.

Data can also be used to look more strategically for needles in the haystack that is the Victorian hospital system. It is hard to overstate how important this is. More than two million hospital admissions happen every year in Victoria, and complications or adverse events occur in more than 300,000 of them.[271] The department must use its scarce resources to analyse and investigate these adverse events and other potential safety incidents in the most strategic way possible.

The alternative is to look only at a tiny number of complications, as is current practice, or to not look at them at all. Few in the community would accept that this represents the appropriate trade-off between looking and being wrong, and not looking and missing something important.

The department must monitor complications

The department must expand its oversight of complications, starting with the ones that impact most on patients, and are the most amenable to reduction.

The Australian Commission on Safety and Quality in Health Care has developed a short list of 'priority complications' that can be measured in routine data.[272] This list captures about 10 per cent of the complications classified in CHADx and focuses on the complications 'prioritised by clinicians based on preventability, patient impact (severity), health service impact and clinical priority'.[273] Table 7 shows the incidence of these priority complications in Victorian hospitals.

269 The introduction of the next iteration of the International Classification of Diseases may improve the use of routine data in this regard. See Southern, *et al.* (2015)

270 Jackson, *et al.* (2009)

271 Without accounting for adverse events that are only discovered upon readmission.

272 This list is still being revised and has been released for trial use only.

273 Australian Commission on Safety and Quality in Health Care (2016a)

Priority complications occurred during more than 70,000 hospital admissions in Victoria last year – about one in six of the admissions with complications recorded. No risk-adjustment model currently exists for priority complications, although previous work has used the indicators while standardising for Australian Refined Diagnosis Related Group (AR-DRG), age and hospital type.[274] Of course, given the complications on this list were judged to be potentially preventable, the use of risk adjustment may be considered nihilistic.

We recommend that for priority complications the goal should be towards 'targeting zero', and hospitals should focus on accelerating their own progress towards that goal using standard improvement science techniques. They should set out their plans for reducing priority complications, focusing on areas of their own choosing, and the department should monitor progress towards those goals and investigate cases where a hospital is stagnating or regressing.

Table 7: Incidence of complications included in a trial national list of hospital-acquired complications, Victorian hospitals, 2014–15

	Public	Private	All
Pressure injury	5,356	1,605	6,961
Falls with fracture or intracranial injury	384	128	512
Healthcare-associated infection	16,597	5,587	22,184
Surgical complications	2,563	1,099	3,662
Respiratory complications	2,846	554	3,400
Venous thromboembolism	1,098	429	1,527
Renal failure	309	52	361
Gastrointestinal bleeding	2,099	617	2,716
Medication complications	2,020	458	2,478
Delirium	7,116	2,588	9,704
Incontinence	1,246	415	1,661
Malnutrition	1,564	482	2,046
Cardiac complications	9,843	4,194	14,037
Healthcare acquired pneumothorax requiring intercostal catheter	230	74	304
Total	**52,891**	**18,157**	**71,048**

274   KPMG Healthcare Group (2013)

Monitoring trends in quality and safety

In addition to monitoring priority complications, the department should also be benchmarking risk-adjusted rates of key quality and safety outcomes. Analysing variation in these outcomes will help the department identify outlier hospitals or specialty units (such as maternity care at Djerriwarrh) that may have problems with safety and quality of care worth investigating, as well as strong performers with systems and lessons worth sharing.

A useful system for doing this conveniently already exists in a statistical process control technique known as Variable Life Adjusted Displays (VLADs, pronounced like the Impaler). VLADs use the 'cumulative sum' technique, which adds up patient outcomes over time and sends out an alert when the hospital's outcomes reach a point of being significantly different from all the other hospitals' outcomes. VLADs adjust for variation in relevant patient risk factors, such as age, so that the outcomes of patients in one hospital can be compared with the outcomes of similar patients in all hospitals.

In Queensland, VLADs have been a part of oversight for over a decade. More than 30 VLADs are currently monitored, encompassing complications, mortality, long stays and unexpected readmissions across general, surgical and obstetric services. The VLADs are linked to a system of graded intervention so that when a hospital is flagged, there is a process by which the hospital is asked to investigate the cases prior to the flag in order to identify potential causes of variation in performance, and report back to the state health department.

The goal of the flags is not to punish the hospital but rather to prompt it to look into possible areas of concern or strength for safety and quality of care. However, there is accountability for repeated and unexplained poor performance, with recurring flags for outlier performance triggering increasing levels of intervention from the department.

A comprehensive monitoring scheme will significantly increase the range of indicators being monitored by the department compared with the handful used as part of formal monitoring at present. This is inevitable because good performance in one specialty is no predictor of good performance in another.

We have therefore proposed a significant increase in the number of indicators used for monitoring; this will not involve an increase in data collection by hospitals as the indicators use data already collected by hospitals. It may, however, require an increase in investigations because a broader range of indicators will potentially lead to identifying a broader range of possible care issues.

The department should use Queensland's set of VLADs as a starting point, adapting the coding where need be and expanding them over time in consultation with clinicians about which indicators are most useful. Appendix 3 presents the proposed list of indicators to be used in the new safety and quality monitoring framework.

Recommendation 3.4:

That departmental monitoring of safety and quality includes monitoring against a comprehensive range of outcome indicators using hospital routine data and data from clinical registries.

We are concerned about reducing reliance on indicators that are less useful at the same time as we increase the number of useful indicators. Later in this chapter we propose streamlining various aspects of reporting on other indicators. As a general rule, we want to see a move away from process indicators for performance monitoring (in contrast to their legitimate use for local improvement) towards a greater use of outcome indicators.

For example, process measures such as the hand hygiene and cleaning standards indicators currently in health services' *Statements of priorities* could be substituted for comparable measures such as patient-reported hospital cleanliness in the Victorian Health Experience Survey. After all, it is far more important that a patient experiences good performance on these indicators than an auditor.

Recommendation 3.5:

That:

3.5.1.   the department seeks to hold hospitals to account for outcome indicators in lieu of process indicators wherever the indicator of interest can be more reliably monitored using the former

3.5.2.   the current cleaning standards process indicator be discontinued and be replaced with comparable outcome indicators such as patient-reported hospital cleanliness.

Addressing information flows

In order for its oversight to be effective, the department needs to be able to view and assess the rich range of information already collected about risks to patient safety. As discussed, this requires using the routine data. However, it also requires fixing a number of bottlenecks in internal information collection and review systems, and fostering open lines of communication with the organisations reviewing information on patient safety risks outside of the department.

Victoria needs an incident reporting system that works

The Victorian Health Incident Management System (VHIMS) is difficult to use. Part of the issue is that significant amounts of information are collected, especially in relation to the classification of incidents. Whilst this assists, to some degree, with organisational analysis and trending, there is limited feedback from the [department]... It is acknowledged that a [department] led project is underway to improve the VHIMS system.

The Royal Children's Hospital

VHIMS is a dreadful experience.

Professor Don Campbell, Program Director General Medicine and Monash Community Medical Lead, Monash Health

Statewide incident management systems allow hospital staff to record clinical incidents (including adverse events, near misses and in some cases occupational health and safety data) into a single, statewide database, allowing for central monitoring of individual incidents and analysis of patterns of incidents. The monitoring tells a health department how well hospitals are identifying, investigating and rectifying problems in care. The analysis tells a health department about recurring problems or emergent risks in the system. It can then alert hospitals to the risk, and develop programs to help them address it. This can stimulate system-wide rather than merely local improvement. As Box 9 shows, New South Wales has successfully used incident reports for both purposes – learning *and* oversight.

By contrast, the Victorian Health Incident Management System (VHIMS) was built for learning only – reports play no role in oversight. However, reports have not actually supported learning either; to date, the 400,000 incident reports sitting in the system have never been systematically analysed. This partly reflects the fact that dedicated staff were not appointed to manage, analyse and use the data to support hospital improvement. It also reflects a lack of confidence in the underlying data quality. The VHIMS system is poorly designed, excessively complex,[275] and is cumbersome to use for both the person entering the data and the person analysing it. As a result, there is little belief that the information in VHIMS accurately represents what is happening in hospitals.

Because of all of these factors, VHIMS played no role in detecting the safety problems at Djerriwarrh Health Services. Of the seven reports that should have been filed in relation to the perinatal deaths over 2013 and 2014, three reports were never made, a further two were lost in the system, and only one was appropriately classified.[276] Even if all reports were made accurately and on time, the department was not monitoring and analysing the incident database and so would not have detected them. As Box 9 shows, this was in stark contrast to the New South Wales approach, which in 2011 detected recurring, system-wide weaknesses in fetal monitoring of a nature similar to the problems at Djerriwarrh, and developed a statewide program to address it.

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275 The current incident classification component of the system has more than 1,400 different types of incidents that users need to select from, making selecting an appropriate classification time consuming and complex. This also means that users may classify incidents inappropriately or select generic classifications like 'other' to save time.

276 This may reflect the difficulty of accurately entering incidents and the fact that the hospital did not always recognise that the perinatal deaths were incidents rather than inevitabilities.

Box 9: In New South Wales, incident reporting allows for rapid notification, analysis and response to adverse events

Incident monitoring for oversight

In New South Wales, the Clinical Excellence Commission (CEC) receives a daily report of all Reportable Incident Briefs (RIBs). The director of patient safety and team monitor the RIBs and notifications to identify risks for immediate escalation, and assess whether there is a pattern in the nature or geography of the incident.

All incidents identified as serious and given a severity assessment code (SAC) of SAC1 currently automatically require a root cause analysis (RCA). Other incidents of lesser SAC may have an RCA conducted at the discretion of the chief executive. RCAs undertaken by the local health district are supported by local clinical governance and/or patient safety staff. Serious issues requiring urgent attention are referred to the chief executive of the CEC, who can deploy staff quickly to intervene when patient safety issues emerge, prior to the completion of an RCA.

Incident monitoring for system-wide improvement

The CEC regularly reviews RCA reports through the Clinical Management, Maternal and Perinatal and Mental Health/Drug and Alcohol Root Cause Analysis Review Committees. These reviews assist in the identification of system-level themes across different practice areas and facilities that have statewide implications. Approximately 600 RCA reports are reviewed annually. The CEC also routinely analyses patterns in its incident reporting system. Review of the full dataset, including incidents of a lower severity assessment code, allows for identification of trends, which may then be investigated in more detail.

This process enables significant issues, risks and trends relating to clinical care to be identified so that staff and managers can work together to improve care for all patients. Some of these detailed analyses have been presented as clinical focus reports, Safety Alert broadcasts and Patient Safety Watch reports. These are developed in close collaboration with clinicians and are distributed widely, to share learnings and best practice.

Identification of serious or recurring issues may prompt the CEC to create a program in response. For instance, the CEC has implemented programs to reduce the cardiac arrest rate in hospitals, increase efficiency in blood transfusions, and reduce the time between diagnosis of sepsis and administration of antibiotics. The CEC also introduced a significant number of state-wide obstetric safety initiatives in 2013 after incident review showed recurrent problems with fetal monitoring.[277] Many of the same issues (such as a lack of up-to-date training for midwives) were also present in the perinatal deaths at Djerriwarrh Health Services.

277   In March 2013 the CEC published a review of all critical incidents related to fetal monitoring submitted to the statewide incident reporting system from January 2010 to May 2011. After screening for relevance, the review included 29 RCAs (previously conducted by the maternity and perinatal subcommittee of the New South Wales clinical risk review committee) together with 128 SAC 2–4 incidents that had not triggered prior review outside local health districts. Human factors, particularly cognitive errors, were identified as contributing to incidents in 19 of the 29 RCAs. Recommendations included ensuring compliance with training standards among all clinical staff, including the urgent provision of education for midwives not presently compliant, and ongoing interventions to address future training deficiencies, particularly for locum/agency staff and those employed in low-activity maternity services. Strategies for improving interdisciplinary communication and removing barriers to escalation of clinical care in high-risk births were also targeted for improvement

Box 9: In New South Wales, incident reporting allows for rapid notification, analysis and response to adverse events (cont.)

Every local health district in New South Wales has participated in these programs, which have generated a significant improvement in patient safety. The Between the Flags program, designed to more closely monitor warning signs in acute settings, has seen a 30 per cent drop in cardiac arrests. The Blood Watch program has led hospitals to reduce both the frequency and volume of blood transfusions. Since 2010 the average time from the diagnosis of sepsis until the administration of antibiotics has been reduced from 290 minutes to 55 minutes, coinciding with CEC's Sepsis Kills program.

The problems with VHIMS are longstanding. VHIMS has now been the subject of three Auditor-General reports, the first in 2005, asking why Victoria was yet to adopt a reporting system, and the latest in 2016, asking why the system still does not work.[278] Victoria was the last state in Australia to implement a working system – and effectively still does not have one – in contrast to all other states.[279] Since it was developed, the department has paid more than $9 million for VHIMS.[280] This is the direct cost only and does not account for the thousands of workforce hours that have been spent entering reports into the system (each one takes up to 40 minutes to enter) rather than providing care.

This review has been asked to provide advice on the implementation of the VHIMS improvement project, which aims to produce 'a streamlined dataset and redesigned user interface' and thereby reduce the current complexity of reporting and difficulty of generating meaningful reports.[281] We note that significant work on this project has already occurred, with pilot sites to be phased in from July 2016, a technical review due for completion in October 2016, and full roll out due for completion in early 2017. It is our understanding that significant changes to this plan are not feasible.

Given the limited scope for the review to provide advice on the current project, we have provided advice below on future directions.

A next-generation incident reporting system

The VHIMS improvement project is designed to make it easier for health system workers to use the current system. However, the international literature on best practice in incident reporting has evolved considerably since VHIMS was first developed.[282] In particular, leading experts now believe that the focus on collecting and processing large quantities of incident data has been misguided, and ultimately distracted from more important efforts to strengthen the quality of investigation and improvement activities.[283]

278 Victorian Auditor-General's Office (2016b)
279 Victorian Auditor-General's Office (2008)
280 Victorian Auditor-General's Office (2016b)
281 Department of Health and Human Services (2015b)
282 The literature shows that, in general, incident reporting often does not live up to its promise of generating system-wide improvements, or double-loop learning, although it appears to have done so in some cases, including New South Wales. Lawton, *et al.* (2012), p. 1
283 Macrae (2016), p. 71

Health systems have set excessively broad criteria for reportable incidents (that is, 'any unintended or unexpected incidents that could have or did lead to harm') and tried to collect comprehensive data on incidents with sophisticated and detailed incident classification taxonomies.[284] This has occurred at a huge cost to employee time that could otherwise be spent on the more important and difficult task of improving care. Further, health systems have erroneously encouraged reporters of incidents to record as much detail as possible on the incident, ignoring the fact that incident reports will inevitably be overlaid with bias[285] and that the point of reporting is to identify a risk and trigger inquiry – not to be an inquiry in and of itself.[286]

Many health systems have also pursued high overall rates of reporting in order to compare hospital performance, which is something incident reporting was never designed for.[287] Reporting rates cannot establish epidemiological trends in safety – they say more about reporting behaviour in a hospital than underlying safety.[288] After long-running and expensive efforts to increase reporting in the NHS, it is now increasingly clear that reporting rates do not accurately measure hospital safety, given the weak relationship between the two,[289] and so cannot be used as a performance measure.

The department should heed these lessons. The danger of re-developing its incident management system to better deliver on its incident management policy of 2008 is that the end product will be inconsistent with international and Australian best practice, which has evolved considerably since then. The department should thus develop a medium term strategy to modernise its incident reporting policy and system. In doing so it should consult and collaborate with other Australian jurisdictions that are currently in the process of redesigning their own incident management policies and systems, consistent with these shifts.[290]

284 Ibid., p. 71
285 Noble and Pronovost (2010)
286 'The incident reports themselves do not matter nearly as much as the practical work of investigating and understanding a particular aspect of an organisational system and then working collaboratively to improve it.' For deeper discussion of these issues, see Macrae (2016).
287 'Incident reporting systems were never intended to provide a system of measuring safety problems. These systems detect only a tiny fraction of adverse events, with reporting rates determined by a range of cognitive, social and organisational factors. Reduced reports of a particular type might simply indicate that people became accustomed to something happening, grew tired of reporting or stopped noticing the problem in question.' ibid.
288 Ibid.; Shojania (2008)
289 Howell, et al. (2015)
290 For example, New South Wales is currently redesigning its incident management system to make it easier to use and improve data quality, as well as to provide better feedback to notifiers. For instance, the redesign is creating resources for frontline managers, such as dashboards, that will allow them to easily see quality and safety issues, and facilitates national reporting. The new system will allow staff to log notifications from any computer (rather than just the health service's computers) so that visiting medical officers and other staff will be able to make reports.

In particular, the department should consider:

- its preferred trade-off between staff time spent filing incident reports versus providing or improving care (as this will determine the optimal breadth and depth of data collection)
- whether it will use the data for quantitative analysis of safety (as this determines the priority placed on comparability of data across hospitals, with comparability requiring consistently high levels of reporting and granular classification of incidents)
- whether it will use the data for thematic analysis of safety (this places a lesser onus on comparability of data or granularity of classification but requires the system to accommodate extensive and searchable free-text fields, including a facility to upload RCA reports and risk reduction action plans)
- how it plans to use the results of analysis to improve safety (Will it simply communicate the results of data analysis to hospitals, or will it investigate the risks detected through analysis and import or create bespoke improvement programs to help hospitals address them?)
- whether it will use the data for surveillance of hospital management of incidents (as this requires fields for the hospital to update progress in investigating an incident, determining a risk reduction implementation where appropriate, and implementing the plan, with automatic alerts sent to the department and hospital when a loop has not been closed).

Each of these decisions should be informed by the anticipated benefits of using the data in this way, and the department's anticipated ability to allocate resources to monitoring, analysing and reporting on trends in the data. After all, management of an incident reporting and response system needs resources – staff to analyse the data and follow up on relevant actions. Without funded staff to manage the information system, further capital investment in VHIMS or, indeed, implementing a new system, will be wasted.

Table 8 summarises our recommended approach for incident reporting. We suggest the department develop a policy for a lean reporting system focused on collecting more information about high-impact incidents and potentially high-impact near misses (ISR 1s) and collecting less information on less severe incidents.[291] It should monitor hospital management of ISR 1s through to resolution centrally, but let hospitals set their own policies regarding expectations of staff reporting ISR 2–4 incidents. The proposed Office for Safety and Quality Improvement (introduced in Chapter 1 and discussed more in Chapter 4) should use the data for qualitative analysis of safety risks, and use it to develop and inform safety improvement programs for hospitals.

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291 The VHIMS incident severity ratings (ISR) methodology was developed to provide a more consistent classification of incident severity and was created following analysis of methodologies used both nationally and internationally. The ISR rating scale is a four-point scale (1 – severe/death, 2 – moderate, 3 – mild, 4 – no harm/near miss) that is derived from three related areas: degree of impact/harm, level of care required, and treatment required. Once these areas have been addressed by the user, an algorithm determines the ISR rating. Although most sentinel events would be classified as ISR 1 incidents, not all sentinel events would technically be ISR 1 incidents based on the methodology above. Department of Health (2011)

Table 8: Current and proposed approaches to incident monitoring

Current approach	Proposed approach	Change required
No central review of information for performance monitoring	• Department to review all incidents with an ISR 1 • Department to monitor progress of hospital management of ISR 1 incidents to ensure open disclosure has occurred and recommendations of RCAs have been implemented	• Dedicated staff to monitor and review VHIMS data • Stronger incident *management* focus in VHIMS system, with capacity (and expectation) for hospitals to upload RCAs and risk reduction action plans, and capacity for the department to monitor implementation status • Inadequate follow-up of ISR 1 incidents to be treated as a performance issue, and managed accordingly
No systematic analysis of information	• Department to analyse VHIMS dataset thematically • Department to alert hospitals to emergent vulnerabilities • Department to develop system-wide programs and policies to address vulnerabilities detected	• Dedicated staff to analyse VHIMS data, look for emergent risks and issue alerts to system • Dedicated staff to develop or adjust system-wide programs and policies to address vulnerabilities detected • Acceptance that the dataset is unlikely to support reliable analysis of quantitative trends, and an expectation that the most valuable information will come from high-severity incident reports and RCAs rather than performance benchmarking
Significant time cost for hospital staff entering incident information	• Significantly less emphasis on capturing comprehensive detail on all incidents • Prioritisation of incidents and near misses involving and risking severe harm	• Leaner data entry requirements for all incident reports, and low-severity incidents in particular • No ambition for comprehensive reporting • Increased focus on information gathered through investigation and improvement work after an incident, rather than detailed reporting at the time of the incident

When the department has developed a policy setting out what its incident management system is meant to achieve, it can then assess what information collection system it requires to meet its needs. At this point, it can conduct an analysis to determine if the right investment decision is to proceed with the improvement project compared with the alternative of procuring an already-working system, as other states have done.[292] This analysis should be made transparent to hospitals and the public.

292 Both Tasmania and Western Australia use South Australia's system.

The information system should be able to collect reports of sentinel events (a small subset of ISR 1 incidents that the department is required to collect under a national reporting agreement). Until this functionality is in place, hospitals should continue to report sentinel events manually to the department.

Recommendation 3.6:

That:

3.6.1. in consultation with health services and discussion with other jurisdictions, the department develop a transparent and evidence-based incident management policy clearly specifying what it aims to achieve through incident reporting in Victoria and how it will achieve those aims, including through:

   – central oversight of hospital progress in investigating and addressing root causes of high-severity incidents (ISR 1s)

   – central analysis of incident report text and data to support safety improvement

   – development or adjustment of departmental policies and improvement programs to mitigate recurrent risks detected through incident reports

3.6.2. the policy prioritises reporting of incidents that had or risked having severe impacts on patients while minimising the time cost of reporting for hospital staff and focusing efforts on investigation and remediation of risks rather than detailed reporting of incidents

3.6.3. the policy specifies the level of resources the department will commit to analysis of incident reports, and its plan for using the lessons of incident reports to support safety and quality improvement in hospitals

3.6.4. once this policy has been developed, the department uses a transparent and competitive process to procure an incident reporting system capable of supporting the policy.

Using clinical registry data

Clinical quality registries are established 'with the aim of improving patient care and outcomes through greater understanding of events, treatments and outcomes'.[293] They collect more detailed data on processes and outcomes of care than currently included in routine datasets held by the department and so can provide feedback on a broader range of measures and can undertake better risk-adjustment for those measures.[294]

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293 Australian Commission on Safety and Quality in Health Care (2010)
294 For example, Victoria's Prostate Cancer Outcomes Registry measures appropriateness and outcomes of care in prostate cancer in 75 per cent of the population. Sampurno, *et al.* (2016)

There are a number of clinical registries funded by the department; other registries are funded, in whole or in part, by the Commonwealth Department of Health. Registries are mostly conducted under the auspices of non-government organisations, typically disease- or treatment-specific organisations.[295] Registries have developed with different histories, differing ways of operating and different approaches to reporting. Participation in some registries is voluntary, inhibiting their effectiveness.

All registries are now expected to operate within a national framework[296] and operating principles.[297] The national operating principles for registries provide that 'Australian Clinical Quality Registries must report without delay on risk-adjusted outcome analyses to institutions and clinicians'.[298]

The principles do not elaborate on what this means and how it is to be effected. Nor do the principles provide a requirement for the department to be advised of aberrant practice.

Many registries currently don't provide feedback to the department about hospital performance, which means that information from registries cannot be be used as part of departmental oversight of hospitals.

Registry data are not normally incorporated into routine datasets. However, the national operating principles already recommend the reverse direction: that registries use routine data as part of their collection. Maintaining separate data repositories limits access to the data by the department. It is now well accepted that data from clinical registries should eventually be in the public domain, with the timing to be based on the maturity of the registry.[299]

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295 The increasing proportion of hospital admissions being patients with multimorbidity raises some challenges for the dominant, single-disease model of registries.
296 Australian Commission on Safety and Quality in Health Care (2014)
297 Australian Commission on Safety and Quality in Health Care (2010)
298 (Principle 35) SOURCE
299 See submission from Professor John McNeil on behalf of the Monash School of Public Health and Preventive Medicine, which states that '… we believe that data from clinical quality registries should eventually be in the public domain. However, at the early stages of development of registries this would be inappropriate. Registries take time to reach a level of maturity at which time there is full confidence in the accuracy and timeliness of the data, risk adjustment has reached an agreed level of precision and preliminary analysis has been undertaken of aberrant results to ensure that the appropriate targets for improvement have been identified.'

> **Recommendation 3.7:**
>
> That:
>
> 3.7.1. the funding contracts for clinical quality registries funded by the department be renegotiated to provide:
>
> – an explicit requirement for all performance metrics to be provided to hospital chief executives (or their designated nominee) and to the department at the same time as they are fed back to clinical units
>
> – for registries that have been in existence for more than a decade, a full dataset of registry data to the department (the new Victorian Health Performance Authority when established) at least annually to allow matching to, and incorporation in, the relevant routine dataset (the data provided should have the names of individual clinicians removed)
>
> 3.7.2. the new Victorian Health Performance Authority publishes metrics derived from clinical registries in its quarterly public report
>
> 3.7.3. clinical networks consider whether participation in relevant registry collections be mandated for public and private hospitals
>
> 3.7.4. the department raises at the appropriate national forum that the Commonwealth Department of Health (or other national funding bodies) changes national funding contracts to ensure nationally funded registries meet the same requirements.

Over the long term, registry data should be able to be extracted from electronic patient records and transmitted to the registry and the routine dataset simultaneously.

A coordinated approach to complaints and risk

Complaint data are a rich source of information about patient risk.[300] A recent review of 19,000 formal patient complaints filed against doctors throughout Australia between 2000 and 2011 showed that the complaints were highly clustered around a very small proportion of the medical workforce. In total, three per cent of Australia's medical workforce accounted for almost half of all complaints, and one per cent accounted for a quarter of all complaints. In New Zealand, research has shown that while complaints are very rare – even in cases where patients suffer serious and preventable adverse events[301] – the likelihood of complaint increases steeply with the severity of a patient's injury.[302] Since complaints are so heavily clustered around a minority of clinicians, and tend to involve high-severity events, targeting complaint-prone clinicians for improvement efforts is likely to yield significant reductions in harm (see Box 10).

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300 Bismark, *et al.* (2013)
301 Complaints were made about 0.4 per cent of adverse events and 4.0 per cent of serious, preventable adverse events (as identified in case record review during the seminal New Zealand Quality in Health Care study in 1998).
302 'Odds of complaint were 11 times greater after serious permanent injuries than after temporary injuries, and 18 times greater after deaths.' Bismark, *et al.* (2006)

Box 10: Complaints data predicted elevated risk at Bundaberg Base Hospital

In 2013 Bundaberg Base Hospital recruited American surgeon Dr Jayant Patel to provide surgery. Dr Patel was willing to undertake surgery on patients whom other local surgeons would have declined to recommend for surgery or referred to larger centres. A number of patients on whom Dr Patel operated had serious adverse outcomes, leading to a major safety scandal at the hospital and Queensland Health.

The first very serious complaint about Dr Patel occurred within eight weeks of his starting, with 22 against him in the 24 months of his employment there. Taking into account periods of leave there was about one formal patient complaint or formal staff report for each month that he actually worked at the hospital. Independent investigations subsequently confirmed that many of these complaints raised valid, serious questions about the competence of Dr Patel, including his clinical decision making.[303]

One important use of complaints data is to predict future risks to patient safety. This could be done by calculating a PRONE score, which predicts the likelihood of a future complaint.[304] As Figure 7 shows, a doctor who has had 10 prior complaints in the previous 10–12 years is almost certain to have another one in the next year.[305]

Figure 7: A clinician's volume of previous complaints strongly predicts their probability of receiving another

1 complaint   2 complaints   3 complaints
5 complaints   10+ complaints
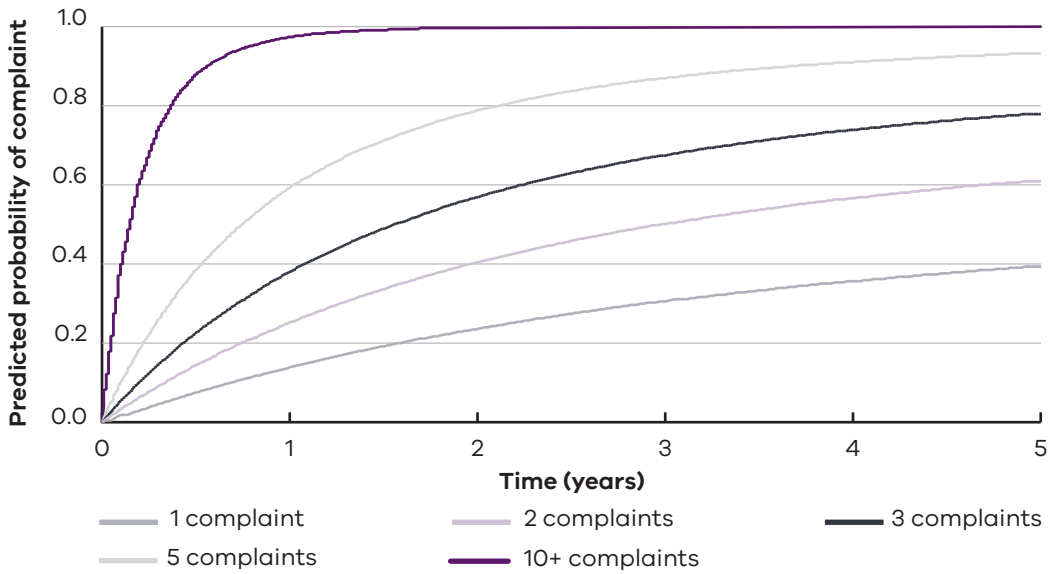
Source: Bismark, Spittal, et al. (2013)

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303 Duckett (2014)
304 The PRONE score is one of the few validated leading indicators of potential safety issues – most other indicators are lagging indicators based on incidents that have already occurred or patterns of reported mortality or morbidity.
305 The data collection time period varied across jurisdictions.

Yet despite its high predictive power and sentinel value, complaints data currently play no role in the department's oversight of public hospitals. Currently the department does not know about all the complaints made about clinicians working in the public hospital system because of a fragmented system of receiving and responding to complaints, discussed in more detail below.[306] Hospitals also do not have the full picture of the complaints previously made against their staff. We believe the department should address this by collating complaints data from across the regulating agencies, including AHPRA and the Victorian Health Services Commissioner. It should calculating a revised PRONE-type score, with a heavier weighting for more recent complaints, to be used as part of its risk assessment of health services described earlier in this chapter. It should also advise hospitals where the PRONE score is above a certain threshold. We suggest that threshold be three previous complaints (which yields a 40 per cent chance of another complaint in the next year).

Information flow issues mean complaints data are underutilised

For the department to use complaints data, it will need to address several issues with the way data are shared between regulatory agencies. Currently, responsibility for handling complaints is divided between several bodies outside the department:

- AHPRA, which has a national responsibility for receiving and investigating complaints about a registered health practitioner's health, performance or conduct[307]
- the Victorian Health Services Commissioner and the Mental Health Services Commissioner (referred to here as the health complaints entities or HCEs), which investigate and resolve consumer complaints about health service providers.

To date, AHPRA has not routinely shared information with the department at any stage of the notification process, unless the department itself is the notifier.[308] Equally, the department does not routinely provide information on clinical governance and safety issues to AHPRA. This is similarly the case with the department and the HCEs. Further, there is uneven information sharing between AHPRA and the HCEs, even for complaints concerning the same health service.[309]

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306 For public hospitals, the department tends only to see complaints that were written directly to the Minister. The majority of complaints are either managed locally by hospitals, the Health Services Commissioner or the Australian Health Practitioner Regulation Agency, in which case the department does not seem them.

307 For example, when AHPRA receives a complaint, it has to make an assessment – using the limited information available to it – about the immediate risk posed by the practitioner to patients. If there is a serious risk, AHPRA can advise the National Boards to take immediate action, including by placing an interim restriction on the practitioner's registration (which they need to practice), or by suspending it altogether. A full investigation process then follows.

308 However, there are examples of where AHPRA has advised the department of concerns about broader systems, clinical governance or policy issues that may arise from the notification process.

309 The Health Services Commissioner shares with AHPRA information regarding complaints when they are made in regard to a registered practitioner. However, the HSC may have complaints information about a health service, and AHPRA about a practitioner at that service, without each other knowing about it. The *Health Complaints Act 2016* will expand the HSC's powers to share information with AHPRA that may be relevant to the latter's complaints, investigations or inquiries.

The lack of information sharing undermines the effectiveness of oversight. It means that the department cannot incorporate critical information about *practitioners* into its risk assessment of hospitals, and AHPRA and the HCEs cannot incorporate critical information about *hospitals* into their risk assessment of practitioners. Further AHPRA and the HCEs have incomplete information about practitioners. The consequences of this are significant, and can mean that a lack of broader context about a health service can stymy investigation of individual practitioners that may otherwise be warranted. Until these data are shared, critical risks to patient safety will continue to be underestimated by both parties, with investigation occurring too slowly and intervention too late.

A common system for receiving complaints

AHPRA submitted to this review that complaints and notification management would be improved by establishing a common 'front door' for receiving notifications and complaints. The need for this was also recognised in the recent Independent Review of the National Registration and Accreditation Scheme for Health Professionals, which proposed a single point of entry for complaints and notifications in each state and territory, with 93 per cent support in submissions.[310]

Several benefits would flow from this model. First, organisations could use pooled complaint data to more accurately assess risk and prioritise investigations. Second, pooling data would help the organisations to spot trends in similar complaints for hospitals or for individual practitioners and broaden the scope of their investigation accordingly. And finally, information sharing would provide a safeguard against slips in oversight of the kind that happened with Djerriwarrh, where AHPRA's investigation of an obstetrician following a maternal 'near miss' mortality incident took 28 months.

We believe improved information sharing (and streamlining AHPRA's procedures) would meet safety and quality needs appropriately, and would be more efficient than setting up separate registration processes for Victoria, as New South Wales has done,[311] or scrapping the national approach to registration altogether.[312]

Ensuring the department knows about and can use complaints

The department should have open lines of communication with the organisations that handle complaints about health services and clinicians. Such an arrangement is feasible. In its submission to this review, AHPRA established that it could inform the department about complaints 'if clear grounds were established that [the department] needed this information to manage its obligations to public health and safety.'

310   Snowball (2014), p. 31
311   Satchell, *et al.* (2015)
312   Breen ibid.

We believe that the experience with Djerriwarrh Health Services has clearly established this need: timely intervention and follow-up requires triangulating data on 'red flags' early. To enact this sharing of complaints data, the department should develop a protocol with AHPRA and the HCEs and, if necessary, seek amendments to Victorian or national legislation to effect this. The department and the HCEs should also develop a compact that sets out the governance arrangements and responsibilities of each party with regard to information sharing and investigation. At a minimum, this should include an arrangement so that AHPRA and the HCEs provide the department with every reported clinician's specialty, place(s) of employment, PRONE score and investigation status, where they possess that information.

The information sharing should go both ways. The department should share with AHPRA and the HCEs its current culture and structural risk assessments of each health service, along with the indicators and investigation status of any problems detected. The department should also undertake further data analysis and calculate a combined PRONE score using pooled data from AHPRA and the HCEs. This score should take into account relative weightings from different agencies to better inform and improve its function.

The Department should triangulate risk assessments with the Victorian Managed Insurance Authority (VMIA), and involve it where feasible in data sharing arrangements. It should also seek to incorporate information about practitioners arising from court settlements in which the VMIA was not involved, and in which the patient did not pursue a complaint through an HCE.

These changes would represent a significant shift in the way that information from complaints is used, and the balance between practitioner privacy and patient safety in particular. We believe this is appropriate. There is broad recognition – including from AHPRA – that the pendulum has swung too far towards the right of a practitioner to remain anonymous throughout the whole reporting, investigating and decision-making process. The priority must be to protect patient safety and the public interest.
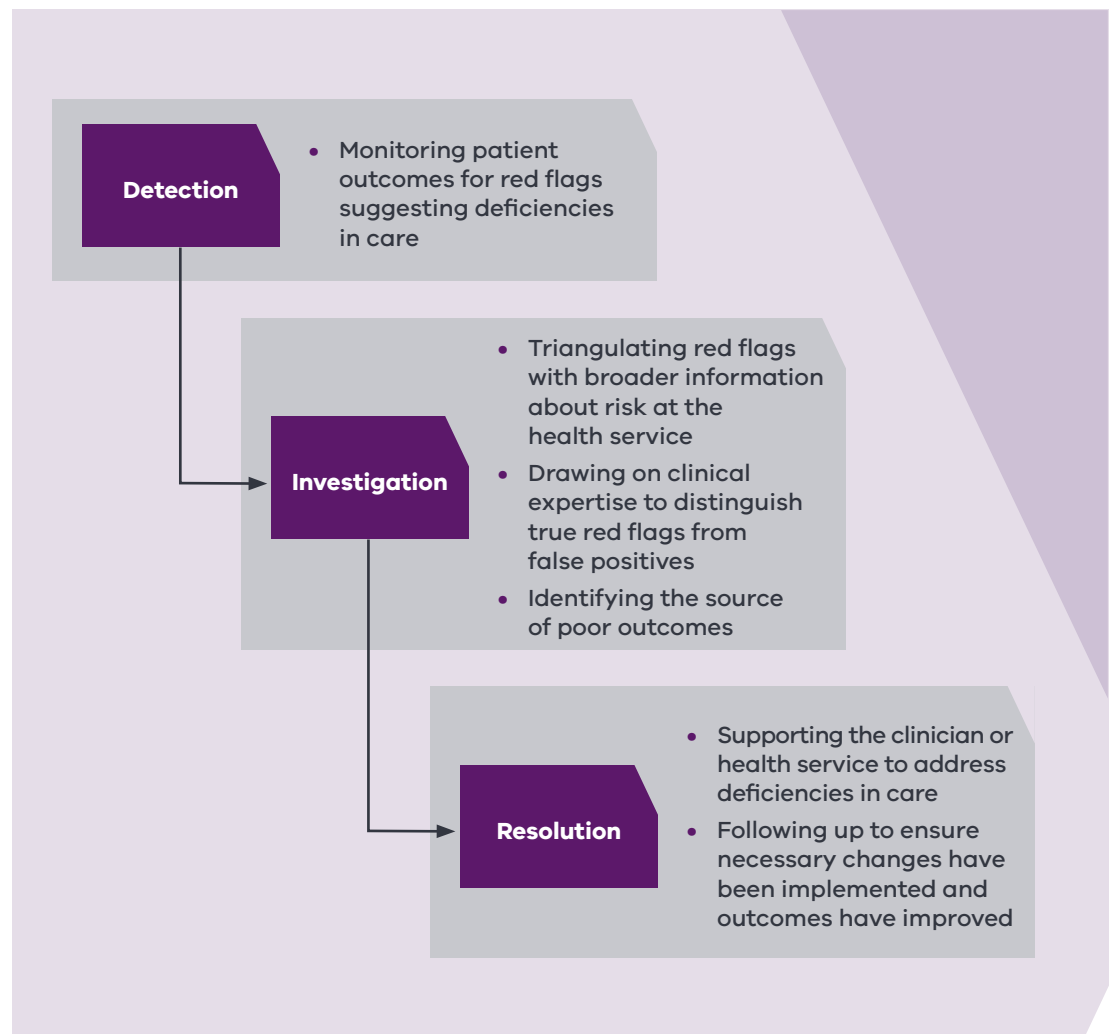
Recommendation 3.8:

That:

3.8.1. the department develops a compact with each of AHPRA, the Health Services Commissioner and the Mental Health Services Commissioner that sets out clear governance arrangements and two-way responsibilities for sharing information about clinicians and other registered and unregistered practitioners, who are being investigated so that the department can alert hospitals where relevant

3.8.2. the department shares its current structural, cultural and outcome risk assessments of all hospitals with AHPRA, the Health Services Commissioner, the Mental Health Services Commissioner and the Victorian Managed Insurance Authority.

