VICTORIA

Auditor General

Victoria

Managing patient safety in public hospitals

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AUDITOR GENERAL
VICTORIA

The Hon. Monica Gould MP
President
Legislative Council
Parliament House
Melbourne

The Hon. Judy Maddigan MP
Speaker
Legislative Assembly
Parliament House
Melbourne

Dear Presiding Officers

Under the provisions of section 16AB of the *Audit Act 1994*, I transmit my performance audit report on *Managing patient safety in public hospitals*.

Yours faithfully

JW CAMERON
Auditor-General

23 March 2005

Foreword

The responsibility of health services to 'first, do no harm' makes the reduction of care-related illness and injury a core task for health services and their staff. It is a major challenge faced by health practitioners and the health system worldwide.

Even the best people, with the highest levels of skill, professionalism and commitment, will sometimes make mistakes. The challenge for organisations is to create an environment where errors are detected, investigated, and systems are in place to ensure that mistakes are not repeated and that potential harm is minimised. If the best people can make mistakes, then the best organisations learn from those mistakes, and use them to improve their practices.

Clinical incidents are incidents in a health care setting that caused, or could have caused, unexpected harm to patients. They can be as simple as a patient fall, or as complex as a medication error. This report considers the effectiveness of the arrangements Victoria's health services and hospitals have in place to identify, investigate, address and prevent clinical incidents.

The work is based on a survey of all public hospitals in Victoria that provide acute care, and detailed fieldwork at 5 health services. As the report is about performance across the sector broadly, and some of the data could be subject to misinterpretation, I have decided not to name the 5 health services where fieldwork was conducted.

One pleasing aspect of the audit was the eagerness of hospitals examined to share what they were doing in this area, and to learn what they could be doing better. This report recommends steps that health services and DHS can take to improve performance in this critical area.

JW CAMERON
Auditor-General

23 March 2005

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1. Executive summary

1.1 Overall conclusion

Clinical risk-management in the acute health area in Victoria is unevenly developed. Hospital and health service performance in this area is highly variable - some are doing it well, with clear policies, good compliance by staff and good internal systems for gathering information and monitoring performance.

However some are quite a distance from good practice – with weak and incomplete frameworks and documentation; poor systems for ensuring errors are recognised when they occur, are recorded, and are addressed; and no effective mechanisms for making sure mistakes that cause harm to patients are not repeated in the future.

In all hospitals, staff training in this area is a significant weakness. Little time is allocated to training in risk management procedures; many staff rely on advice from others and 'best-guesses' on what to report. This is a concern because improvement can only be driven by well-informed and committed staff.

To date DHS has been relatively hands-off in this area, and has not been prescriptive about the detail of how clinical risk management programs should operate. Broad parameters have been laid down in legislation, and the Victorian Quality Council has been established as a resource to provide information and guidance on good practice. While this approach has clearly been successful with some hospitals and health services who have made good progress, the worse performers may need more prescriptive guidelines.

Additionally, if each hospital and health service develops its own definitions of clinical incidents, and develops its own frameworks for gathering and recording data, opportunities for sharing information and for learning from others, are lost.

One of the most useful drivers of organisational performance is good comparative performance data that enables organisations to benchmark against similar bodies. However we found that current data on clinical risk management outcomes is poor. Improvements in this area need to be a priority, as without good data accountability and performance improvement needs are not met.

These are challenges health services worldwide are facing. In the past, clinical risk management was seen as the responsibility of the clinician alone. Structured clinical risk management, integrated within the hospitals management framework, is a relatively new discipline.

1.2 Are clinical risk management frameworks and systems rigorous?

The strength of clinical risk management frameworks in health services is currently variable. The best have integrated their clinical risk management framework into their wider organisational risk management framework. This ensures that clinical risk receives the same priority as other risks such as financial risk. However, we were not satisfied that 2 of the 5 health services we visited had rigorous and accountable risk management systems. Given the legislative and accreditation requirements that such systems be in place, this reflects poorly on the governance structures within those health services.

All health services have strongly embraced the notion of health service quality and safety committees. They have committees in place, a clear line of accountability to the board and strong networks across organisational levels. This is an important step for building staff ownership and involvement in clinical risk management.

However, the quality of policies and guidelines in place to direct clinical risk management activities throughout the organisation was varied. This is a significant concern given that the importance of clear policies has been identified in a number of high-profile inquiries into patient safety failures.

Hospitals are gathering data about clinical incidents locally, however the absence of a consistent statewide dataset means that it is not possible to collate this body of information and identify statewide patterns and trends.

DHS has identified the importance of a consistent approach to clinical risk management with its intention, stated in the *2003-04 Departmental Plan*, to standardise clinical risk management activities across Victoria. Currently, more work needs to be done in this area.

One of the contributing factors in the hit-and-miss nature of work in this area appears to be the lack of clearly defined minimum standards from DHS. Further work needs to be undertaken in clearly defining minimum standards.

Recommendations

1. **Hospitals and health services should ensure that their clinical risk management framework is linked to their wider organisational risk management framework.**
2. **DHS should develop minimum requirements for the content of hospital clinical incident policies. Hospitals should regularly review these policies.**
3. **DHS should develop a recommended minimum data set for incident reporting in hospitals and health services.**
4. **Hospital and health service incident reporting systems should meet minimum guidelines outlined by the Australian Council for Safety and Quality in Health Care.**

1.3 Are clinical risk management practices effective?

In examining how health services are putting clinical risk management into practice, we found significant variation on what to report, when to report, what to investigate further and how to conduct an investigation. There was no certainty that the same incident would be identified and treated consistently between 2 units in a hospital, nor between 2 hospitals. The current system relies too heavily on individual judgement.

Many health services do not have a rigorous risk rating process to prioritise their responses to identified risk. In a situation of limited resources and competing priorities, this means that larger and harder-to-address priorities may be overlooked.