3.8.3. the *Australian Health Practitioner Regulation Agency (AHPRA)*, the Health Services Commissioner and the Mental Health Services Commissioner calculate scores predicting the risk of clinicians receiving future complaints (further analysis should be done to enable calculation of combined predictive scores using pooled data and taking into account relative weightings)

3.8.4. the department provide information about likely future risk of complaints to public and private hospitals and facilities when there is at least a 40 per cent chance of another complaint

3.8.5. the department undertake or commission further analysis to enable calculation of combined complaint predictive scores using pooled data from AHPRA, the Health Services Commissioner, the Mental Health Services Commissioner, and the Victorian Managed Insurance Authority

3.8.6. the department recommend such legislative changes as are necessary to allow collection of this information and provision of the PRONE score.

3.8.7. the Minister raises in the appropriate national forum the desirability of ensuring this flow of information. In particular, the Minister should raise the possibility of amending registration requirements to require practitioners to inform AHPRA of their employers and places at which they practice, and for AHPRA to have the power to inform employers and places of practice of changes to a practitioner's registration status.

Improving detection, investigation and resolution of deficiencies in care

Reducing avoidable harm requires effective detection, investigation, and resolution of deficiencies in care. The department needs to be able to detect red flags suggesting potential deficiencies, situate those red flags within a broader assessment of risk at the health service, and draw on clinical expertise to investigate and support the health service to address the problem, with ongoing monitoring to ensure that it has been effectively resolved (see Figure 8).

Figure 8: A three step process for detecting, investigating and resolving deficiencies in care

Detection
- Monitoring patient outcomes for red flags suggesting deficiencies in care

Investigation
- Triangulating red flags with broader information about risk at the health service
- Drawing on clinical expertise to distinguish true red flags from false positives
- Identifying the source of poor outcomes

Resolution
- Supporting the clinician or health service to address deficiencies in care
- Following up to ensure necessary changes have been implemented and outcomes have improved

To achieve this, the department has historically relied on performance monitoring, described above, and to a lesser extent its plethora of specialist bodies responsible for reviewing cases in which a patient died or suffered severe harm. These bodies include the consultative councils for obstetric and paediatric, surgical and anaesthetic mortality (CCOPMM, the Victorian Surgical Consultative Council (VSCC) and the Victorian Consultative Council on Anesthetic Mortality and Morbidity (VCCAMM) respectively), various expert panels (the Mortality Expert Review Panel (MERP), the Healthcare

Associated Infection Advisory Committee (HAIIC), and the Clinical Incident Review Panel (CIRP), respectively), and VASM.

Of all the departmental and extra-departmental activities addressing quality and safety, these bodies hold the most detailed information on the most severe forms of patient harm and possess the deepest expertise to review it. However, they are fragmented and each appears to have a varying degree of effectiveness in identifying preventable harm and ensuring that it doesn't occur again.

This is because, in most cases they have been not set up, resourced and coordinated to effectively address harm.[313] Some are unable to *detect* red flags in a timely manner. Some are unable to fully *investigate* red flags and lack access to information that could inform risk assessment but is housed elsewhere in the department. Some have limited powers to *resolve* deficiencies in care by following up issues in a timely manner and ensuring that the clinician or health service in question rectifies the problem.

These committees impose a cost on health services, which have supplied senior clinicians and executives to sit on them, and on the department, which provides extensive secretariat support to each of them. These costs should be weighed against their benefits. In this chapter we have carefully reviewed the functions and value-add of each committee, and recommended ways to make better use of their resources. We have recommended an expanded remit for two – VASM and CCOPPM – and absorption of the others into the department, OSQI and the clinical networks.

Empowering the Consultative Council on Obstetric and Paediatric Mortality and Morbidity

CCOPMM is responsible for reviewing all cases of maternal, perinatal and paediatric mortality and morbidity, and advising the Minister and the department on strategies to improve clinical performance and avoid preventable deaths. It has existed since 1962, and hospital reporting of mortality and morbidity to the council is mandated in legislation.[314] It has a very wide remit, covering all aspects of maternal and paediatric mortality and morbidity.[315]

CCOPMMs role in discovering the problems at Djerriwarrh exemplifies both the strengths and shortcomings of the role of specialist case review committees as they are currently designed. It was CCOPMM – not the department's dedicated performance monitoring unit – that discovered the failings in care at Djerriwarrh. In this sense, the committee *provides* an important safeguard against failures in hospital morbidity and mortality review and departmental performance monitoring: if a hospital does not detect avoidable harm, a committee will catch it.

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313 These councils' and committees' idiosyncratic powers and approaches to case review and follow-up are a result of their varying histories, resources, statutory powers and relative independence from the department. Some were set up for purely academic purposes, while others have a clearer performance function.

314 Although hospital compliance with the morbidity reporting requirement is rarer than it should be.

315 However, morbidity is only related to the admitted episode. It does not review post-discharge morbidity.

However, CCOPMM caught the cluster at a very late stage, and almost did not discover it at all.[316] In large part, this reflects the fact that CCOPMM was set up to classify deaths, not to monitor adverse outcomes in real time. By design, its role in quality improvement was reactive, rather than proactive. Prior to the latter half of 2015, CCOPMM had neither the reporting systems nor the staffing resources to facilitate the early identification of potential systematic failures that were resulting in adverse outcomes in individual maternity services. Further, a slow, paper-based reporting system and long delays in health services responding to CCOPMM's request for additional information saw some of the reports delayed by up to 18 months.

Some of these limitations have been addressed. Transitional issues with a new online reporting system have at last been worked through, and incident receipt and review is much faster now. The problems with under-reporting of morbidity are being circumvented, to an extent, by monitoring morbidity through the routine data.

However, CCOPMM still lacks crucial powers to follow up outliers (as VASM does) and to mandate improvement work (as the Chief Psychiatrist in Victoria and CCOPMM's counterpart in England do).[317] This has meant that avoidable errors in care have been repeated. For example, expert review of the cluster of perinatal deaths at Djerriwarrh confirmed CCOPMM's findings that misuse and/or misinterpretation of fetal surveillance by cardiotocography was a recurrent feature in six of the 10 perinatal deaths that occurred there over 2013 and 2014, suggesting that the hospital's staff were inadequately skilled in fetal surveillance.[318] Devastatingly, a family's submission to this review highlighted that the same error had been present in the potentially avoidable loss of their baby at Djerriwarrh Health Services several years earlier.

This cannot be allowed to happen again. The department must urgently strengthen CCOPMM's responsibilities and resources to enable it to follow up identified deficiencies in care. CCOPMM must be given substantial powers to issue evidence-based guidelines for care, audit compliance against them and mandate improvement work in health services where preventable harm has occurred. It must be able to follow this improvement work up to ensure it has been correctly implemented and preventable harm has ceased. CCOPMM has developed considerable skill and expertise in reviews of deaths, expertise that could also be extended to reviewing deaths in another extremely vulnerable group: children in statutory child protection. Consideration should also be given to strengthen CCOPMM's role in oversight of deaths of children who are clients of child protection services at the time of their death.

Adverse outcomes during delivery are devastating for families and providers of care, and are often preventable (see Box 11). The maternity network should develop strategies (in a way analogous to the NHS) to eliminate preventable stillbirths, neonatal and maternal deaths and intrapartum brain injuries.

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316 Over 2013–14, CCOPMM received 11 reports of perinatal mortality and stillbirth at Djerriwarrh Health Services. It did not alert the department to the cluster until March 2015. Subsequent review found that of the 11 deaths, seven were avoidable or potentially avoidable.
317 Wallace (2015), p. 3, 11.
318 ibid.

Box 11: Reducing stillbirths in the NHS

Stillbirths are tragic and can often have an enduring, profound psychosocial impact on families. They are also often preventable,[319] with rates varying greatly across high-income countries (1.3–8.8 per cent, 28 weeks or greater gestation).[320]

A recent article in the *Lancet* has concluded that ending preventable stillbirths in high-income countries is indeed possible through improvements to the quality of maternity care, along with improvements in the health status of women and the reduction of social inequities.[321] They also identified the clear and persisting priorities for action of reducing stigma and fatalism related to stillbirth and improving bereavement care.[322]

The British Government has taken up the challenge with the Secretary of State for Health, announcing a national ambition to halve the rates of stillbirths, neonatal deaths, maternal deaths and intrapartum brain injuries by 2030, with a 20 per cent reduction by 2020. As part of this ambition, all staff who care for women in labour in NHS England hospitals are now required to undertake an annual training and competency assessment on cardiotocography interpretation.[323] This issue of up-to-date cardiotocography training was a key problem at Djerriwarrh Health Services in 2013 and 2014.

A strengthened CCOPMM role will lead to earlier identification of deficiencies in care, and will ensure these deficiencies are addressed so that further harm does not arise. However, there is a risk that things will still slip through the cracks. It is the department's role to keep a close eye on this risk by actively monitoring all health services where severe avoidable harm has arisen until it is clear that the problem has been resolved.

For this reason, when CCOPMM finds that preventable harm involving mortality or severe morbidity has occurred, it must also ensure the department is informed. This means sharing information on the type of incident, the name of the health service concerned, and the status of the investigation and subsequent improvement work. The department should triangulate this information with other governance, cultural and outcome risks at the same health service and update its risk assessment of the hospital accordingly.

319 'Substandard care contributes to 20–30 per cent of all stillbirths and the contribution is even higher for late gestation intrapartum stillbirths' Flenady, et al. (2016)
320 Ibid.
321 Ibid., p 691-702.
322 Ibid.
323 O'Connor (2016)

Recommendation 3.9:

That:

3.9.1. the provisions of the Public Health and Wellbeing Act relating to the Consultative Council on Obstetric and Perinatal Morbidity and Mortality be amended to allow the council:

– to issue practice guidelines relevant to its findings and work

– audit compliance against those guidelines in all hospitals and advise the department where it has found noncompliance

– where the council finds that preventable harm involving mortality or severe morbidity has occurred, immediately provide the department with information on the type of incident, the name of the health service concerned, and the status of the investigation and subsequent improvement work

3.9.2 the council be involved in reviewing deaths of children subject to child protection orders, and be appropriately resourced to do so.

Consolidating surgical audit

At present, there are three groups with responsibility for reviewing severe harm and deaths that have occurred during surgery and/or when patients were under anaesthesia.[324] These are the VCCAMM, the VSCC, and VASM,[325] which is managed by the Royal Australasian College of Surgeons (RACS).[326]

Of the three, VASM has had by far the most success in developing a system for reducing avoidable harm. Since 2008 VASM has been funded by the department to review cases of surgical mortality and provide feedback to surgeons and more recently health services (before then, the VSCC performed this function).[327] Audit participation is a compulsory component of the RACS continuing professional development program, which means all surgeons must participate in order to maintain their college fellowship. A peer-reviewed evaluation of the program found that over 2010–2013 there was a significant decrease in serious clinical management issues associated with surgical mortality.[328] There was also a 20 per cent reduction in surgical mortality in the five years after VASM was established, for which VASM's activities are likely to be partially responsible.[329]

324 Many but not all anaesthesia deaths are also surgical deaths, which is where VCCAMM overlaps with VSCC and VASM. There is also direct overlap between the functions of VSCC and VASM, with the former concentrating on surgical morbidity and the latter on surgical mortality.

325 In terms of the authorising environment, the RACS is accountable to the department via contract for the VASM. The VSCC is accountable to the Minister for Health. The VASM Clinical Director is an ex-officio member of the VSCC and the Chair VSCC and Manager, Clinical Councils Unit are ex-officio members of the RACS VASM Management Committee.

326 VASM operates through a contract with the department.

327 Since VASM now manages the surgical case reviews, VSCC reviews the reviews and considers system-wide findings.

328 These include a decrease in delay of definitive treatment ($p < 0.001$), inappropriate operations ($p < 0.001$), preoperative care ($p < 0.03$) and postoperative care ($p < 0.001$). There was not a significant decrease in issues with management or adherence to protocol (for example, adverse events related to protocol breach, diagnosis-related complication, failure to use DVT prophylaxis, high dependency unit not used, patient refusing treatment, surgeon too inexperienced). Beiles, *et al.* (2015), p. 805

329 VASM identified a progressive increase in both surgeon and hospital participation, and a significant reduction in errors in management. However, the review did not seek to establish a causal association, and the long-term secular decrease in surgical mortality must be noted. Ibid., p. 806

The VSCC and VCCAMM, by contrast, have struggled with weaker mandates and a value-add that has diminished over time.

The VSCC was established in 2001,[330] before VASM, but never had the same ability to enforce reporting or stimulate improvement work. In 2007 its responsibility for reviewing mortality cases was transferred to the VASM. It now reviews the VASM outcomes and recommendations to provide high level system advice to the department and Minister for Health on the strategies to address avoidable harm. It has continued to develop/revise and publish clinical practice guidelines and the *Intern manual: Immediate management of surgical emergencies* for surgical trainees. The VSCC, the department and the RACS have kept up collaborations to develop and present the annual VASM education seminars jointly (although this role has predominantly remained with the RACS/VASM). The VSCC occasionally reviews sentinel events related to surgery on behalf of the department.

The VCCAMM similarly has seen its value-add diminish over time. It was established in 1976,[331] at a time when anaesthetic mortality was considerably more common than it is today.[332] However, there has always been considerable overlap between its role and that of VASM and the VSCC, since most anaesthesia deaths are also surgical deaths.

The department must prioritise use of its resources, and the resources of the health system, much more carefully. We recommend absorbing the oversight work of VSCC into an expanded VASM and growing VASM's contract to include serious surgical morbidity and anaesthetic mortality. The role of VCCAMM should be reviewed in this context. The VSCC and VCAMM's improvement functions (including reviewing data for system-wide trends, and issuing practice guidelines) should be moved into a newly formed surgical clinical network (see Recommendation 4.8.6), discussed in Chapter 4 of this report.

The department and VASM should strengthen their information-sharing arrangements. When preventable mortality or morbidity occurs, VASM should provide a report to the health service with its recommendations for strengthening care, and share it with the department.[333] It should also provide the department with the responsible clinician's specialty, place(s) of employment and investigation status (for example, whether the health service has received advice from VASM yet, and whether it has implemented VASM's recommendations). VASM should also keep the surgical clinical network (discussed in Chapter 4) abreast of its work and findings.

330 Field (2014), p. 1

331   Victorian Consultative Council on Anaesthetic Mortality and Morbidity (2015)

332   A systematic review found that mortality solely attributable to anaesthesia has declined from 357 per million (95 per cent CI 324–394) before the 1970s to 52 per million (42–64) in the 1970s–80s, and 34 per million (29–39) in the 1990s–2000s ($p < 0.00001$). Bainbridge, *et al.* (2012)

333 Since this review was established, VASM has started providing the department with hospital reports that contain aggregated data.

VASM should notify the department when it detects broader risks to patients in a health service, and the department should provide the same information to VASM. This would ensure more accurate risk assessment for both, prompting timely and intensified support to health services when it is required.

Recommendation 3.10

That:

3.10.1. the contract with the Royal Australasian College of Surgeons for the conduct of the Victorian Audit of Surgical Mortality (VASM) be renegotiated to expand the coverage of VASM to include anaesthetic deaths, subject to appropriate involvement of anaesthetists, and when preventable mortality or serious morbidity occurs, for VASM to provide a report to the relevant health service (and the department) with its recommendations for strengthening care.

3.10.2. the department provide VASM with data to enable it to calculate rates of surgical and anaesthetic deaths in all hospitals

3.10.3. the department discuss with the Royal Australasian College of Surgeons the desirability of VASM providing the department with the responsible clinician's specialty, place(s) of employment, and investigation status (for example, whether the health service has received advice from VASM yet).

Streamlining clinical incident management

CIRP, the department's clinical incident review panel, is responsible for reviewing sentinel events.[334] By definition these are infrequent events that occur in health services as a result of deficiencies in systems and processes. They cause extreme harm to the patient, often leading to their death. Around 50 sentinel events are reported in Victoria each year.

When a sentinel event occurs at a health service, they are expected to notify CIRP, conduct an RCA, create a risk reduction action plan (RRAP) and submit the RCA and RRAP for feedback. The panel then reviews the report and provides feedback to the health service about how it might be improved. Once the health service has implemented its RRAP, it must send a report to the department.

It is unclear how much value CIRP is currently adding to safety and quality in Victoria. As the Victorian Auditor-General recently reported:

There are prolonged delays in reviewing RCA reports submitted by health services. Health services can wait up to 16 months before CIRP reviews an RCA report – seven months on average. At 30 September 2015, CIRP had 33 unprocessed RCA reports, which represents a backlog of approximately one year of committee work.[335]

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334   CIRP reviews incidents that are reported under any of the eight national sentinel event categories or the one Victorian-defined sentinel event category (Other catastrophic: Incident severity rating one – ISR1).

335   During this audit, CIRP has worked to address this backlog by scheduling an additional meeting in November 2015 and an additional meeting in 2016. The November 2015 meeting reduced the number of unprocessed RCAs awaiting CIRP review to 25. Victorian Auditor-General's Office (2016b), p. 17

This is clearly not acceptable. However, it is unclear how much value CIRP adds when it *does* review the RCA. During our consultations we found a strong view from health services that CIRP usually has less information, and often does not have greater expertise, than the health service conducting the RCA. As a result, its value-add is often minimal.

We certainly see the importance in having an oversight mechanism to ensure hospitals implement necessary process improvements following a sentinel event.[336] We also see the importance in disseminating the lessons of sentinel events across the hospital sector to ensure all health services learn the lessons of a tragedy, and wherever possible take effective steps to reduce the risk of it happening again. However, it is clear CIRP is not doing this well. As the Victorian Auditor-General recently reported:

> Across the sector, there is ongoing delayed publication of [the department's] bulletin, Riskwatch, partly due to delays with the publication of CIRP's Sentinel Event Program Annual Report. For instance, the latest bulletin was released in December 2014, despite it being a monthly publication. There was no annual report for the 2013–14 or 2014–15 period, and data for the 2011–12 and 2012–13 annual report was published in May 2014 – almost three years after the first sentinel event included in the report.[337]

We recommend dissolving CIRP and reallocating its functions in the following way:

- When a hospital has a sentinel event, it must (as now) notify the department within three days of the event and also report, within an appropriate timeframe, the composition of its RCA panel. The panel must include at least one independent expert who is not from the same hospital.
- The department should continue to provide an RCA and action template on its website for hospitals[338] and regularly update it to ensure it reflects international best practice.[339]
- All hospitals should submit their RCA and RRAP reports to the department, along with evidence that the RRAP has been implemented.
- The department should share these materials with OSQI, who would be responsible for using them to promote statewide learnings.
- If at any point the department has misgivings about the quality or appropriateness of the RCA panel and its report, RRAP or implementation evidence, or if from the outset it doubts the ability of the hospital to effectively resolve the problem (for example, because of assessed structural or cultural issues), it should request further information and/or ask OSQI to support the hospital with improvement work.

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336 As the American National Patient Safety Foundation notes, 'It cannot be over-emphasized that if actions resulting from an RCA are not implemented and measured to demonstrate their success in preventing or reducing the risk of patient harm in an effective and sustainable way, then the entire RCA activity will have been a waste of time and resources.' National Patient Safety Foundation (2016)

337 Victorian Auditor-General's Office (2016b), p. 17

338 This should draw on work from the US National Patient Safety Foundation. National Patient Safety Foundation (2016)

339 For example, the template could follow the US National Patient Safety Foundation's recently developed 'RCA squared' approach, which was developed in response to evidence of inconsistent successes in using RCAs to drive improvement.

Recommendation 3.11:

That:

3.11.1. the department dissolves the Clinical Incident Review Panel, with CIRP's compliance functions absorbed by the department and its improvement functions absorbed by OSQI

3.11.2. the department requires all hospitals to:

– demonstrate they have at least one independent expert on their sentinel event root cause analysis panel

– identify the individual responsible for ensuring the panel's recommendations are implemented

– provide evidence that they have implemented their panel's recommendations

3.11.3. the department uses its discretion to appoint additional experts to panels and audits the implementation of improvement recommendations

3.11.4. OSQI use relevant information arising from sentinel event review to promote statewide learnings, and support hospitals with improvement work when requested to do so by the department.

Prioritising effective mortality review

In 2014 MERP was established as a specialist mortality expert review panel to audit hospitals flagged in Hospital Standardised Mortality Ratio (HSMR) monitoring. To date, it has reviewed all the mortality cases of 11 outlier hospitals, and found in each case that the hospital's high mortality rate was *not* driven by avoidable deficiencies in care.[340]

The limited success of MERP is unsurprising given the inherent difficulty of using HSMRs to detect safety and quality problems in hospitals.[341] HSMRs are 'all-cause' measures, so trying to identify reasons for an elevated mortality rate across patients with quite different diagnoses and procedures is almost impossible.[342] Leading safety experts have described HSMRs as 'a bad idea that won't go away' because of their weak predictive power.[343] As the 2013 Keogh Review into 14 NHS hospitals with persistently high mortality rates noted, 'poor standards of care don't necessarily show up in mortality rates', and using HSMRs to quantify avoidable deaths is 'clinically meaningless'.[344] Recent

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340 Djerriwarrh was not detected through this process because MERP's brief specifically excluded neonatal mortality. For this reason, neonatal deaths and stillbirths are not included in calculation of HSMRs.

341 The validity and reliability of HSMRs remain in doubt, as there has only been a weak and inconsistent relation found between hospital mortality and other measures of quality. HSMRs especially suffer from low-sensitivity and low-specificity issues, since most problems with quality of care do not cause death and most hospital deaths do not reflect poor-quality care. Its comparative power is also particularly limited for interhospital comparisons due to differences in reference populations, coding practice and admissions criteria. Variation in coding can exacerbate bias in HSMRs by causing significant interaction between HSMR variables, such as the Charlson comorbidity index, and emergency presentations for case mix adjustment. Bottle, *et al.* (2011) Lilford and Pronovost (2010) Mohammed, *et al.* (2009) Scott, *et al.* (2011) Shojania and Forster (2008)

342 Lilford and Pronovost (2010) In contrast, complications occur at an average rate of around one in 10 episodes (and more in overnight patients), making them a more tractable form of harm to analyse statistically.

343 Ibid.

344 Keogh (2013)

research in the NHS found no significant correlation between HSMRs and the incidence of avoidable deaths as judged by clinician case review and that neither measure is sufficient as a means of identifying poor-quality hospitals.[345]

> Hospital standardised mortality ratios derived from administrative data are amongst the most widely used measures of quality in use in Victoria. These measures are highly controversial with most recognised authorities now considering them to be misleading and inappropriate as measures of quality.
>
> **Professor John McNeil on behalf of the**
> **Monash School of Public Health and Preventive Medicine**

Reviewing HSMR outliers reflects poor prioritisation of resources and should be abandoned accordingly. MERP should be dissolved, and the department should turn its focus to condition- and treatment-specific mortality outliers flagged through the statistical process-control monitoring process discussed earlier in this chapter. Our monitoring approach emphasises monitoring of cause-specific mortality across four domains (pneumonia, acute myocardial infarction, fractured neck of femur and stroke) as more appropriate than the all-cause HSMR. Outliers would be managed through the department's performance management framework, with the department able to request OSQI to support the hospital with its improvement work.

Recommendation 3.12:

That the department:

3.12.1. dissolves the Mortality Expert Review Panel and ceases to investigate hospital-standardised mortality rates

3.12.2. focuses instead on condition- and treatment-specific mortality outliers, which would be detected and supported under the new performance management framework

3.12.3. redirects the Mortality Expert Review Panel's resources into OSQI.

Abolishing the Patient Safety Advisory Committee

The Patient Safety Advisory Committee (PSAC) was established in June 2014 to advise the Minister for Health on a broad range of patient safety issues (see Table 9). The department has not resourced, directed or supported PSAC to deliver on its broad remit. Instead, it has been directed to spend much of its time reviewing information already analysed by three subcommittees: CIRP, MERP and the Healthcare Associated Infection Advisory Committee.

345 Hogan, *et al.* (2015)

Its reliance on these relatively ineffective committees,[346] lack of access to the Minister[347] and inability to anticipate and advise the Minister on the problems at Djerriwarrh has meant the committee has been unable to add value to patient safety in Victoria. Meanwhile, it is occupying the time of very senior clinicians, hospital executives and other stakeholders while its secretariat consumes scarce resources at the department.

As Table 9 shows, we have re-assigned most of the functions of the PSAC, while others are already duplicated elsewhere in the department. This would leave little for the PSAC to do. Accordingly we recommend abolishing the committee.

Table 9: Proposed reallocation of the Patient Safety Advisory Committee's functions

PSAC function	Re-assigned to:
Patient safety performance	The Victorian Health Performance Authority
Emerging trends	The Victorian Health Performance Authority
Strategies for preventable harm reduction	The Office for Safety and Quality Improvement
Innovative solutions, with a focus on overcoming inequities in care	The Office for Safety and Quality Improvement in partnership with Better Care Victoria.
Specific matters referred to it for consideration[348]	The Office for Safety and Quality Improvement and the Victorian Clinical Council

Recommendation 3.13:

That the Patient Safety Advisory Committee be dissolved, with its responsibility for trend analysis re-assigned to VHPA and its responsibilities for system-wide innovation and improvement reassigned to OSQI.

Striking an appropriate balance between risks to safety and privacy

As this chapter has demonstrated, the department and boards will require improved access to and use of data in order to strengthen their oversight of care and ensure that risks to safety are promptly detected and acted upon. This requires the department to break down information silos and draw on much broader and richer information to form a complete picture of risk.

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346 We have recommended that CIRP and MERP be abolished. In Chapter Four, we discuss abolishing HAAIC and moving its functions into a newly formed Infection and Infectious Disease clinical network.

347 '... up until September 2015, PSAC has never provided advice or recommendations to the minister, despite a significant patient safety failing [at Djerriwarrh Health Services]' detected in March of that year. Victorian Auditor-General's Office (2016b), p. 16

348 Ibid., p. 15

Militating against this improvement is a culture in the department where information is fragmented and very difficult to access. As a recent departmental capability review found:

> Consultations with staff revealed that risk aversion contributes to unnecessary restriction of data sharing. The review observed a culture of 'need to know'. Staff advised the review that data and information are 'jealously guarded' in pockets across the department. Access to information is largely reliant on individuals' networks; a source of great difficulty for new starters coming into the department.[349]

These excessive restrictions on data use reflect an inappropriate balance between risks to patient and clinician privacy and risks to patient safety. The default setting for all members in the department should be to share data, and to work hard to ensure that risks to privacy are appropriately mitigated.

The increased prevalence of chronic disease increases the importance of good links between the primary care system and hospital services. In parallel with that there needs to be better data holdings that link patient experience across health service settings. The proposed Victorian Health Performance Authority (VHPA) should take a lead role in opening up data holdings to make better use of Victoria's substantial investment in routine data collections. Western Australia has led Australia in making linked data available to facilitate research,[350] and there is no reason why Victoria should not be the new national leader in this field.

Recommendation 3.14:

That the Victorian Health Performance Authority:

3.14.1. provides an easy-to-use webpage to identify data holdings and data definitions

3.14.2. within three years provides more online access to data holdings, including linked data holdings

3.14.3. works with researchers and consumer groups to develop protocols for access to linked data to facilitate evaluation and research projects.

Acting on early warning signs

Better information collection and review strategies will help the department identify hospitals with concerning safety and quality performance more rapidly. But it isn't enough to know; the department must also act on the information. This entails investigating the issue and also through ensuring that underperformers[351] have the support they need to get up to speed.

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349 Victorian Public Sector Commission (2015)
350 Holman, *et al.* (1999)
351 Who needn't necessarily be outliers.

In the past, the department has not had a particularly activist role in this regard. For example, when sentinel events or potentially avoidable deaths occur in hospitals, the department or consultative councils will supply advice[352] to the hospitals about improvement but not inspect the hospital to look for potentially broader issues, ensure there has been uptake of improvement advice, or evaluate the quality of the hospital's own improvement work.[353] These tend to be considered 'operational' matters and therefore the responsibility of the hospital.

> Department staff need to get out of the office and into hospitals, and physically clap eyes on the processes and structures in place.
>
> **Rural hospital CEO**

The department has also failed to act on red flags signalling more systemic problems in care. Nowhere has this been more apparent, to us, than in mental health care. It was clear to the panel that significant degradation in funding relative to needs in quality and safety has occurred over the past decade, and not been acted upon by the department. As a consequence, acutely unwell patients are waiting longer to access mental healthcare in acute settings and compulsory treatment in forensic settings. In the latter, they are awaiting treatment in facilities where it is not possible to provide the safe and high-quality care that they need. And in both settings, when patients are admitted for treatment, they tend to be sicker and are at risk of receiving treatment that is too brief to fully address their needs.

There has been no shortage of information regarding this problem. As we show below, the issues have been consistently highlighted in independent research, by key stakeholders with responsibility for provision of care, and by the Victorian Auditor-General and the Ombudsman. Yet this information has been met with inaction in the department. System reform is needed to address the full spectrum of oversight, encompassing detection, investigation and *rectification* of risks to safety and quality of care.

Ignored red flags in acute mental health

Like all patients, mental health patients are at risk of harm during the course of treatment in healthcare settings. However, they are also at risk of an additional range of safety incidents that are uniquely or strongly associated with mental health settings.[354] These include self-harm and suicide, assault (including sexual violence) from other patients,[355] (which as Figure 9 shows is very rare for general patients) along with trauma or physical harm arising from seclusion and restraint.[356] Further, mental health patients may have lower capacity for self-advocacy and so be less able to protect themselves from harm.[357]

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352 Including through reviewing and advising hospitals on the RCAs they performed after a sentinel event.
353 For example, departmental staff consistently responded to concerns about Djerriwarrh through arm's length enquiries about progress, and without interrogating the assurances of improvement supplied.
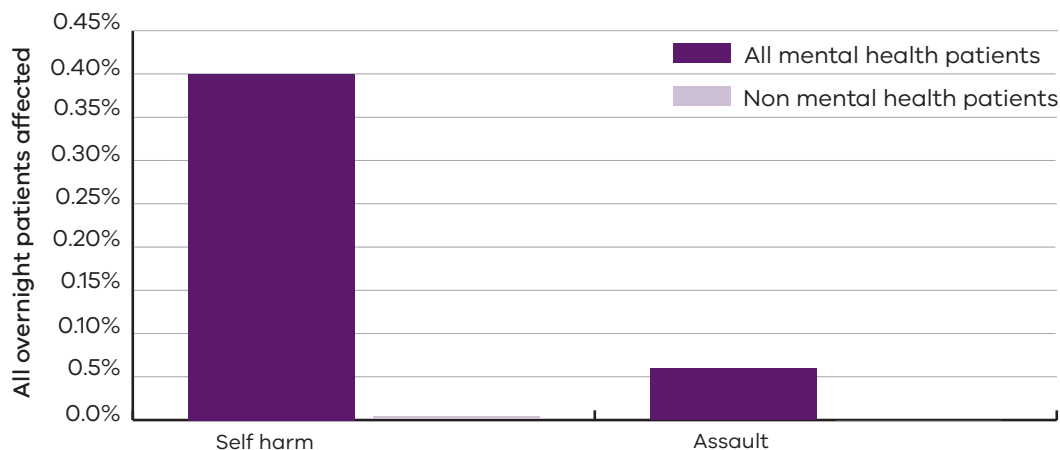354 Brickell (2009), p. 9
355 Though it should be noted that the majority of mental health patients are actually not aggressive. Ibid., p. 16
356   Ibid., p. 6
357   Ibid., p. 6

Figure 9: In-hospital assault and self-harm are much more common for mental health patients
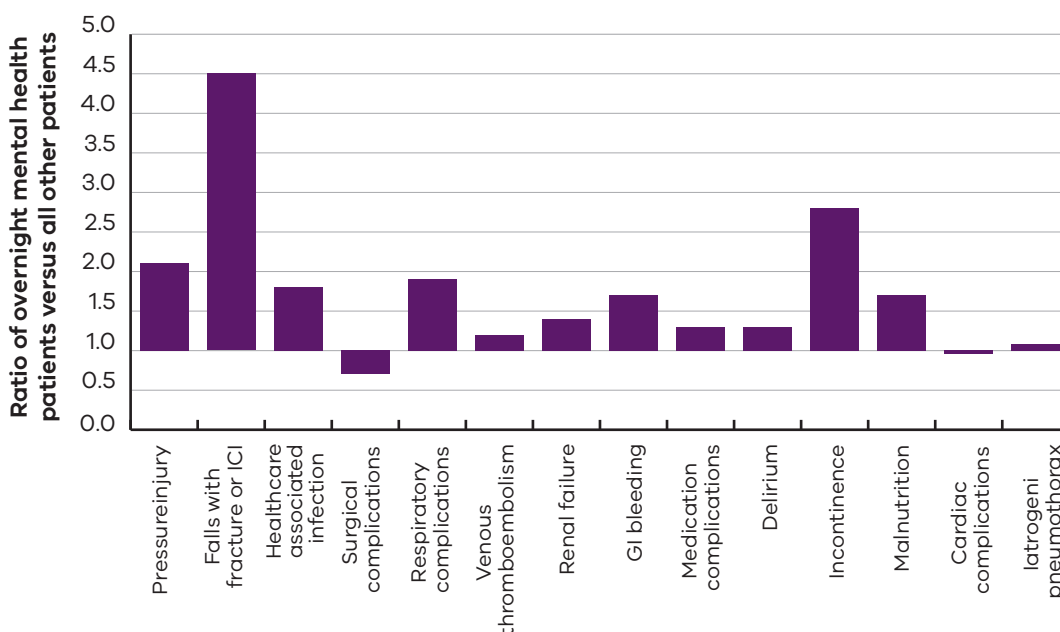

Source: analysis of the Victorian Admitted Episodes Dataset, FY 2014–15.

Notes: These estimates are of injuries arising from self-harm and assault (including sexual assault). As such, they do not count all incidents of self-harm and assault in the system. Further, they are likely to be highly conservative, given both incidents are likely to be under-coded in the routine data.

Finally, as Figure 10 shows, even complications that by definition are highly preventable are much more common for patients with mental health diagnoses than other patients. This may reflect differences in the quality of care, or heightened risk for mental health patients as a result of greater complexity, multi-morbidity and worse self-management of health.[358]

**Figure 10: Most preventable complications occur much more often for mental health patients**

Source: analysis of the Victorian Admitted Episodes Dataset, FY 2014-15, using Australian Commission on Safety and Quality in Health Care (2016a)

358 Barnett, *et al.*

Knowing these vulnerabilities, we should have strong and continuously improving systems in place to protect patients at elevated risk. But sustained growth in demand for mental health services in Victoria[359] has not been matched with a commensurate increase in funding.[360] Over the past 20 years, Victoria had the slowest growth in funding for mental health in the country, and went from being the state with the highest mental health spending per capita to the lowest. Hospitals have had to spread the same amount of resources more and more thinly.

One way this manifests is in the long waiting times that mental health patients routinely face in emergency departments before being admitted for treatment. As Figure 11 shows, we have a very low bar for emergency wait times in mental health, with the statewide target set at 80 per cent of *admitted* mental health patients waiting fewer than 8 hours in emergency beforehand. Nevertheless, we are consistently not meeting this target. Across Victoria about one in three mental health patients, on average, wait more than eight hours in a hospital emergency department before they are admitted for treatment.[361]

Figure 11: Adult mental health emergency department presentations transferred to mental health bed within 8 hours
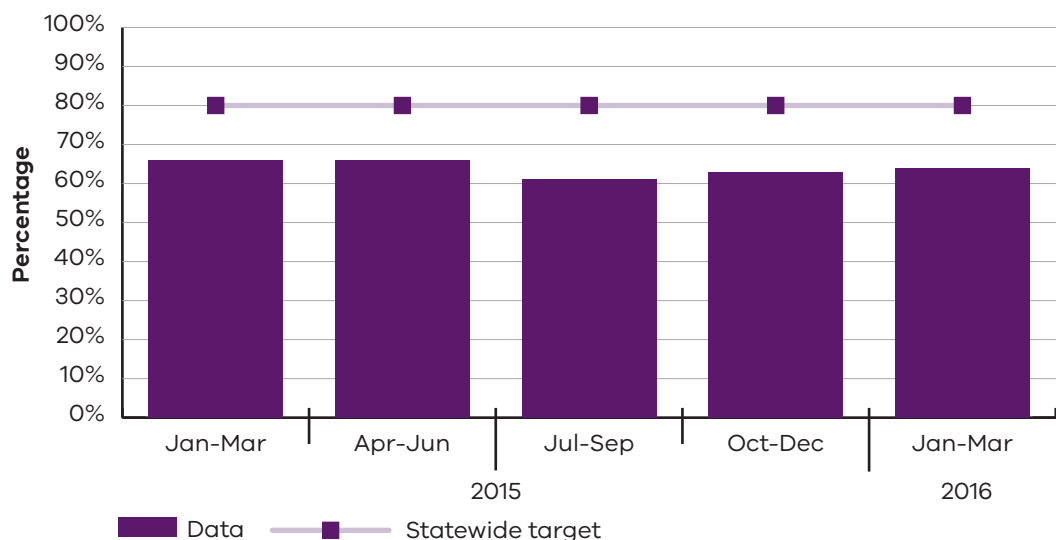
Source: Department of Health and Human Services (2016b)

As Victoria's 10-year mental health plan notes:

> … many people, including people with severe mental illness, do not access public mental health services … Increasing and sustained demand pressure on services has not been matched with increasing resources. Shifting population and growth has left some services under even greater pressure. The result is longer waiting times to access services and higher thresholds for entry. The increased pressure on services creates a risk that people may receive treatment that is less timely, less intensive and shorter in duration than they want or need.[362]

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359 Both through population growth and the ice epidemic, which saw methamphetamine-related emergency department presentations (which are often violent and paranoid) rise 20 per cent between 2011–12 and 2012–13. Victorian Auditor-General's Office (2015b), p. 3
360 Department of Health and Human Services (2015a), p. 10
361 Department of Health and Human Services (2016b)
362   Department of Health and Human Services (2015a), p. 10

These problems have occurred in the context of broader national issues in mental health systems. As the recent review of mental health services in Australia conducted by the National Mental Health Commission concluded:

> On the basis of our findings, it is clear the mental health system has fundamental structural shortcomings. This same conclusion has been reached by numerous other independent and governmental reviews. The overall impact of a poorly planned and badly integrated system is a massive drain on people's wellbeing and participation in the community – on jobs, on families, and on Australia's productivity and economic growth.[363]

Public mental health services in Victoria – which deal with the most seriously mentally ill – are in exactly the same situation. Victorian public mental health inpatient services perform well on one key criterion: cost per patient treated. In 2013–14 the average cost per inpatient bed day in Victoria was about 80–83 per cent of the national average for all classes of patient except forensic mental health, where the bed day cost was around 73 per cent of the national average.[364] Bed day costs were cheaper than every other state.

However, performance on other measures was generally poor. In 2013–14 Victoria had:

- the lowest proportion of the population receiving (public) clinical mental health services (1.1 per cent vs a national average of 1.8 per cent)
- the lowest proportion of new clients to all clients, indicating failure or inability to discharge (36.8 per cent vs 41.7 per cent)
- the highest proportion of patients readmitted within 28 days of discharge (14.7 per cent vs 14.3 per cent).

Victoria's relative position has been stable for some years, yet the issues identified here have not been meaningfully addressed. Instead, hospital resources have been spread increasingly thinly, with length of stay compressed and acuity thresholds raised to cope with demand.[365] As a result, the average mental health patient is sicker both on admission and on discharge than they were five years ago (see Figure 12).[366] Occupational violence – a measure of stress on the system – is endemic[367] but normalised to the extent that workers consider it 'part of the job'.[368]

363 National Mental Health Commission (2014)
364 Data in this section are taken from the Australian Institute of Health and Welfare's Key Performance Indicators for Australian Public Mental Health Services website: Australian Institute of Health and Welfare (2012)
365 Department of Health and Human Services (2015a), p. 10
366 HoNOS refers to Health of the Nation Outcome Scale, which is a measure of illness severity in adult mental health services.
367 A 2014 study of Victorian mental health workers found that 83 per cent had at some stage been a victim of abuse or violence at work, and one in three had been physically assaulted in the preceding 12 months. Victorian Auditor-General's Office (2015b), p. 11
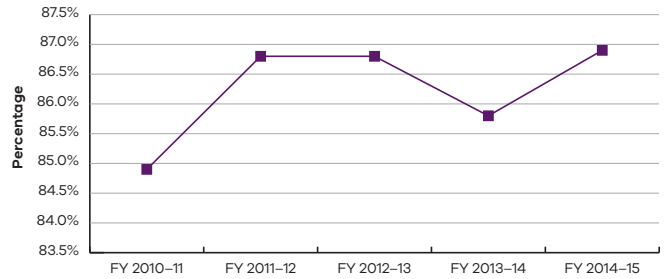368 Ibid.

Figure 12: Hospital stays for mental health patients in Victoria, 2010–11 to 2014–15
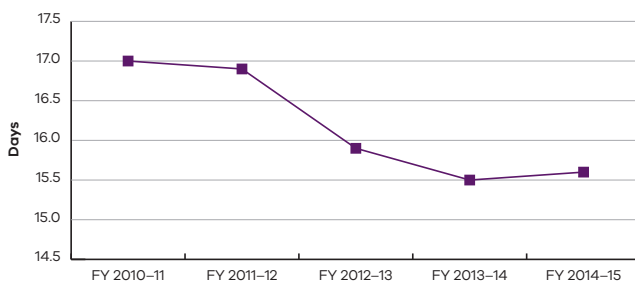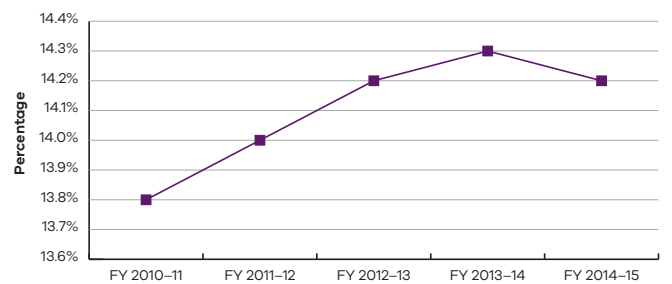
Total separations
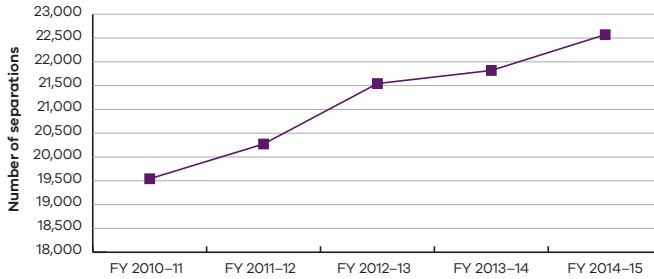
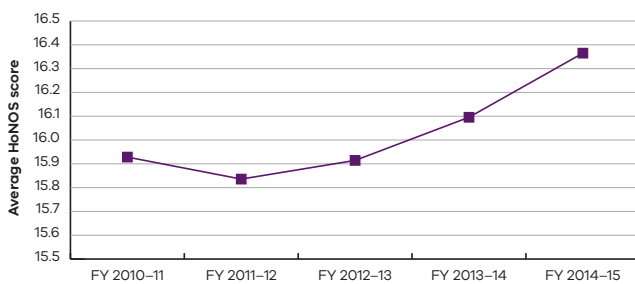### Bed occupancy rate

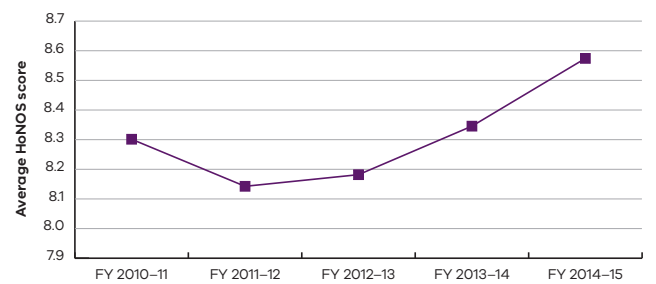### Average length of stay

28 day readmission rate

Average HoNOS at admission start

Average HoNOS at separation

Source: data supplied by the Department of Health and Human Services

Notes: HoNOS is a clinician rated tool developed to measure the health and social functioning of people experiencing severe mental illness

This poor access to care creates a problem for the individual who needs but can't get treatment, and a problem for the wider community in terms of potential safety issues.

The Victorian Government's strong commitment to mental health is an opportunity to turn this around. Its recent release of a 10-year mental health strategy that publicly articulates many of the problems we have discussed is an important and welcome first step. So too is its significant funding commitment to mental health in the 2016–17 State Budget, which allocated $356 million to mental health infrastructure and programs.[369] The establishment of a Mental Health Annual Report, the first of which is to be tabled later this year in Parliament, is an important opportunity to focus attention on the problems in access, pressure on services, and safety and quality, and provide the basis for a broader discussion with the community on safety and quality in mental health services.

Decisive action to address the worst inadequacies in care should now follow. The creation of an OSQI focussed on improving safety and quality presents an opportunity to strengthen mental health care. The department should consider the relationship between the office of the Chief Psychiatrist and the OSQI, and undertake a review of the Office of the Chief Psychiatrist to ensure that there is good alignment of the safety and quality priorities of OSQI with mental health.

A strengthened focussed on improving care in mental health will be insufficient, however, when the overwhelming threat to safety and quality of care in mental health is the significant and rising pressure on services. This will need to be addressed through funding.

Victoria's acute hospitals are on average more efficient than hospitals in other states.[370] As indicated above, the same is true for mental health services, but the difference between the national average and Victoria is greater (mental health services in Victoria costs about 80 per cent of the national average, whereas general health services in Victoria costs are about 90 per cent of the national average).[371] The decline in quality indicators and strength of the evidence we heard about mental health services suggests that the drive for narrowly defined efficiency in mental health is now having an adverse impact on quality.

> **Recommendation 3.15:**
>
> That the department ensure that the Mental Health Annual Report includes indicators of access to and pressure on services (including Forensicare services), and safety and quality outcomes including adverse events, and is used as the basis of a broader discussion with the community on safety and quality in mental health services.

Ignored red flags in forensic mental health

Inadequacies in the acute mental health system impact on the broader community and the justice system. At the time of arrest, 17 per cent of people arrested were being treated by a public mental health service.[372]

369 Department of Treasury and Finance (2016), p. 21
370 National Health Performance Authority (2016)
371 Productivity Commission (2015)
372 Department of Health & Human Services (2015)

In order for patients to receive safe and high-quality care, they must receive it in an appropriate setting that is able to cater to their specific needs. For acutely unwell prisoners who require compulsory treatment, or who have a court order to be detained for psychiatric assessment and/or care,[373] this setting is Thomas Embling Hospital (TEH). TEH is Victoria's only forensic facility able to provide compulsory treatment for patients who are acutely unwell and require treatment but have refused it. Victorian prisons are, appropriately, not allowed to provide this kind of treatment.[374]

TEH provides care for three types of patients:

- forensic patients found not guilty or unfit to be tried under the *Crimes (Mental Impairment and Unfitness to be Tried) Act 1997* (forensic patients)
- security patients (prisoners) who require compulsory mental health treatment under the *Mental Health Act 2014*
- civil patients of area mental health services unable to be managed in the community and who require compulsory treatment under the *Mental Health Act* in a highly secure environment.

In 2003 Forensicare[375] identified that demand for these beds had outstripped availability, leaving patients with serious mental illness untreated, and therefore at increased risk of self-harm and suicide, violence to staff, exacerbation of their illness, and reoffending after being released.[376] Since then, demand has continued to escalate,[377] and to date there has been no change in access to compulsory treatment services.[378] In 2014 the Victorian Ombudsman noted:

> For over a decade concerns about the capacity of the Thomas Embling Hospital have been repeatedly raised and to date no additional forensic mental health services have been made available for prisoners. The inability to provide sufficient mental health services to acutely unwell prisoners can be detrimental to their mental health, leading to instances of self-harm and even death.[379]

373 Forensicare (2016)

374 This is because the mental health services within the prison system are only able to provide voluntary treatment to prisoners as TEH is the sole facility that can treat prisoners who have been certified and require involuntary treatment. Pursuant to the Mental Health Act, following a certificate from a psychiatrist confirming that a prisoner appears to be mentally ill and requires treatment, the Secretary to the Department of Justice can issue an order for a prisoner be transferred to an approved mental health facility, such as TEH, for involuntary treatment. Victorian Ombudsman (2014b), pp. 120–121

375 The Victorian Institute of Forensic Mental Health, known as Forensicare, is responsible for providing adult forensic mental health services in Victoria.

376 Victorian Ombudsman (2014a)

377 The hospital's 116-bed capacity was originally based on information available in the early 1990s regarding the requirement for forensic mental health beds, and relied on the Department of Justice's forecast that the prisoner population would peak at 2,500 before descending. As at January 2014, the prison population had reached 5,857. Ibid., p. 119 Further, the number of beds available for prisoner patients at TEH has steadily reduced as the number of patients held under the *Crimes (Mental Impairment and Unfitness to be Tried) Act* has increased. The number of patients held as unfit to be tried has increased from 52 at 30 June 2005 to 77 at 30 June 2014. There were 25 beds allocated to prisoner patients at 30 June 2014. Victorian Auditor-General's Office (2014), p. 36

378 A small increase in beds (eight beds) is currently being built at TEH. A new voluntary unit is also being commissioned as part of the new Ravenhall Prison. However, these beds will not meet the identified needs: While the Department of Justice is adding 75 mental health beds at Ravenhall in 2017, without an investment in compulsory care facilities outside prisons, severely ill prisoners will continue to wait in prisons for access to the compulsory treatment they require.' Victorian Auditor-General's Office (2014), p. 39 Despite extensive planning, a proposed 120-bed medium security unit at Austin Hospital has not proceeded.

379   Victorian Ombudsman (2014b), p. 120

In 2014 the Victorian Auditor-General stated that 'indicators of under-capacity within prison and compulsory mental health facilities have become extreme.'[380] The prison system is burdened with a large number of acutely unwell prisoners to whom it is not authorised or able to provide appropriate care.[381] Only those who are exceptionally mentally unwell are currently being admitted to TEH for treatment,[382] with the threshold for certifying prisoners for compulsory treatment driven by availability of beds, not just a prisoner's mental health needs.[383] The danger of this is not only exacerbation of illness in the prison environment but the reality that people with mental illness being inappropriately detained in prison will be released into the community untreated.

Safety and quality of care for those who *are* certified for compulsory treatment is also a significant concern. Patients who are admitted to TEH risk receiving inadequate care, as the hospital is under a significant amount of pressure to expedite the return of prisoners to prison.[384] Further, patients are waiting longer periods before being admitted to TEH and in a facility where it is not possible for them to receive safe and appropriate care. In 2014 a Victorian Auditor-General report noted the average number of days between prisoners being certified for compulsory treatment and their admission to TEH has increased from 5.3 in 2009–10 to 22.2 in 2013–14.[385] Waiting times have climbed further over the past year (see Figure 13). Currently fewer than 40 per cent of certified prisoners are transferred to a TEH bed within 28 days, against a target of 95 per cent. As Forensicare's submission to this review notes:

> During 2015, at any one time there were on average ten male prisoners being held in prison, acutely unwell and refusing treatment, identified by a psychiatrist as meeting criteria for compulsory treatment under the Mental Health Act 2014, but unable to access a hospital bed.

380 Victorian Auditor-General's Office (2014), p. 38
381 Victorian Ombudsman (2014b), p. 121
382 Ibid., p. 120
383 'The Assistant Director Clinical Services, Acute Assessment Unit at the Melbourne Assessment Prison spoke about the high threshold for certifying prisoners for involuntary mental health treatment due to the lack of beds available at the Thomas Embling Hospital. He said: There is the question of course of … the threshold at which you make the decision to certify [a prisoner]. One could certify much larger numbers of people than we do, because there is no point if there is no possibility of a bed [at Thomas Embling Hospital].' ibid., p. 120
384 Ibid., pp. 120–121. This does not apply to patients held at TEH on a long-term basis under the Crimes (Mental Impairment and Unfitness to be Tried) Act.
385 Victorian Auditor-General's Office (2014)

Figure 13: Prisoners face increasingly long wait times for admission to Thomas Embling Hospital
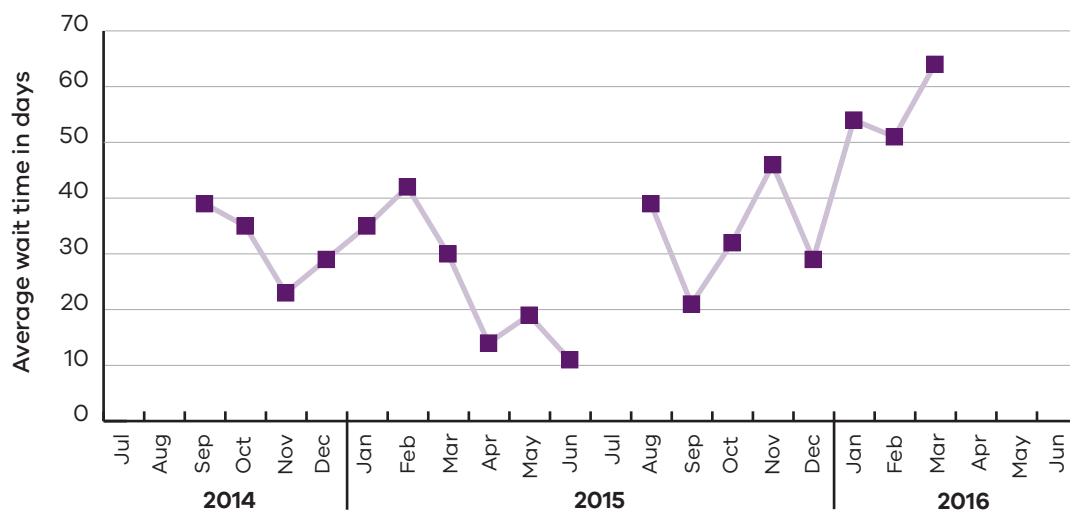
Source: data supplied by Foreniscare

One result of the long waiting times for treatment is that TEH patients are presenting as more unwell upon admission.[386] This is unsurprising given the significant increase in the volume of prisoners who are on 'lockdown' while awaiting transfer (see Figure 14). The latter involves prisoners who are acutely suicidal or have severe behavioural disturbances being locked in a cell for 23 hours per day.

Figure 14: An increasingly large number of prisoner days are spent on 'lockdown' every month
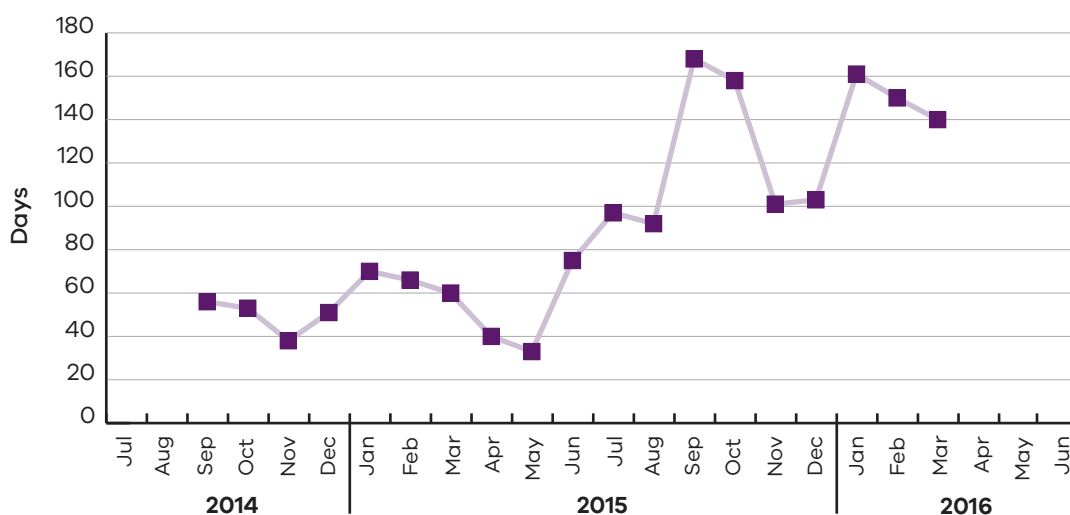
Source: data supplied by Foreniscare

386 'The Executive Director also said that prisoners are presenting more unwell due to the longer waiting times to be admitted to the hospital. An example was provided of a prisoner who was required to be extracted from his prison cell to be transferred to the Thomas Embling Hospital. It was believed that his condition was exacerbated due to extended waiting periods. Upon arrival at the hospital, the prisoner appeared traumatised and this had a significant impact on how the hospital managed his care.' Victorian Ombudsman (2014b), p. 121

We are unlikely to be saving money by scrimping on funding for forensic mental health beds. Poor access to treatment means a more unwell prison population, and may lead to significant social and economic costs for patients, their families and the healthcare system in the long run.

There is no ambiguity or disagreement about the problem. It has been covered in the public domain in Auditor-General[387] and Ombudsman[388] reports at various points, and has been raised repeatedly by the department's past and present Chief Psychiatrists and by boards of Forensicare.[389] A recent departmental document summarised this issue:

> There is a clear need to improve the availability and quality of mental health secure treatment options for high-risk forensic patients, security patients (prisoners) and high risk civil patients, and to improve the availability and quality of mental health care available to correctional facilities and both transitional and post release environments.[390]

There is also no ambiguity or disagreement about the solution needed. The Victorian Law Reform Commission's Review of the *Crimes (Mental Impairment and Unfitness to be Tried) Act* is only the most recent of many recommendations for a new medium security unit for forensic mental health patients to be established.[391]

The Victorian Government's commitment to a small number of additional beds at TEH is a welcome one. These beds will improve care but will not provide the substantial increase in provision that is required.

Recommendation 3.16:

That:

3.16.1. as part of the current development of a mental health infrastructure plan, the department develops a forensic mental health infrastructure sub-plan to address other needs including additional high-security beds and a specialist adolescent inpatient unit to meet the needs of young people

3.16.2. the forensic mental health infrastructure plan includes a clear timeline to implement the Victorian Law Reform Commission's recommendation to expand medium-security forensic bed capacity.

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387 Victorian Auditor-General's Office (2014)

388 Victorian Ombudsman (2014b)

389 Forensicare's submission to this review states: 'Forensicare has been raising this issue for a number of years, and reporting data in relation to this problem of bed access to the Department of Health & Human Services and the Department of Justice & Regulation (see Ombudsman's Investigation into deaths and harm in custody March 2014 p. 119). Internally it has been a management and Board priority since 2013.'

390 Department of Health & Human Services (2015)

391 Victorian Law Reform Commission (2014) Review of the Crimes (Mental Impairment and Unfitness to be Tried) Act 1997.

Using information to build a stronger system

This chapter has outlined the steps the department needs to take to build a functional oversight system capable of detecting and investigating key risks to safety and quality of care. Establishing such a system is crucial for managing risks in the short term, and for driving improvement in the longer term. After all, in order to do better, we first need to know where we are doing well, and where our biggest opportunities for improvement reside.

However, an effective oversight system alone will not sufficiently strengthen safety and quality in Victorian hospitals. As our discussion of mental health shows, *knowing* there is a problem is not enough. The department must also act on information.

Beyond detecting addressing hospital-based and systematic risks to safety, the department must also act to strengthen the hospital system's ability for *preventing* these risks arising in the first place. This requires significant investment in ensuring that best practice systems and processes are in place to support the delivery of safe and continuously improving care by frontline clinical staff. The next chapter sets out our recommendations for achieving this.
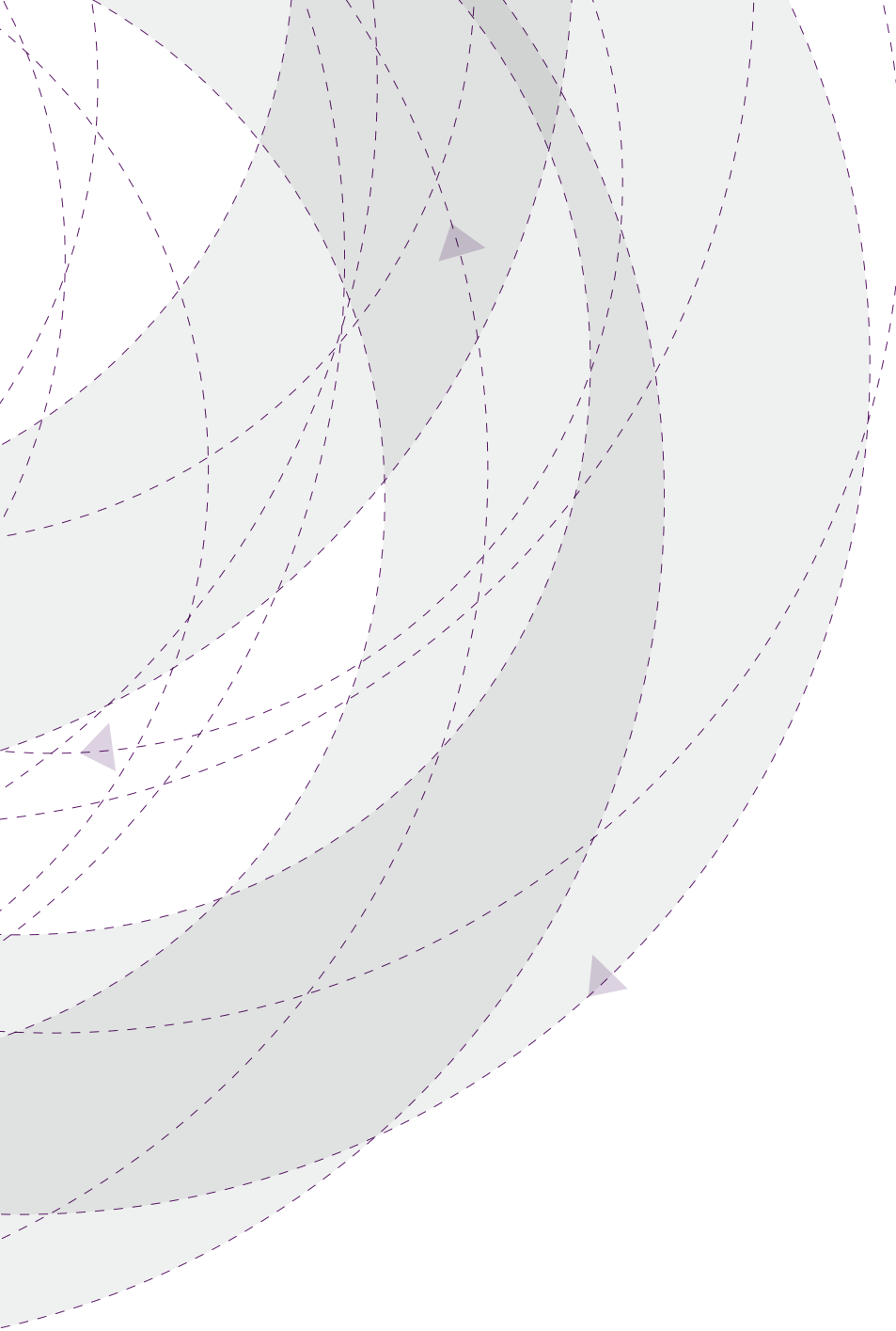
Chapter 4: Creating the conditions for excellence

Uniting a fragmented system

A system of vigorous oversight will help guard against the worst failures in care, but it will not make the Victorian hospital system a place of excellence. Broader change is required to achieve that goal.

Clinicians and hospital executives cannot provide the best possible care without a strong system that gives them the right resources, information and incentives to do so. The department is not adequately delivering these three forms of vital support, and in failing to do so it has held back the Victorian health system.

The necessary resources are missing. The department has provided too little leadership in safety and quality. Clinicians and hospitals have been on their own in researching and developing resources to guide care and quality improvement, with inefficiency, duplication and wide variation in clinical practice the result.

High-quality information is not being developed and shared. The department has made poor use of the data already at its disposal and underinvested in developing and sharing clinical data to drive quality improvement. As a result, the hospital system lacks useful information, and clinicians lack credible data telling them how much and why *their* patients' outcomes differ from best practice. As a result, they lack both the impetus for improving care and the information needed to guide improvement.

The wrong incentives are in place. The department has set a low bar using key performance indicators that bear little relation to overall safety in a hospital. It has also focused the system on a narrow measure of efficiency – the cost of a hospital admission, regardless of subsequent readmissions or need for future treatment – that does not hold hospital managers accountable for the broader costs of low-quality and unsafe care.

The system is overdue for change. This chapter sets out our framework for achieving it.

Our strategy has two key components: support for clinician-led quality improvement across the hospital system, and improved provision of clinical data to drive and guide that improvement.

Clinical leadership of quality improvement

We envision a department with deep expertise in safety and quality improvement working with clinical leaders to discover and implement best practice care.

To achieve this, the department should form an Office of Safety and Quality Improvement (OSQI) headed by a chief executive officer (CEO) with deep experience in leading clinical quality improvement. It would establish a clinical council to provide expert advice on policy development, it would train clinical leaders to deliver quality improvement, and it would revitalise the clinical networks to drive system-wide improvement in safety and quality for specialty or patient groups. The clinical networks would be accountable for improving patient outcomes on key safety and quality indicators, and would be closely supported by the department.

Clinical data to drive and guide quality improvement

Second, we recommend the establishment of the specialist safety and quality reporting body previously discussed in this report – the Victorian Health Performance Authority (VHPA). Granular and credible data would become the lifeblood of a now continuously improving health system. The VHPA would manage all the department's health data collections, publish comparative information on health service performance and provide clinicians with granular, unit-level data on patient journeys and outcomes. It would invest in the collection of high-quality clinical data, and its work would be supported by the department establishing a uniform patient identifier and health services moving towards electronic patient records over the next five to seven years.

A more ambitious and accountable health system

With greater support must come higher expectations of hospitals' safety and quality performance, and greater accountability for outcomes. The department must adjust its policies, culture and leadership to ensure that no hospital is satisfied with being what a participant in our rural health services workshop colourfully termed 'being the cream of the crap'. By this, she meant complacency with being 'at least average' (or worse still, 'not being an outlier'). This is a sentiment and frankness of expression that we heartily agree with. Low ambitions are dangerous in patient safety, as they create a culture where average performance and incremental decline are normalised over time.[392]

All Victorian hospitals should have an ambition of excellence. All must be striving every day to improve on the care they provided the day before. The department should share this ambition. Its own policies and priorities must profoundly reflect a goal of excellence. In order to be a leading and responsive health system, the department must 'place the quality of patient care, especially patient safety, above all other aims'.[393]

The department must pursue system-wide excellence

The following sections set out our framework for excellence in Victoria hospitals. We recommend three key changes in the way that the department conceives and pursues excellence:

- first, a broadened concept of efficiency incorporating the long-term outcomes of care – not just the measured cost of a hospital stay
- second, a pursuit of clinical practice convergence around best-practice standards of care
- third, a much more rigorous approach to quality improvement, with clear, measurable goals and stronger accountability for outcomes.

392 Britnell and Berg (2013)
393 Berwick (2013), p. 4

True efficiency means safe and high-quality care

The Victorian health system prides itself on its efficiency. It costs significantly and consistently less to treat a patient in Victoria than in any other Australian state.[394] This is in part a legacy of the state's early adoption of activity-based funding, which contains strong and proven incentives for cost containment. In a time of structural deficits, of which the leading cause is hospital cost growth,[395] cost containment is a key strength in the Victorian system. It stands us in good stead for the future by giving us the flexibility now to experiment and invest in better models of care that deliver improved outcomes for patients, saving more money down the line.

However, our current focus – 'cost per treatment' – focuses narrowly on the costs to a hospital rather than to the system as a whole. To maintain cost control, we need to be concerned with costs in a much broader sense. Efficient care is safe, high-quality care, and improving safety and quality needs to be considered part of a truly efficient system. The fact the department does not yet take this approach is a wasted opportunity for long-term savings.

Governments pay heavily for low-quality and unsafe care. Between 2006 and 2015, the estimated medical indemnity claims costs for Victorian public hospitals totalled $1.3 billion, of which more than $300 million in cumulative payments had been made as at FY 2014–15.[396] A recent analysis commissioned by the Australian Commission on Safety and Quality in Health Care found that, in 2011–12, complications directly raised the incremental cost of hospital stays by close to $1 billion across Australia.[397] An older study using a different methodology to evaluate these costs found that, in 2003–04, complications cost $460 million in Victoria.[398] Both of these studies significantly underestimate the cost of complications in hospitals because they don't account for complications discovered after the patient returns to hospital.

Most importantly, these studies do not account for the ongoing social and health costs of complications and so underestimate their impact. When a person is temporarily or permanently affected by complications, they are often unable to work or meet carer responsibilities, at significant ongoing cost to both their families and taxpayers. In the United States, studies have tried to account for these costs by using workplace injury cost estimates as a proxy.[399] An analogous approach estimates that the cost of avoidable injury to individuals, employees and the community (social welfare payments, medical and health scheme costs and loss of potential output and revenue) ranges from

394 Ham and Timmins (2015), p. 38

395 Duckett, *et al.* (2015)

396 Medical indemnity is a long-tail class of insurance, and as such many recent policy years will not have had claims mature and payments made. On average it takes five to eight years from the date of the incident for claims to be notified and closed. Victorian Managed Insurance Authority (2015a), p. 74

397 This estimate is based on analysis of the incremental cost of hospital-acquired complications using the National Hospital Cost Data Collection 2010–11, scaled to estimate total costs for all hospitals. The total cost was $868.7 million, unadjusted for inflation. Health Policy Analysis (2013), pp. 52–53

398 This figure is unadjusted for inflation. Ehsani, *et al.* (2006)

399 This is somewhat problematic given that workplace injuries tend to happen to healthy people, whereas hospital-acquired complications are more likely to affect someone who is already sick and therefore may not be working already. The study estimated the social cost of adverse events at $393 billion to $958 billion. Goodman, *et al.* (2011)

$4,500 for a short absence from work, to $1.6 million for a fatality, and $3.5 million for full and permanent incapacity.[400]

A final source of cost is the psychosocial toll of suffering from, or losing a loved one to avoidable harm.. These costs are hard to put a number on because of the difficulty of putting an economic value of a human life. These costs are not captured in the 'cost per admission' calculation. A more sophisticated notion of efficiency would be how much it costs to *cure* a patient, or extend the length and quality of their life. This means aiming to reduce the cost of *all* the treatments the patient had for their condition – not just the costs incurred in a single hospital admission – and improving the *outcomes* of treatment.

We cannot rely on hospital autonomy to drive this form of efficiency the way it has with the narrower measure of costs per admission. Our funding system provides mixed incentives for hospitals to minimise long-run costs for patients. The department, as system manager, needs to concern itself with the broader costs borne by taxpayers.

For all these reasons, the department must invest in improving efficiency in the fullest sense of the word by reducing waste[401] arising from:

- complications that drive up the average cost of treatment (as this determines the department's payment to hospitals for each type of treatment)
- complications that significantly increase treatment complexity and allow the hospital to bill the department for a more expensive patient than they were initially treating
- readmissions caused by ineffective treatment during the patient's first admission, or untreated complications arising from it
- insurance payouts for avoidable harm
- productivity losses to the state from disability and death caused by medical injury.

Minimising these costs requires the department to take a much more active role in leading and supporting improvement in safety and quality of care. To do this, it will need to engage closely with the sector, consulting widely about how it can support improvement, and investing in clinical leadership to drive it.

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400 Table 1.9: Average costs ($ per incident) for work-related incidents, Australia, 2012–13, p. 26. Safe Work Australia (2015) These figures have not been adjusted for inflation.

401 Quality waste is waste arising from poor-quality care. Examples of it include payment for treatments for complications due to adverse events that could have been avoided were it not for failures in clinical processes. Quality waste is often a cost to the system, not a penalty to the service provider, since many payment models tolerate poor quality and pays the same for poor- and high-quality care. Quality waste also includes the often significant cost of detecting outcome failures (inspection costs) because such vigilance would not be necessary if the process produced no failures. We have not discussed another major form of waste – efficiency waste (where an equivalent outcome could have been achieved through cheaper means) as it is outside the scope of this report. James and Bayley (2006)

From 1 July 2017 a national agreement to integrate quality and safety into hospital pricing and funding will take effect.[402] This will include a risk-adjusted model that reduces payment for certain kinds of avoidable readmissions and complications, along with reduced payment for specific ineffective interventions and procedures known to be harmful (see Box 12).[403] The proposed changes also include strategies to penalise high readmission rates. This model is likely to make the funding model fairer while increasing the focus of boards and CEOs on safety and quality of care.

Box 12: Pay for performance

Remunerating good care is challenging because of the diversity and complexity of patient presentations and underlying health. Though adjustments for risk are often made, this process is itself analytically complex, and if not done correctly will lead to unfairness.[404] Other research has raised questions about whether differences in performance are caused by differences in motivation, and whether financial incentives will add to total motivation rather than undermine it. Further, for hospitals and physicians delivering poorer care, it is unclear whether restricting their resources will lead them to improve.[405]

Pay for performance (P4P) is the idea that rather than paying health service providers for a service (for instance, a hip surgery), they are paid (at least in part) for their performance (for instance, the proportion of their patients who do not need to be readmitted following hip surgery). P4P can theoretically be used to drive change in clinician practice by providing a financial incentive for quality care.

Despite ongoing experimentation with P4P, models often fail to deliver on theoretically possible savings and improvements in quality. Research has also found that initial differences in outcomes under performance pay are often short-lived; overall there is little evidence supporting consistently improved patient outcomes under P4P.[406] The overall picture of P4P is unclear, and expectations for driving quality and efficiency through P4P should be modest.[407]

Research suggests P4P is more likely to drive change when the desired practice or outcome is clearly defined and more straightforward to implement – for instance, P4P based on whether clinicians are using a specific set of steps to insert a central line[408] when the health service it is targeting has lots of room for improvement,[409] and where rewards are based on absolute (rather than relative) performance.[410]

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402 Council of Australian Governments (2016)
403 Developed by the Australian Commission on Safety and Quality in Health Care and the Independent Hospital Pricing Authority.
404 Of course, the risk of unfairness to hospitals and clinicians should be weighed against the risk of not promoting achievable improvements in patient safety.
405 Himmelstein, et al. (2014)
406 For example, a P4P program in England found that though the hospitals in the program had lower 18-month mortality, this was not maintained in the long term (24 months). See Kristensen , et al. (2014).
407 A few systematic reviews of P4P initiatives have been conducted in recent years that are particularly relevant to policymakers. See Eijkenaar, et al. (2013) and Van Herck, et al. (2010).
408 Waters, et al. (2015)
409 Cromwell (2011) Van Herck, et al. (2010)
410 Doran, et al. (2014) Van Herck, et al. (2010)

Victoria is already experimenting with P4P, with a 'pricing for quality initiative' in place since 2014–15. The initiative uses a small number of metrics including accreditation results, central-line-associated bloodstream infections and results from the healthcare experience survey, rewarding hospitals with excellent performance. This initiative has not yet been evaluated.[411]

As Box 12 shows, financial incentives do not always live up to their promise. However, the Council of Australian Governments' decision means that financial incentives for improving quality and safety will be a national reality from 1 July 2017. The new funding model will influence the funding Victoria receives from the Commonwealth Government, and it is therefore important to ensure that Victoria is not impacted adversely by these changes.