A standardised risk assessment matrix would encourage a more consistent and objective approach to rating incidents and determining whether a root cause analysis is needed. It would also support the development of a standardised organisational response. Without this, there is a potential for clinical risk management activities to be conducted according to time and available resources, not according to objectively assessed need.

While there is a wealth of guidance material on risk identification and risk rating available, it is not being used in many hospitals. DHS may need to issue more prescriptive guidelines on minimum standards for risk rating and assessment.

Even the hospitals that are making good progress in risk identification and consistent risk rating have work to do in improving their evaluation of actions taken. If health services do not evaluate their responses to critical incidents, they cannot be sure there are no unintended consequences and will be unable to learn from past events.

Recommendations

5. **Hospitals and health services should ensure that all clinical incidents from internal incident reporting systems are collated and reported centrally to the board and quality committee.**
6. **Hospitals and health services should ensure that investigations into lower risk incidents (those not requiring a full Root Cause Analysis) are conducted effectively and consistently. DHS should lead the development of guidelines in this area.**
7. **Hospitals and health services should implement standard risk rating methodologies for clinical incidents, in accordance with the Australian Standard AS/NZ 4360.**
8. **DHS should ensure that hospitals and health services adopt consistent definitions of adverse event, near miss and sentinel event in line with the Australian Council for Safety and Quality in Health Care definitions.**
9. **Hospitals and health services should develop strategies to ensure that responses to clinical incidents are reviewed and their effectiveness is evaluated.**

1.4 Are people issues managed effectively?

Training for staff in the objects and conduct of clinical risk management programs is crucial if these programs are to achieve their aim of improving patient safety. Currently, the training programs in place have poor reach, and there is a lack of agreement on core training content.

Those staff who are trained in the principles of clinical risk management often get a cursory overview. This is likely to be limiting progress in improving patient safety, and the absence of self-paced training material presents a further missed opportunity for improvement.

The decision by the VQC to implement a trial of more formal education for health service staff is a positive step toward rectifying this weakness in clinical risk management programs. However, hospitals will need to make it a priority, as currently limited time is allocated to training in clinical risk management.

DHS' development and roll-out of RCA training for investigating serious incidents is a positive step. However, this training needs to be maintained through regular participation in investigations, and skill maintenance needs to be monitored.

Many staff currently conduct investigations into minor incidents without any training at all. A less intensive course may provide a cost-effective way of addressing this training need without requiring these staff to complete full RCA training.

Addressing clinical risk management training needs will require significant long- term commitment from DHS and hospitals. A strategic approach is needed to set priorities, decide on target groups and to explore new ways of delivering the training, such as self-paced and online options. DHS and VQC need to take the lead in this area, building on the work being undertaken by the Australian Council for Safety and Quality in Health Care in developing a national clinical risk management education framework.

Involving patients in clinical risk management programs is also an important step in improving patient safety. While progress is being made, some health services need to be more active when it comes to involving patients. Their policies and procedures need to reflect a commitment to patient involvement that can then be put into practice.

Recommendations

10. DHS should develop guidelines on recommended content of training for staff in clinical risk management.

11. Hospitals and health services should monitor whether staff who have completed RCA training maintain these skills through participation in investigations, and consider refresher training if required.

12. DHS should develop a statewide clinical risk management training strategy, incorporating the work undertaken by VQC and the ACSQHC. This work should consider utilising online and self-paced training delivery options for relevant levels of staff.

13. Hospitals and health services should develop clear policies and procedures on disclosure of clinical incidents to patients, and ensure that all staff are aware of, and adhere to, the policy.

1.5 Is performance monitoring and reporting effective?

Performance monitoring in health services and hospitals is highly variable. Hospital boards are responsible for making sure that effective and accountable systems are in place for patient safety. Currently, however, few hospitals have effective systems in place for reporting on their clinical risk management performance. Without these systems, boards cannot be sure that they are discharging their clinical risk management responsibilities.

The requirement that hospitals be accredited by ACHS is one of DHS' major assurance mechanisms. However, up until the start of 2005, accreditation requirements relating to clinical risk management were not mandatory. With this change, a number of hospitals that have previously been accredited in spite of weak clinical risk management processes will need to undertake substantial work in the area to retain accreditation.

Reporting requirements that apply to hospital clinical risk management programs have not always been clear. As a result, DHS compliance monitoring is not fully effective. DHS needs to decide what it wishes to achieve through hospital reporting on clinical risk management activities, and give clear statements of its requirements. Without this clarity, hospital commitment to such reporting will be minimal.

Together with health services and stakeholders such as the VQC and the VMIA, DHS needs to develop a long-term strategy that will give clear and consistent statewide datasets about clinical incidents. Currently, incident data on adverse events and near misses are not collected or classified consistently at hospitals. Significant work needs to be done before statewide data collection will yield valuable information, but this needs to be a priority.

Projects like the Pressure Ulcer Point Prevalence Survey show the power and value of statewide data collection. Purposive studies such as these inform both practice and policy development. They need to continue, and the information they give needs to be supplemented with comprehensive performance indicator data, gathered on a regular basis.

There is no statewide picture of the nature and number of adverse events and near misses in Victorian hospitals. While sentinel events are reported to DHS - and it is leading the nation by reporting these publicly - sentinel events are only a small fraction of all clinical incidents. As a result, their value in identifying emerging issues, and for trend analysis, is limited. Data will improve from 2004-05 with the inclusion of serious near-misses as reportable events, however, information about the bulk of reported incidents will still not be available at state level.

Any statewide data gathering efforts must be aware of the substantial reporting task already faced by hospitals. However, better use can be made of existing datasets and systems. Hospitals currently record substantial data about patient outcomes in the VAED. This can be mined to give hospitals better performance information and to help them identify emerging issues, trends and benchmarks.

The VMIA receives reports on around 100 000 clinical incidents each year. However, this information is currently not available to DHS. The web-based system linking Riskman data recorded in hospitals - currently being trialled by the VMIA - may improve statewide information on performance and trends. Even so, greater coordination of data collection systems, and collaboration between DHS and the VMIA will be needed for this system to reach its potential.