The overwhelming majority of clinicians are *already* trying to maximise the safety and quality of care they provide. Strengthening the business case for their improvement efforts is a good thing. What is then needed is well-directed investment in rigorous local improvement efforts that effectively build the capacity of clinical teams and local clinical governance. This includes effective training and development of clinical leaders and meaningful measurement of processes and outcomes that help clinicians identify the opportunities for improvement in their practice.

> **Recommendation 4.1:**
>
> Victoria's funding model for public hospitals should mirror the national funding model incentives for safety and quality (including readmissions) to be adopted from 1 July 2017.

Finding the right balance between standardisation and innovation

A corollary of substantial local autonomy is substantial variation in clinical practice, management, systems and outcomes.[412] This is all the more the case in Victoria, which has an unusually large number of health service organisations. We have 86 in the public sector: four times the number of boards in New South Wales, which has a comparable population size, and five times the number of boards in Queensland. Further afield, it is three times the ratio of health service organisations to population as in England, and six times the ratio in Scotland, which is a closer comparator.[413] If 86 hospitals are individually finding and defining good practice, it is unlikely that all 86 are right.

411 Policy and funding guidelines
412 See Britnell and Berg (2013) for a discussion of variation and reliability.
413 Scotland has a similar population, no split between health purchasers and providers, and a sizeable rural hinterland to Victoria's. Ham and Timmins (2015), p. 23. In addition to public sector entities, there are 171 private hospitals and day procedure centres registered by the department.

Nevertheless, devolved governance may be powerful in enabling local innovations to drive substantial improvements in care. As David Dean, former CEO of the Health Roundtable, wrote in his submission to this review:

> My personal observation is that Victorian health services that have taken active part in benchmarking for improvement are far ahead of their counterparts in other jurisdictions because they and their Boards are directly accountable for patient care and recognise the importance of continuous improvement. Organisations … have the autonomy to have lapses in patient care, but also to implement major initiatives that improve care far beyond the level that could be dictated by a one-size fits all government policy … I do not see the same level of health service initiative in jurisdictions with centralised program development. Useful programs … are promoted … from the top down, making them available to a large number of facilities. However, the lack of autonomy to identify and act on local issues in such jurisdictions in my opinion can stifle major improvements in patient care.

Such a conclusion about the power of devolved governance to drive improvements in safety and quality is of course contested; many stakeholders we spoke to had the opposite assessment.[414]

Regardless of the relative advantages and disadvantages of the model we are using, we believe it is important for health services to be able to make the most of it. The standardisation of useful programs can complement autonomy, particularly when hospitals retain power to adapt the programs and reject them altogether if they provide sufficient justification.

Evidence-based safety protocols such as safe surgery checklists[415] and central-line management protocols[416] save lives in the hospitals that adhere to them. But the existence of, and adherence to, such protocols is variable in most Victorian hospitals. As Box 13 shows, Victorian hospitals can achieve substantial improvements in care through local initiative. However, these efforts consume substantial resources at the hospital, and are not necessarily adopted by others.

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414 As one commentator recently noted, 'there is no inherent advantage in one system versus another. After all, a devolved system can be a fecund environment for innovation and creativity. But when it comes to the safety and quality of care, there is scant evidence that such is the case in Victoria.' Levy (2016)

415 Overall, surgical checklists have been found to be effective mechanisms to achieve better patient safety outcomes. The primary benefit derived from the use of checklists is to facilitate greater team communication and teamwork, particularly in operating rooms. Both of these are recognised as key factors for patient safety and quality of care, particularly as they help identify any knowledge gaps and allow for better decision making. Both the total number of complications and in-hospital mortality decreased for most studies once checklists were introduced. These positive quality and safety outcomes especially improved where there was sound compliance with the checklists, an important aspect since checklists are considered a supplementary tool for improving patient outcomes. Borchard, *et al.* (2012) de Vries, *et al.* (2010) Russ, *et al.* (2013) Van Klei, *et al.* (2012)

416 A systematic review of the literature found that, in the majority of studies, the introduction of quality improvement measures, such as hand hygiene, sterile barriers and skin disinfection, decreased the rate of central-line infection for adults in intensive care, in a preventative capacity. The strength of this relationship increased when the quality improvement measures were coupled with the consistent use of checklists and other preventative initiatives. Blot, *et al.* (2014)

Box 13: Eliminating central-line-associated bloodstream infections

Central-line-associated bloodstream infections (CLABSIs) are one of the most important and common healthcare-associated infections for patients in intensive care units (ICUs). These infections are very dangerous and lead to increased morbidity, increased length of stay in ICU, and death with an associated mortality rate of 4–20 per cent.[417]

For a long time, clinicians thought CLABSIs were not preventable but instead the inevitable consequence of very sick patients being more vulnerable to infection. However, preventative practices have been well documented in the literature over the past 15 years[418] and have led to the contemporary view that CLABSIs are in fact highly preventable.

Central line infections in Victoria

Despite this evidence, the department is fairly tolerant of CLABSIs. The statewide target for CLABSIs is 2.5 infections for every 1,000 'device days', with a financial incentive if the hospital reaches zero.[419] At present, two of Victoria's 10 largest hospitals[420] have eliminated CLABSIs, while the other eight hospitals each have between two and nine cases per year.

One of the hospitals that eliminated CLABSI's is Barwon Health's University Hospital Geelong. In 2008 their CLABSI rate rose to 3.8, significantly above the state average of 2.7 in that year, and even further above the optimal, and achievable, rate of zero.

In response to this, the hospital implemented a **zero tolerance** approach to these types of infections and established a CLABSI prevention program. The program primarily focused on the auditing of insertion practices as well as implementing recognised best practice. The program has been highly effective. No patients at University Hospital Geelong have had a CLABSI since June 2012.

Central line infections in NSW

NSW has taken a top-down, rather than bottom up, approach to reducing CLABSIs. In 2003, it identified high rates of complications linked to CLABSIs. In response, the Clinical Excellence Commission (in collaboration with the Intensive Care Coordination and Monitoring Unit at the Agency for Clinical Innovation) developed the CLAB-ICU project to investigate international best practice and develop a protocol.[421] From July 2007, a revised central line insertion guideline was implemented in all adult intensive care units in NSW (as well as two major paediatric wards), including a streamlined 6-step process to promote hand hygiene, skin preparation and barrier precautions.

417 Entesari-Tatafi, et al. (2015)
418 Australian and New Zealand Intensive Care Society (2012)
419 The Victorian Health Services Performance website states 2.5 as the target, but the department actually monitors the health services based on a target of 1.5 and 1 (depending on the size of the ICU). Health services are assessed quarterly and receive a $30,000 payment if they have had zero CLABSI cases for the last two consecutive quarters.
420 Top 10 hospitals in terms of total number of central-line days per year.
421 Burrell (2010)

Box 13: Eliminating central-line-associated bloodstream infections (cont.)

This was supported by a checklist to be used in central line insertions and education, training, equipment and compliance measures.[422] By December 2008, CLABSI rates had decreased by 60 per cent, and recent findings indicate that the benefits have been sustained since the project's conclusion in 2010.[423] The success of CLAB-ICU in NSW led to the funding of a national project by the Australian and New Zealand Intensive Care Society (ANZICS), and similar interventions have also been implemented in central line management outside the intensive care context.[424]

It is a matter of perspective as to whether duplication of efforts and variation in avoidable, life-threatening complications reflects a success of local autonomy or a failure of it. Certainly it reflects the absence of central leadership.

Because we know there are better and worse ways of providing care, variation in practice suggests variation in quality.[425] It is clear from the variation between services that, for example, there are not 86 optimal ways to insert and manage a central line. Further, with so many different processes in place, it is more risky for part-time clinicians (who make up a substantial proportion of the Victorian clinical workforce) to work across hospitals where they are unfamiliar with the safety procedures. This lack of convergence around quality is dangerous for patients and the general public.

> Sharing of best practice is not readily available. We believe many health services are duplicating work in developing and obtaining this information. Clinician's time would be better utilised if this information was available.

Siva Sivarajah, Chief Executive, Northern Health

The status quo is also wasteful. Without guidance, each health service must invent its own systems. The enormous and ever-expanding volume of clinical research makes it impossible for individual clinicians to read and keep up with research on their own, even when utilising clinical guidelines and systematic reviews.[426] Smaller hospitals often struggle to research, develop and update their own evidence-based protocols.

This is clearly not a recipe for efficiency, nor for ensuring that all hospitals adopt best practice. The savings from this *laissez faire* attitude accrue to the department. The costs, which we suspect are many times greater, are hidden from public view and fall on hospitals. Because of the inevitable weakness of individually developed protocols in some hospitals, they fall on patients as well.

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422   Ibid.
423   Ibid.; Clinical Excellence Commission (2016a)
424   Australian and New Zealand Intensive Care Society (2012)
425   See Britnell and Berg (2013) for a discussion of reliability and autonomy in healthcare systems.
426   The volume of medical evidence – including systematic reviews – available to clinicians is enormous and continuously growing, while clinical guidelines are produced by a large array of organisations, can run to hundreds of pages, and can be uneven in quality. Duckett*, et al.* (2015), p. 22

The department must support convergence around clinical best practice

The department could be using its vantage point as system leader to disseminate accessible evidence on contemporary best practice, and to identify the innovations that have saved lives in Victorian hospitals. It should drive their adoption and adaptation across the sector. Under such a model, innovations such as Barwon's (outlined in Box 13) would not be case studies but standard practice.

Such an approach would improve patient safety and efficiency, saving lives and money. It is also already within the department's power to issue evidence-based guidelines and to audit compliance against them in public hospitals.[427] Section 12 of the *Health Services Act 1988* empowers the Minister to prepare 'health services development guidelines' including guidelines about 'the improvement of the quality of health care and health facilities' (s. 12 (b)). The Act includes several provisions about the application of s. 12 guidelines, which apply to both public and private hospitals.

We recommend that where clinical networks or the proposed OSQI identify a need for standardisation, the CEO of OSQI should issue authoritative guidance with the expectation (or requirement) that it be adopted throughout Victoria,[428] drawing on the findings of clinical networks, best practice in Victorian and other Australian hospitals, and the work of the National Health and Medical Research Council Advanced Health Research and Translation Centres.[429] A starting point would be templates for best practice in root cause analysis and morbidity and mortality review protocols.[430] This would save health services' time, support convergence to best practice, and drive standardisation to facilitate comparative study.

427 Indeed, this is precisely the approach taken by the department's own Chief Psychiatrist in mental health services.

428 These should also be made available through the department's document sharing application PROMPT. PROMPT is a web-based document management system that allows easy access to policies and guidelines for health professionals. The system also enables the searching of document libraries of other health services. PROMPT was initially seed-funded by the department and designed by Barwon Health.

429 Research translation involves taking the findings of the thousands of experiments, reviews and articles that are published every day, and translating those findings into improved clinical practice, policy and health system design. Two of the four national NHMRC Advanced Health Research and Translation Centres are based in Victoria – the Alfred Health and Monash Health and Partners Advanced Health Research and Translation Centre, and Melbourne Academic Health Centre. National Health and Medical Research Council (2016)

430 Standardised processes for case audit creates a more focused review process, resulting in more accessible findings, and increasing the utility of case reviews for clinicians as well as executives. Higginson, *et al.* (2012) Similarly, the fact that processes and techniques commonly used for RCA in health care are not standardized or well defined, "can result in the identification of corrective actions that are not effective—as demonstrated by the documented recurrence of the same or similar events in the same facility/organization after completion of an RCA." National Patient Safety Foundation (2016), p 1.

Recommendation 4.2:

The department should adopt the goal of reducing clinical practice variation in all hospitals, with change led by the clinical networks.

4.2.1. The clinical networks should identify best practice in their relevant specialty areas, develop strategies to share best practice and support hospitals and clinicians to implement best practice.

4.2.2. The department should provide best practice root cause analysis and morbidity and mortality review protocols and expect or mandate adherence to them across hospitals.

4.2.3. The department should ensure the clinical protocols of top-performing hospitals (on relevant indicators) are highlighted on the department's document sharing system, PROMPT.

4.2.4. Where all hospitals are required to have a new protocol in place (for example, in response to a public health emergency), the department should commission a specialist clinical unit to develop a single protocol with an implementation guide for common use across hospitals.

A scientific approach to improvement is required

As discussed in Chapter 3,[431] there are ongoing issues with the department's ability to respond to recommendations such as those from the Victorian Auditor-General's three separate audits of patient safety in Victoria in the past 11 years.[432] In each case, the department accepted most of the Auditor-General's recommendations, and there was no lack of effort on its part to improve. After each report there has been a flurry of activity and projects. But there is a big difference between action and achievement, and the history of the Auditor-General reports and the department's struggle to implement their recommendations is a sorry one.

This section discusses the department's ability to implement both external recommendations and create effective policy. Strengthening safety and quality requires a thoughtful, carefully planned and, above all, *rigorous* approach to the way that projects are selected, funded and evaluated. We consider the department's capacity to identify issues in-house, design improvement programs and ensure that policy designed at 50 Lonsdale Street flows all the way through hospital boards, CEOs and managers to frontline clinical staff, and then delivers the anticipated improvements in patient outcomes.

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431 Which discussed the three Auditor-General reports addressing the department's lack of a statewide incident management system.

432 Victorian Auditor-General's Office (2005) Victorian Auditor-General's Office (2008) Victorian Auditor-General's Office (2016b)

Such an approach is too often missing in the department's work. Instead, program logic is frequently weak, reflecting a preoccupation with *doing* something in the short term rather than achieving measurable outcomes. The department is constrained by its progressive loss of in-house expertise, which is reflected in an excessive reliance on consulting work that is expensive and often of dubious rigour.

> The [department] must allow greater access to data held by the state (eg VAED, VEMD), including for linkage, to allow for evaluation of outcomes and future risk prediction. Lack of access to these data has long been a frustration. Significant capacity exists within Universities to analyse data (including the vast amounts of unstructured data) and evaluate health programs, but the hospital sector/ [department] and Universities don't collaborate enough. Rather, the [department] seems keen on engaging private consultancies that are expensive and undertake non scientifically peer reviewed work.
>
> **Professor Danny Liew,[433] Chair of Clinical Outcomes Research, School of Public Health and Preventive Medicine, Monash University Consultant Physician at Alfred Health**

A recent departmental capability review notes widespread concerns among stakeholders that although Victoria 'had developed Australia's leading health system … this position is now subject to question' due to complacency.[434] There is a lack of long-term strategic planning and widespread concerns about performance management, leadership and talent retention. Multiple stakeholders observed that among the leadership team, 'there are capable people but they are very thinly spread.'[435]

Going forward, the department must rebuild its own capacity for excellence. Vitally, it must resist the impulse to embark immediately upon a series of projects to demonstrate that it is *doing* something, and instead develop a coherent long-term plan for *achieving* excellence in safety and quality of care. This should involve the development of much stronger internal capacity to support health services, and capacity to develop improvement plans that evaluate and improve programs using measurable outcomes.

The department must select programs on the basis of their evidence and monitor the effectiveness of their implementation. Where a program is new or experimental, the framework underpinning it must involve clear measurable goals, and a staged plan to monitor impact and improve on the basis of that impact. The department must engage closely with clinical leaders in this process and draw on the expertise of our universities. Critically, it must invest in finding, developing and retaining its own senior leaders with deep knowledge and experience in improvement science within complex systems.[436]

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433 Views expressed are personal, and not those of Monash University nor Alfred Health.
434 Victorian Public Sector Commission (2015), p. 17
435 Ibid., p. 19
436 The department's need 'to focus on performance management and talent retention' was also highlighted in the recent capability review. Ibid., p. 18

Shared responsibility for leading quality improvement

The above sections set our framework for excellence: conceptualising efficiency as safe and high-quality care; striking the right balance between local innovation and standardisation of best practice; and adopting a rigorous approach to improvement.

The rest of this chapter sets out our mechanisms for *achieving* excellence.

We have recommended that the department partner with clinical leaders on this journey. To achieve this, we have recommended a complete rebuilding of the clinical networks to lead quality improvement, as well as the establishment of a clinical council to advise the department on policy and strategic direction. In order to support the networks and councils properly, and ensure that their recommendations can be implemented, we have recommended that the department develop its own expertise and capacity to drive quality improvement, and invest in building the quality and accessibility of clinical data.

Departmental leadership of safety and quality improvement

I'd like to see [the department] address its own understanding of and attitude to, safety, quality and complexity; and make the conversations we've been having as part of the Review the norm, rather than the exception. Building deep knowledge in at least a few influential individuals, and bringing some smart, strategic thinking to the problem with the same vigour and priority as waiting times and lists are pursued would send a message to CEOs as the critical partners, that 'set and forget' clinical governance is not acceptable, and is not how safe, high quality care is achieved.
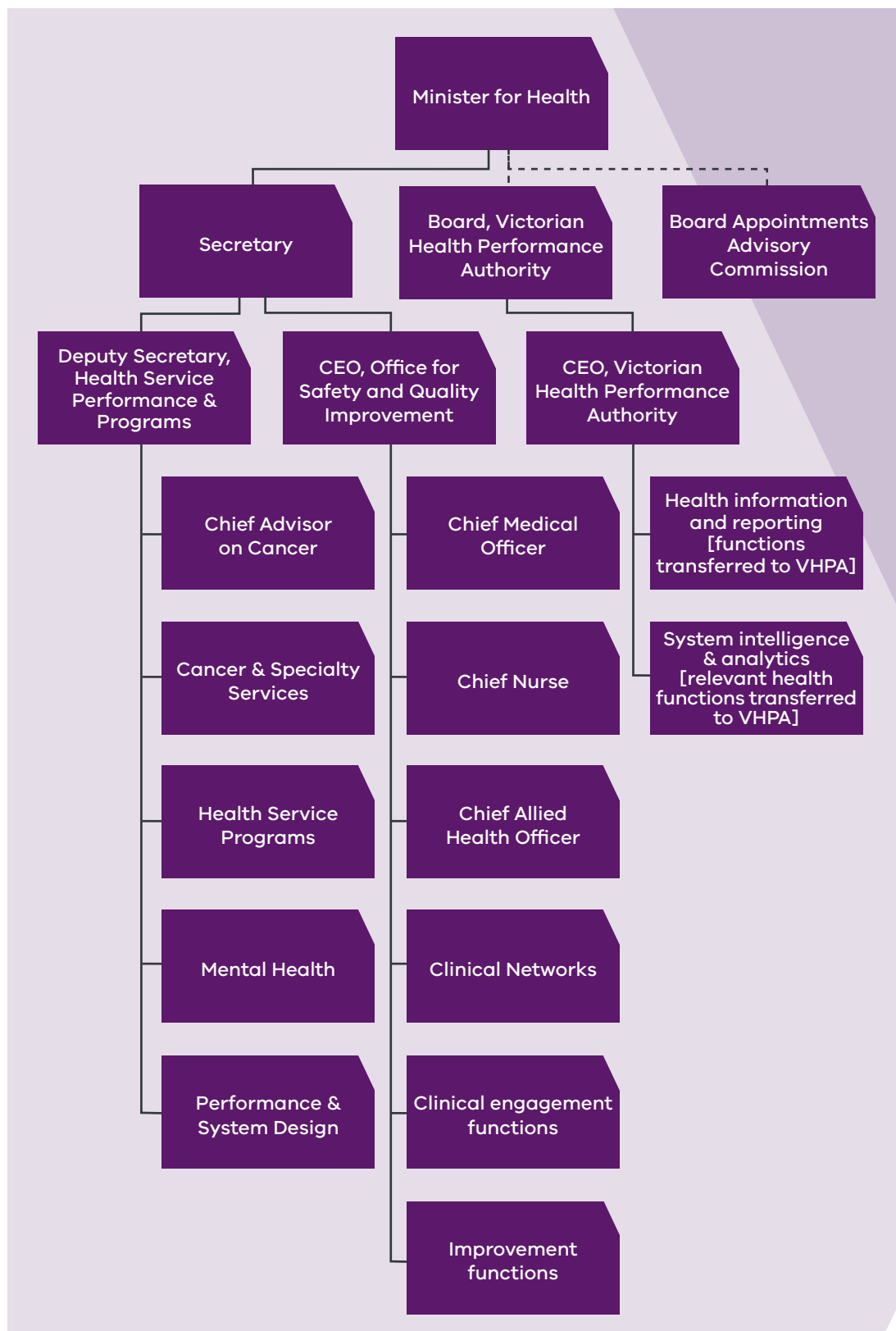
Dr Cathy Balding, Director, Qualityworks

As discussed in the previous section, the department must rebuild its capacity to support and lead quality improvement. To do so, we have recommended the formation of the Office of Safety and Quality Improvement (OSQI) as an administrative office under s. 11 of the *Public Administration Act 2004* reporting to the Secretary.

The role of the Office of Safety and Quality Improvement

In contrast to the department's Performance and System Design branch, which would remain responsible for individual hospitals' performance management, the OSQI's core responsibility would be system-wide performance improvement.

To achieve this, the OSQI would bring together a large number of existing but separately managed quality improvement activities under one umbrella (see Figure 15), incorporating the entire Quality and Safety branch, and functions from the Clinical Networks, Cancer and Specialty Programs branch (clinical networks) and the Health Service Programs branch's Acute Programs (development of capability frameworks) and Perinatal and Clinical Councils Units (all activities).

Figure 15: Departmental bodies incorporated into OSQI

- Minister for Health
  - Secretary
    - Deputy Secretary, Health Service Performance & Programs
      - Chief Advisor on Cancer
      - Cancer & Specialty Services
      - Health Service Programs
      - Mental Health
      - Performance & System Design
    - CEO, Office for Safety and Quality Improvement
      - Chief Medical Officer
      - Chief Nurse
      - Chief Allied Health Officer
      - Clinical Networks
      - Clinical engagement functions
      - Improvement functions
  - Board, Victorian Health Performance Authority
    - CEO, Victorian Health Performance Authority
      - Health information and reporting [functions transferred to VHPA]
      - System intelligence & analytics [relevant health functions transferred to VHPA]
  - Board Appointments Advisory Commission

There are three benefits from centralising these activities under a single point of authority.

First, creation of a separate office would raise the profile of safety and quality across the department: it would no longer be a third-order function but the chief executive of the office would report directly to the Secretary.

Second, it would ensure that quality improvement activities are much better coordinated. Currently there are a number of councils, networks and committees working on common specialty areas,[437] but across different branches and divisions of the department. As a result, they have fragmented lines of accountability and may have duplicative or poorly aligned areas of focus. Centralisation will ensure they all work together on common or complementary goals.

Third, it would allow standardisation of approaches to quality improvement within the department so that the work of the clinical networks and other groups will start from a common base.

Creation of a high-profile office would also help ensure that where quality improvement activities run by the networks are successful, they are adapted into ongoing programs by the department. This has been a previous weakness by the department, which has funded a large number of often successful but ultimately disjointed micro-projects whose findings have not been translated into policy changes or been used to support quality on an ongoing basis.

> The current structure and funding of Clinical Networks supports short term discrete improvement initiatives … The current structure and funding of clinical networks does not adequately address the sustainability of the improvement activities they introduce. Ongoing sustainability of improvement activities can be encouraged through the [departmental] programs area.
>
> **Victorian Paediatric Clinical Network**

In order to maximise quality improvement in Victoria, the OSQI must do much more than just coordinate the activities of existing bodies. The people working to drive improvement must be supported by clinical data (discussed at the end of this chapter), authority to drive down clinical practice variation by mandating adherence to evidence-based guidelines developed in consultation with clinical leaders (discussed in the next section), research on international best practice, and expertise to develop rigorous quality improvement programs.

The latter two functions are particularly important. In many cases, best practice will already be present in some Victorian hospitals as a result of local innovation or adaptation of international evidence. The role of the OSQI will then be to disseminate or standardise these practices across the hospital system. However, in many other cases the OSQI will need to adapt emerging evidence from international research for local hospitals, or to develop a novel program to address a new or distinct risk.

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437 For example, obstetric and perinatal care quality improvement is currently managed by CCOPMM, a departmental Maternity and Newborn Program, and the Victorian Maternity and Newborn Clinical Network.

To use this emerging evidence base to support local improvement, the OSQI needs to have a significant pool of staff dedicated to researching contemporary Australian and international best practice and distilling it for the relevant programs and clinical networks. It will also need to have staff who are skilled in improvement science and can support OSQI programs and clinical networks to adopt, adapt and develop rigorous quality improvement programs and processes. Given the evidence of the poorer hospital outcomes for Aboriginal patients, the OSQI will need to have access to staff with expertise in Indigenous health service delivery and quality improvement.[438]

Finally, the OSQI will need to have strong partnerships with other organisations working in the quality and safety space. This includes partners in Victoria (such as the Health Services Commissioner[439]) and counterparts in other jurisdictions (such as the Clinical Excellence Commission in New South Wales) who wish to share lessons and resources and partner on improvement research initiatives.

Leadership of the Office of Safety and Quality Improvement

Reflecting the importance of its role, the OSQI should be resourced to recruit leaders with deep experience in quality improvement.

In early 2016 the position of 'Chief Medical Officer' (CMO) was created in the department. We think this was a good idea. Creating a CMO role has opened up an opportunity to embed clinical leadership, albeit by just one clinician, in departmental policymaking. Further, it has created space for a person with clinical credibility and networks and deep expertise in quality improvement to spearhead efforts for change.

However, the CMO is just one person. Further, the part-time staffing of the CMO role precludes him from taking a major role in providing direct leadership to the new patient safety agenda that we envisage.

We recommend that the department preserve the current CMO role but appoint a CEO to lead the OSQI. This person should be in the department full time and with the ability and capability to assume significant operational responsibilities. As discussed in Chapter 1, they should have responsibility for the Quality and Safety branch and the clinical networks, along with a large number of other quality improvement

438 Australian research shows that while in some cases outcomes of care do not differ for Indigenous people (for example, O'Brien, *et al.* (2015), Russell, *et al.* (2015) and Wiemers, *et al.* (2014)), in others Indigenous people have significantly higher rates of complications, comorbidities and discharges against medical advice (DAMA).(Katzenellenbogen, *et al.* (2015) A 2013 audit of emergency department attendances in Melbourne's south-east found that Aboriginal and Torres Strait Islander people were more likely to attend the ED, less likely to nominate a general practitioner, more likely to leave before or after treatment had commenced, and were more likely to re-attend the ED than non-Indigenous people. Martin, *et al.* (2013) Perhaps reflecting the higher rates of DAMA, there is (dated) evidence that Indigenous patients are less likely to have a principle procedure recorded in public hospitals, suggesting systematic differences in their treatment. Cunningham (2002) Indigenous patients receive most of their specialist services in hospital (Katzenellenbogen, *et al.* (2015)) but many find hospitals unwelcoming and may be reluctant to attend for diagnosis and treatment, particularly when few Aboriginal health professionals are employed in the facility. Durey, *et al.* (2012) Willis, *et al.* (2010)

439 The Health Services Commissioner works closely with health services where complaints have arisen in relation to poor care and the health service has undertaken improvement work during conciliation. Historically the HSC has not been able to share this information, but will be able to do so to a greater extent in future under its expansion of powers in the *Health Complaints Act 2016*.

programs. They should work closely with the CEO of the VHPA, Better Care Victoria, the director of Health Performance & System Design, and the Chief Psychiatrist, along with counterparts in other jurisdictions, including the CEO of the Centre for Clinical Excellence in New South Wales. They should lead the department's clinical engagement, with a permanent seat on the clinical council (discussed later in this chapter), and should report to Victorians annually on the sector's progress against the improvement goals pursued by the clinical networks.

The CEO should be seen as a leader by other clinicians, with deep expertise in safety and quality improvement, significant previous responsibility for clinical governance and a demonstrated record of success in delivering quality improvement in senior health management.

The CMO, Chief Nurse and Chief Allied Health Officer should report to the CEO, and be responsible for supporting the OSQI's work and advising on strategic direction.

The CEO should report directly to the Secretary, and have a powerful role within the Victorian health system. The CEO should have authority to issue best-practice guidelines and protocols on the advice of the clinical networks and the clinical council, and clinicians should be held accountable locally for their appropriate application.[440]

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440 The issue of compliance with protocols was covered in a recent inquiry into chemotherapy prescribing at St Vincent's Hospital in Sydney, see Currow, *et al.* (2016)

Recommendation 4.3:

4.3.1. The government should form an Office of Safety and Quality Improvement (OSQI) within the department, incorporating activities of the Quality and Safety branch, the Clinical Networks, Cancer and Specialty Programs branch, and the Acute Programs, and Perinatal and Clinical Councils Unit from the Health Service Programs branch.

4.3.2. The OSQI should coordinate the quality improvement work of the bodies it incorporates, and support their work by recruiting a pool of specialist staff dedicated to analysing available data, researching contemporary evidence on best practice and distilling it for the relevant bodies, and supporting them to adopt, adapt and develop rigorous quality improvement programs and processes to be implemented in hospitals.

4.3.3. A chief executive officer (CEO) should be recruited to lead the OSQI. The CEO should be seen as a leader by other clinicians, with deep expertise in safety and quality improvement, significant previous responsibility for clinical governance and a demonstrated record of success in delivering quality improvement in senior health management.

4.3.4. The CEO should lead the department's clinical engagement and ensure the department's understanding of the sector is informed by feedback from clinical leaders as well as hospital managers.

4.3.5. The CEO should report annually on strategies being pursued by the clinical networks for, as well as progress on, system-wide improvement on the key quality and safety indicators.

4.3.6. The CEO should have authority to inspect and audit hospitals and to issue best-practice guidelines and protocols on the advice of the clinical networks and the clinical council.

4.3.7. The Chief Medical Officer, Chief Nurse and Chief Allied Health Officer should report to the CEO, and be responsible for supporting the OSQI's work and advising on strategic direction.

4.3.8. The CEO should report directly to the Secretary.

Developing and engaging clinical leaders in safety and quality improvement

Doctors in Victorian public health are not consistently engaged in clinical reform or quality and safety systems. Many hospital organisational structures actively place layers against their involvement and engagement. There is a perception that involving medical staff at all levels of the patient journey and the clinical governance pathway is not essential. This needs to be reversed for real life, grassroots quality and safety improvement to patient care.

Submission from a hospital chief medical officer

The following sections set out our two-part strategy for engaging clinical leaders in the work of driving quality improvement across Victorian hospitals. We envisage first a revitalised, better supported and much more focused set of **clinical networks** working within the department to lead its quality improvement work from the ground up. Second, we recommend establishing a **clinical council** to advise the department on safety and quality policies and priorities, effectively guiding improvement from the top down.

In the context of hospital management, it can be all too easy for a 'concrete floor' to develop, where management initiatives and clinical work are separated or misaligned by differing objectives and work cultures.[441] Clinician engagement is one critically important way that policymakers and hospital managers can benefit from the knowledge of clinical staff. Clinician engagement and leadership means clinical staff having a broader view of healthcare beyond the illness of the patient in front of them and considering the needs and best interests of the patient and the community as part of their professional practice.[442] There is substantial evidence that when clinicians are engaged in hospitals and in the health system more generally, patient and hospital outcomes are better, perhaps because they are able to use their skills and experience to improve care, culture and processes.[443]

Similarly, it is very difficult to effect system changes without the buy-in and active cooperation of clinicians.[444] In the United Kingdom's National Health Service (NHS), use of a validated medical engagement scale found significant correlations between clinician engagement and a wide swath of performance indicators from the Care Quality Commission, including financial management scores and overall quality scores, as well as decreased patient time on waiting lists and in emergency departments. Many of these findings have been borne out in other research.[445] Strengthening clinician engagement and leadership – at both the hospital and system level – is an ongoing project in many healthcare systems including the NHS, Western Australia and New South Wales.[446] This section focuses on how Victoria could support leadership and engagement across the system.

441 Britnell and Berg (2013)
442 Spurgeon, *et al.* (2015)
443 Ibid.
444 Taitz, *et al.* (2011)et al.</style> (2011
445 More engaged doctors make fewer mistakes. Prins and Hoekstra-Weebers (2010)
446 On the NHS, see Clark and Nath (2014).

Developing leaders in quality and safety improvement

The quality of leadership makes a proven difference to safety and effectiveness of care. Research shows that effective clinician leadership improves patient care by encouraging teamwork, facilitating the design and close monitoring of care processes, promoting a clinical culture that supports safe practices, and enabling innovation and continuous development of skills and outcomes.[447]

In order to drive improvement, both the networks and council will need to be composed of leaders both in system improvement as well as in clinical practice (see Box 14 for a discussion of these different leadership types).

Box 14: Systems improvement and clinical professionals

Professor Michael Ward, who stimulated the development of clinical networks in Queensland, outlined the distinction between clinical practice leaders and systems improvers.

'**Traditional professional**' style leadership often refers to clinicians with high levels of knowledge, technical and cognitive skill, wide experience, and an ability to communicate these professional attributes to a peer group in a form consistent with their ethos and aspirations. These leaders tend to focus on ensuring the best possible outcomes for an individual patient, and are often accustomed to high levels of autonomy with less emphasis on team-based approaches in healthcare.

'**Systems improvement**' leadership is defined by an engagement with the broader context of healthcare, including the indirect costs emerging from opportunity cost, unwieldy management and to shortfalls in the safety and quality of care. Systems improvement leadership considers organisational matters and the cost-benefit for taxpayers as well as individual patient needs.[448]

The Victorian health system has developed and nurtured many 'traditional professional' leaders in all of the health professions but has few who would identify as 'systems improvement' leaders. Transitioning from a 'traditional professional' leadership role to becoming a 'systems improvement' leader requires a change of thinking, eschewing advocacy for sectional interests, and thinking of the overall patterns of care.

We understand that Better Care Victoria has also identified developing capability for improvement as a critical goal. For this reason we recommend that the department, in partnership with Better Care Victoria, invests in the development of 'system improvement' leaders.

In order to drive system-wide improvement, clinical leaders need to be trained in the technical methods of improvement science (such as clinical epidemiology and variation reduction), have well-developed skills for implementing improvement projects, and be acculturated to model the values underpinning continuous improvement. Indeed, many of these skills are already core business of hospital-based clinicians. However, their training accustoms them to understand patients one by one, rather than to see commonality and patterns.

447 Blumenthal, *et al.* (2012), p. 513
448 Ward (2005)

Skilled clinicians often have not received the training they need to be highly effective in leadership positions.[449] On a practical level, leadership and change management skills are rarely taught in pre-registration educational training.[450] And on a cultural level, they may lack the skills and confidence to challenge poor practice[451] and the leadership style needed to facilitate disclosure of error and harm by peers and subordinates.

Recognising this, New South Wales' Clinical Excellence Commission has invested heavily in educating clinical leaders (see Box 15). We propose that Better Care Victoria play a similar role in funding rigorous training in clinical improvement leadership, building off previous initiatives that have met with success.[452]

Box 15: Training clinical leaders in New South Wales

The New South Wales Clinical Excellence Commission (CEC) plays a major role in training clinicians in patient safety and quality improvement, with about 3,500 graduates since 2007.

Clinical Practice Improvement program

This program trains staff from local health districts and other public health organisations in clinical improvement. The aims of the program are to create a body of clinicians who can identify, investigate and act on process failures, apply improvement methodology to effect change, and address issues raised by root cause analyses. Training in data collection and use of statistical process control is part of the program. It offers its training as a one- or two-day workshop, with accompanying e-learning modules freely available to NSW Health public health organisation staff. A version of the program is also offered to Royal Australasian College of Physicians advanced trainees, in conjunction with the college. This program runs over a year and participants implement a quality improvement process in one of their rotations.[453]

Clinical Leadership Program

This program aims to improve clinical leadership as a means of enhancing patient safety and quality of care. Funded through the Ministry of Health, the CEC offers two versions of the program. The first, a foundational program for clinicians and managers, is delivered through local health districts, with participants undertaking a work-based improvement process alongside learning about process improvement, clinical leadership, team dynamics and self-knowledge.

449 Blumenthal, *et al.* (2012)
450 Leggat, *et al.* (2015), p. 138
451 Ham (2011), p. ix
452 For example, Victoria piloted a clinical leadership program (CLiQS – La Trobe Uni/ACHSM)) over 2013–14, which achieved benefits for participants and their health services as determined by independent evaluation, with recommendations made for enhancing the program. The recommendations may be useful to consider in the development of a new clinical leadership program. Leggat, *et al.* (2015)
453 Clinical Excellence Commission (2016b)

Box 15: Training clinical leaders in New South Wales (cont.)

The second, the Clinical Leadership Program, is an executive program for senior clinicians,[454] with the aim of building a cohort of patient safety-oriented leaders who can influence systemic change. It runs over a year with six two-day intensives. During the program, participants complete a 360-degree review process and conduct a clinical practice improvement project related to a challenge in their work, with a plan to sustain change.[455] The Clinical Leadership Program was strongly supported by an evaluation in 2008.[456]

Leadership development should be targeted at a wide range of people holding leadership positions in hospitals, encompassing clinical divisional directors and middle managers, quality directors/managers, CEOs and board members, directors of nursing and directors of medical services, as well as members of clinical networks and the proposed clinical council.

Through such programs, clinicians would gain more of the skills required to serve on hospital boards. Hospitals and other organisations could expect their staff completing to the program to use what they have learned on an ongoing basis, whether through training other staff, running improvement projects or having a portion of their time allocated to quality review and improvement. Development of a large cohort of clinical leaders trained in improvement science will help to minimise the risk that an 'engagement gap' develops between these leaders and other clinicians.[457]

Recommendation 4.4:

4.4.1. The department, in conjunction with Better Care Victoria, should develop a clinician leadership training strategy that incorporates training in contemporary quality improvement methods.

4.4.2. The training program should have intakes on a regular basis.

4.4.3. Hospitals and health services should ensure all leaders of significant clinical departments have completed the program or a similar program within six months of their appointment.

As critical as leadership is, ongoing improvement requires the involvement of many (preferably most, if not all) staff. Those delivering care ultimately determine the fate of any improvement efforts. Any reform at the 'top' needs to be understood, accepted and integrated into care by people working at the frontlines of care.

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454 Equivalent to head of department, clinical stream director, director of nursing/allied health, or a senior clinical manager.
455 Clinical Excellence Commission (2016c)
456 Clinical Excellence Commission (2009)
457 Breen (2015)

A substantial body of research into clinical improvement suggests this 'microsystem' level (where care actually takes place through the interaction of staff and patients) is an important focus for improvement efforts.[458] How well these systems work will depend on staff knowledge of patients and their conditions, their access to and ability to use data, and the quality of the connections between systems (for instance, the processes for transferring patients from one type of care to another), among other factors.[459]

To create patient-centred, high-quality and safe care, staff in care units need to understand the needs of the patients they are serving, the interactions between people and the processes of care, as well as patterns and trends in quality and safety.[460] Knowledge generated by frontline staff is also invaluable in designing and scaling up more effective care.[461]

This knowledge should not be assumed to be held universally by staff. Care units that operate well tend to use many of the principles of improvement science, while those that are not continuously improving might not be aware of their potential and actual role in quality improvement.[462] Therefore, as well developing and engaging leaders, improvement initiatives should heavily involve frontline staff.[463] It is not known exactly what proportion of staff need to have 'buy-in' for an idea to be brought into practice, but experience in the NHS and elsewhere has suggested a critical mass of staff educated in clinical improvement is needed[464] as are 'early adopters' who will promote change.[465]

Evaluating how well clinical units are functioning is a core responsibility of management, but often the focus is on poorer performing units, highlighted because of apparent problems. Moving from good (or even very good) to excellent will require purposive action. Many hospitals in Australia and internationally have a policy of regular external reviews of clinical units to help the unit strengthen its performance. The Harvard Medical School program has an eight-year cycle;[466] other hospitals initiate reviews when the unit head changes.

Recommendation 4.5:

That larger hospitals consider initiating a program of regular external reviews of clinical units.

458 Nelson, *et al.* (2008) Nelson, *et al.* (2007)
459 Likosky (2014)
460 Nelson, *et al.* (2007)
461 Likosky (2014)
462 Godfrey, *et al.* (2004)
463 Godfrey, *et al.* (2003) Nelson, *et al.* (2007)
464 Walley, *et al.* (2006)
465 Benn, *et al.* (2012)
466 Office for Academic and Clinical Affairs (2016)

Engaging leaders in quality and safety improvement

As discussed, our vision for clinical engagement will provide two types of forums for systems improvement leaders: a newly established Victorian Clinical Council to advise on policy; and revitalised clinical networks to drive quality improvement. We recognise that the effectiveness of both of these will in large part rely on the contributions of the clinicians who participate in them, and the support they will be provided. But we are confident that with this increased engagement, the new 'system improvement' leaders can reposition the Victorian health system and lead to a dramatic improvement in quality and safety.

Establishing a clinical council

The clinical networks will engage clinicians within specialty groups, focusing on improving care within that specialty or for people with the relevant condition. However, those clinicians will be selected first on the basis of their practical skills in improvement science, not their ability to represent their specialty and profession in policy debates.

A number of Australian states have instead created designated bodies (usually termed 'clinical senates') for this purpose. The clinical senates are intended both as a means of seeking clinician advice and engaging clinicians in designing, delivering and improving care at the policy level. In most states where the clinical senates operate they also serve to create informal networks of clinicians. The issues they have considered have ranged from clinical education to health services research and providing quality care 24/7 in hospitals (see Box 16).

Box 16: Clinical senates around Australia

Clinical senates have been established in Queensland, Western Australia and South Australia, as well as the ACT. Though they are similar in design, in practice they operate slightly differently in each state. For instance in South Australia, the clinical senate (recently reconstituted and renamed the 'Directors' Forum') is comprised mainly of members with responsibility for implementing policy who use the senate to plan implementation strategy. In Queensland it has played a more advisory role to the department and in some cases acted as a convenor for reaching agreement on policy reform. In Western Australia, the clinical senate works closely with the Director General and makes a limited number of priority recommendations each session, which are generally then endorsed by the Director General and implemented by local health districts.[467]

Clinical senates can become irrelevant and tokenistic when there is not a clear link between their activities and the priorities of the health sector or the department. For instance, it is of little use to make recommendations about improving a central agency's processes when it is in the midst of devolving the relevant powers to hospital boards.

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467 In Western Australia, a review of the clinical senate's work over the previous decade showed that 82 per cent of the recommendations passed on to the Director General were accepted and implemented by local health services. Department of Health (Western Australia) (2014)

Box 16: Clinical senates around Australia (cont.)

The experience of the clinical senates in Australia over the past decades has shown that clinical senates work well when they are independent from the department but with a clinical senate executive who can ensure the senate is providing useful, implementable advice. For instance, in both Western Australia and Queensland, the executive of the clinical senate will regularly meet with senior members of the health departments as well as clinician groups and other relevant health bodies, both to promote the senate's work and gather ideas for future senate sessions. The department also needs to be willing and able to use the advice of the senate – for instance, referring pressing strategic health matters to it, and working to implement their recommendations whenever appropriate.

Importantly, the clinical senates are not 'representative' of different professional groups. Senators are appointed based on their expertise and ability but are explicitly not there to advocate for their organisations or profession. In Western Australia and Queensland effort is made to appoint senators with broad networks in different health services, both to increase the exposure of clinical senators and so they will be more able to champion the senate's agenda. Senators are generally not paid, though may receive some reimbursement of their travel costs, and the chair usually receives an honorarium and administrative support through the department.

It is proposed that a Victorian Clinical Council be established as a second arm of clinical engagement. The clinical council should consist of about 60 people with broad representation across specialties and clinical professions, inclusion of consumer members, and an appropriate balance of rural and metropolitan workforce.[468] The clinical council should include the chairs of the clinical networks as *ex officio* members and a significant proportion of the membership be drawn from the revitalised clinical networks. The clinical council should meet three to four times a year, with an agenda that contains a mix of council-selected issues and department-selected issues.

The process used by the Western Australian senate for selecting issues should be considered as the starting point for nominating issues. Here, the relevant parties (the Director General, clinical senators, the CMO and the State Health Executive Forum) are able to submit possible topics, which are then reviewed by the senate executive for their scope and relevance and to determine if the issue is one where the clinical senate is genuinely in a position to offer timely advice. If the item is suitable for discussion, the clinical senate executive will arrange for it to be scheduled and for appropriate briefing materials to be prepared.

468 We use the term 'clinician' to include all those involved in direct patient care, not just medical practitioners.

In order to be effective, the clinicians who participate in the council must feel their advice is being heard and that they are making a difference. This puts an obligation on the council to be realistic in their recommendations, but equally it puts an obligation of the department to assess the views of the council openly and carefully. To ensure this, at each session of the clinical council a representative of the Secretary should report on whether the recommendations from the previous session have been endorsed or not endorsed and the reasons why. The council should be able to make recommendations about quality to both the department and to hospital boards. Progress on implementing recommendations should be more formally reported back to the council at a regular interval.

To be seen as credible, the council needs an independent chair and executive comprised of people who have clinical credibility and command the respect of their peers. Although in the first instance the council should be selected by the department, subsequent rounds of appointments should be made by the council itself.

The council should be subject to an external evaluation after it has been in operation for about three years.

Recommendation 4.6:

4.6.1. That the department establishes a Victorian Clinical Council to provide a forum whereby the department can obtain the collective advice of clinicians on strategic issues.

4.6.2. Councillors should be drawn from the ranks of practising clinicians, to serve in a non-representative capacity. A significant proportion (more than two-thirds) of the membership of the council should be drawn from the clinical networks. A Council Executive (including a chair and deputy chair) should be elected by the council, with the initial chair appointed by the department. Issues for consideration should be sought from the department, chairs of clinical networks, and from councillors.

4.6.3. All clinical network chairs should be members of the council, as should be the chief executive officer of the Office of Safety and Quality Improvement, the Chief Medical Officer, the Chief Nurse and the Chief Allied Health Officer. At least four skilled consumer representatives should have seats on the council.

4.6.4. To ensure accountability from the department, the Secretary or her delegate should make a report at each session of the council on whether the recommendations are endorsed, the reasons for this, and their plans and progress on implementing them.

4.6.5. Secretariat support should be provided by the department.

Fostering relationships with clinical leaders in the private sector

Clinical leaders working in the private sector should be included in the Victorian Clinical Council discussed above, and the clinical networks (discussed below). The department should also develop a focussed channel for engaging with private clinical leaders. One option for doing this may involve the Chief Medical Officer and Chief Nurse running quarterly meetings with their counterparts (hospital CMOs and Directors of Nursing) in all the major private hospital groups. These meetings should be used as a forum for exchanging information on private and department initiatives, and discussing contemporary issues.

Recommendation 4.7

That the department's Chief Medical Officer and Chief Nurse each hold a quarterly discussion forum with the major private hospital groups' Chief Medical Officers and Directors of Nursing, respectively.

Rebuilding and focusing the clinical networks

I consider the clinical networks have an important role in driving quality and safety. Firstly, they should have a key role in setting the metrics that are safe, reasonable and achievable. Secondly, they should be involved with the programme team to help craft the financial instruments that will allow these to be achieved. Thirdly, there should be an oversight of the data by the department and presentation of this data to clinical networks. Potentially the clinical networks could require a formal response to queries about services identified with outlying data. Equally maybe there should be some encouragement to those who are performing well.

Professor Stephen Holt, Director of Nephrology, The Royal Melbourne Hospital

As discussed, the department alone cannot deliver safer and higher quality care for patients in Victoria. To lift the safety and quality of care provided in hospitals, it needs to foster and support clinical leadership of improvement.

A core part of this will be rebuilding the clinical networks. In contrast to the existing networks, which have had varying goals and varying levels of success, the revitalised clinical networks will have one clear goal: to improve specific outcomes of care in Victorian hospitals. Initially, outcomes will be measured in terms of the performance indicators assigned to the networks, but over time the networks should refine these and develop new measures.

The revitalised clinical networks will be a key way to strengthen the department's support for safety and quality improvement. The networks need to be seen as part of the department, with a particular role in improving safety and quality of care in their remit. To be effective in that role, they must be first and foremost clinically credible and comprised of clinicians with expertise in improvement science (and others with governance or economic evaluation expertise). They must reflect the workforce in terms of diversity, and must include consumer representatives.

Members will be part-time so the networks need to be adequately serviced by full-time staff who can develop briefing papers on the evidence about particular interventions and developments in improvement strategies in other jurisdictions. This support will be essential to ensure that network recommendations are evidence-based. In addition, as we discuss below, the networks must have access to extensive clinical data and analytic support.

The old clinical networks

A number of clinical networks have been operating since 2008 for the purpose of harnessing the knowledge and experience of clinicians to plan and deliver more responsive, effective and efficient services across Victoria.[469] As Table 10 shows, each network sets its own priorities in response to different stimuli, and each has chosen very different ways to stimulate improvement.

Table 10: The priorities of Victoria's current clinical networks

Network	Priority setting	Current priority
Cancer	Statewide initiatives as defined by governance groups	Optimal care pathways based on tumour streams
Cardiac	Heart Health strategy documents	Congenital heart disease project, clinical trials initiative accelerator, data collaborative
Emergency	Various – steering committee, ideas from clinicians, new evidence in medical literature, national quality standards, identified risk areas	Evidence-based care implementation, medication safety, fact sheets, leadership development, emergency department–mental health interface projects, consumer input to ED
Maternity and newborn	Various – steering committee, sector, department, government, consumer, maternity performance indicators	Neonatal handbook, mortality and morbidity workshops, webinar series, safe infant sleeping
Paediatric	Various – government priorities, department strategic emphasis, sector	Standardisation of care, advocacy and system improvement
Renal	'Renal directions' strategy document, key performance indicators	Renal supportive care implementation, patient education, patient assessment pathways
Stroke	Stroke strategy, new evidence, national guidelines	Endovascular clot retrieval program, subacute services, clinical registries

469 Department of Health (2007)

A new critical care clinical network was recently developed, and there are two other networks (for palliative care and older people in hospital) supported through separate processes.[470]

While some networks have had important successes,[471] most have been inadequately resourced and lacked clear direction and accountability.[472] Detached from the department's own improvement priorities, they have been floating adrift in the department with three organisational homes in the past three years. In October 2015, they were moved to the Health Service Performance and Programs division.

With stability, clear goals and appropriate resourcing, we believe *all* of the networks could play a pivotal role in service improvement. For this reason, we recommend the department rebuild and support the clinical networks to provide clear clinical leadership across the state. Rather than being detached from the department, they should be embedded in its work to minimise harm and improve safety and quality more broadly. Their work should be coordinated and collaborative. They should be focused on well-defined objectives, accountable for measurable outcomes, and have re-appointment, autonomy and funding allocated on the basis of success against those outcomes.

The network's' activities must be coordinated and collaborative

> The Maternity and Newborn Clinical Network appears to be working in isolation and should be brought under the one system umbrella. They should continue to exist, but should have a line of sight from an overarching group looking at the whole system.
>
> **The Royal Women's Hospital**

The department's current approach to networks is somewhat idiosyncratic. Networks seem to have been created to address specific issues with varying reporting arrangements rather than as part of the department's overarching goals for system improvement. Further, there has been limited collaboration between the networks, who in the absence of effective central coordination have individually pursued specialty- and hospital-specific improvement goals, rather than working together to improve patient outcomes across their entire care journey.

This approach is at odds with the reality that an increasing number of patients suffer from more than one condition and so require complex, coordinated and interdisciplinary care involving multiple providers across the acute and primary care systems.

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470 The department's Continuing Care branch also supports two further clinical networks: the 'Palliative Care Clinical Network' and the 'Clinical Leadership Group on Care of Older People in Hospital' (project officer positions for the Clinical Leadership Group on Care of Older People in Hospital are funded through Alfred Health).

471 For example, a recent project run by the Emergency Clinical Network led to clinically and statistically significant improvements in the way that atrial fibrillation was managed. Kelly and Pannifex (2016)

472 A recent review of the clinical networks noted that there is 'no over-arching vision or strategic plan for the clinical networks as a collective', however, a 2011 unpublished departmental document concerning the clinical networks stated the purpose was 'connecting care, driving best practice and improving patient outcomes'. This does not appear to have been operationalised.' Department of Health and Human Services (2016a), p. 2.

We think the networks should evolve to reflect this reality better. We propose that the OSQI develop a strategic plan to improve coordination of the networks' objectives and activities. One way of doing this may be to create a new and comprehensive configuration of networks that cover all aspects of care, and are organised along lines that promote integrated care. This option is described in Box 17.

Box 17: Quality Improvement Networks to coordinate interdisciplinary improvement work

The OSQI may consider creating overarching Quality Improvement Networks (QINs) to coordinate the work of the existing specialty-specific networks. These QINs would bring together the work of specialty-specific networks to improve integrated care.

For example, a chronic disease QIN could bring together several specialty-specific networks, such as the renal and cardiac, and a potential diabetes network. Those networks would continue to pursue specialty-specific goals (for example, reducing incidence of in-hospital renal failure, cardiac complications and hypoglycaemia, which are among the Australian Commission on Safety and Quality in Health Care's priority complications). However, they would also cooperate on integrated care improvement projects (for example, improving outcomes for diabetes patients who are at risk of both renal and cardiac complications, which have common care antecedents).

QINs should not only be interdisciplinary but also involve a mix of clinicians and patients, hospital-based and primary care clinicians, and people with public and private sector experience. They should be balanced in terms of rural–urban location and gender.

The OSQI should develop a plan for its coordination strategy within 12 months for full implementation within three years. It should also develop a strategy for engaging the newly formed Primary Healthcare Networks in the development of agreed baselines of evidence-based best-practice care across acute and primary care settings.[473] The initial output of this work will be agreed care paths that can then be used to assist with transparent monitoring of patient, process and cost outcomes across the patient journey. The new networks must work towards a clear and shared goal.

The OSQI should ensure that the new network configuration (whether through additional standalone clinical networks, or through the overarching network structure proposed in Box 17) incorporates mental health, infections and infectious disease, surgery and general medicine, as there is a clear need for development or refinement of a range of performance indicators related to these fields.[474]

473 Swerissen and Duckett (2016)
474 As discussed in Chapter 3, the surgical network should replace the Victorian Surgical Consultative Council and the Victorian Consultative Council for Anaesthetic Morbidity and Mortality, and have close links with the Royal Australasian College of Surgeons and the Victorian Audit of Surgical Mortality. The infections and infectious disease network would incorporate the functions of the Health Associated Infection Committee.

The new networks must work towards a clear and shared goal

In Chapter 3 we recommended that the department monitor each hospital's incidence of high-priority complications along with its relative performance on a number of safety and quality Variable Life Adjusted Displays (VLADs). As discussed, vigorous oversight of these indicators will help the department more quickly identify and address the worst failings in care in a minority of hospitals. However, oversight alone will not help the majority of hospitals go from good to excellent performance, with zero preventable harm, minimal complications and optimal quality.

We think the latter task should belong to the clinical networks. Each network should have responsibility for lowering the statewide incidence of all priority complications relevant to their field, and improving statewide performance on the clinically relevant VLADs. For example, the Cardiac Clinical Network or its successor would be responsible for improving performance on the heart failure VLADs (namely, lowering the statewide average rate of readmissions and long hospital stays for this condition) and reducing rates of the priority in-hospital cardiac complications.[475]

One or two of these indicators should be selected as being of the highest priority and published by the department as part of the 'statewide improvement goals' proposed in Recommendation 1.3.

The networks should have a high degree of autonomy over how they pursue improvement on these goals. In the first instance they may focus on areas where there is significant inter-hospital variations in clinical outcomes or substantial gaps between evidence-based best practice and current practice.

In pursuing their task, they might decide to do any or all of the following:

- develop agreed best-practice guidance and strategies to implement and monitor them
- investigate the state's high-performing outlier hospitals to see what they are doing well and spread their ideas and innovations across the system
- identify where variation occurs across the state and develop strategies to reduce under-performance
- support staff in low-performing outlier hospitals to strengthen their practice, and advise managers of these hospitals on investment required to enable and support improvement
- partner with other departmental bodies or external organisations, including Better Care Victoria, to share information or collaborate on projects
- develop best-practice protocols and pathways and show clinical leaders how to train their staff in using them
- identify procedures or treatments where low volume of activity is associated with poor patient outcomes and develop strategies for mitigating the effect of these, including (potentially) identifying minimum threshold volumes

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475   These are: heart failure and pulmonary oedema, arrhythmias, cardiac arrest, acute coronary syndrome including unstable angina, STEMI and NSTEMI. Australian Commission on Safety and Quality in Health Care (2016a)

- identify procedures where variation in rates of admission might indicate clinical uncertainty and raise concerns about variation in appropriateness of care and develop strategies to reduce admissions and procedures for indications not supported by research
- identify gaps in the data required to monitor quality and efficiency of care
- identify gaps in evidence and make recommendations to research funding bodies
- provide advice about responding to the Council of Australian Governments' (COAG's) policies about how funding and pricing can be used to improve patient outcomes, where they are relevant to the network, and develop strategies to assist hospitals to improve care on dimensions relevant to the COAG indicators
- provide advice about developing funding incentives for improved performance
- provide advice to the department on improving certain clinical services through rationalisation
- ask the department to mandate compliance with protocols when they are unjustifiably ignored.

Although the networks may support underperforming hospitals, their work should be focused on improving performance across all hospitals. Their role would remain separate from the performance accountability functions of the department, and would not absolve the department from responsibility to effectively monitor and manage hospital performance.

At the end of each year, the clinical network should be accountable for changes in relevant statewide performance. Each network should be required to present a short report annually on:

- overall trends in the indicators for which it is responsible
- strategies it is pursuing to improve statewide performance on the indicator(s) and any evaluations of outcomes
- priorities for the next year.

These reports should be published as part of the proposed OSQI's statewide safety and quality annual report.

The networks should be well supported. They should be staffed to a level commensurate with their responsibilities (which will vary), and each should have a small budget to undertake 'proof-of-concept' work to test out improvement strategies. They should have full access to any data they need to analyse variation in performance and identify outliers. This should include the routine data, along with incident data, registries and other specialist data collections. As discussed, they should also be supported by the OSQI's dedicated research and quality improvement staff, who should provide the networks with relevant advice on developments in international best practice, and support them to import, adapt and develop quality improvement programs.

Networks that do not have sufficient VLADs and priority complications should be able to propose additional indicators (provided they are clinically meaningful, evidence-based and measurable) to the department.[476] Further, the networks should also be able to make an evidence-based case to the department for substituting its initial set of VLADs and complications for other measures with greater clinical relevance or priority. Relevant networks should give priority to developing indicators that will robustly measure performance in smaller hospitals. Once they have been refined, indicators included in the proposed COAG set of financial indicators should be assigned to clinical networks and incorporated in the statewide monitoring suite. Over time, the networks should develop and roll out a more refined set of patient outcome measures, including measures reported by patients (see Box 19).

The work of the clinical networks will be supported by the recent establishment of Better Care Victoria and its Innovation Fund which, among other things, will fund projects focused on improvement and reducing clinical variation, both of which will be core business of the clinical networks. Networks should submit business cases to Better Care Victoria for rollout of high-priority improvement cases, consistent with Better Care Victoria's processes. The fact that Better Care Victoria is supported in a separate division of the department will help to ensure the business cases submitted by the clinical networks are assessed rigorously and ensure that these investments are cost-effective.

The networks should also be considered an opportunity to develop young and emerging clinical leaders. The department should encourage all clinical networks to offer development opportunities to less senior clinicians, including through departmentally funded secondments.

476 For example, there are no complications specific to maternity or newborn care. The Commission plans to continue developing its complication list and supporting resources over 2016. Ibid.

Recommendation 4.8:

That:

4.8.1. the department revitalise the clinical networks. Each should be focused on a single objective: to improve outcomes of hospital care.

4.8.2. the OSQI develop a strategic plan for coordinating interdisciplinary improvement work to be published before 1 July 2017, with the strategic plan incorporating infection and infectious disease, mental health, surgery and general medicine. Work in these areas should begin as soon as possible.

4.8.3. each network be charged with improving the overall performance across all hospitals (public and private) on relevant indicators from the statewide safety and quality analytics report by reducing variation on quality indicators and lowering incidence on safety indicators.

4.8.4. networks report to the chief executive officer of the Office of Safety and Quality Improvement annually on progress against their improvement objectives.

4.8.5. networks have staffing appropriate to their new role, including data-analytic support. There should be provision, in the first few years of the new network role, for 'data advisers' to support access to the new data portal.

4.8.6. the work of the Ministerial Advisory Committee on Surgery and the Surgical Consultative Council be absorbed into a new surgery network, consideration also be given to absorbing the Victorian Consultative Council for Anaesthetic Morbidity and Mortality into the surgery network. The work of the Healthcare Associated Infection Committee be absorbed by a newly formed infection and infectious disease network.

4.8.7. the department ensure staff and chairs of networks have training in contemporary improvement methods.

4.8.8. the network chairs meet quarterly to share experiences, identify any common priorities and ensure critical opportunities for improvement are being pursued.

4.8.9. every network have at least two consumer representatives with personal experience relevant to the network's focus, who meet the requirements for being able to reflect the perspective of health system users set out in Recommendation 2,2.

4.8.10. the department develop a strategy to involve clinical networks and Primary Healthcare Networks in creating evidence-based best practice care paths for implementation across Victoria.

Improving the quality of data across the system

The Victorian Hospital Association is committed to the concept of 'information in, information out'. Healthcare data – including clinical incident data – should be collected with the key purpose of driving improvements to healthcare delivery and the system. Statewide initiatives are essential to enable comparative data feedback to individual agencies, facilitate benchmarking against similar services, and importantly, accurately identify trends in service delivery and outcomes. Safe and quality healthcare comes from a collaborative, integrated approach assisted by an information management system that encourages services to work together.

Victorian Healthcare Association

In order for the Victorian health system to achieve significant improvements in care, there needs to be a system-wide improvement in access to data on clinical processes and patient outcomes, with measures that are timely, meaningful and clinically credible. Such measures must make it *easier* for clinical teams to develop a detailed understanding of the specific problems and opportunities for improvement in the way they are delivering care, and observe the effect of improvement strategies when they are implemented. This requires thought into the way the measures are designed.

Currently, the information the department makes available to the sector is often provided far too late to be useful. As noted in Chapter 3, clinicians can wait literally years to learn about statewide trends and findings in obstetrics, sentinel events and infections.[477]

We also heard repeatedly during consultations for this review that the information currently provided to hospitals through the national core hospital-based outcome indicators and Dr Foster is duplicative yet often contradictory to the information they are already accessing through the Health Roundtable.[478] This has led to a situation in which hospital managers have to waste time reviewing three different measures of the same outcome, and can be held to account for poor performance on one measure, regardless of their performance on the other two.

Finally, we learned that investment in improving data quality has been uneven and, again, inefficient. The department has funded a number of clinical registries of exceptional quality whose data it does not see or share for improvement work, and which universities struggle to access.[479]

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477 For example, the most recent available report on healthcare-associated infection in Victoria is based on data from 2010–11 and 2011–12. Department of Health (2014)

478 Dr Foster is only available to the largest hospitals, and numbers are too small for outcome indicators to be useful in small hospitals. The department funds Dr Foster and provides outcome indicators, while hospitals pay the Health Roundtable.

479 Disturbingly, we learned that outliers identified in some registries are not necessarily followed up, even when clear issues with quality and safety of care have been identified.

Creating a specialist analytics and performance reporting body

The Victorian hospital system urgently needs to improve its measurement of care. We recommend the creation of a specialist analytics and performance reporting body independent from the department with its own statutory base to fulfil this role.[480] Such a body (which we refer to as the Victorian Health Performance Authority, or VHPA) should take over responsibility for administering and analysing all health datasets funded and collected by the department, with the department retaining real-time direct access to the data.[481] Clinical registries funded by the department should be required, as a condition of funding, to provide their data to the VHPA.

The VHPA should work closely with and support clinical networks, the department more broadly, and health information analysts[482] in hospitals. It must provide the clinical networks with easy access to information to understand patterns of adverse outcomes and patient harm. The networks should be able to nominate clinical quality measures for the VHPA to develop, with a focus on measures that show high variability to identify targets for concentrated specialty-wide improvement and benchmarking work.

The VHPA would also be responsible for producing the safety and quality analytics report for boards, as outlined in Chapter Two, and should report regularly on how individual hospitals and the system as a whole are catering to patients who are culturally and linguistically diverse, of low socioeconomic status, or are Aboriginal or Torres Strait Islanders

In other respects, the VHPA should have a high degree of independence in setting its own work programs.[483] This independence would allow the VHPA to preserve its core function of stimulating clinical improvement, rather than see it diminished over time through involvement in other departmental projects and briefs, and losing staff to departmental restructures. This stability and independence would allow the VHPA to become a magnet for clinical analytics talent in Victoria and from other jurisdictions, in turn enabling it to develop deep expertise and credibility with the hospital system.

The VHPA should form close relationships and research collaborations with other health analytic research centres, including the Bureau of Health Information in New South Wales, and academic health science centres in Victoria.

The VHPA should be an end-to-end data manager, working from collection to publication. It should assume the current responsibilities of the department for management of the hospital routine datasets (for example, the Victorian Admitted Episode Dataset), and should provide a cleaned, authoritative dataset to the department monthly.

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480 In this report we only discuss the VHPA's role relating to safety and quality. The department should consider a broader role for it publishing comparative data on access and efficiency as well.
481 Including VAED, VEMD, VPDC, VHIMS, all sentinel events, all infection surveillance data and all patient and staff survey data.
482 One of the roles of the VHPA should be to strengthen the quality and efficiency of analytics in hospitals. It should publish all of its model specifications and code on its website so that analysts working within hospitals can efficiently replicate the work and build on it. It should also develop links between hospital analysts in order to facilitate collaboration, mutual training and information sharing.
483 In the interest of efficiency, the VHPA's back office functions should still be provided by the department.

The VHPA's responsibilities should flow across measurement of patient care and outcomes for three key purposes: public reporting, oversight and clinical improvement.

Recommendation 4.9:

Government should legislate to establish a Victorian Health Performance Authority, independent from the department to:

4.9.1. provide the public with hospital safety and quality performance data on a quarterly basis that covers all safety and quality indicators against which hospitals are monitored, for both public and private hospitals; the names of hospitals should be identified

4.9.2. provide the department and all hospitals with a report detailing hospital performance against safety and quality indicators; this report should be updated on a monthly basis

4.9.3. support the clinical networks to refine and develop new measures to monitor safety and quality

4.9.4. provide the clinical networks and hospitals with an interactive data portal that enables users to explore patient outcomes and patient journeys in their hospital, and compare their outcomes with other hospitals' outcomes

4.9.5. support the networks and hospitals to use the portal by providing data advisors

4.9.6. provide a small analytic team (four or five staff) to support the clinical networks (this is in addition to administrative staff to support networks)

4.9.7. provide data analytic support under contract to the department by seconding staff where appropriate

4.9.8. collect data from hospitals and other entities and manage health sector data holdings, providing the department with real time direct access to the data as well as an authoritative data extract to the department on a regular (for example, monthly) basis.

Measurement to improve public accountability

Public reporting will be the most obvious component of the VHPA's work. Currently the community is able to see very little information on hospital safety and quality – an issue we address later in this chapter. While there is little evidence that public reporting stimulates clinical improvement (see Box 18), there is a clear case for greater transparency to strengthen the accountability of hospitals and the department to the public.

Our consultations found that hospital CEOs and clinical leaders (along with consumers) support the department moving in this direction, and indeed see it as a contemporary expectation of good system governance. We recommend that as a general principle the VHPA should publish all of its findings where they have been carefully checked, are clinically credible, and do not pose a risk to patient privacy.

Box 18: Public reporting strengthens accountability but does not drive improvement in clinical practice

In order for public reporting to drive improvement in clinical practice, certain conditions have to be present. Patients and clinicians must engage with the reports. The data must be reliable, so patients will choose the hospitals that actually deliver better care. Hospitals must be motivated and able to improve when they lose patients or suffer reputational damage as a result of poor performance.

Public reporting has a long history – dating back at least to Florence Nightingale – but the evidence on its efficacy is still very mixed. It appears that public reporting can stimulate quality improvement activities by hospital leaders – even when they don't believe the data are reliable.[484] Real improvements have been found in several instances,[485] including when public reporting has been combined with the financial incentives of pay-for-performance.[486]

However, public reporting often doesn't live up to expectations. This may be because the necessary conditions for its effectiveness are often absent. For example, performance scores can be unreliable because of poor data quality or methodological weaknesses behind the ratings.[487] When reports are published, too few patients might engage with public reports, particularly when they are difficult to access and interpret.[488] Clinicians may have little faith in the scoring and decide not to use them when referring their patients to specialists.[489] Hospitals may feel or be unable to address factors that are leading to patient harm, even when they are alerted to them.[490] Instead, they may resort to gaming the performance measures, either through changes to coding and documentation or through changes in clinical processes.[491]

484 A 2012 survey of 630 hospitals (with 380 respondents) in the United States found that more than 66 per cent of organisational leaders believed that public reporting had stimulated quality improvement activities at their institution, and more than 73 per cent agreed that their hospital was able to influence performance on reported measures. However, most respondents disagreed that measured differences in hospital performance were meaningful. Further, the respondents closest to quality improvement work were least likely to believe that public reporting stimulated quality improvement activities or reliably differentiated between different hospitals' performances, and while equally likely to believe their hospital was able to influence performance on these measures, were much more likely to believe that hospitals may attempt to maximise performance primarily by altering coding and documentation practices. Lindenauer, et al. (2014), p. 1,909

485 Chassin (2002) Hibbard, et al. (2003) Hibbard, et al. (2005)

486 Lindenauer , et al. (2007)

487 ProPublica surgeon scorecards have been criticised for this. Friedberg, et al. (2016)

488 Faber, et al. (2009)

489 Brown, et al. (2013)

490 Paddock, et al. (2015)

491 Gould, et al. (2005)

Measurement to strengthen oversight

Measurement for oversight should also be part of the VHPA's role. The VHPA should be charged with producing (and updating) the analytics book discussed in Chapter 2 of this report, and supplying boards and CEOs with it.

The VHPA should also have responsibility for the analytic component of the department's monitoring of hospital performance (including through VLADs and priority complications), and should be supplying the Health Service Performance and Programs division with updated hospital performance data every month.

Finally, the VHPA should work with the department's Health Service Performance and Programs division to develop and calibrate risk assessment models that improve the department's ability to detect problems in hospitals before they become catastrophic.

Measurement for oversight is important. When done well, it protects patients from the worst failings in care. However, while these measurements will support efforts to lift minimum performance, measurement for clinical improvement is needed to support lifting the median performance. Victoria needs both.

The VHPA must prioritise measurement for clinical improvement

Measurement for clinical improvement should be a key priority for the VHPA, and where investment in future data collection and systems will be required. For while all three measurement purposes described above have an important place, clinically focused measurement is the only lever likely to transform the hospital system into one that has much safer and higher quality care, and is ultimately much more efficient.

Measurement for improvement works at two levels – statewide and local.

The revitalised clinical networks have been repositioned to drive statewide improvement. Their focus will be on improving patient outcomes and understanding patterns in complications, readmissions and mortality, and in patient-reported pain and function after treatment. To do this, they need to be able to access risk-adjusted performance data, analyse variation in care, identify outliers, and lift performance of all closer to the best.[492] The routine data provides a strong starting point for this analysis, and through investment will become even more useful over time.

Clinicians in hospitals need additional data to drive frontline process management and improvement. At the local level, measurement for improvement focuses on the processes that clinicians follow to deliver care, and the outcomes of care. Typically the first step in improvement is to standardise current processes. Measurement for clinical improvement often requires data developed for that explicit purpose to be used in local improvement cycles (for example, Plan-Do-Study-Act, PDSA). If, after reducing variation and acting on opportunities for improving the process, outcomes are not of the required quality, then the process needs to be fundamentally redesigned, and the PDSA cycles begin again based on the redesigned care process until the improved outcome is achieved.

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492   Measurement for selection vs improvement; see Berwick, *et al.* (2003).

It is instructive that Intermountain Healthcare – one of the world's leading low-cost, high-quality health systems – did not succeed at driving major improvements in clinical management until *after* it had invested heavily in expanding data collection.[493] Two previous attempts failed because they presumed the existing data systems would be sufficient; experimentation later showed those systems did not track 30–50 per cent of the data needed to monitor and manage their clinical processes.[494]

A vital role for the VHPA will therefore be developing information collection systems that drive future improvement, in addition to making the best possible use of information that already exists. The sections below discuss a number of key opportunities in this area, encompassing:

- measurement of outcomes such as pain and functionality from the patient's perspective
- measurement of patient experience
- measurement of care processes and structures
- measurement of adherence to best-practice care pathways
- establishment of interoperative electronic medical record systems to enable more detailed analysis of patient care
- establishment of a statewide unique patient identifier to better track patient journeys over time.

For the most part these forms of data collection do not exist in Victoria but have been under development for a number of years in international jurisdictions.

Of course, collecting more data are not enough. It has to be accessible to clinicians who can use it to improve their practice. At the end of this chapter, we discuss the need for establishing an interactive data portal to facilitate this.

Develop and implement measures to monitor outcomes from a patient perspective

Patients undergoing elective procedures normally expect their pain or other presenting condition to improve. One way of measuring the extent to which care delivers on this expectation is through patient-reported outcome measures, or PROMS, which are data reported by the patient, rather than clinicians. These are frequently validated measures of quality of life that are not easily observable, such as pain or the impact of a condition or treatment on daily activities, which provide useful insight into the quality if not the safety of care. [495] For example, a patient may give a rating of the impact of their pain or mobility before and after an operation.

There are many arguments for use of PROMs from a clinical perspective. These include patient experience correlating poorly with clinical ranges (for example, hypertension in one patient may have a different range of symptoms than in another patient). PROMs are more relevant to management of chronic conditions, where improving mobility for activities of daily living or pain management are somewhat subjective and depend on

493 James and Savitz (2011), p. 1,188
494 Ibid., p. 1,188
495 Black (2013) Van der Wees, *et al.* (2014) ; Fayers and Machin (2013)

a range of social factors as well as the patient's physical health.[496] Though there are methodological limitations in many studies, [497] there is some evidence that use of PROMs improves communication between doctors and patients, leading to better decision-making and higher patient satisfaction.[498]

Systematic collection of PROMs is now underway, or planned, in a number of countries both as part of clinical practice (including helping patients understand the likely outcome from a procedure) and as part of performance monitoring. In England, for example, data are published for named hospitals on PROMs for hip and knee replacement surgery, varicose vein surgery and groin hernia repair. The reported data show the extent to which the average change in a patient's reported health status from before surgery to after surgery is better or worse than the national average change.[499]

PROM collection is also underway in a number of Victorian health services and are being used to assess and improve the quality and efficiency of care (see Box 19). However, the absence of departmental support for and coordination of this local innovation means that hospitals are not building on each other's experiences (but instead duplicating them) and second that hospitals are not following a standard measurement approach (and so cannot be benchmarked against each other).

Box 19: Patient Reported Outcome Measures (PROMs)

In Victoria there is no systematic collection of PROMs across the state. However, there are a number of health services that collect PROMs as part of routine care. One of these is Alfred Health's Physiotherapy Arthroplasty Review clinic.

Since 2010 physiotherapists at the clinic have been assessing hip and knee replacement patients to measure their pain, function and quality of life before surgery,[500] and assess how it changes afterwards.[501]

This data has allowed them to measure the effectiveness of treatment and make changes to clinical practice accordingly. For example, clinicians were able to establish that good functional status at six weeks following total hip arthroplasty strongly predicted good outcomes six and 12 months down the line. Knowing this, they stopped asking these patients to come in for an appointment at the six-month mark. This improved patient convenience, reduced waste and allowed the clinic to reallocate the appointments to other patients.

496 Chen (2014)
497 Nelson, *et al.* (2015); Basch (2014)
498 Chen, *et al.* (2013) ; Valderas, *et al.* (2008)
499 Black (2013)
500 The measures collected include a disease-specific measure (Oxford hip and knee score) and quality of life measure (SF 12) as well as two pain scores – the numeric pain rating scale (NPRS) and the painDETECT questionnaire.
501 Two and six weeks, six months (now knees only), 12 months, two years and five years following surgery.

Recommendation 4.10:

The Victorian Health Performance Authority (VHPA) should establish a project to collect and report on patient-reported outcome measures (PROMs) using validated questionnaires. Initially this program might cover the same procedures for which data are collected in England. The VHPA should develop a business case to Better Care Victoria for initial funding of this work.

Over time, PROMs should cover an increasing proportion of Victorian hospital activity and cover both public and private hospital activity.

Measure patients' experiences of care

As we discuss in Chapter 5, monitoring patient experience data are strongly justified on both normative and empirical grounds. It is currently measured and monitored by the department through the Victorian Healthcare Experience Survey, which the VHPA should inherit upon establishment. The VHPA should use this data to analyse quality of care, and over time should build on it, including by linking it with clinical datasets. The VHPA should investigate improved methods of patient experience surveying, including by collecting information during a patient's admission (for example, via bedside interviews) rather than after it.[502]

Recommendation 4.11:

The Victorian Health Performance Authority, when established, should review the Healthcare Experience Survey to improve its use and potentially the efficiency of its collection.