The weakness of our picture of state-level performance in patient safety is consistent with the national picture: there is little systematic information by which the quality and safety of health care in Australia can be evaluated. However, some other states are more advanced than Victoria in building statewide datasets about clinical incidents. A priority is to develop systematic information based on consistent definitions, minimum datasets, performance review criteria, information management systems and standards. DHS needs to take the lead in this, supported by the VMIA and the VQC.

Recommendations

14. Hospital boards should ensure that they regularly receive key performance data enabling them to monitor local performance in patient safety. Areas to be reviewed routinely should include the minimum reporting datasets recommended by the DHS governance reform panel and the VQC.

15. The Integrated Performance Report should include regular reporting on the minimum reporting datasets recommended by the DHS governance reform panel and the VQC.

16. DHS should develop a strategy to collect and analyse data to encourage safety and improvement in quality. This should consider:

- **whether it is beneficial to link current hospital level reporting systems to provide state-level data**
- **utilising routinely reported datasets such as the VAED to obtain information about clinical incidents**
- **exploring opportunities to share information with the VMIA.**

RESPONSE provided by Secretary, Department of Human Services

Overall the report is a fair reflection of the status of clinical risk management in acute health in Victoria. The Department of Human Services (DHS) has provided policy and direction but not hands-on monitoring of clinical risk management across the acute health system.

The recommendations support a more hands-on directive approach by DHS. This goes beyond the current approach and DHS will consider how incentives and national initiatives might be used as an alternative. We agree that there is evidence of good compliance in this area but that overall performance across the system is variable with some areas requiring significant work to ensure consistent good practice.

Adverse event reporting is a part of clinical risk management, which is in turn a part of clinical governance. This was confirmed in the report of the governance review of the Victorian Health System (2003) and is also reflected in the Victorian Quality Council (VQC) Safety and Quality Framework.

Training of health care staff in aspects of clinical quality and patient safety has been the responsibility of hospitals and health services. VQC are currently developing an education framework for safety and quality and clinical risk management training. DHS work in training undertaken to date will fit within the model developed.

Policy and procedure development should be a part of the core business of hospitals and health services.

Responses to individual recommendations are included in the body of the report.

2. Clinical risk management in public hospitals

2.1 Introduction

Making sure that hospital patients are safe from care-related injury and harm is a challenge for health service providers and governments worldwide. Health care is complex - an error by treating staff, equipment failure or failure to follow procedures can all potentially cause harm to patients.

As well as causing personal harm and suffering, unintended patient injury adds to the cost of care in an already heavily-burdened health system. The direct medical costs of preventable clinical incidents have been estimated at $2 billion each year in Australia, with the total lifetime costs of preventable harm from clinical incidents estimated to be $4 billion each year[1]. The cost in extra bed-days alone has been estimated at $800 million each year, based on 1992 figures[2].

The issue of patient safety has gained prominence since the 1990s, following the results of several Australian and international studies. These studies quantified the number of patients experiencing preventable harm and the causes of this harm. Of course, medical professionals have always been concerned with reducing harm to patients. But in recent years, improving patient safety and managing the risks associated with medical care has become an increasing focus for state and federal governments.

2.2 What are clinical incidents?

"Clinical incident" describes a range of incidents in a health care setting that resulted - or could have resulted - in unexpected harm to the patient. These incidents include medication errors, patient falls, health care-associated infections, pressure ulcers, equipment failures and errors in diagnosis.

[1] Australian Council for Safety and Quality in Health Care 2003, *Patient Safety: Towards Sustainable Improvement*.

[2] R Wilson et al, "An analysis of the causes of adverse events from the Quality in Australian Health Care Study", *Medical Journal of Australia*, 1999, vol. 170, pp. 411–15.

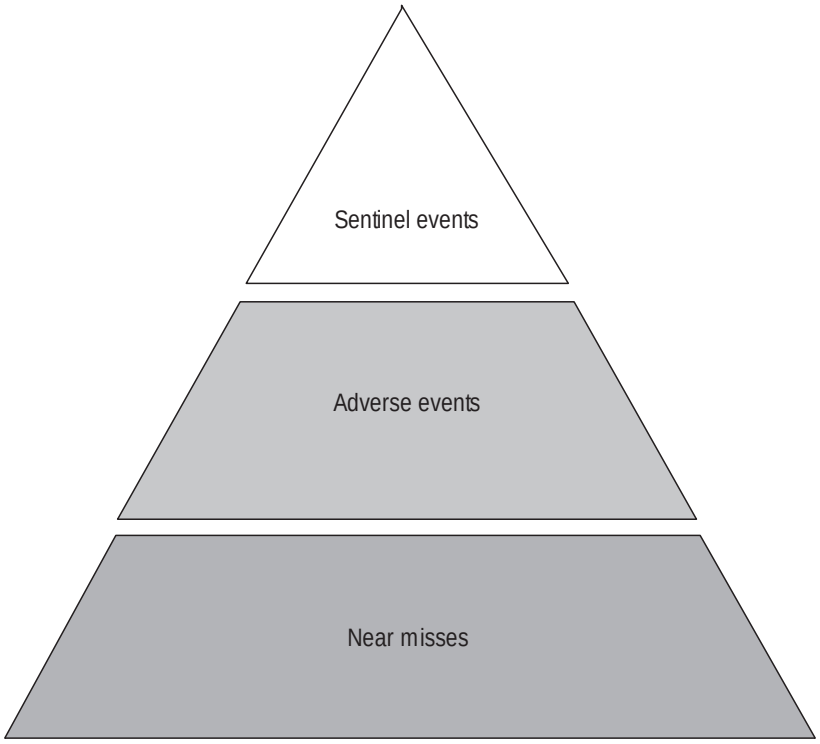
In the most extreme cases (for example, retained instruments after surgery), clinical incidents are easily identified as something that should not have happened in the course of normal treatment. However, in many cases, naming an event a clinical incident is not clear-cut. For instance, if a patient has an adverse reaction to medication, a number of factors will influence a judgement on whether the clinician could have, and should have, predicted the reaction. Those factors include the patient's age, health and medical history. What one practitioner classifies a "clinical incident", another may assess as a complication of care.