Monitor process and structural measures

In some jurisdictions, clinical process and structural measures are used alongside outcome measures to evaluate performance and quality of care. Process measures evaluate how often a hospital adheres to evidence-based recommendations about best practice in treatment for a given condition or procedure (for example, administration of antibiotic prophylaxis prior to surgery) or to a 'care bundle' of multiple, reinforcing practices designed to transform care.[503] Structural measures evaluate the environment in which care is delivered (for example, presence of a computerised system to prevent medication errors when prescribing).[504] Both measures should only be used when they have a well-evidenced and causal relationship with quality and safety of care for patients.

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502 A recent study trialled three pilots designed to improve live patient feedback mechanisms in hospitals by encouraging patient identification and reporting of safety issues. It found that bedside interviews were most conducive to patients expressing concerns, compared with a safety 'hotline' and a bedside interview. More timely data collection may also be an important factor in improving the outcomes reported in patient experience surveys post-discharge, although this is not explicitly tested in the literature. O'Hara, *et al.* (2016)
503 Resar R*, et al.* (2012)
504 The Leapfrog Group (2015)

The advantage of process measures is that they provide a leading indicator of quality of care and so can draw attention to the potential for harm before it occurs. Further, they reflect aspects of care that hospital staff are able to directly influence and can have greater legitimacy as a quality measure with clinicians.[505] By contrast, outcome measures such as readmissions and mortality have much to do with patient risk and care after treatment, which can only be imperfectly adjusted for.

The disadvantage of process measures is that they are more difficult to evaluate, since compliance with them is generally only captured in medical records or registries[506] rather than routine data, and so can be expensive and time-consuming to review. Further, they may be more easily gamed.[507]

Clinical networks can help local improvement work by developing standard process measures. These measures should not be used for performance evaluation or reporting, which should focus on patients' outcomes and experience.

Recommendation 4.12:

Clinical networks should develop clinically relevant process indicators for use in local improvement work.

Monitor care paths

There is an increasing recognition that developing and implementing evidence-based care paths – which detail what should happen to patients as part of their treatment – helps to improve quality and safety of care. If the care of similar patients is standardised rather than idiosyncratic it assists in staff training and setting expectations for patients. For patient populations with different needs, the design of different care models is a critical part of future healthcare.[508] The key role of clinicians for patients following a care pathway is to identify necessary variation in care required to suit individual patient needs.

A standardisation exercise at the Mayo Clinic found that two-thirds of adult cardiac surgical patients could be assigned to care paths, including patients with multimorbidities. Implementation of the revised model of care (distinguishing patients who were treated as part of a standardised process from those with unique issues) resulted in reduced cost and better outcomes.[509]

505 A recent American survey of attitudes of hospital leaders towards (publicly reported) quality measures (encompassing mortality, readmission, process measures, patient experience, costs and volume) found that respondents were most likely to agree that public reporting stimulates quality improvement activities at their institution and accurately reflected quality when the question was about process measures, but were also most likely to agree that public reporting can be gamed (primarily via coding and documentation) and result in neglect of more important matters when the indicator in question was process measures. Lindenauer, *et al.* (2014), p. 1,908
506 Gallego, *et al.* (2015)
507 Lindenauer, *et al.* (2014), p. 1,908
508 Cook, *et al.* (2014)
509 Ibid.

Expedite the transition to electronic health records across Victorian hospitals

Electronic patient records (EPRs) are expected to transform the capacity of the system to study and improve safety and quality of care.[510] Research shows EPRs can improve information flows between and within hospitals, make it much easier to measure, manage and coordinate care, and reduce the risk of clinicians misreading forms and providing patients with inappropriate treatment as a result.[511] Sophisticated systems have further quality and efficiency benefits by automating ancillary services and nursing workflow, and offering computerised provider order entry[512] and clinical decision support.[513]

Some studies show the introduction of EPR systems has been associated with significant quality improvement,[514] including declines in length of stay, infection rates, mortality[515] and medication errors,[516] with improvement particularly concentrated in previously low-performing hospitals.[517] Other studies have found more mixed results, with the introduction of EPRs increasing costs of care or reducing some forms of harm while increasing others.[518]

As discussed, while the routine data provides a very useful starting point for asking questions about variation in quality of care and incidence of priority complications, it has important limitations that restrict its ability to help clinicians accurately track and understand the quality of their care. For example, diagnostic test results are not captured in routine data and patient comorbidities may be under-coded, leading to reduced ability to detect poor risk management or inadequate adjustment for risk (see Figure 16). This isn't necessarily a problem for performance benchmarking (provided all hospitals are under-coding risk to a similar extent), but it is a problem for a clinician trying to understand whether an individual case's outcome was driven by poor-quality care. Other limitations include the absence of process measures, which a clinician needs to observe in order to understand the relationship between care and outcomes.

510 Hillestad, *et al.* (2005)
511 Nguyen, *et al.* (2014)
512 A recent review found that Computerized provider order entry for medications is associated with a greater than 50% decline in preventable adverse drug events. Nuckols, *et al.* (2014)
513 Teufel, *et al.* (2012) A recent review found that across clinical settings, new generation clinical decision support systems integrated with electronic hospital records do not affect mortality but may moderately improve morbidity outcomes. Moja, *et al.* (2014)
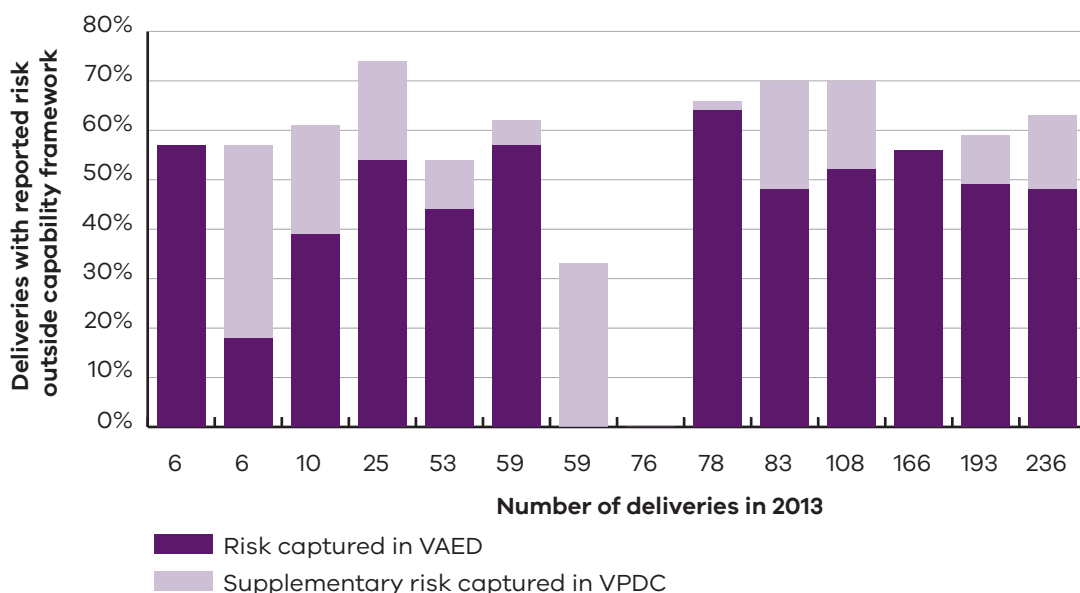514 Appari, *et al.* (2013)
515 Xue, *et al.* (2012)
516 Zlabek, *et al.* (2011)
517 Appari, *et al.* (2013)
518 Nguyen, *et al.* (2014) ; Teufel, *et al.* (2012) Choi, *et al.* (2013); Appari, *et al.* (2013)

Figure 16: Hospitals may under-code risk in the routine data

Source: analysis of the Victorian Admitted Episode Dataset, 2013, and Victorian Perinatal Data Collection, 2013. **Notes:** the hospitals in this chart are level two maternity services, which tend to be smaller hospitals. As such, they will likely be block-funded, with weaker incentives to code patient morbidities than larger hospitals, which generally receive more funding for higher risk patients, if that risk is recorded.

Implementing EPRs is difficult, with the full benefits only realised when the system is operational. For instance, ambitious projections of efficiency and quality gains were not realised in early use of EPRs in the United States.[519] This was attributed to sluggish adoption rates and implementation issues, with clinicians and managers struggling to transition to the systems and integrate them into hospital processes.[520] Once implemented, EPRs can facilitate improved quality of care through improved monitoring of care (for example, of invasive procedures such as catheter insertion) and criterion-based care decision making.

In response to these problems, the United States government devoted intense effort to expediting take-up. In 2009 it allocated almost $30 billion to increasing adoption, mostly through incentive payments to reward both adoption and meaningful use of these systems.[521] A rapid surge in uptake followed, with the proportion of hospitals with EPRs almost doubling.[522] This experience suggests that government can support hospitals to transition to EPRs through financial incentives and alignment of EPRs with other institutional and policy goals.[523]

519   Hillestad, *et al*. (2005) Kellermann and Jones (2013)
520   Kellermann and Jones (2013)
521   DesRoches, *et al*. Ibid. Since 2014, hospitals have faced financial penalties for inadequately using EPRs.
522   Ibid. pp. 1,478–1,479. Uptake was previously increasing by around three percentage points per year.
523   Ibid.

Victoria's experience with EPRs has been varied

The department has not adequately supported the transition to electronic patient records. After the HealthSMART program finished in mid 2012, which included the implementation of an EPR in four health services, there has been no commensurate investment in the statewide transition to electronic patient record systems. A subsequent ministerial review[524] and 2013 Auditor-General audit were deeply critical of the project. The latter found that:

> … poor planning and an inadequate understanding of the complex requirements to design and implement clinical ICT systems […] meant that the Department of Health exhausted its allocated funds, and ultimately delivered the HealthSMART clinical ICT system to only four [of 19] health services.[525]

Perhaps unsurprisingly, the concurrent ministerial review recommended a less ambitious IT strategy for Victoria, and greater devolution of decision making to health service provider boards.[526] The department was to focus on setting directions, support and monitoring, along with active scrutiny of major capital projects where required.[527] Supporting this, the Auditor-General recommended that the department 'develop a comprehensive strategic plan for the ongoing development of electronic medical record or clinical ICT systems across the Victorian public health sector.'[528]

As in many other aspects of the current system, each health service has been left to develop its business case to implement its own system, resulting in significant variation. One of Victoria's hospitals have just implemented a large scale EPR project, 50 per cent funded by Government and 50 per cent funded by health service and donations. Others have been able to obtain some funding for EPR programs as part of a Hospital building program, and others have been able to obtain some funding through departmental funds. There is, however, concern that many health services currently have no plans or funding to implement a fully electronic health records, the first stage of an EPR, which means they will remain paper-based and for many years and be unable to share clinical information with other health services.

It is unclear how successful the pendulum shift from complete centralisation to complete devolution has been. Some hospitals have received individual funding,[529] while others have been left on their own and, as discussed, progress at this task has been extraordinarily variable.

Victoria also has no statewide unique patient identifier (UPI), although some hospitals have developed their own. In contrast, the Northern Territory, Western Australia and New South Wales all have longstanding UPIs.[530] A statewide identifier is necessary to calculate readmission rates accurately (readmission to any hospital) and to link patient records to provide reliable information on interhospital transfers. A reliable measure

524 Perrignon, *et al.* (2013), p. vii
525 Victorian Auditor-General's Office (2013), p. vii
526 Perrignon, *et al.* (2013), p. 3
527 Ibid., p. 3
528 Victorian Auditor-General's Office (2013), p. XV
529 For example, the Royal Children's Hospital Melbourne Cowan (2014).
530 National Health Information Management Group (2002)

of readmissions will be required before 1 July 2017 when financial incentives will be introduced related to readmission rates.[531]

EPRs are one of the key building blocks for a system in which patient safety interventions and their effects can be continuously monitored and improved.[532] To get there will require an expensive and difficult transition process.[533] There is a clear role here for the department to support hospitals in the transition by facilitating collaboration and mutual learning. It will particularly need to support small and rural hospitals in the transition, as these hospitals' uptake of EPRs have proved most difficult in both Victoria[534] and in other jurisdictions.[535]

Recommendation 4.13:

4.13.1. The department should support Victorian public hospitals to expedite their transition from paper-based to electronic patient record (EPR) systems developed to support clinical decision making and data analytic capability, which have proven benefits for safety and quality of care.

4.13.2. The department should adopt a goal of ensuring that, by 2021, all major hospitals have a fully electronic health record that enables interchange of information with other hospitals.

4.13.3. The department should implement a statewide unique patient identifier before 1 July 2017.

Ensuring that clinical data are interactive

The data that the proposed VHPA collects should be easy for clinicians to access and explore. This requires interactive online portals that allow users to easily compare and benchmark their hospital's performance, and then drill down into their own records, examine drivers of clinical variation and map patient journeys across facilities and over time.

Portals are necessary because clinicians are time-poor. They are doing the best they can to improve quality with the information available to them, but they are currently asked to respond to a range of case-based incident reports and 'indicators' of the quality of their care, usually with no ability to see patterns of harm across the range of their own patients in a timely way.

The benefit of personalised reports is that clinicians otherwise receive little information on the patterns and rates of unintentional harm from *their own* treatments. This creates a risk that they won't believe the commonplace patient harm found in major studies applies to their own departments'.[536] Lack of comparative outcome data can lead to clinical complacency or 'illusory superiority' – the inclination to assume one's own performance is 'better than average'.[537]

531   April 1 COAG decision
532   Gallego, *et al.* (2015)
533   Takian, *et al.* (2012)
534   Perrignon, *et al.* (2013), p. 26
535   DesRoches, *et al.* (2012)
536   Hayward and Hofer (2001)
537   Consistent with this, a 2013 survey of all Victorian health service boards (to which 96% (82/85) of boards had at least one member respond) found that almost every respondent believed the overall quality of care their service delivered was as good as, or better than, the typical Victorian health service. Bismark, *et al.* (2013)

Finally, portals create opportunities to weave local reports into local quality improvement processes. If they are accessible and clinicians are adequately trained to use them, they encourage engagement, allow clinicians to prioritise issues they consider to be remediable local problems, and support them with local data to monitor and evaluate the success of interventions.[538]

Portals currently already exist in a number of jurisdictions including New South Wales (see Box 20). The department is paying for 14 health services to use one such portal (Dr Foster), and 18 (with some overlap) are independently paying for another (Health Roundtable)[539] themselves.

The cost of Dr Foster is significant, at over $1 million per year,[540] and the contract will be up for review in November 2016. Prior to that, the department (or the VHPA) should investigate the business case for developing a portal internally, and compare it with the costs and quality of commercially available products such as Dr Foster and Health Roundtable. Internal development is likely to be significantly cheaper: New South Wales developed their own model using an existing online platform with two FTE staff in the space of six months. Internal development further offers the opportunity for the department to continue tweaking the portal's content in response to feedback from clinical users.

Box 20: Interactive data in New South Wales

NSW Health has developed an activity-based management (ABM) portal that enables administrators and clinicians in all local health districts to access benchmarked hospital data. The ABM portal was built with an existing online platform and provides easy access to timely benchmarking and variation analysis. The portal primarily benchmarks cost, length of stay and readmission data; however, further work is currently underway to include other quality and safety metrics.

More specifically the portal is described as being 'a rich data source that can support local decision-making about clinical care evaluations, reduce unwarranted clinical variations, improve care models, facilitate service planning, and effectively manage services within budget.'[541]

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538 Vincent (2011)
539 Health Roundtable is a non-profit membership organisation of health services across Australia and New Zealand that collects, analyses and publishes de-identified information comparing organisations. Membership costs range from $12,000 to $36,000 per year, with monthly data for 30 within-hospital users costing $3,000 per month, and quarterly data for 10 within-hospital users costing $1,000 per month. The Health Roundtable (2016)
540 A further $200,000 (approx.) a year is spent on an international benchmarking tool for four health services. Victorian Government Tenders System (2013) Victorian Government Tenders System (2014)
541 Damato (2015)

Whatever its choice, the VHPA must ensure that the selected portal is available to all health services, covers all the major cost and quality dimensions of care,[542] produces meaningful and clinically credible information that can be understood by users without significant prior statistical training, has fully transparent methodologies, and allows users to examine outcomes at their clinical unit level. The portal will encourage re-engagement by clinicians, allow them to prioritise issues they consider to be remediable local problems, and support them with timely local data to monitor and evaluate the success of interventions.[543]

In addition to software support, the data portal will need implementation support to facilitate effective use. 'Data advisors' (specifically trained nurses, doctors or health information managers) would help familiarise clinical groups with the portal's capabilities. This includes understanding the strengths and limitations of the source data, a 'just culture' approach to quality improvement, the 'data investigation pyramid' – which looks at multiple causes of variation to identify sources of clinical variability outside the hospital or unit's control[544] – and formulation of clinically specific report formats for local clinical audit and morbidity review processes.

Initially the data portal will present information on key reporting metrics and overall patterns of hospital-acquired complications using the Classification of Hospital Acquired Diagnoses, but the VHPA should work with clinical networks to develop reporting templates specific to each specialty (for example, facilitating tracking of the most common complications in a specific sub-specialty). The VHPA should also evaluate different reporting templates to identify which are most useful to support local improvement work.

Recommendation 4.14:

4.14.1. The Victorian Health Performance Authority should:

- ensure all public hospitals have access to local safety and quality data through an interactive portal
- evaluate the costs and benefits of commercially procuring a portal versus developing one internally.

4.14.2. The chosen portal must be methodologically transparent, clinically credible and comprehensive, easily used, and allow clinicians to drill down into data, working from hospital-level outcomes to disaggregated information at the unit, clinician and patient levels.

4.14.3. There must be flexibility to adapt the portal over time in response to user feedback.

4.14.4. The Victorian Health Performance Authority, working with the clinical networks, should ensure that clinical and management staff in hospitals are appropriately trained and supported to use the portal.

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542 Including complications, readmissions and mortality.
543 Bohmer (2013)
544 Mohammed, *et al.* (2004)
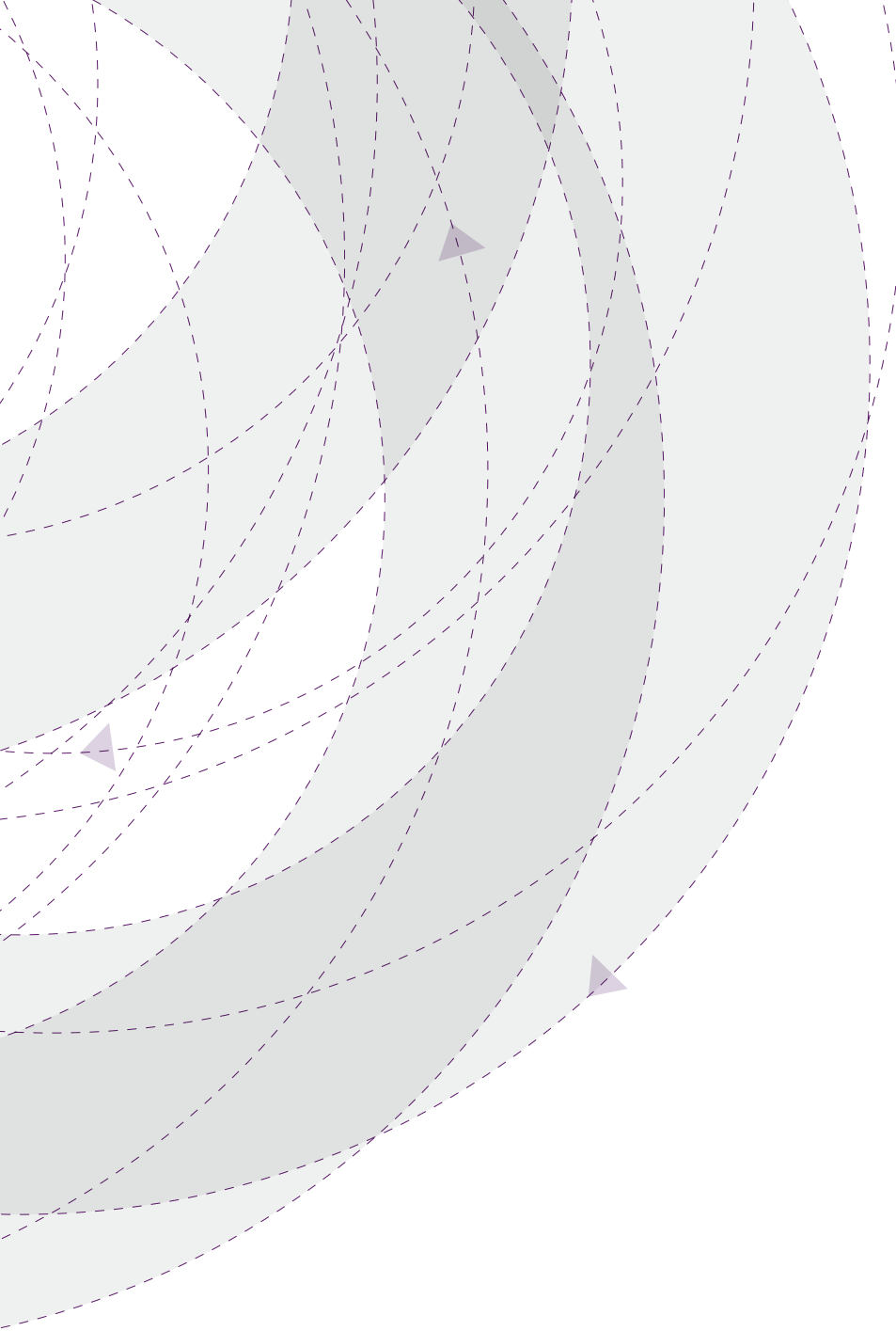
Chapter 5: The Victorian hospital system must be transparent and accountable to patients

The events at Djerriwarrh Health Services have shaken the community's trust in the Victorian hospital system. In order to rebuild this trust, the department must significantly strengthen the system's accountability to patients.

This should begin with improved transparency about hospital safety and quality. Members of the community need to be able to see when their local hospital is performing well, when it is deteriorating and how its outcomes compare with similar hospitals.

It is also essential that increased transparency does not adversely affect the willingness of healthcare workers to openly admit and discuss errors in care. This will require much closer monitoring of patient safety cultures through staff surveys, and greater support to hospitals to strengthen their safety cultures and reduce bullying. Consideration should be given to strengthening 'just cultures' through the establishment of a no-fault medical indemnity insurance scheme.

Ultimately, the department must help the hospital system pivot towards a much deeper engagement with patients. It should hold hospitals more effectively to account for patient experience, meeting the needs of patients from diverse backgrounds, and appropriately soliciting and responding to consumer complaints. Over the long term, it should work closely with clinicians and patients to transform the Victorian hospital system into one that is truly patient-centred.

Meaningful transparency to the community

The department should have a statutory obligation to assess how public hospitals help patients make informed decisions about healthcare.[545] For patients, making an informed choice requires first knowing whether they stand a good chance of feeling better after treatment than before it, whether there is a risk of things going wrong (and how badly wrong), and the potential benefits and risks of alternative treatment options, including treatment at different health services.

As this section shows, the community currently lacks much of this information. While patients may be fully informed on the risks of a given treatment, they almost never know how the risks of a bad outcome would differ if they sought the same treatment from a different clinician or at a different hospital. Thus while the public is able to access a handful of isolated safety indicators, it has little sense of the *overall* safety picture in hospitals, or of the information that is most relevant to them.[546] In particular, no member of the public is likely to be able to answer one of the most important questions: *Which is the best hospital for a patient like me?*

The public has too little access to information on hospital safety

Even highly motivated, resourceful and educated consumers find it all but impossible to determine if Hospital A is a safer place to have their appendix removed than Hospital B. And if they are concerned about important patient experience indicators such as patient centredness, shared decision-making or access to personal health information they would struggle even more.

Health Issues Centre

545 See s 18(a)(iv), *Health Services Act 1988*.
546 See Britnell and Berg (2013) for a discussion of the most relevant aspects of information for patients and policymakers.

The Victorian Health Services Performance website[547] currently publishes only four indicators of hospital safety.[548] Smaller hospitals' safety and quality data are not made publicly available, and neither are their patient experience results from the Victorian Healthcare Experience Survey.[549]

The data that are available are presented in such a way as may give the public a false sense of reassurance about the performance of the health system. For example, the system is currently performing 'well' against a statewide target of 2.5 central-line infections per 1,000 device days, trending down from around 1.0 to 0.75. However, international best practice is not 2.5. It is zero.[550]

The public are able to access annual performance reports about specialty areas, but in most cases these are published far too late to help consumers make informed choices about where to seek care (see Table 11).

Patients are also to be able to see annual reports from hospitals (and annual quality reports for larger hospitals).[551] Some hospitals make exemplary efforts in these reports to be transparent about deficiencies in care and their strategies for rectifying them.[552] However, many hospitals, unfortunately, do not provide this information. Reports are often uninformative, and were recently characterised by an independent review as 'slim, often quite glossy documents that (with a few exceptions) are public relations puffs for how well a local service is doing rather than anything that resembles a true "account" of the local health service.'[553]

Currently, extensive information on the way that the average patient experience varies across hospitals is available online in an interactive portal. A person can compare, for example, rates of agreement with the question 'Do you think the hospital staff did everything they could to help manage your pain?' across all Victorian health services. However, this information is not available to the public. Only departmental and health service staff are able to log in to the portal.

A recent report by The George Institute for Global Health and the Consumers Health Forum of Australia recommends making patient experience data public, not only to enhance the capacity for patients to make informed choices about healthcare provider but also to encourage healthcare organisations to improve their own practices.[554] The importance of public data to inform patient choice is echoed in a submission to this review by the Health Issues Centre, which recommended that the department commit to collecting and publishing safety and quality information.

547 The My Hospitals website, run by the National Health Performance Authority, provides similar information (reporting rates of staph infections and hand hygiene compliance) and is less conservative in excluding smaller hospitals from reports.

548 These are: hand hygiene compliance, surgical site infection surveillance status, rates of *Staphylococcus aureus* bacteraemias (SAB) infections, and rates of intensive care unit central-line-associated bloodstream infections.

549 De-identified sentinel event data are also publicly reported by the department in the *Sentinel event annual report*. The latest publicly available report is 2012–13.

550 A target of zero appropriately reflects the lethality and avoidability of these infections. It was achieved in seven of the reporting hospitals for each of the reporting periods. Gray, *et al.* (2015)

551 These include detail on consumer experience and staff perceptions, along with qualitative information on how results of these are being used to improve care, performance against indicators in the *Statement of priorities*, and hospital accreditation status.

552 Western Health (2016) For example, Western Health publishes extensive information on its improvement work and outcomes data, even when the data may not be flattering.

553 Ham and Timmins (2015), p. 44

554 The George Institute for Global Health and Consumers Health Forum of Australia (2016)

Table 11: There are significant lags in publication of many specialty performance reports

Information	Last report published...	Using data from...
Maternity services performance indicators	April 2014	2010–11 and 2011–12
Sentinel event annual report	April 2014	2011–12 and 2012–13
Healthcare-associated infection in Victoria – surveillance report (VICNISS)	2014	2010–11 and 2011–12
CCOPMM – Victoria's mothers and babies	July 2014	2010 and 2011
Victorian Surgical Council triennial report	December 2014	2011 – 2013
Victorian Audit of Surgical Mortality – annual report	2015	2014
Chief Psychiatrist's annual report	January 2016	2014–15

Recommendation 5.1:

That the guidelines for the public hospital annual board quality reports be changed so they are simply required to:

5.1.1.   disclose the number of sentinel events and adverse events with an incident severity rating of one or two[555] that have occurred in the previous year

5.1.2.   describe the actions taken by the health service to prevent the recurrence of a similar event

5.1.3.   include the results of the indicators in the most recent board quality report provided by VHPA/the department

5.1.4.   include commentary on those results, including where steps being taken to improve the care being provided by the health service

5.1.5.   include information on the three patient experience goals identified by the hospital as its current priorities and the steps being taken to address those issues (see Recommendation 5.7).

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555 Incidents with a severity rating of one involve severe harm or death; a rating of two involves moderate harm.

Transparency should go beyond new legislative requirements

Legislation currently before parliament will require the department to publish each hospital's performance against key performance indicators (KPIs) in their *Statement of priorities* every quarter. As discussed earlier in this chapter, we believe the department or VHPA should go beyond this and publish all safety and quality performance information that is clinically credible, has been carefully checked, and does not pose a risk to patient privacy.

We have recommended this for several reasons. First, the goal of reporting should be to provide meaningful information on hospital performance. As discussed in Chapters 2 and 3 of this report, the indicators currently in the *Statement of priorities* do not provide this. Second, publishing a large number of indicators makes it much harder for health services to game the indicators or narrowly focus on the indicators being published (to the detriment of other aspects of quality). Finally, the department should encourage the development of a culture of openness and candour around healthcare, and that means moving to a system in which the default is to share information.

> Victoria – and indeed Australia – is behind a number of other jurisdictions which include Sweden, England and parts of the United States in using timely, public, easily accessible and easily interpretable data on performance, including crucially clinical and quality data, as a means to harness the natural competitiveness of both clinicians and managers to improve services. Publishing such data provides the public with a clearer picture of the quality of the local services they receive. At least as importantly, it can also be a way of spotting trouble early.
>
> **Chris Ham and Nicholas Timmins, The King's Fund**[556]

Such a shift would bring the Victorian system much closer to international practice. In other countries patients enjoy much greater access to information on hospital safety and quality, a result of consumer demand for greater transparency in care, and the use of public reporting as a strategy for stimulating improvement.[557]

In New Zealand, a running sentinel events tally is published for each district health board,[558] which in turn publishes its own report detailing the kinds of sentinel events that have occurred, its findings from reviewing the incidents, and the progress made on recommendations arising from the review.[559] In England, the NHS also publishes each hospital's tally of 'never events', [560] and many hospitals voluntarily publish their own safety experience and improvement data in regular 'Open and Honest' reports

556 Ham and Timmins (2015)
557 The theory is that public reporting will improve care if patients use information on hospital performance to make informed choices about where to seek the best treatment, and if the information leads to economic or reputational pressure on hospitals to lift their own performance.
558 Health Quality & Safety Commission of New Zealand (2015)
559 For example, see Northland District Health Board (2015).
560 The NHS defines never events as "serious incidents that are wholly preventable as guidance or safety recommendations that provide strong systemic protective barriers are available at a national level and should have been implemented by all healthcare providers. Each Never Event type has the potential to cause serious patient harm or death. However, serious harm or death is not required to have happened as a result of a specific incident occurrence for that incident to be categorised as a Never Event. Never Events include incidents such as: wrong site surgery, retained instrument post operation, and wrong route administration of chemotherapy." The tally is kept current and updated monthly. NHS England (2016a)

developed by the NHS, which show the hospital's current performance on NHS 'safety thermometers' and detail the hospital's progress on strengthening safety and quality processes.[561] Finally, in the United States, large volumes of hospital safety data are available to the public, allowing independent organisations and media to evaluate hospital data and publish quality and safety rankings.[562]

> Transparency of data collection, sharing data for improvement, rewarding success [and] supporting areas in need of improvement are all key to shifting towards an improvement culture.
>
> **Victorian Paediatric Clinical Network**

There is something to learn from each of these approaches. Publishing sentinel event tallies ensures hospitals are held to account for catastrophic and highly avoidable events. Publishing broader performance data enables the public to evaluate and compare hospital performance. Publishing safety thermometers and improvement plans allows hospitals to engage candidly in a conversation with their patients about their journey to safer care.

Some Victorian hospitals are already publishing key quality and safety indicators on their websites.[563]

Recommendation 5.2:

That:

5.2.1.   the Victorian Health Performance Authority publishes all safety and quality performance information that is clinically credible, has been carefully checked, and does not pose a risk to patient privacy. The published indicators should include:

– all the indicators included in the proposed board safety and quality report

– an update-to-date tally of each hospital's sentinel events, noting how long it has been since the last event occurred and including a link to information about actions the hospital is taking in response to the sentinel events

– results from the Victorian Healthcare Experience Survey.

5.2.2.   the department adapts the National Health Services' 'Open and Honest' report template for Victorian hospitals.

5.2.3. the Minister extends these requirements to private hospitals, through legislation if necessary.

561   Reports tend to be uploaded to websites monthly (at fortnightly lags). Safety thermometers are results from a point of care survey that is carried out on 100 per cent of relevant patients on one day of the month and measures the proportion of relevant patients free from certain forms of harm. NHS England (2016b)
562   Austin, *et al.* (2015) Note that each organisation generates a different ranking of hospitals, often with little overlap between the top performers in one list and the top performers in another. This is a result of the different methodologies used, which were devised to reflect different prioritisations of performance. For example, the Leapfrog Group defines safety as 'freedom from harm', while another defines it as 'a hospital's commitment to the safety of their patients'. Another two organisations emphasise quality (defined in terms of patient outcomes such as complication, readmission and mortality rates), which again leads to different rankings.
563   Alfred Health (2016)

Hospitals must be transparent with patients when harm occurs

A commitment to transparency and candour in care must be system-wide. As the department strengthens its commitment to publishing performance data through the VHPA, hospitals must be strengthening their practices around open disclosure of harm to patients.

Open disclosure is the practice of openly discussing incidents that have resulted in harm to a patient while receiving care with the patient, their family, carers and other support people.[564] Open disclosure is a core requirement under Standard 1 (Governance for Safety and Quality in Healthcare Organisations) of the National Safety and Quality Health Service (NSQHS) Standards. This reflects the fact that open disclosure is a vital practice in health systems, demonstrating the system's commitment to continuous improvement (which first requires recognition, open discussion and ownership of problems when they occur) and accountable, patient-centred care. As one author put it, the 'the open, honest, and timely disclosure of medical error to patients ... is ethically, morally, and professionally expected of clinicians ... [it] should be a "no brainer"'.[565]

Unfortunately, hospital cultures do not always support admission of error, let alone disclosure of it to patients.[566] Further, there appears to be weak familiarity with obligations for open disclosure at the board level in Victoria, as highlighted in 2014 research that found that 46 per cent of surveyed board members were 'not familiar' with the national Open Disclosure Standard.[567] Appropriate open disclosure practices clearly did not occur at Djerriwarrh. Submissions to this review highlighted that while open disclosure processes have strengthened in Victoria in recent years, there is still significant room for improvement.[568]

The United Kingdom has recently introduced a statutory 'Duty of Candour' requiring all organisations to ensure that when things goes wrong, patients and their relatives are promptly told about it.[569] The duty is intended to foster a culture in which mistakes are acknowledged and learned from, and to counter the legalistic and defensive culture that surrounded failures in care at Mid Staffordshire.[570]

We recommend that the Minister adopt the Duty of Candour for the Victorian hospital system. It should be applied to hospital boards and executives who are responsible, as organisation leaders, to create a culture of candour in which staff feel comfortable and indeed encouraged to disclose errors in care to patients. Disclosure should occur regardless of whether a complaint has been made or a patient has made enquiries. It should be undertaken by an appropriately trained professional, and in a manner consistent with the national Open Disclosure Framework.[571]

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564 Australian Commission on Safety and Quality in Health Care (2016d)
565 Lamb (2004)
566 Finlay, *et al.* (2013) Lamb (2004)
567 The study was based on a survey of 322 board members from 85 public health services, and semi-structured interviews with 35 board members and senior executives from 13 public health services in Victoria. Bismark, *et al.* (2014), p. 146
568 We have protected the anonymity of these submissions at the authors' request.
569 Department of Health & Human Services (2015)
570 Ibid.
571 Australian Commission on Safety and Quality in Health Care (2013)

Recommendation 5.3:

That a statutory Duty of Candour be introduced that requires all hospitals to ensure that any person harmed while receiving care is informed of this fact and apologised to by an appropriately trained professional in a manner consistent with the national Open Disclosure Framework.

The department and health services must foster a just culture

Creating a culture of blame and retribution will lead to problems being driven underground and poor quality being uncorrected because local managers or health professionals will be afraid of admitting to errors and failure. No service can be error free.[572]

Sir Liam Donaldson, former NHS Chief Medical Officer

Substantial cultural change needs to occur in the healthcare sector – by management, clinicians and bureaucrats. The much espoused 'no blame' or 'just and trusting' culture in Victoria is not always the culture experienced by healthcare clinicians… Open and frank multidisciplinary investigations of harm to patients with a view to improvement of patient safety need to replace adversarial discussions.

Victorian Paediatric Clinical Network

There is significant appetite in the hospital sector for greater transparency, and a strong belief that members of the public are entitled to it. Nevertheless, the transition is likely to be a difficult one. Increased transparency will see some hospitals celebrated for outstanding performance. Others may be subject to unflattering stories in the media and face increased pressure from stakeholders to account for their performance.

In some cases, greater transparency could potentially come at a cost to care. Pressure to lift performance may undermine hospital 'safety cultures', with staff feeling under pressure to conceal problems rather than bring them to light. International experience shows that increased public reporting can lead to hospitals avoiding patients who are high-risk, difficult to manage or at high likelihood of readmission, while also reducing screening that can identify hospital-acquired diagnoses in patients before they are discharged, and shifting the focus of quality and safety improvement to documentation.[573]

The department must counter this risk head on. The best way to do this is to support hospitals to develop just cultures. Hospitals with 'just cultures' (as opposed to cultures of blame) balance appropriate accountability for blameworthy events with an understanding that, in many cases, human errors are the consequence of system

572 Donaldson (1999)
573 Goitein (2014)

failures.[574] These hospitals' responses to incidents are structured by a belief that blaming individuals is counterproductive and distracts from an opportunity to learn from mistakes.[575]

As Wachter and Pronovost note:

> Most errors are committed by good, hardworking people trying to do the right thing. Therefore, the traditional focus on identifying who is at fault is a distraction. It is far more productive to identify error-prone situations and settings and to implement systems that prevent caregivers from committing errors, catch errors before they cause harm, or mitigate harm from errors that do reach patients.[576]

Openness to discussing and learning from error underpins a hospital's continuous improvement. Truly excellent hospitals have robust systems and cultures to support disclosure of failure and learning from it. They employ this approach consistently, regardless of the prestige and status of the individuals involved.

In order to ensure that increased accountability for safety and quality performance does not undermine just cultures, three steps are needed to rebalance organisational and clinical incentives back in favour of openness. First, the department needs to strengthen and invest in measurement of safety cultures. Second, it needs to help hospitals to address endemic levels of bullying. Third, the Victorian Government should consider moving towards a no-fault insurance scheme for medical injury.