Clinical incidents are also classified according to the harm caused. In Victoria, they are generally considered within one of the following 3 categories[3]:

- ***sentinel events*** are events in which death or serious harm to a patient has occurred
- ***adverse events*** are incidents in which harm resulted to a person receiving health care
- ***near misses*** are incidents that did not cause harm

Not all clinical incidents occur at the same frequency. As Figure 2A highlights, the most serious incidents happen less often, with near misses making up most clinical incidents.

FIGURE 2A: RELATIVE FREQUENCY OF CLINICAL INCIDENTS



Source: Victorian Auditor-General's Office.

[3] The formal definitions of these classifications, as used in Victoria, are in this report's glossary.

2.3 How often do clinical incidents occur?

To correctly estimate how often clinical incidents happen is difficult. Many clinical incidents are not reported because of inconsistent standards and definitions, the subjectivity of incident reporting systems, and poor reporting cultures. As well, Victoria has no centralised data collection systems for aggregating the number and type of clinical incidents.

This audit did not seek to report on how many recorded clinical incidents there are in Victorian health services. Nor did we set out to rank health services in terms of the number of reported incidents. While higher levels of reported incidents may superficially indicate poor safety, high reporting levels can also indicate a strong incident reporting culture and good patient safety. Conversely, low levels of reported incidents could indicate good patient safety, but are most likely to indicate a poor reporting culture and, as a result, poor patient safety. Levels of reported incidents do not correctly reflect the level of patient safety.

Having said this, estimates have been made of the number of adverse events[4], with the best current estimates based on retrospective file reviews. This method applies the same criteria to medical records and removes the more subjective acts of identifying and reporting clinical incidents. Several Australian and international studies have found that at least 10 per cent of all hospital admissions are associated with an adverse event, with many of these preventable.

A study using analysis of routinely reported medical record abstracts, analysed all hospital separations in Victoria from 1 July 2000 to 30 June 2001[5]. The study suggested that of 1.6 million separations recorded in the period, 136 000 had codes showing a potential complication of care.

Estimates of the most common clinical incident types suggest that:

- Nationally, potentially preventable *adverse drug events* represent 10 to 20 per cent of all clinical incidents. Clinical incidents linked to medicines are estimated to cost $380 million a year in the public hospital system[6].
- Nationally, health care associated *infections* may number as many as 150 000 each year, again with many potentially preventable[7].

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[4] These estimates are based on a specific definition of adverse event, similar to that used by DHS. Generally, they do not include near misses or sentinel events.

[5] TJ Jackson, SJ Duckett, J Shepheard and KG Baxter, *Measurement of complications of care using "incidence flagged" diagnosis codes*, School of Health, La Trobe University, 2004.

[6] Australian Council for Safety and Quality in Health Care 2003, *Patient Safety: Towards a Sustainable Improvement*.

[7] ibid.

- *Patient falls* have been estimated in one study[8] to be 38 per cent of all clinical incidents in the hospital setting. Of these falls, 30 to 40 per cent cause injuries[9].
- A study of hospital patients in Victoria showed an average rate of *pressure ulcers* of 26 per cent[10].

2.4 Why do clinical incidents occur?

Many factors contribute to clinical incidents. Human error has been cited as the leading cause, with one influential study indicating that about 80 per cent of clinical incidents were linked with one or more human error categories[11].

However, "human error" is not a very useful explanation for why incidents and accidents happen. The most highly-skilled, well-trained and committed people will sometimes make errors. The working environment, systems of work and equipment design will influence how often errors happen and how severe their consequences are.

While these external factors include safeguards or barriers against human error, none is 100 per cent effective. Incident analysts have suggested that harm to patients happens when weaknesses or gaps in each layer of barriers coincide.

The way in which multiple safeguards and error prevention systems overlap is illustrated in Figure 2B.

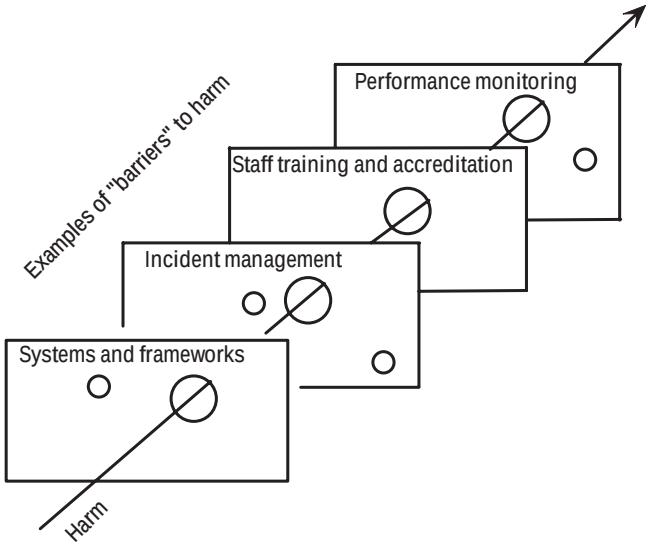
[8] K Rigby, R Clark, W Runciman, "Adverse events in health care: Setting priorities based on economic evaluation" *Journal of Clinical Practice* 1999, vol. 19, pp. 7-12.

[9] P Halfon, Y Eggli, G Van Melle, A Vagnari, "Risk of falls for hospitalised patients: a predictive model based on routinely available data", L Chu, C Pei, A Chui et al, "Risk factors for falls in hospitalised older medical patients" cited in: Victorian Quality Council, *Minimising the Risk of Falls and Fall-related Injuries Research supplement*, 2004.

[10] Victorian Quality Council 2003, *State-wide Pressure Ulcer Point Prevalence Survey Report*.

[11] ibid.

FIGURE 2B: THE "SWISS CHEESE" MODEL OF INCIDENT PREVENTION



Source: Victorian Auditor-General's Office, based on incident model developed by Reason[12].

Early approaches to error control in medicine focused on - and often blamed - the individual clinician. The current approach recognises that many errors come from faults in the underlying *systems* that deliver health care. This approach accepts that human error is inevitable, and looks at the environment in which errors occur to address the underlying system problems[13].

This does not mean moving away from individual accountability. It does, however, spread responsibility to systems in which care is provided. This creates a "just" organisational culture; one that balances the need for a non-punitive learning environment with the need to hold people accountable for their actions[14].

This approach to understanding incident causation is also essential if effective prevention strategies are to be developed. Rather than simply focusing on the ways clinicians can reduce error, it ensures that multiple prevention strategies are built into procedures, systems, equipment design and management systems.

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[12] J Reason, *Managing the risks of organisational accidents*, Brookfield, VT: Ashgate, 1997.

[13] Department of Human Services2000, *Improving Patient Safety in Victorian Hospitals*.

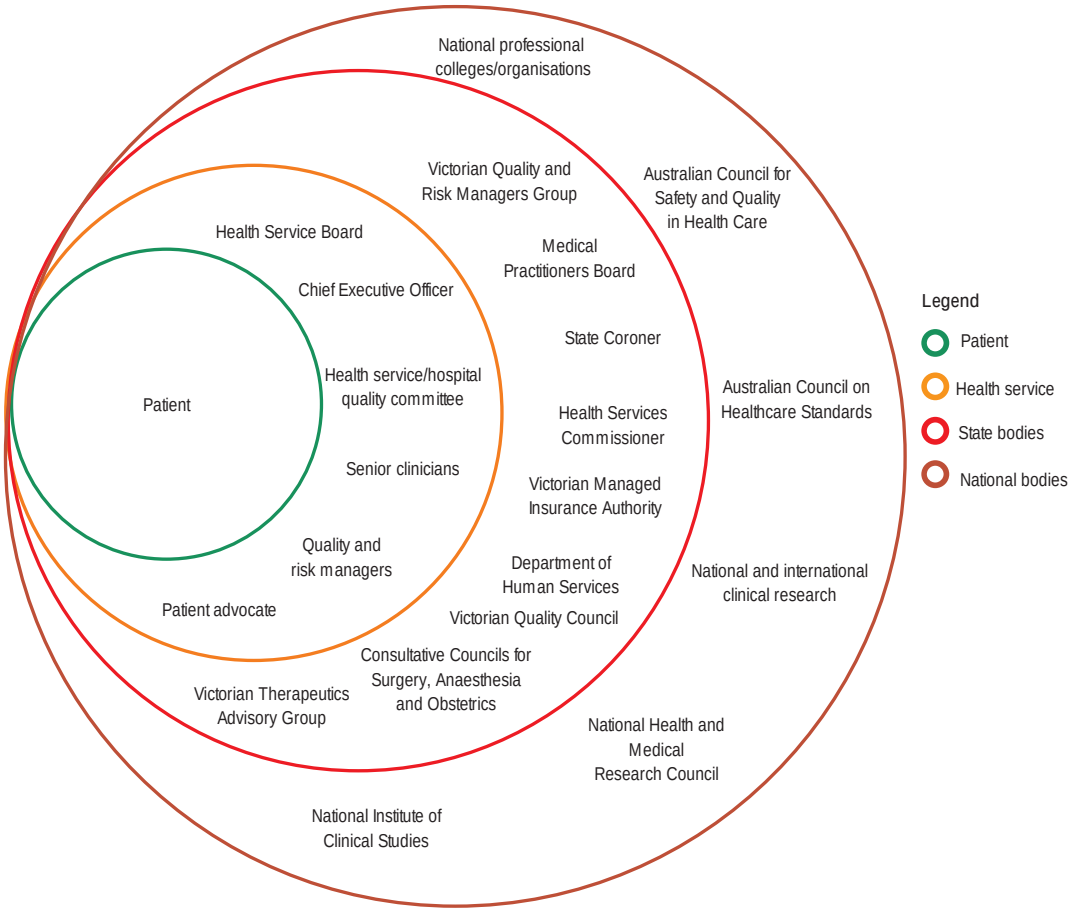
[14] <http://www.navy.gov.au/publications/touchdown/html/april2004/rebriefing.htm>

2.5 The patient safety system

While the patient is at the centre of clinical risk management activity, there are many stakeholders.

Figure 2C illustrates some of the responsible bodies at the health service, state and national levels.

FIGURE 2C: STAKEHOLDERS IN PATIENT SAFETY



Source: Victorian Auditor-General's Office.

The roles and responsibilities of some of the key stakeholders in the system are described below.

2.5.1 Hospitals and health services

Victoria's metropolitan and large regional hospitals are grouped into larger bodies called health services. Health services, as defined under the *Health Services Act 1988*, have extra responsibilities for clinical risk management. To safeguard patients from clinical incidents, the Act requires health service boards to:

- make sure their health service has effective and accountable risk management systems
- make sure effective, accountable systems are in place to monitor and improve the quality of their health services
- make sure any problems identified with the quality and effectiveness of their health services are addressed in a timely manner
- set up a quality committee.

Department of Human Services (DHS) policy and funding guidelines require all Victorian hospitals to have a quality framework that includes quality and safety programs, and initiatives covering clinical risk management.

While responsibility for patient safety rests with all staff in hospitals, ultimate responsibility rests with the hospital's health service board.

2.5.2 Department of Human Services (DHS)

DHS is responsible for high-quality and efficient health care services in the public hospital system. It is not a direct provider of care, but has a funding, regulatory and compliance-monitoring role.

DHS develops statewide strategy and policy, plans and allocates resources, and monitors performance. In relation to patient safety, it develops statewide policy, gives advice, and monitors hospital-acquired infections and sentinel events.