In addition to these steps, the department should ensure that its own approach to hospital performance reflects a just culture. As discussed throughout this report, part of this is striking an appropriate balance between accountability and support. While holding hospitals tightly to account for outcomes, the department should encourage hospitals to see it as a partner in helping them to deliver better care, and to ask for help when they are struggling to address problems on their own.

Hospital boards and executives must prioritise safety cultures

> Within each health system incident reporting often misses important events. I think an element of this is that there is no anonymous way of reporting errors and therefore for example if the error occurred within the medical team (and would not be appreciated outside the team) there may be reluctance for one team member to 'dob' in the error for fear of upsetting superiors etc.

Sarah Whiting, General and Infectious Diseases Physician, Alfred Health

Culture is important in any organisation. For better or worse, it determines the common and accepted ways of doing things among staff, and shapes the way they individually and collectively think about the organisation and their work.[577]

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574 Boysen (2013) Some health organisations use a 'just culture algorithm' to distinguish between harm caused by human error (an inadvertent act, such as a 'slip' or 'mistake'), at-risk behaviour (taking shortcuts that the caregiver does not perceive as risky), and reckless behaviour ('acting in conscious disregard of substantial and unjustifiable risk'). Only the latter category is considered blameworthy. Wachter (2013)

575 Horstman and Naik (2015), p. 1

576 Wachter and Pronovost (2009), p. 1,401

577 Singer, *et al.* (2007) ; Mardon, *et al.* (2010)

Culture is particularly important in hospitals. As discussed, cultures of blame lead staff to conceal poor outcomes and so allow system weaknesses to incubate and fester.[578] Culture can be the difference between a staff member concealing error in fear of punitive consequences, ignoring it in the knowledge that reporting will achieve nothing, or bringing it to the attention of managers without hesitation.

Hospital cultures also make a difference to how members of staff approach their jobs. In hospitals with a positive 'safety culture', there is a powerful organisational commitment and investment in safety. The safety culture manifests in 'the intangible sharing of the safety values' among members of organisations, and 'the tangible results of this shared value' through behaviour and structures.[579] Staff interactions are characterised by mutual trust, shared perceptions of the importance of safety, and confidence in the efficacy of preventive measures.[580] Approaches to care go beyond mere compliance with protocols, with staff vigilant about emergent risks to safety and invested in continuous improvement of care.[581]

Culture can also be the difference between a successful improvement project and a failed one. For example, a recent study found that superficial implementation of surgical checklists in compliance with a new policy requiring them did not lead to significant reductions in operative mortality or complications.[582] By contrast, a surgical safety intervention that focused on improving teamwork, communication and culture while including checklists (rather than the inverse) lead to a 50 per cent reduction in mortality.[583]

Recently, a panel of leading safety experts wrote a milestone report recommending ways to accelerate patient safety improvement 15 years after *To Err is Human*, the landmark United States safety study, was published.[584] The panel considered the most important recommendation of their report to be that hospital leaders (namely, boards and executives) establish a safety culture 'as the foundation to achieving total systems safety'.[585]

The department must invest in measurement of safety cultures

Once a year, the Victorian Public Sector Commission (VPSC) conducts its 'People Matter Survey' on hospital staff. This survey gauges staff opinion on a range of organisational issues, including management, retention and bullying, and has a number of questions specific to safety cultures.

Unfortunately, staff participation in the survey is often low. The VPSC strongly recommends a census rather than a sample approach to the survey,[586] which allows all employees to share their views but also carries the risk that the views reported are non-representative. In 2013 the response rate ranged from 39 per cent in very large organisations (of more than 2,500 employees) to 20 per cent in very small organisations

578 For example, the safety scandal at King Edward Memorial hospital in the late 1990s was underpinned by 'a culture of blame, unsupportive of open disclosure of errors and adverse events' Australian Council for Safety and Quality in Healthcare (2002), p. 1
579 Groves (2014)
580 Health and Safety Commission (1993)
581 Ibid.
582 Urbach, *et al.* (2014)
583 Neily, *et al.* (2010)
584 National Patient Safety Foundation (2015)
585 Ibid., p. 11
586 Victorian Public Service Commission (2014), p. 11

(with fewer than 100 employees).[587] Such low and non-random participation can be difficult to interpret and easy for managers to ignore.[588] A leading safety expert in the United States has argued that much higher response rates are essential for interpreting data over time, and that when response rates fall below 60 per cent the data tend to represent opinions rather than culture.[589]

The survey's limitations do not invalidate its usefulness but underscore the need to invest in developing it. Over time, the department and the VPSC should invest in more refined measurement of patient safety culture, following the lessons of international research in this area.[590] Immediate priority should be given to collecting the respondent's clinical unit wherever possible, given intrahospital variation in safety cultures can be very large,[591] and given the unit is of course where the improvement work should take place.[592]

The VPSC should immediately start providing the department with backdated and disaggregated patient safety information, which would be more useful than the current index formed from responses to eight patient safety questions.[593] Answers to these questions should inform the department's cultural risk assessment of a service, as discussed in Chapter 3.

Where the VPSC survey reveals concerning information about safety cultures, the department should treat this as a serious performance concern and manage it accordingly. This would include low rates of agreement with any of the following statements:

- Patient care errors are handled appropriately in my work area.
- I am encouraged by my colleagues to report any patient safety concerns I may have.
- My suggestions about patient safety would be acted upon if I expressed them to my manager.

Over time, the department should investigate options for strengthening measurement of culture. For example, the department could consider using the Medical Engagement Scale (MES), a validated scale that has been used in the NHS and other Australian states to analyse doctors' engagement. The MES uses a 30-item survey developed from a very large sample of more than 20,000 NHS staff, with subscales for 'Working in an Open Culture', 'Having Purpose and Direction' and 'Feeling Valued and Empowered' that can be used to diagnose specific issues with hospital culture.[594]

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587 Ibid., p. 11
588 Pronovost and Sexton (2005), p. 232
589 Ibid., p. 232
590 Jones, et al. (2008) Pronovost and Sexton (2005) Sammer, et al. (2010)
591 Pronovost and Sexton (2005), p. 232
592 Ibid., p. 232 Smits, et al. (2009)
593 This index assesses agreement with the following questions: Patient care errors are handled appropriately in my work area; This health service does a good job of training new and existing staff; I am encouraged by my colleagues to report any patient safety concerns I may have; The culture in my work area makes it easy to learn from the errors of others; Trainees in my discipline are adequately supervised; My suggestions about patient safety would be acted upon if I expressed them to my manager; Management is driving us to be a safety-centred organisation; I would recommend a friend or relative to be treated as a patient here.
594 Clark (2010) Spurgeon, et al. (2011) Spurgeon, et al. (2015)

The data from participating organisations are combined to create a dataset for benchmarking and making comparisons. In the NHS, MES results were correlated with a range of performance measures from the Care Quality Commission, showing strong relationships between engagement as measured by the MES and clinical performance, financial management, safety indicators, patient experience and overall quality standards.[595] In Australia, the MES has been used in 12 sites and more than 2,100 doctors have completed the survey – meaning there is already Australian data that could be used as a comparison.[596]

Recommendation 5.4:

That:

5.4.1.   the department works with the Victorian Public Sector Commission to improve measurement of safety culture, including by refining the survey methodology, collecting unit identifiers where appropriate and significantly increasing participation rates in the People Matter Survey

5.4.2.   the department will treat low rates of agreement with the People Matter Survey's hospital safety culture questions as a serious performance concern and address it with the hospital accordingly.

The department must support hospitals to address problems with bullying

The health system has the highest rate of bullying in all Victorian public sector agencies. Since 2005, 41–45 per cent of surveyed health sector employees have reported witnessing bullying in their workplace, compared with 26–35 per cent of respondents from non-health sector organisations.[597] Similarly, 24–28 per cent of surveyed health sector employees reported experiencing bullying, compared with 15–20 per cent of respondents from non-health sector organisations.[598] The problem is apparent throughout the medical hierarchy, and particularly prominent in nursing[599] and surgery.[600]

Bullying is anathema to a culture focused on continuous learning and improvement. People cannot point out opportunities for improvement in a hostile work environment. People cannot admit and address error in a culture where shaming is commonplace. People cannot raise concerns with management or make internal complaints when there is fear of social or professional retribution.

595   Spurgeon, *et al.* (2015)
596   For instance in New South Wales, see Long (2014).
597   Victorian Public Service Commission (2014), p. 6
598   Ibid., p. 7
599   'In 2014, Monash University's report *Leading Indicators of Occupational Health and Safety: A report on a survey of the Australian Nursing and Midwifery Federation* found that 40 per cent of nursing professionals who responded to a survey reported experiencing bullying or harassment within the previous 12 months.' Victorian Auditor-General's Office (2016a), p. ix
600   'In 2015, a prevalence survey conducted by the Royal Australasian College of Surgeons' Expert Advisory Group found that 39 per cent of surgeons who responded to the survey reported experiencing bullying and 19 per cent reported having experienced harassment.' ibid., p. ix

The Minister has recently announced timely action to address bullying in hospitals, stating a commitment to 'ensure the insidious, unacceptable and unlawful nature of workplace bullying will become a thing of the past in our hospitals'.[601] This plan includes education and support for health service boards, and an independent team that will intervene in services with bullying problems. This action is an important step forward. There is a significant recognition of the need for change in clinical professions, explored recently in a special issue of the *Medical Journal of Australia*.[602]

More needs to be done in the department itself. A 2016 Auditor-General report found that too little is being done by the department to support boards and health services to effectively address the problem. As the Auditor-General reported:

> Neither [the department] nor WorkSafe have developed guidance or provided support to health service leadership – board and executive level – to assist them in managing the risk of bullying and harassment, despite implementing initiatives focused on improving boards' governance capability.[603]

We recommend that all Victorian hospitals and the department implement, as a matter of priority, the Auditor-General's recommendations for addressing bullying. In particular, hospitals must ensure that information on the prevalence, causes and impact of internal bullying is being reported to the board and actively monitored by it.[604] The board's attention to this issue should form a part of board performance evaluation process described in Chapter 2 of this report.

The department must drive improvement in this area. It should support health services to find efficient solutions to internal problems by developing and providing hospitals with a 'best practice' anti-bullying framework and resources to use and adapt. It should support hospitals by providing data and analysis reports, by sharing best practice,[605] and by investigating hospitals flagged for bullying in the People Matter Survey. Finally, it should lead by example, including by investigation and addressing any internal problems with bullying and culture.

Recommendation 5.5:

That the department monitors the bullying questions in the People Matter Survey as part of its routine monitoring of safety and quality in public hospitals and incorporate the results into its assessment of health service risk.

601 Hennessy (2016)
602 Australian Medical Association (2015)
603 Victorian Auditor-General's Office (2016a)p. xiv
604 Ibid., p. xiv–xv
605 Ibid., p. xv

Victoria should consider moving towards no-fault compensation for medical injuries

> A broad based government funded no-fault scheme is absolutely worth pursuing. It works well in New Zealand and removes the focus and energy from litigation into greater focus on prevention. Rather than wasting energy on the dispute process it allows patients and staff to be compensated and move forward to understanding the causal factors and mitigating strategies of the issue.
>
> **Senior leadership team, metropolitan health service**

Victoria could improve incentives for learning from patient safety incidents by changing the legislation regarding compensation for medical injuries. Currently, we have a tort-based approach to compensation for medical injuries. This means that when patients suffer complications from care, they must prove their doctor or the hospital was negligent in order to receive compensation (a costly process usually requiring legal representation). No-fault schemes do not require proof of negligence for a patient to claim compensation and largely avoid the courts.

From the state insurer's perspective, the tort system reduces the number (although not necessarily the cost) of payouts. The downsides are for patients, doctors and perhaps also – ironically – the state. The litigation process is long and expensive for all parties, and an unpleasant one for people whose lives have already been affected by serious harm from medical care. When facing up to error, doctors have to worry about the risk of malpractice litigation, rather than focusing on opportunities for improvement. And from the state's perspective, the process may not be cheaper, since the administrative costs tend to be high and the payouts more variable.[606]

The National Injury Insurance Scheme, which is being rolled out in parallel with the National Disability Insurance Scheme, will eventually introduce no-fault compensation for people who suffer 'catastrophic' injuries from 'medical accidents'.[607] The timelines for this are uncertain, but it is clear this is a move towards a no-fault scheme for injuries associated with healthcare. The issue now is what injuries will be covered, how the scheme will be paid for and what the scheme's governance arrangements will be.

Moving from our current tort-based system to a no-fault scheme would mean that patients would file claims and be compensated, mostly without a prolonged litigation process in between. Further, doctors could file reports that disclose error without having to worry about patients using the reports in malpractice litigation.

Changing systems would have many benefits, but it would not remove all disincentives against openness and honesty in discussing medical error. After all, clinicians are subject to the same human foibles that make people afraid or reluctant to admit error in other fields. This tendency is amplified in the strongly hierarchical culture of the medical

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606 When New Zealand moved to a no-fault compensation system, it found that payouts were 'generally lower and more consistent than under a malpractice equivalent … economic losses are compensated according to a fixed schedule, and compensation for noneconomic losses is available only for permanent disabilities.' Bismark and Paterson (2006), p. 281
607 The Treasury (2016)

profession, where it can be very difficult for people to point out or document the errors of others, and their superiors in particular.[608]

Currently insurance for medical negligence claims in Victorian public hospitals is the responsibility of the Victorian Managed Insurance Authority (VMIA), which also covers other insurance for public hospitals and the state government. Medical negligence insurance for private hospitals and doctors is provided by a number of private insurers.

A no-fault insurance scheme could be the responsibility of a new agency that would take over responsibilities from the VMIA for in-hospital adverse events. A model might be the Transport Accident Commission, which provides compensation and arranges treatment and rehabilitation for those injured in road crashes, and invests in prevention strategies.

A new Healthcare Adverse Events Commission could be established on the same basis, providing compensation[609] (perhaps using the current schedule used by the Transport Accident Commission), funding restorative treatment and rehabilitation, and driving prevention of adverse events. In this model, hospitals would report incidents and sentinel events to the Healthcare Adverse Events Commission, which would also receive root cause analysis reports. The commission should have power to direct hospitals to introduce revised policies and procedures to reduce the risk of future adverse events.

The commission could be funded by a levy on hospitals, partly based on the hospital's patient mix and partly based on claims experience. Depending on the scope of the scheme, particularly whether injuries sustained outside hospitals are in scope, a levy of registration fees of health professionals practising in Victoria could also be used as a funding source.

The limited time provided for this review has not allowed for an estimate of the costs of moving to a 'no-fault' scheme, a detailed plan for how it might work, or how it would relate to other compensation arrangements. However, the merits and costs of a comprehensive no-fault scheme need to be assessed.

Recommendation 5.6:

That the government refers the issue of the feasibility of extending no-fault medical insurance to all healthcare injuries not currently planned to be covered by the National Disability Insurance Scheme or the National Injury Insurance Scheme to the Legal and Social Issues Committee of the Legislative Council for investigation.

608 Singh (2015)
609 Injuries covered by the National Disability Insurance Scheme would not be covered by the Healthcare Adverse Events Commission.

The Victorian hospital system must be more focused on patient needs

> A serious commitment to embracing patient centred care at a system-wide level across Victorian hospitals will require recognition that institutional culture is the most pervasive barrier to change. This must be prioritised above its current status as a footnote to participation. Culture change invariably requires leadership commitment, but this commitment to a patient centred culture varies greatly between health services. Even CEOs with best intentions frequently lack the skills and tools to drive institutional culture change.

Health Issues Centre

Given that the hospital system exists to serve patients, it would seem intuitive for patients to be at its centre. Feedback from consumer representatives suggest this is often far from the case. Meaningful patient involvement in the operation, evaluation and governance of hospitals is widely lacking, and patient engagement is often tokenistic.

The underinvestment in patient engagement means the system is poorly prepared for increasing prevalence of chronic disease, where many patients are adept self-managers of their own conditions, often have better information than their treating clinicians on their own needs, and – regardless of their clinicians' best efforts – will continue to live with that disease after they leave hospital.

The department therefore needs to support hospitals to transform existing models of care from a paternalistic focus on cure to an empowering focus on improving self-management. This requires the close engagement of patients in design, delivery and evaluation of care.[610]

Throughout this report we have recommended a series of improvements in patient engagement in clinical governance, quality improvement and policymaking.[611] The rest of this report addresses ways in which the department could strengthen the patient focus in delivery of care in Victoria.

These recommendations should be seen as a starting point only. In the long term, the department, through the proposed Office of Safety and Quality Improvement (OSQI) should partner with clinicians and consumers to transform the Victorian hospital system into one that is truly patient-centred.

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610   This is also known as co-production. Blackstock*, et al.* (2015)
611   In Chapter 2, we recommended a significant improvement in consumer representation on boards. In Chapter 3 we recommended investment in statewide collection of patient-reported outcome data. In Chapter 4 we recommended a critical mass of skilled consumer representatives on both the clinical networks and a newly formed Victorian Clinical Council.

The department must hold hospitals to account for patient experience

If people are commonly treated with personal respect, given as much information as possible, and included effectively in decision-making, their well-being is enhanced. However many research studies, including some of my own, attest to the engrained patterns of disrespect embedded in many hospital cultures. Their hierarchical nature... remain embedded in the consciousness of many health professionals. Rudeness not only to patients but to others lower in the professional hierarchy varies across sectors and units but remains largely unaddressed by 'quality and safety' initiatives.

Dr Kerreen Reiger, School of Humanities and Social Sciences, La Trobe University

Although overall patient satisfaction with care in Victoria is high (with 69 per cent of patients reporting that care is very good and a further 23 per cent reporting that it is good),[612] a look behind those numbers gives cause for concern. Seventy-seven per cent of patients reported that they always felt that they were listened to and understood in hospital, but the corollary of that is damning – almost one-quarter of patients felt that 'standard' care wasn't met all the time. Almost one in eight patients felt they weren't always treated with dignity and respect.

Patients seek hospital care to address a problem. Patients seek help for a range of problems including pain, mobility issues, trauma or psychiatric illness. Medical treatment is a service provided to help patients with these problems. Accordingly, hospitals should be held to account for the patient experience – not just the throughput and treatments – they provide.

Monitoring experience is justified on empirical, as well as normative, grounds. There is a well-documented relationship between a patient's experience of care and the outcomes of it. A recent systematic review[613] found that a positive patient experience was associated with:

- improved objective health outcomes (reduced mortality, fewer medical errors and infections)
- improved self-reported health and wellbeing (greater functional ability, quality of life and health status, and reduced anxiety)
- greater adherence to prescribed treatment
- greater incidence of preventive care
- reduced hospitalisations, readmissions, emergency department use and primary care visits
- fewer errors and adverse events
- higher technical quality of care.

612 Victorian Healthcare Experience Survey (2016)
613 Doyle, *et al.* (2013)

The current hospital performance-monitoring framework captures patient experience through ratings of the overall care experience in the Victorian Healthcare Experience Survey. This is a relatively weak indicator for accountability purposes. The evidence shows patients can report high levels of satisfaction even after a negative care experience (and vice versa), with satisfaction ratings shaped by patients' expectations and perceptions of the care process, and their tendency to be forgiving of care providers given their high-intensity work environment and competing responsibilities.[614] Reflecting this, the overwhelming majority of patients surveyed in Victoria consistently rate their experience of care as 'good' or 'very good'.[615]

It is possible that care really is this good. However, even in outstanding hospitals there is always room for improvement, and the goal of performance indicators should be to focus hospitals on this. An overall measure of satisfaction does the opposite. Because it does not tell hospitals where their opportunities for improvement are[616] it creates a risk of complacency and underinvestment in place of a focus on improvement.

The department should change this.

First, it should replace the overall satisfaction measure with the Victorian Healthcare Experience Survey's 'Transition Index'.[617] This measures the patient's experience of the way the hospital managed their care transition, an increasingly important component of care given the increase in the prevalence of people with chronic conditions who require ongoing care in the community.

Second, it should require all hospitals to nominate a set of specific priorities (such as communication, care coordination or bathroom cleanliness) for improving their patients' experience of care, as measured in the Victorian Healthcare Experience Survey. The department should hold the hospital to account for improvement on these priorities and treat regression or failure to improve on a priority measure as underperformance.

When a hospital has very low ratings on any of the patient experience measures, the department should consider this a cultural risk, and adapt its risk assessment of the hospital accordingly.

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614   Harrison, *et al.* (2015), p. 2
615   Between March 2014 and December 2015, 86–90 per cent of surveyed patients in Victoria rated their overall hospital experience as 'good' or 'very good'. Victorian Healthcare Experience Survey (2016)
616   Harrison, *et al.* (2015), p. 2
617   The index is calculated from answers to four questions: Before you left hospital, did the doctors and nurses give you sufficient information about managing your health and care at home? Did hospital staff take your family or home situation into account when planning your discharge? Thinking about when you left hospital, were adequate arrangements made by the hospital for any services you needed? (for example, transport, meals, mobility aids)? If follow up with your General Practitioner (GP) was required, was he or she given all the necessary information about the treatment or advice that you received while in hospital?

Recommendation 5.7:

5.7.1. That the department uses the Transitions Index, which measures the patient experience of the way a hospital manages care transitions, as its headline measure of patient experience rather than the 'overall' indicator for patient experience.

5.7.2. That from the 2016 *Statement of priorities* onwards, health services be required to identify three specific priorities for improving the patient experience of care. These would then become key performance indicators in their *Statement of priorities*.

– These key performance indicators should be revised biannually to reflect new areas for improvement in patient experience.

– The priorities should be informed by the most recent Victorian Patient Experience Survey and the priority setting process should involve consultation with consumers.

The department must strengthen safety of care for patients from diverse backgrounds

Victorians are lucky to live in a state that is rich in cultural diversity. Our communities are filled with people from more than 200 countries who speak 260 different languages and dialects, and follow 135 different religious faiths. Almost 50,000 Indigenous Australians live in Victoria.[618] Around 26 per cent of Victorians were born overseas, and more than 46 per cent – almost half the Victorian population – were either born overseas or have at least one parent born overseas.[619] More than 74 per cent of the total overseas-born population come from non–English-speaking countries.[620]

Our hospitals must be able to deliver safe and high-quality care to the *entire* community, in all of its cultural and linguistic diversity. To do so, hospital staff need to be able to communicate effectively with all patients. Effective communication is vital to providing safe and high-quality care. A patient must be able to accurately describe and disclose their symptoms and pre-existing diagnoses to their treating clinician, who in turn must be able to convey the proposed treatment and any attendant risks (in order to establish consent) and advise on post-discharge care.

Hospitals must therefore be able to access timely and effective translation support services when they are needed. They are required to do under the department's *Language services policy*, and under Standard 3 of the *Cultural responsiveness framework: guidelines for Victorian health services*,[621] which specifies that an accredited

618 Australian Bureau of Statistics (2014)
619 Victorian Multicultural Commission (2012)
620 Ibid.
621 Department of Health (2009)

interpreter must be provided to people who need one. The *Australian Charter of Healthcare Rights in Victoria* (2007) also specifies the right of communication, including via an accredited interpreter in public healthcare services.[622]

Nevertheless, compliance with these requirements does not always occur, with documented shortages of interpreters in Victorian hospitals. A 2014 study found that the majority of surveyed Afghan women in Victorian maternity care wards reported difficulty accessing an interpreter, often while receiving care during labour.[623] For example, some received interpreters who did not speak the same dialect, or received male interpreters to whom they were not comfortable asking questions about obstetric issues.[624] The study found that, contrary to Victorian language policies, the availability of professional interpreters during pregnancy visits was 'sporadic and virtually non-existent during labour and birth', with the hospital staff relying on family members with insufficient levels of English to translate during labour.[625]

Similarly, a Victorian study undertaken by Foundation House in 2013 found failures in provision of language interpreters, identifying inadequate funding from state and federal governments and inadequate hospital procedures as contributing factors to the insufficiency.[626] Research by the Victorian Human Rights Commission also identified shortcomings in the provision of Auslan interpreters to Victorian hospitals, which it regarded as a failing of public hospitals to fulfil their obligations under the *Equal Opportunity Act 2010*.[627]

The Victorian Healthcare Experience Survey shows that of the four per cent of people who needed help understanding English while in hospital, half didn't have access to an interpreter, and half were not given information (for example, leaflets) in their own language.[628] Further, of those who did have access to an interpreter, only a handful had access to a hospital or telephone interpreter, with most relying on relatives or friends, rather than a professional.[629] This is inconsistent with Standard 3 of the department's *Cultural responsiveness framework*, which states that the health service must provide accredited a interpreter for patients who need one.[630]

This creates safety and quality risks. When people are unable to access interpreters in Victorian hospitals, effective communication is unlikely to take place, leading to an increased risk of harm through misdiagnosis, failure to establish informed consent, or failure to ensure the patient is sufficiently informed to manage their own care after to discharge (see Box 21).

622 The charter states that interpreters should be provided at important times such as when discussing medical history, treatments, test results and diagnoses.
623 Yelland*, et al.* (2015)
624 Ibid.
625 Ibid.
626 Vanstone*, et al.* (2013)
627 Victorian Equal Opportunity and Human Rights Commission (2016)
628 Of the people who responded to the survey in October–December 2015.
629 Of the people who responded to the survey in October–December 2015.
630 Department of Human Services (2004)

Box 21: A lack of access to interpreters has been associated with serious harm and negative patient experiences in Victoria

The Victorian Sentinel Event Program annual report has described instances where procedures involving the wrong patient or body part were performed on non-English-speaking patients.[631] This includes two cases where non-English-speaking patients were not provided with access to interpreter services, which, combined with insufficient site checking procedures, resulted in procedures being undertaken on incorrect body parts.

A 2014 inquiry into access to Auslan interpreters in Victorian hospitals has also highlighted a number of instances where patients were not given access to interpreter services.[632] The inquiry's report describes one particular case where a patient arrived for a post-operation check and described that they had emergency surgery a week ago but had no idea what had happened. There was no interpreter provided at the patient's presentation to the emergency department, before or after surgery, or on discharge, which meant that informed consent could not have occured.

Hospitals are funded to provide interpreter services[633] for their patients, with additional funding provided to hospitals meeting unusually high demand. Health services should ensure all staff are aware of their obligation to use professional interpreter services for patients with limited English proficiency, rather than to 'make do' or ask family members to translate.

Recommendation 5.8:

5.8.1. That the department monitors the Victorian Healthcare Experience Survey to ensure all public hospitals are providing interpreter services to patients who require them.

5.8.2. That when the Victorian Healthcare Experience Survey shows a hospital may not be complying with its requirement to provide accredited interpreter services to patients who need them, the department treats this as a serious performance issue and manage it accordingly.

5.8.3. Hospitals must ensure all clinicians are aware of their ability and obligation to request professional interpreter services when required.

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631 The subsequent root cause analyses found that insufficient information was documented in the patient medical record and interpreters were not used to communicate with non-English-speaking patients. Ibid.
632 Lowrie (2014)
633 Interpreter services can be provided face-to-face or a telephone interpreter

Hospitals must effectively respond to consumer complaints

> Often patients and their carers do not wish to make a formal complaint, but feel that it is the only way they will be heard in a health system that appears distant and difficult to engage, especially when things go wrong or could be improved. This suggests that there may be a disconnect between the public and how health services listen and respond to their voice … What the public want is an opportunity to provide feedback to health services on their terms, to 'feel heard', and to see that their feedback has made a difference to the safety and quality of care. By giving patients this opportunity to contribute to the quality of our health services, there is a sense of change and partnership.

Associate Professor Michael Greco, Chief Executive, Patient Opinion Australia

When patients make formal complaints about quality of care, there can be a tendency for health practitioners to view the complaint in a negative light.[634] Similarly, patients themselves may be reluctant to make a complaint, fearing it may be taken as ingratitude or could prejudice their future care.[635]

Such attitudes lead to missed opportunities for identifying patterns of harm (as discussed in Chapter 3) and for improvement. Complaints are useful quality assurance tools when they provide a stimulus for appraisal and revision of work practice and help health services to identify remediable system flaws.[636] Further, complaints are rarely litigious or vexatious, and tend instead to reflect a desire for health services to apologise and ensure the same problem does not affect other patients in future.[637]

Many health services in Victoria have made admirable efforts to encourage consumer complaints.[638] These efforts are visible in the prominent location of consumer liaison desks at the entrance of some hospitals, the colourful posters on the walls of wards providing advice to patients on how and where to complain, and commitment by boards and executives to review complaints at the highest level.

As always, however, there is variation across the system. For example, many hospitals (including, at the time of the perinatal deaths, Djerriwarrh Health Services) lack a consumer liaison officer. Consumer liaison officers play an important role in working with consumers to identify issues and support safety and quality improvements, and

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634 Anderson*, et al.* (2001)

635 As the Health Issues Centre noted in its submission to this review: 'Although the public generally rates doctors and nurses very highly in terms of being respected and trusted professions, when it comes to making a complaint against those same health professionals, many patients and families are fearful and, thus, reticent about expressing dissatisfaction with care. Reasons cited for this include fear that future care will be compromised, concern about being seen as "ungrateful" or labelled as "difficult"'.

636 Anderson, *et al.* (2001)

637 For example, an audit of 1,308 complaints at a major Australian hospital found that on 97 per cent of occasions, an explanation and/or an apology resulted, and no complaints had proceeded to litigation. Ibid. A similar study (auditing an NHS hospital over a 22-month period) found that 99 per cent of patients were satisfied with an explanation and an apology indicating that almost all have been due to a lack of good communication than due to real deficiencies in the clinical care. Siyambalapitiya*, et al.* (2007)

638 As the Health Issues Centre noted in its submission to this review: 'Most health services now make a concerted effort to inform patients about how to complain, providing brochures and signs encouraging complaints, and make a commitment to follow through with complaints. Yet fear and hesitation still persist, resulting in not only unresolved issues for patients and families but significant missed opportunities for improvement.'

should be visible and accessible in all hospitals. Further, many hospitals reportedly lack an ability to capture or respond to real-time complaints, concerns and feedback about potential safety, which is often a preferred alternative to lodging a formal complaint after the fact.[639]

The department should hold hospitals to account for responding promptly, respectfully and effectively to patient complaints, feedback and concerns. To do this, it should work closely with the Office of the Health Services Commissioner (OHSC), which is responsible for resolving complaints from consumers of health services about health service providers in Victoria, and have increasing powers to use information from health information complaints to improve the quality of healthcare.[640]

The OHSC should monitor the effectiveness of complaints handling by health services and report on this aspect of performance to the department, which should treat underperformance as a cultural risk to be managed in accordance with the performance monitoring framework set out in Chapter 3. The OHSC should also report trends, innovations and best practice in complaints management to the OSQI, and work with it to support improvement in hospital engagement with consumer feedback.

Recommendation 5.9:

That:

5.9.1.   the Office of the Health Services Commissioner (OHSC) monitors the effectiveness of complaints handling by all hospitals and report on individual health service providers' compliance with complaints handling standards to the department's Performance and System Design branch

5.9.2.   poor handling of complaints detected by the OHSC be considered as a cultural risk by the department and managed accordingly

5.9.3.   the OHSC reports on trends, innovations and best practice in complaints handling by health services to the Office for Safety and Quality Improvement, which should use this information to support improvement in patient engagement across all hospitals

5.9.4.   the department requires all hospitals to have an identified person who is responsible for addressing patient concerns and who is visible and accessible to patients. In smaller hospitals it may be appropriate for the person in this role to be appointed jointly across a few hospitals. The contact details for the identified person should be readily accessible (including on the hospital's website) and consumers must be able to meet with them in person within a week of initial contact.

639 Submission from the Health Issues Centre.
640 On 3 May 2016, the *Health Complaints Act 2016* was given Royal Assent. The Act expands the role and powers of the current OHSC and provides a more comprehensive health complaints system to protect the public and to improve the quality of health services.

The OSQI should support hospitals to improve the way they partner with patients

The great challenge of 21st century healthcare is to strengthen patient engagement at all levels of the healthcare system – from the board table to the bedside. The rise of chronic disease means that paternalistic models of care focused on cure by a clinician, rather than empowered self-management by a patient, are increasingly counterproductive.

The evidence supports this. A large number of studies shows that care can be safer, more effective, more responsive and more innovative when patients are engaged in its design and delivery.[641] Reflecting this, 'Partnering with Consumers' is Standard 2 of the NSQHS Standards, which all hospitals are accredited against.[642]

Many Victorian hospitals and health workers are deeply committed to strengthening patient engagement. Some outstanding examples of this are highlighted in Box 22.

However, many hospitals – in Victoria and throughout Australia – struggle with this standard, even when they recognise its importance. A forthcoming evaluation of the implementation and early outcomes of the NSQHS Standards found that partnering with consumers (Standard 2) was consistently singled out by stakeholders as being a particular challenge for health services, with a lack of strategy and funds to address deficiencies cited as particular problems.[643]

A survey recently undertaken by the department found that health services report the requirements under the 'Consumer Participation' domain as the most challenging of their clinical governance obligations.[644] One in ten health services reported they had not implemented the requirement for consumer participation in quality and safety committees'.[645] Access was raised as an issue by many health services and rural services in particular; in some instances, health services have had to rely on untrained community members to act as consumer representatives.[646]

641 Boaz, *et al.* (2016) Carman, *et al.* (2013) Doyle, *et al.* (2013) Thompson and McCabe (2012)
642 Australian Commission on Safety and Quality in Health Care (2016b)
643 Australian Commission on Safety and Quality in Health Care (2016c), p. 7
644 "Review of compliance by Victorian public health services with the Victorian Clinical Governance Policy Framework (2009): Key findings report on the Health Service Board Clinical Governance Survey." Department of Health and Human Services April, 2016, p 11
645 "Review of compliance by Victorian public health services with the Victorian Clinical Governance Policy Framework (2009): Key findings report on the Health Service Board Clinical Governance Survey." Department of Health and Human Services April, 2016, p 11
646 "Review of compliance by Victorian public health services with the Victorian Clinical Governance Policy Framework (2009): Key findings report on the Health Service Board Clinical Governance Survey." Department of Health and Human Services April, 2016, p 12

Box 22: There are outstanding examples of patient engagement in Victoria

In its submission to this review, Boort Health Service argued that

'Person centred care needs to be incorporated into the ethos into every health service as it leads to outstanding outcomes in terms of improved safety and quality of care. It's about listening to patient's stories and coming together to not only learn from the personal narrative but also how to use these stories to embed continuous quality improvement… Examples of individuals in Victoria who clearly demonstrate person centred care include:

Dr Catherine Crock AM from the Royal Children's Hospital … [who is] the Director of the Australian Institute of Patient and Family Centred Care. The primary work at the Royal Children's Hospital is to ensure children and their families are involved in decision making. She has also been a trailblazer to have families educate staff about what it means to deliver person centred care.

Eastern Health, where [chief executive] Alan Lilly … responds personally to every story posted on the site as he wants to lead by example that person centred care is the reason for the existence of the health service.

Jen Morris, who is a patient advocate and healthcare researcher. Jen's work focuses on bringing the voices of patients to forums where traditionally these voices would be absent – including research teams.'

Source: Submission from Marlies Eicher (board chair) and Vicki Poxon (CEO) of Boort Health Service

The difficulties experienced by hospitals in developing meaningful and effective patient partnerships is unsurprising. Although the evidence base is strong on the general relationship between patient engagement, safety and quality, and positive outcomes of care,[647] the literature is less clear on the optimal method for achieving engagement.[648]

Full partnership with patients requires a seismic shift in the culture and models of care historically embedded in hospital systems, with change supported by committed leadership and effective strategy. For this reason, developing evidence and strategy in partnership with leading health services for best practice in patient engagement should be a key priority of the OSQI and the clinical networks going forward. The department should expect a transformation in care in the years to come, and support hospitals to achieve it.

Recommendation 5.10:

That the OSQI adopt patient engagement and patient experience as a priority improvement goal for the hospital system.

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647 Schiffinger, *et al.* (2016)
648 Berger, *et al.* (2013)

Chapter 6: Next steps

Patients are the heart of the health and hospital system, its reason for existence. When the safety and quality of that system fails, it is patients and their families who suffer... Patients and families need to have complete confidence in not only the safety but the adequate governance of Victorian health systems.

Health Issues Centre

The place of risk and consequences

Thousands of people are involved in each episode of care in Victoria, from the patient and their family to the treating clinicians and support staff, hospital administrators, departmental staff, the Secretary and the Minister.

When something goes wrong in the hospital system, it is the patient and their family who bears the immediate consequences. Everything we have proposed in this report is about reducing the risks that patients have to bear.

The legislation should reflect that, at the other end of the chain of care, the Minister also bears risk for adverse events in Victorian hospitals. As the experience with Djerriwarrh Health Services shows, the Minister can and should be held accountable publicly when things go wrong. In particular, the Minister is held to account for sustained, undetected and unaddressed deficiencies of care that have devastating consequences on patients and their families.

The legislation should establish a chain of responsibility between the patient and Minister, along which risk and responsibility is spread. The rhetoric of 'devolved governance' has supported the department as responsibility for oversight has been shifted to hospital boards, even as its statutory functions have remained constant.

In this setting, some boards and board members may not have seen clinical governance as their key responsibility. Some hospitals, especially smaller ones, have not been supported to meet their accountabilities, and no hospital has all the information it needs to meet its clinical governance responsibilities. The result is weaker accountability and poorer overall system performance.

This is what we want to change. We want problems in the system to be clearly identified, and in a timely way. We want to build capacity for addressing problems. We want stronger local accountability for ensuring they do not happen again.

Our recommendations

This report sets an ambitious agenda for change. We have provided over 50 detailed recommendations, touching almost all areas of safety and quality in the department.

Once implemented, these recommendations will transform governance, oversight, capacity for excellence and transparency in the Victorian hospital system. They will ensure that:

1. Safety and quality improvement is a core goal of the department and health system
2. All boards are highly skilled, independent and effective
3. All hospitals are held to account for improving safety and quality of care, regardless of their size or sector.

4. The flow of information in the health system ensures deficiencies in care are identified and focuses attention on opportunities for improvement.

5. All hospitals have access to independent clinical expertise to help identify deficiencies in care and focus attention on opportunities for improvement.

6. The department's assessment of hospital safety and quality performance and clinical governance is robust.

7. Risk is managed across the system to ensure that hospitals only offer care that is within their capabilities, with high-risk care concentrated in the centres where it is safest.

8. Mental health services are adequately funded to allow delivery of timely, safe and high-quality care.

9. Clinical leaders are engaged to strengthen, direct and lead efforts to improve safety and quality of care.

10. The system has a strong focus on improving patients' experience of care.

Our report's natural focus has been on what the department can do to strengthen care. As we have shown, it can do a lot.