2.5.3 Victorian Quality Council

The Victorian Quality Council is an expert multi-disciplinary council that advises the minister on patient safety and quality in health care. Its primary aims are to:

- provide leadership and direction
- adapt relevant aspects of the national safety and quality agenda for Victoria
- ensure consistency with the DHS quality plan
- provide a framework for patient safety and quality with clear standards and priorities
- build stakeholder relationships.

2.5.4 Health Services Commissioner

The Victorian Health Services Commissioner has a range of functions to do with patient safety under the *Health Services (Conciliation and Review) Act 1987*. These include the power to:

- investigate complaints about health services
- review and identify causes of complaints
- conciliate between users and providers where a complaint has been made.

2.5.5 Australian Council for Safety and Quality in Health Care

The Australian Council for Safety and Quality in Health Care was set up in January 2000 by all Australian health ministers to lead national efforts to improve the safety and quality of health care. The council is an advisory body with a particular focus on minimising the likelihood and results of errors.

2.5.6 Consultative councils

Under the *Health Act 1958*, the minister can set up special purpose committees to study causes of avoidable mortality and morbidity. These councils also give feedback to the medical profession on issues that need targeted, quality-improvement initiatives. Currently in Victoria, 3 consultative councils cover the specialties of anaesthetics, surgery and obstetrics and paediatrics.

2.5.7 State Coroner of Victoria

The State Coroner of Victoria is responsible for investigating reportable deaths. In the context of patient safety, reportable deaths include those that:

- are unexpected, unnatural or violent
- resulted, directly or indirectly, from accident or injury
- happened during an anaesthetic
- resulted from an anaesthetic and were not due to natural causes.

Following investigations, the coroner's office makes recommendations to help reduce the number of preventable deaths and injuries. The coroner's office, with the Victorian Institute of Forensic Medicine, has set up a clinical liaison service to improve patient safety.

2.5.8 Victorian Managed Insurance Authority

The Victorian Managed Insurance Authority provides insurance and risk management services for public health services. Its primary roles include:

- managing insurance and risk management programs
- managing and settling claims
- funding claims
- helping DHS, associated departments and participating bodies to set up programs to identify, measure and manage risks
- monitoring how well departments and participating bodies manage risk
- giving risk management advice and training to departments and participating bodies.

2.6 Victoria's initiatives in patient safety

In 2000, DHS initiated a report into patient safety in Victorian health services. The final report, *Improving Patient Safety in Victorian Hospitals*[15] made 10 recommendations to improve patient safety:

- Victorian hospitals should be urged to develop local clinical risk management programs.
- A statewide program for systematic reporting should be set up so that information about adverse events can be shared.
- Existing databases that collect and record routine clinical incidents should be used to gather information about adverse events.
- A system should be developed to investigate and analyse data about adverse events, and provide graded recommendations for relevant institutions.
- An effective means to share information about adverse events - and to make sure hospitals respond to them - should be put in place.
- Procedure registries should be set up to collect valid and reliable data on clinical areas of high risk and high frequency.
- Coordinated training should be given to health professionals in the principles of clinical risk management.
- An online reference library of policies and procedures should be set up.
- Decision support software to help with drug prescribing should be investigated, developed and made available.

[15] Department of Epidemiology and Preventive Medicine (Monash University), *Improving Patient Safety in Victorian Hospitals*, 2001.

- Further research into clinical risk management should be funded, with a focus on finding effective and efficient mechanisms for use in local hospital-based programs, and evaluating clinical risk management strategies.

DHS has acted on many of these recommendations. One important starting point was the DHS' *Clinical Risk Management Strategy*, released in 2001, which focused on preventable adverse events. The strategy highlighted the importance of a systems approach so that factors leading to adverse events could be looked at. To achieve the strategy's aims, 2 key programs were developed: local hospital-based clinical risk management and statewide sentinel event reporting.

Local hospital-based clinical risk management. This requires all Victorian hospitals to develop (or align their existing programs to) clinical risk management programs as a way of gathering clinical incident information and bringing about relevant cultural change. Core program elements are:

- supporting executive level staff
- supporting physicians and nurses
- setting up multidisciplinary committees
- limited screening of adverse events (LAOS)
- reporting clinical incidents
- analysing clinical incidents
- responding to clinical incidents
- managing patient complaints.

Sentinel event reporting. Hospitals are required to tell DHS of sentinel events, to investigate their causes, and to give details of their investigations and remedial actions.

These programs and their effectiveness are discussed in the body of this report.

2.7 Conduct of the audit

The audit considered 4 questions:

- Are hospital clinical risk management frameworks and systems rigorous?
- Are hospital clinical risk management practices effective?
- Are the people issues managed effectively?
- Is performance monitoring and reporting effective?

2.7.1 Method

We conducted detailed audit fieldwork that included interviewing staff and examining documents at 5 health services, 2 large regional and 3 large metropolitan.

As well, we surveyed all 99 Victorian hospitals that provide acute care, to assess how far they had carried out the key elements of the clinical risk management framework. The survey asked for both quantitative and qualitative responses in the following areas:

- clinical risk management frameworks
- methods of identifying clinical incidents
- reporting systems
- investigation and analysis systems
- staff training in clinical incident management
- sharing of lessons learned.

The audit also examined how effectively DHS meets its roles and responsibilities in relation to clinical risk management.

The audit was performed in accordance with the Australian auditing standards applicable to performance audits, and included tests and procedures necessary to the audit.

2.7.2 Assistance to the audit team

The following people gave specialist advice to the audit steering committee:

- Dr Ross Wilson, Director, Centre for Healthcare Improvement, North Shore Hospital
- Ms Michelle McKinnon, Director of Safety and Quality, Royal Adelaide Hospital
- Dr Terri Jackson, Senior Research Fellow, La Trobe University.

Iridium Consulting Pty Ltd helped in developing the audit program and conducting the fieldwork.

We thank staff from the Department of Human Services and from the hospitals examined for their cooperation with the audit.

3. Are health service clinical risk management frameworks and systems rigorous?

3.1 Introduction

The delivery of quality health care in hospitals depends heavily on the knowledge, skills, judgement and experience of large numbers of staff. They need clear frameworks - well-defined processes, policies and procedures - to ensure the most effective approach is taken, and to make treatment decisions based on evidence-based best practice.

To find out whether health services had effective frameworks and systems for managing patient safety, we asked:

- Is clinical risk management integrated into broader organisational risk management frameworks?
- Are oversighting committee structures in place?
- Are policies and procedures for clinical incident management comprehensive?
- Are incident reporting and management systems sound?

3.2 Integrated risk management

Risk management is "the systematic application of management policies, procedures and practices to the task of identifying, analysing, assessing, treating and monitoring risk"[1].

In health services, risk management can be broken into 2 linked streams. The first is the management of risks affecting the whole organisation, such as financial and corporate risks. The second concerns the management of risks that affect patients and patient care. This is commonly referred to as clinical risk management.

Clinical risk management is a way for health services to improve patient safety through a structured system that identifies, orders and monitors risks. Benefits of this approach include:

- a high standard of accountability
- a high standard of patient-focused service
- improved capacity to manage in the face of competing obligations
- more effective management and patient care decisions
- the efficient and effective allocation and use of resources

[1] Management Advisory Board's Management Improvement Advisory Committee (MAB/MAC), *Guidelines for managing risk in the Australian Public Service*, Report No. 22, Canberra, October 1996, p. 3.

- the efficient and effective delivery of health services
- transparent decision-making.

The *Health Services Act 1988* requires metropolitan and large regional health services to have effective and accountable risk management systems in place. To make sure patient safety is given the same level of priority as other risks, we expected that the 5 health services we looked at would carry out clinical risk management and integrate it into their broader risk management system.

We found that health services were developing integrated risk registers to centrally coordinate risk management, although there was variation in the progress being made. Two health services had well-developed integrated risk registers with clinical risks included on the organisational risk register and prioritised for action; a third had recently put an integrated risk register in place.

The remaining 2 health services said they had integrated risk registers, however, there was limited evidence of their existence. One health service's integrated risk register was in draft format and had yet to be presented to the board for approval. When we checked the document, we found it did not include any clinical risks. The remaining health service had a draft document that referred to an integrated risk register, however, staff could not produce any further evidence of a register.

3.3 Health service quality committees

Each hospital has a health service quality committee which is responsible for overseeing the hospital's quality and safety program, and is expected to take an "active safety and quality planning, monitoring and evaluation role on behalf of the Board"[2]. The roles of this committee include:

- working with the Chief Executive Officer (CEO) and senior managers to find the best approach to planning, evaluating and improving safety and quality in the hospital
- ensuring the CEO is adequately resourcing the safety and quality program
- analysing and discussing safety and quality information[3].

The *Health Services Act 1988* requires metropolitan and major regional health services to make sure that quality committees are in place.

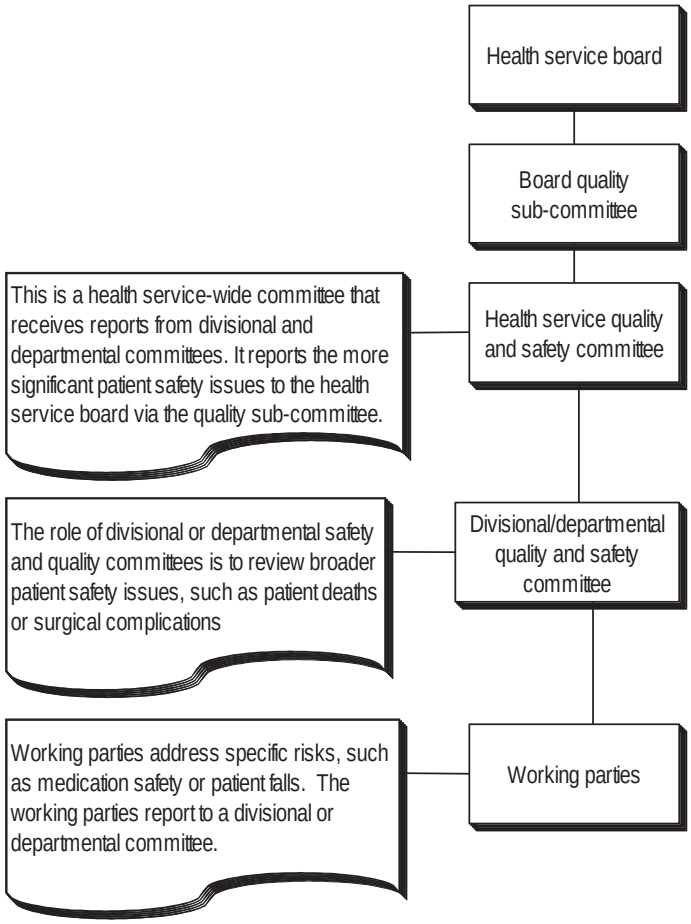
[2] Victorian Quality Council 2003, *Better Quality, Better Health Care*.

[3] ibid.

All the 5 health services we examined had quality committees that reported directly to the board, and were supported by cross-organisational committee structures. Quality and safety committees were evident across the main areas of the health services, including obstetrics and gynaecology, anaesthetics, infection control and allied health. It was common practice for the health services to operate 4 levels of committee structure, all aimed at improving patient safety.

Figure 3A shows a typical quality and safety committee structure in health services.

FIGURE 3A: COMMITTEE STRUCTURES WITHIN HEALTH SERVICES



Source: Victorian Auditor-General's Office.

We found that staff representation on board quality sub-committees was diverse, reflecting individual health service needs and structures. All committees had the CEO and at least 2 members of the health service board as participants. Similarly, all health service quality committees had senior medical and nursing representation, with staff from quality and risk, mental health, legal, community and human resources also involved.

3.4 Policies and procedures

Clear policies and procedures are essential for the effective functioning of an organisation by giving staff an understanding of processes and expectations. The importance of robust policies has been identified in several inquiries into clinical incidents, including the King Edward Memorial Hospital (WA) in 2000, the Royal Melbourne Hospital in 2002, and the DHS' review of the West Wimmera Health Service in 2003.