Ultimately, however, it is those at the front lines of care that have the power to drive a system-wide transformation. Change of this kind needs to engage clinicians and be embraced by them.

Victoria has a proud history of local ingenuity and initiative. We do not want the department to replace this local initiative, but to enhance it. We want the department to support local initiative by providing a baseline of best-practice resources, protocols and guidelines for hospitals to build on, and we want the department to take the lead in sharing best practice between hospitals. We want clinicians to spend every available moment improving care – not reinventing the wheel – and we want all patients in Victoria to benefit from local innovations.

This will require leadership of the department and middle managers to be energised and enthusiastic about what can and should be done. The good news is that throughout our consultations we saw that many people are ready for this change.

The change must begin with internal ownership of reform. Implementation and management of reform processes is part of the core business of the department and we are confident that the department has the capability to manage this transition process internally. Although many aspects of the report can be implemented quickly (within 12 months), some others may take up to three years.

We are confident that the department will be backed and held to account by the Minister in doing so. Her comments at the time of the release of the recent Auditor-General's report on patient safety:

> This is a damning report that shows the Department has failed to put patient safety first over a number of years. Access to a safe health system is a core right of all Victorians, and what this reports shows is that the Department has failed to do its job to help hospitals deliver safe, efficient and high quality care.
>
> *Up until now there has been a complete failure to drive cultural reform and leadership in this space. This is una*cceptable, and I have made it clear to the new Secretary that it is unacceptable to the Government, to our health services, and to the public.
>
> Since coming to Government, I have been clear that the safety of patients, and of our health workers, is my number one priority. Over the last past year I have taken decisive action to address these gaps and failings in our system, and to improve patient safety, governance and oversight – and this work will continue into the future.
>
> This is the beginning of a long and hard journey – we know we can't achieve significant cultural and system wide change overnight. But I want to assure Victorians that this is not negotiable for me. I will hold the Department to account to ensure they prioritise safety and provide greater leadership and support to our hospitals. With new leadership within the Department, a new Government, and a renewed focus on patient safety, now is the time to overhaul the system to improve the care and support Victorians receive.

The reform needed will be a long and hard journey. It requires dramatic change in the department. But the department has been a leader in Australia and internationally before. It is within its capability to become a leader again. The agenda we have set will help it get there.

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Appendix 1: Terms of reference

At the request of the Minister for Health, the Department of Health and Human Services has commissioned a review panel to examine ways to strengthen monitoring of the safety and quality of care in Victorian public hospitals. The panel consists of:

- Dr Stephen Duckett, Director, Health Program, Grattan Institute (chair)
- Ms Maree Cuddihy, Chief Executive Officer, Kyneton District Health Service
- Associate Professor Harvey Newnham, Clinical Program Director of Emergency and Acute Medicine, Director of General Medicine, Alfred Health.

The review will:

- examine the role of the Department of Health and Human services (the department) in monitoring safety and quality in Victoria's public hospitals and public health services
- identify strategies to optimise the department's response capacity and engagement in promoting an improvement culture among both management and clinicians, including through better information sharing
- provide advice on the type of information that should be available to boards and CEOs to assist monitoring of quality and safety
- provide advice on the relationships and information flows between the department and other bodies (for example consultative councils, Health Services Commissioner) with responsibility for quality of care
- provide advice on the relationship and information flows between the department and private hospitals with regard to quality and safety
- consider the best approach for providing clinical leadership, advice and support to the new Chief Medical Officer that will strengthen the department's oversight of quality and safety systems.

Following the recent issue of concern at Djerriwarrh Health (Bacchus Marsh), the Australian Commission on Safety and Quality in Healthcare examined the role of the department in that matter and provided recent insights into the department's existing systems and approaches.

This review will examine whether the department has adequate systems in place and, where they are not, how they might be improved to achieve contemporary best practice, as seen within other jurisdictions and internationally.

The department is the funder (through an activity-based funding system, also called casemix) of acute public hospital care in 86 scheduled public hospitals and public health services (these are large, often multi-campus facilities in metropolitan Melbourne and large regional centres) in Victoria. Services delivered include acute inpatient care; mental healthcare; outpatient and emergency department care; subacute and rehabilitation services; and a variety of home and community-based care often as alternatives to hospital based care. Each public hospital and public health service has a board of management appointed by the Minister on advice (except for one private and two denominational providers), which employs a CEO who in turn employs all staff and manages the day-to-day functions of the entity at arm's length from the department.

These entities also manage acute mental health services, some residential aged care and some community and dental health services where those services are integrated with public hospitals and health services.

The annual operating budget (all service revenue 2014–15) for these entities is approximately $13.2 billion.

The department is the regulator of private hospitals.

There are a number of parameters that are set through legislative and regulatory mechanisms to provide assurance to the public on standards of healthcare provision.

Legislative, regulatory and ethical obligations should be fulfilled by the health service. The legislative direction in relation to governance is delineated in the Health Services Act 1988, as amended by the *Health Services (Governance) Act 2000* and includes requirements for health service boards of directors.

- State level – where appropriate, legislative safeguards should be developed to protect the public interest, and ensure safety and quality of care.
- Health service level — the board or board's special committees should fulfil their governance role as specified in the *Health Services Act 1988*, and amended by the Health Services (Governance) Act 2000. Health services are required to manage risks and ensure compliance with legislative and policy requirements. They are required to comply with and maintain currency Victorian clinical governance policy framework.

The department considers itself to be the 'system manager'. That is, it has the role of planning, constructing funding and monitoring these services, but the responsibility for their effective operation sits with the boards and management of public and private entities.

The department engages with public hospitals and public health services by way of a statement of priorities (SoP) (an agreement between the Minister or delegate and each board).

The principle underlying this devolved management model is that of subsidiarity, where decisions made locally are held, in general, to be superior and more responsive than could be made in alternative arrangements.

This model has recently been studied by the independent UK King's Fund and the report is available online.

Public hospitals and public health services report on a wide range of statutory and non-statutory ('policy') matters. There is an understandable focus on operational service delivery and financial performance, but also on access measures against certain targets, and safety and quality measures.

Under s. 65S(2) of the *Health Services Act 1988*, all public health services must have a quality committee of the board and this must report publicly annually. Public hospitals do not have this same legislative requirement, but are expected to follow suit.

There are a limited number of safety and quality reporting requirements in SoPs including hand hygiene, Staph. aureus bacteraemia, accreditation and patient satisfaction. It is recognised that this is not yet a mature system.

As a matter of policy, all public hospitals and public health services must: adopt a common approach to clinical governance and clinical risk management and must report sentinel events; adopt a common clinical incident system (the Victorian Health Incident Management System – VHIMS); and adopt a rigorous approach to credentialing and scope of practice of clinicians.

Public hospitals and public health services also report to many 'registry' functions, including for maternal and perinatal care. They also utilise benchmarking tools such as Dr Foster, and the department monitors some selected indicators, including hospital standardised mortality rates and deaths in low mortality diagnosis-related groups. Health services and public hospitals are asked to investigate and report back on outlier performance in these indicators.

There are some known weaknesses in current systems, such as VHIMS, the functionality of which is currently being addressed; and the size of some public hospitals. Smaller public hospitals are not of a sufficient size to have dedicated comprehensive safety and quality teams, clinical expertise in board members and often also only have limited access to medical administration expertise.

The department has relied on these elements, and in particular national standards accreditation, to assure itself that the internal governance and management mechanisms to ensure safety and quality are in place and working.

In light of the Djerriwarrh issue of concern, it is timely to review and reassess the current approach. In particular the department seeks advice on these key questions:

- What should the department have in place to assure itself, government and the community that robust monitoring of safety and quality, including benchmarking, is in place and working at the hospital and health service level; including strengthening its role in monitoring clinical governance at health services, and further developing the performance management framework to monitor clinical safety and quality in local health services?
- What should be reported to the department, through SoPs or otherwise, regarding safety and quality and how should it use that information, possibly including public reporting?
- Should the scope of the reporting to the department be differently configured in public health services as compared with public hospitals?
- What should the scope of the reporting to the department be for private hospitals?
- Provide advice on the implementation of the Victorian Health Incident Management System improvement project.
- How should the department participate in and provide leadership to the safety and quality agenda, particularly in improvement, including enhanced clinical engagement?

- How should the department ensure that all boards of public health services and public hospitals are capable of providing appropriate local governance of safety and quality?

In considering these matters the review should ensure inclusion of any findings or recommendations and the response by the department to the recommendations arising from the *Review of the Department of Health and Human Services' management of a critical issue at Djerriwarrh Health Services (November 2015)*

The review panel will report by 30 April 2016. A program of selected stakeholder consultation will be integral to the review. Staff from the department will support the review including all necessary scheduling and administration of consultations.

Appendix 2: Consultation list

Name	Title	Organisation
Adjunct Professor Debora Picone AM	Chief Executive Officer	Australian Commission on Safety and Quality in Health Care
Dr Christine Dennis	Chief Executive Officer	Australian Council Healthcare Standards
Mr Martin Fletcher	Chief Executive Officer	Australian Health Practitioner Regulation Agency
Dr Tony Bartone	President	Australian Medical Association Victoria
Mr Paul Gilbert	Assistant Secretary	Australian Nursing & Midwifery Federation (Victorian Branch)
Ms Lisa Fitzpatrick	State Secretary	Australian Nursing & Midwifery Federation (Victorian Branch)
Mr Doug Travis	Board Chair	Better Care Victoria
Mr Michael Mire	Board Member	Care Quality Commission (England)
Ms Carrie Marr	Chief Executive Officer	Clinical Excellence Commission
Dr Gerry O'Callaghan	Chair	Clinical Senate of South Australia
Professor Julie Quinlivan	Chair	Clinical Senate of Western Australia
Adjunct Associate Professor Kim Gibson	Immediate Past Chair	Clinical Senate of Western Australia
Professor Jeremy Oats	Chair	Consultative Council on Obstetric and Paediatric Mortality and Morbidity
Associate Professor Andrew Wilson	Chief Medical Officer	Department of Health and Human Services
Dr Margaret Grigg	Acting Director, Mental Health	Department of Health and Human Services
Dr Neil Coventry	Chief Psychiatrist	Department of Health and Human Services
Mr Jim Round	Director, System Intelligence & Analytics	Department of Health and Human Services
Mr Matthew Hercus	Assistant Director, Programs & Performance (Mental Health)	Department of Health and Human Services
Mr Pat Henry	Acting Director, Health Information & Reporting	Department of Health and Human Services
Mr Peter Breadon	Director, Priority Health Projects	Department of Health and Human Services
Mr Peter Fitzgerald	Deputy Secretary, Risk, Review & Evaluation	Department of Health and Human Services
Mr Terry Symonds	Deputy Secretary, Portfolio Strategy & Reform	Department of Health and Human Services
Ms Anna Burgess	Director, Cancer, Clinical Networks & Speciality Services	Department of Health and Human Services
Ms Debra Sudano	Acting Director, Private Hospitals	Department of Health and Human Services

Name	Title	Organisation
Ms Frances Diver	Deputy Secretary, Health Service Performance and Programs	Department of Health and Human Services
Ms Genevieve Schrieber	Project Director, Better Care Victoria	Department of Health and Human Services
Ms Glenda Gorrie	Assistant Director, Quality and Safety	Department of Health and Human Services
Ms Kym Peake	Secretary	Department of Health and Human Services
Ms Nicola Reinders	Director, Quality and Safety	Department of Health and Human Services
Ms Simone Corin	Director, Health Service Programs	Department of Health and Human Services
Professor Bob Thomas	Chief Adviser on Cancer	Department of Health and Human Services
Professor Chris Brook	Former Chief Advisor on Innovation, Safety & Quality	Department of Health and Human Services
Professor Daniel O'Connor	Deputy Chief Psychiatrist	Department of Health and Human Services
Ms Larissa Strong	Director, Justice Health	Department of Justice
Mr Andrew Freeman	Chief Executive Officer	Djerriwarrh Health Services
Mr Alan Lilly	Chief Executive Officer	Eastern Health
Adjunct Professor Sharon Donovan	Executive Director, Clinical Services	Epworth Healthcare
Mr Bill Healy	Board Chair	Forensicare
Mr John Rimmer	Board Member	Forensicare
Ms Emma Sayers	Senior Project and Policy Manager	Health Issues Centre
MS Susan Biggar	Senior Manager, Consumer Partnerships	Health Issues Centre
Dr Sophie Hill	Head, Centre for Health Communication and Participation	LaTrobe University
Ms Natalie Kelly	General Manager, Strategy – Provider Networks and Integrated Care	Medibank Private
Associate Professor Ruth Vine	Executive Director, NorthWestern Mental Health	Melbourne Health
Ms Susan Pearce	Deputy Secretary, System Purchasing and Performance	NSW Health
Dr Grant Davies	Victorian Health Services Commissioner	Office of the Health Services Commissioner
Dr Cathy Balding	Director	Qualityworks P/L
Dr David Rosengren	Chair	Queensland Clinical Senate
Associate Professor Ian Scott	Clinical Senator	Queensland Clinical Senate

Name	Title	Organisation
Mr Greg Hall	Operations Executive Manager – Victoria	Ramsay Health Care
Ms Glenna Parker	Group Clinical Governance Manager	Ramsay Health Care
Mr Barry Beiles	Clinical Director, Victorian Audit of Surgical Mortality	Royal Australasian College of Surgeons
Hon Rob Knowles AO	Board Chair	Royal Children's Hospital
Ms Michelle McKinnon	Director, Safety and Quality	SA Health
Ms Tracey Tobias	Chief Executive Officer, Pinelodge Clinic	St John of God Healthcare
Ms Janine Loader	Acting Chief Executive Officer	St Vincent's Private Melbourne
Mr Paul W. Long	Founding Director	The Centre for Health Leadership
Mr Chris O'Gorman	Health Consultant	The Health Roundtable
Mr John Menzies	General Manager	The Health Roundtable
Mr Michael Herbert	Health Sector Director, Performance Audit	Victorian Auditor-General's Office
Associate Professor Larry McNicol	Chair	Victorian Consultative Council on Anaesthetic Mortality and Morbidity
Mr Tom Symondson	Chief Executive Officer	Victorian Healthcare Association
Ms Katie Phillis	Director of Policy	Victorian Healthcare Association
Mr Andrew Davies	General Manager, Medical Indemnity	Victorian Managed Insurance Authority
Ms Liz Cox	Manager, Risk Advisory	Victorian Managed Insurance Authority
Associate Professor Trevor Jones	Chair	Victorian Surgical Consultative Council
Dr Beth Wilson AM	Former Victorian Health Services Commissioner	
Ms Rennis Witham	Hospital and Health Care Consultant	

Group Consultations

- Patient Safety Advisory Committee
- Council of Board Chairs
- Rural and Regional health service workshop
- Metropolitan health service workshop
- Clinician workshop
- Consumer forum – organised by the Health Issues Centre
- Public Health Services CEO forum
- Rural health services CEO forum (sub-regional and local)

Submissions

91 submissions were received by the review panel. Eight of these submissions were received anonymously and six were received confidentially.

The subsequent submissions[649] were received from:

- Alfred Health
- Associate Professor Andrew Hughes
- Associate Professor Deborah Friedman
- Associate Professor Diana Badcock
- Associate Professor Graeme Houghton
- Associate Professor Grant Phelps
- Associate Professor Michael Murray
- Australasian College of Emergency Medicine
- Australian Health Practitioner Regulation Agency
- Australian Medical Association
- Bendigo Health
- Boort District Health
- Cabrini Health
- Casterton Memorial Hospital
- Colac Area Health
- Critical Care Clinical Network
- Dental Health Services Victoria
- Djerriwarrh Health Services
- Dr Brett Forge
- Dr Cathy Balding
- Dr Ian Wilson
- Dr Ines Rio
- Dr John M Elcock
- Dr Kerreen Reiger
- Dr Peter Sloan
- Dr Sarah Whiting
- East Grampians Health Service
- Eastern Health
- Expedite Health
- Forensicare
- Health Issues Centre
- Hesse Rural Health Service
- Kyabram District Health Service
- Latrobe Regional Hospital
- Lorne Community Hospital
- Monash School of Public Health and Preventive Medicine

649   A small proportion of the submissions listed were also received confidentially.

- Mr Leo Casey
- Mr Philip Cornish
- Mr Ray Newland
- Ms Debra Hailes
- Ms Jan Pannifex
- Ms Mary Draper
- Ms Mary Malone
- National Stroke Foundation
- North Western Melbourne PHN
- Northern Health
- OneVault Enterprises
- Patient Opinion Australia
- Peninsula Health
- Peter MacCallum Cancer Centre
- Professor Alan Wolff
- Professor Anne Maree Kelly
- Professor Danny Liew
- Professor Don Campbell
- Professor Paul Johnson
- Professor Peter Cameron
- Professor Sandra Leggat
- Professor Stephen Holt
- Registry Sciences Unit, Monash University
- Royal Australasian College of Surgeons
- Society of Hospital Pharmacists of Australia (Victorian Branch)
- Spiritual Health Victoria
- St John of God Health Care
- St Vincent's Private Hospital Melbourne
- The Health Roundtable
- The Royal Children's Hospital Melbourne
- The Royal Women's Hospital
- Victorian Cardiac Clinical Network
- Victorian Cardiac Outcomes Registry
- Victorian Clinical Leadership Group on care of older people in hospital
- Victorian Healthcare Association
- Victorian Integrated Cancer Services
- Victorian Paediatric Clinical Network
- Victorian Renal Clinical Network
- Victorian Stroke Clinical Network
- West Wimmera Health Service
- Western Health

Appendix 3: Safety and quality indicators

Indicator type	Indicator name	Data collection status
Infection control	Hand hygiene	Currently collected and reported
	Health care worker immunisation	
	Healthcare associated Staphylococcus aureus bacteraemia (SAB)	
	ICU Central line associated bloodstream infections	
	Surgical site infection	
Mental health	Mental health post discharge follow-up	Currently collected and reported
	Mental health readmission	
	Mental health seclusion rate	
Aged care	Falls and fall related fractures	Currently collected and reported
	Pressure injuries	
	Unplanned weight loss	
	Use of nine or more medicines	
	Use of physical restraint	
'At zero' safety indicators	Sentinel events	Currently collected
	Incident reports assigned with an incident severity of one	Currently collected through the Victorian Hospital Incident Management System, with functionality issues that are being addressed.
Maternity service indicators	*A new suite of indicators is currently under development*	Under development.
Capability framework adherence	Maternity service framework adherence	Much of the necessary data for monitoring adherence is collected through the VAED.
	Capability frameworks will need to be developed for other service areas.	
Patient experience	Transitions index	Already collected
	Three patient experience improvement goals (to be selected by the hospital)	Already collected

Indicator type	Indicator name	Data collection status
Safety culture	Rates of agreement with the following questions: 1. Patient care errors are handled appropriately in my work area; 2. This health service does a good job of training new and existing staff; 3. I am encouraged by my colleagues to report any patient safety concerns I may have 4. The culture in my work area makes it easy to learn from the errors of others; 5. Trainees in my discipline are adequately supervised; 6. My suggestions about patient safety would be acted upon if I expressed them to my manager; 7. Management is driving us to be a safety-centred organisation; 8. I would recommend a friend or relative to be treated as a patient here.	Already collected
'Targeting zero' safety indicators (ACSQHC hospital-acquired complications)	Cardiac complications	New indicator, with necessary data collected already in the VAED
	Delirium	
	Falls resulting in fracture and intracranial injury	
	Gastrointestinal bleeding	
	Healthcare associated infection	
	Hospital rapid response team (RRT) call	
	Iatrogenic pneumothorax requiring intercostal catheter	
	Malnutrition	
	Medication complications	
	Persistent incontinence	
	Pressure injury	
	Renal failure	
	Respiratory complications	
	Surgical complications requiring unplanned return to theatre	New indicator, with plans to add it to national data collections
	Unplanned Intensive Care Unit (ICU) admission	

Indicator type	Indicator name	Data collection status
Comparative quality indicators (Variable Life Adjustment Displays)	Abdominal Hysterectomy Complications of Surgery	New indicator, with necessary data collected already in the VAED
	Acute Myocardial Infarction In-hospital Mortality	
	Acute Myocardial Infarction Longstay	
	Acute Myocardial Infarction Readmission	
	Colorectal Carcinoma Complications of Surgery	
	Depression Longstay	
	Depression Readmission	
	Fractured Neck of Femur Complications of Surgery	
	Fractured Neck of Femur In-hospital Mortality	
	Heart Failure Longstay	
	Heart Failure Readmission	
	Hip Replacement (Primary) Complications of Surgery	
	Hip Replacement Longstay	
	Hip Replacement Readmission	
	Knee Replacement (Primary) Complications of Surgery	
	Knee Replacement Longstay	
	Knee Replacement Readmission	
	Laparoscopic Cholecystectomy Longstay	
	Laparoscopic Cholecystectomy Readmissions	
	Paediatric Tonsillectomy and Adenoidectomy Long stay	
	Paediatric Tonsillectomy and Adenoidectomy Readmission	
	Pneumonia In-hospital Mortality	
	Prostatectomy Complications of Surgery	
	Schizophrenia Longstay	
	Schizophrenia Readmission	
	Selected Primip (Assisted births) Episiotomy or 3rd and 4th degree Perineal Tears (Public facilities)	

Indicator type	Indicator name	Data collection status
	Selected Primip (Unassisted births) Episiotomy or 3rd and 4th degree Perineal Tears (Public facilities)	
	Selected Primip Caesarean Section (Private mothers in Public facilities)	
	Selected Primip Caesarean Section (Public patients in public facilities)	
	Selected Primip Induction of Labour (Public facilities)	
	Selected Primip Instrumental Delivery (Public facilities)	
	Stroke In-hospital Mortality	
	Vaginal Hysterectomy Complications of Surgery	
Core hospital-based outcome indicator	Death in low-mortality Diagnosis Related Groups (DRGs)	Currently collected and reported

Appendix 4: Comparison of safety and quality programs

The Clinical Excellence Commission (CEC) is responsible for leading safety and quality improvement in the NSW public health system. The CEC was established in 2004 and is focussed on programs, projects and initiatives to address quality and safety issues identified in the NSW health system. By contrast, the Victorian Department of Health and Human Services has not viewed its role as being that of system leader in the area of safety and quality improvement. Hence, the subsequent table compares the current CEC programs with similar programs in Victoria.

CEC Program	Description	Victorian Comparison
AMBER Care	The AMBER Care Bundle helps patients and clinicians clarify goals of care in the context of clinical uncertainty.	Nil equivalent
Between the Flags	Between the Flags is a state wide patient safety system which provides a 'safety net' to identify patients who are deteriorating and ensure they receive appropriate care. The NSW BTF system is unique, in its scale and its design.	Nil equivalent
Blood Watch	Blood Watch is a Statewide transfusion medicine improvement program. Its primary goal is to improve the safety and quality of fresh blood product transfusion in all NSW public hospitals.	Victorian Blood matters program is funded by the department and managed through the Specialty Programs branch of Health Service Performance and Programs.
CAUTIs	The Healthcare Associated Infections (HAI) program assists local health districts to improve systems to manage and monitor the prevention and control of HAIs.	Nil equivalent
Chartbook	The Chartbook is designed to stimulate both discussion and action across the system, that will lead to improvements in the quality and safety of health services.	Monitoring results spread through various reports. Nil equivalent overarching measuring and reporting tool.
CHASM	The Collaborating Hospitals' Audit of Surgical Mortality (CHASM) is a systematic peer-review audit of deaths associated with surgical care.	Victorian Audit of Surgical Mortality
Clinical Leadership	Strategies for sustainable patient safety and system improvement are dependent on strong clinical leadership capabilities.	Nil current equivalent

CEC Program	Description	Victorian Comparison
Clinical Practice Improvement	CPI training provides clinicians with a methodology to undertake projects to improve care for patients. It uses a structured approach based on process improvement methodology adapted from the teachings of W. Edwards Deming.	Nil current equivalent
Clinical Procedure Safety	To improve patient safety and the quality of clinical care of patients undergoing clinical procedures.	Nil equivalent
Continuity of Medicines	The CMM program has been established to help prevent the harm that can result from unintentional changes in patients' medicines, by improving medication management when patients transfer between and within health care settings.	Nil equivalent
eChartbook Portal	The CEC's eChartbook Portal - a tool to assist LHDs to monitor quality improvement.	Nil equivalent
End of Life Care	The End of Life program will play an important role in the introduction of a state-wide approach to EOL care that ensures all patients who die under our care benefit from a consistent approach to individualised end of life care.	Functions located within the departments continuing care program.
Falls Prevention	The NSW Falls Prevention program is responsible for the implementation of the policy to Reduce Fall Injury Among Older People, NSW Ministry of Health.	Nil equivalent
HAI - Healthcare Associated Infections Program	The Healthcare Associated Infections (HAI) program assists local health districts to improve systems to manage and monitor the prevention and control of HAIs.	Some functions are performed by VICNISS
Hand Hygiene	Reducing the spread of germs in hospitals and the number of serious infections among patients, is vital for improving patient safety.	The department currently funds specific targeted projects to improve hand hygiene in Victorian hospitals.

CEC Program	Description	Victorian Comparison
High-Risk Medicines	The High-Risk Medicines program heightens awareness of the harm that can be caused by high risk medicines and provides information that will assist in improving the management of these medicines in NSW healthcare facilities.	Nil equivalent
In Safe Hands	The In Safe Hands program provides a platform for building and sustaining efficient and effective healthcare teams within a complex healthcare environment. It enables teams to address daily challenges of patient care and empowers them to make good decisions based on understanding the full scope of a patient's care.	Nil equivalent
Medication Safety	The Medication Safety and Quality unit supports the safe and quality use of medicines. Its four programs, Continuity of Medication Management, High-Risk Medicines, Medication Safety Self Assessment (MSSA) and VTE Prevention assist health care teams.	Nil equivalent
Medication Safety Self Assessment	Risk assessment tools specifically designed to help hospitals take a proactive and system-based approach to medication safety.	Nil equivalent
Open Disclosure	The Open Disclosure program provides a framework for effective open disclosure discussions and resources to support clinicians and managers to practice open disclosure.	Victorian open disclosure guidebook
Paediatric Quality Program	The Paediatric Quality Program works across a range of areas to improve the quality and safety of health care for children and young people in NSW, including a close partnership with the Office of Kids and Families.	Some functions within the Victorian Paediatric Clinical Network.
Partnering with Patients	The Partnering with Patients program fosters the inclusion of patients and family as care team members to promote safety and quality.	Some functions with the department's quality and safety branch

CEC Program	Description	Victorian Comparison
Patient Safety	The NSW Patient Safety Program builds on previous policies, frameworks and strategies already in operation within the NSW health system to create what is potentially one of the greatest ever systemic improvements to clinical quality and safety.	Some functions through Sentinel event program and VHIMS.
Pressure Injury Prevention Project	The Clinical Excellence Commission (CEC) has established the Pressure Injury Prevention Project to foster best practice in the prevention and management of pressure injuries in NSW.	Nil equivalent, some functions with the department's aged care branch.
QUAH - Quality Use of Antimicrobials in Healthcare	The Quality Use of Antimicrobials in Healthcare program is designed to facilitate and support antimicrobial stewardship initiatives in NSW public health facilities.	Some limited functions (currently 0.1 FTE)
Quality and Safety Education	This project explores ways of delivering quality and safety education in medical, nursing and allied health schools.	Nil equivalent
SCIDUA	SCIDUA's primary function is to investigate deaths that occur while under, as a result of, or within 24 hours after the administration of an anaesthetic or sedation administered for a medical, surgical, dental or like procedure.	Victorian Consultative Council on Anaesthetic Mortality and Morbidity (VCCAMM)
Sepsis Kills	Improving the recognition and management of severe infection and sepsis - a project to improve the recognition of severe infection and sepsis and promote faster treatment for patients in the emergency department and the inpatient wards.	Nil equivalent
VTE Prevention	The VTE Prevention Program has been established to reduce the incidence of hospital-associated Venous Thromboembolism (VTE) in NSW public hospitals.	Nil equivalent

Appendix 5: Safety and quality report for boards and sub-committees

The review panel has developed a one-page safety and quality report which the Department (or the Victorian Health Performance Authority when created) can produce from routinely collected hospital data. The production of the report can be easily standardised and automated.

The one-page report (see page two of this appendix) summarises the hospital's performance on more than 50 indicators. This provides the opportunity for Boards to question management on any areas where the hospital is identified as significantly different from state-average performance or nominated benchmarks, or where the hospital›s trend is deteriorating.

The one-page report is supported by a one-page overview of performance on each metric, two examples of which are also provided in this appendix.

Depending on the number of metrics where the hospital is identified as aberrant, the supplementary one-page overview of performance for each metric could also be provided to the board. It should always be provided to the Board's safety and quality committee. If the full report is not provided to the board, a very short summary can be extracted for reporting to the Board.

Global hospital S&Q dashboard

Indicator set	Performance relative to benchmark	Local progress
Comparative quality indicators (VLADs)	● Far below target on ● Below target on ○ Near target on ● Exceeding target on ● Far exceeding target on	● Deterioration in ○ No change in ● Improvement in
'Targeting zero' safety indicators (ACSQHC hospital-acquired complications)	● Far below target on ● Below target on ○ Near target on ● Far exceeding target on	○ No change in ● Improvement in
'At zero' sentinel events and ISR 1 incidents	● Two ISR-1 incidents ○ Zero sentinel events	● Deterioration in ISR 1s ○ No change in SEs
Maternity indicators	● Below target on ○ Near target on ● Exceeding target on	○ No change in ● Improvement in
Capability framework compliance	● Far below target on ○ Near target on	● Deterioration in ● Improvement in
Safety culture	○ Near target on ● Exceeding target on	○ No change in ● Improvement in
Patient experience	● Below target on ○ Near target on	● Deterioration in ○ No change in
Death in low-vol. DRGs	○ Near target	○ No change
Mental health indicators	○ Near target on ● Exceeding target on	○ No change in ● Improvement in
Aged care indicators	● Below target on ○ Near target on	● Deterioration in ○ No change in
Infection control indicators	○ Near target on ○ Exceeding target on	○ No change in ● Improvement in
Overall performance	● Far off target on ● Below target on ○ Near target on ● Exceeding target on ● Far exceeding target on	● Deterioration in ○ No change in ● Improvement in

Notes: For indicators where performance is measured against peers (e.g. VLADs), "far off/exceeding target" = high/low outlier, whereas for indicators where performance is measured to a standard benchmark (e.g. hand hygiene), "far off/exceeding target" means a substantial and significant difference between the hospital's performance and the standard. Any ISR 1 incidents or sentinel events are considered off target; zero is considered the target. Currently capability frameworks are only available for maternity; this presumes an additional framework (e.g. for surgery).
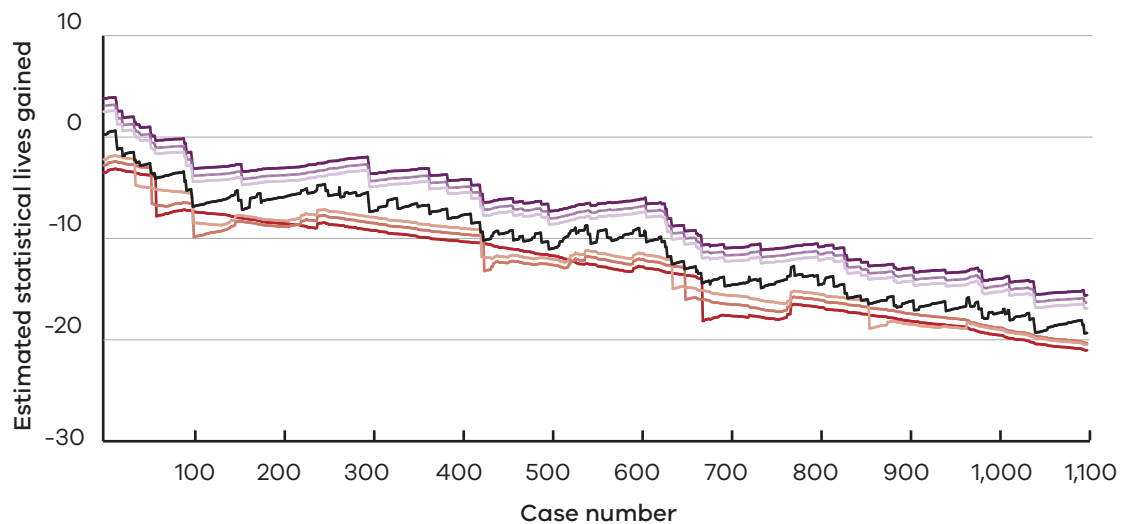
1.1 Pneumonia in-hospital mortality (VLAD)

Pneumonia is a common morbidity in hospitals, and a leading cause of in-hospital patient deaths. However, evidence-based models of care can be followed to reduce patients' risk of contracting and succumbing to pneumonia in hospital.

The chart below shows the outcomes (in terms of mortality) for patients admitted with pneumonia to your hospital, after adjusting for common risk factors such as the age of your patients, whether they were receiving palliative or surgical care, and whether they had certain chronic diseases and other comorbidities that may increase their risk. Downward movement of the curve indicates deaths are occurring, upward indicates patients are discharged alive. If the trend is downward it means more deaths are occurring than expected taking patient risk into account. The black curve is your hospital's trend, while the purple and red curves represent the control limits placed around the trend.

As the chart shows, more deaths have occurred at your hospital than were expected, given your patients' risk. Over the period shown, 18 more deaths than expected have occurred. The contact between your hospital's curve (the black curve) and the lower control limit (the red curve) means that the trend is significant and warrants investigation.

Pneumonia In-Hospital Mortality for the period from 1 July 2014 to 29 Feb 2016

Refer to [the new OSQI website] for a summary of the international evidence on 'what works' in preventing in-hospital mortality for pneumonia, and top performing Victorian hospitals' protocols for doing so.
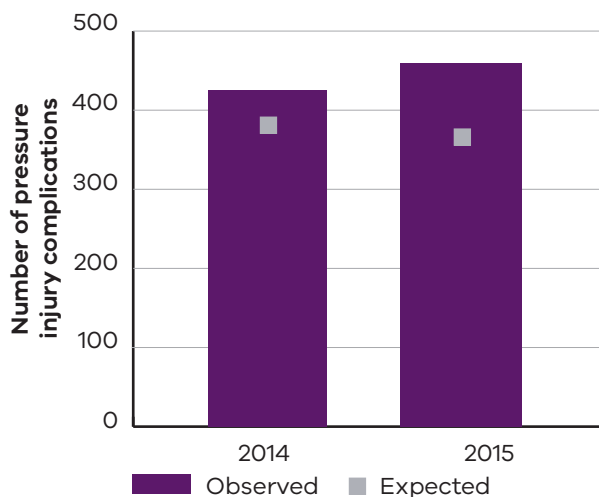
2.1 Pressure injury complications

Immobility, such as that associated with extended bed rest in hospital, can cause pressure injuries. These are injuries localised to the skin and/or underlying tissue. Research shows that pressure injuries are a major contributor to the care needs (and costs) of patients within the health industry and in the majority of cases, pressure injuries are preventable. Preventing and managing pressure Injuries is the 8th National Standard against which hospitals are accredited.

Your crude rate is 12.27 pressure injuries per 1000 patients. **Patients are substantially more likely to have a pressure injury in your hospital than in others, as your relative risk (and the enclosing confidence interval) is above 100.**

Stage III and IV ulcers have a greater impact on the patient but all four stages of pressure injury should be monitored in order to prevent lower stages of injury from becoming more severe.
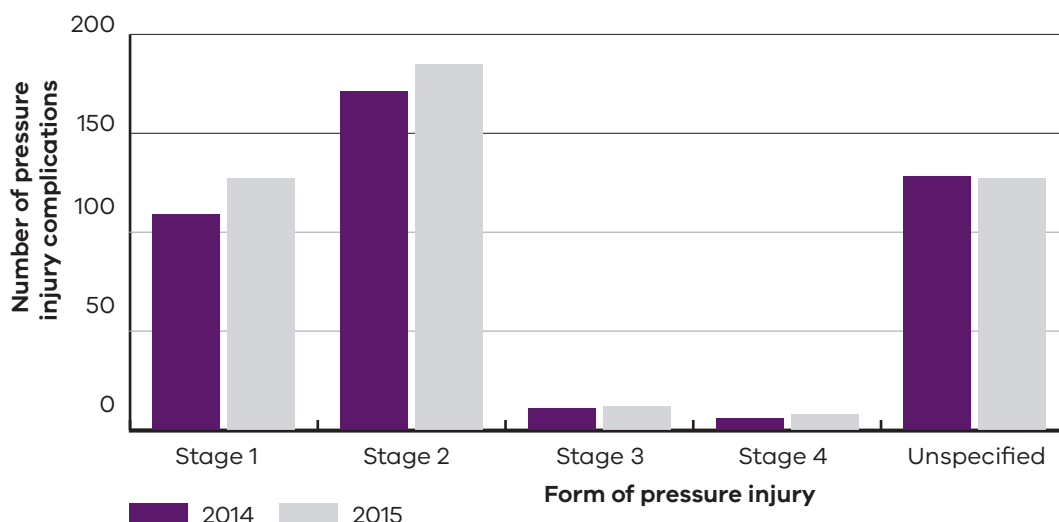
Count of pressure injury complications at your hospital

Relative risk of pressure injury complications at your hospital
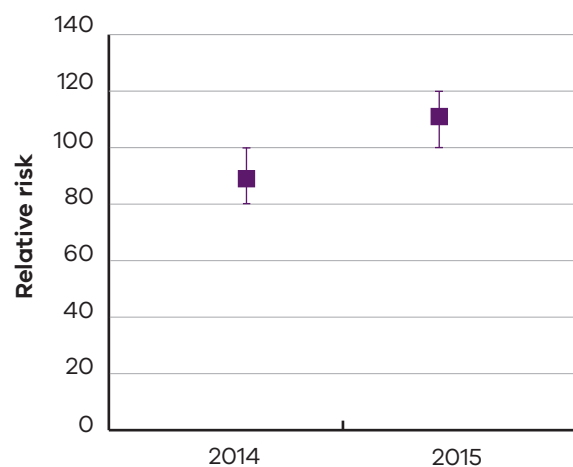
Sub-categories of pressure injury complications at your hospital

Refer to [the new OSQI website] for a summary of the international evidence on 'what works' in preventing pressure injury complications, and top performing hospitals' protocols for doing so.