In its review of West Wimmera Health Service[4], DHS identified 3 key parts to an effective clinical incident management policy:

- procedures for reporting, reviewing and responding to clinical incidents
- accountability for investigations
- feedback to staff on the outcome of investigations.

We therefore expected the 5 health services we visited to have current clinical risk management policies that guided staff on procedures, accountability and feedback. We also expected they would have strategies for:

- making the policy readily available
- educating staff in using the policy
- evaluating the policy.

DHS and the Australian Council for Healthcare Standards (ACHS) both require health services to receive reports of, and have strategies for, adverse events, sentinel events and near misses. We also expected policies to identify incidents by these 3 types.

[4] Department of Human Services 2003, *West Wimmera Health Service Review Final Report*.

3.4.1 Clinical risk management policies

Each of the 5 health services we examined had a clinical risk management policy although, as Figure 3B highlights, content of policies varied.

FIGURE 3B: HEALTH SERVICE CLINICAL RISK-MANAGEMENT POLICIES

	Hospital A	Hospital B	Hospital C	Hospital D	Hospital E
Purpose	✓	✓	✓	✓	✓
Identification procedure includes					
Incident	✓	✓	✓	✓	×
Adverse event	✓	✓	×	×	✓
Near miss	✓	✓	×	✓	×
Sentinel event	✓	✓	×	✓	×
Reporting procedure	✓	✓	✓	✓	✓
Responsibility for responding to incidents	✓	✓	×	✓	✓
Investigation procedure	×	✓	×	×	×
Feedback procedure	×	×	×	×	×
Dissemination strategy	✓	×	×	×	×
Available on intranet	✓	✓	✓	✓	✓
Education	×	×	×	×	×
Monitoring strategy	×	×	×	×	×
Evaluation strategy	×	×	×	×	×
Date current	March 2004	March 2004	September 2003	March 2004	April 1999
Review date	March 2007	May 2007	September 2006	Not stated	Not stated

Source: Victorian Auditor-General's Office.

Only one of the policies we looked at specifically covered all types of clinical incident even though DHS requires (and the ACHS advises) health services to receive reports of, and have strategies for, adverse events, sentinel events and near misses[5]. While 3 health services nearly met the criteria, 2 fell well short of providing sufficient information for staff to identify the different types of clinical incident.

All policies had a reporting procedure that gave staff enough information on what to do if a report was submitted. Four of the 5 policies clearly identified responsible staff members in the reporting process.

Only one health service's policy included guidelines on investigation procedures for clinical incidents.

[5] DHS does not require health services to address incidents, however, the ACHS advises that incidents should be addressed to satisfy accreditation criteria.

Despite feedback being seen as an essential part of the incident management process, not all of the polices described how to do this. Two policies identified the *need* for this to happen, but did not identify *how*.

None of the health service policies had strategies to educate staff on the policy, monitor staff understanding or evaluate the effectiveness of the policy - although one policy stated an intention to do this each year.

Only one policy included a dissemination strategy, although all health services had their policies available on the intranet. In practice, the lack of education and attention to dissemination has led to poor knowledge of these policies. None of the medical and nursing staff we spoke to had read the clinical risk management policy or knew its contents, although many said they knew where to get it should they need it.

Policies varied in how well they informed readers of current status and review dates, although only one policy provided neither. Incorporating review dates into policies is important because it sets a time frame for evaluation and lets readers check if the policy is still relevant to current practice. Of concern, one health service had not reviewed or updated its clinical risk management policy since 1999; this pre-dates DHS' clinical risk management strategy.

Statewide clinical risk management policies

We found considerable variation in the clinical risk management policies used by health services. Eighty-one per cent of respondents to our survey said they had a clearly-defined framework for dealing with clinical incidents, while 13 per cent said they did not[6].

Of those who had an overall policy on clinical incidents, 83 per cent included a policy on sentinel events and 85 per cent on adverse events. Comparatively fewer (69 per cent) included near misses in their policies and procedures.

[6] The remaining percentage did not respond or marked the response as "not applicable".

3.5 Incident reporting and management systems

3.5.1 Incident reporting systems

It is a DHS funding requirement that all Victorian health services have an incident reporting system. However, DHS does not give specific details on what form a system should take, nor how it should operate.

We assessed the health services' incident reporting systems against the key elements of an incident reporting system given by the Australian Council for Safety and Quality in Health Care[7]. These are:

- anonymous and/or confidential reporting
- a non-punitive response to reporting
- voluntary reporting
- ease of reporting
- collection of appropriate information
- timely reporting
- encouragement for anyone to report.

Anonymous and/or confidential reporting. Anonymous reports, while potentially limiting the ability of the health service to respond to incidents, may also encourage staff to report incidents without fear of retribution. Where the reporter chooses to identify him or herself, confidential reporting ensures that any identifying information is not released or published, providing important protections[8]. All health services we visited had confidential reporting systems with the capacity to accept anonymous reports.

A non-punitive response to reporting. Senior staff and clinical risk management staff at the 5 health services believed that a supportive reporting environment existed, with a no-blame approach for incidents caused by system faults. However, in 2 of the health services we visited, staff said they did not have a well-developed culture to support incident reporting.

Voluntary reporting. Four of the health services we visited used voluntary reporting, with one health service opting for mandatory reporting. Staff members we spoke to at this health service were not aware of this requirement. Given the ambiguity around defining an "incident" (which we discuss later in Part 4 of the report) it is also unclear what "mandatory" reporting would mean.

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[7] Australian Council for Safety and Quality in Health Care 2002, *Functional Specifications for Incident Reporting and Management Systems*.

[8] Ibid.

Ease of reporting. All health services we visited had internal incident reporting processes, with multiple ways to report incidents. Incident reporting forms were the most common method for reporting clinical incidents. These could be completed manually or electronically, although electronic lodgement was not available in all health services. Where forms were used, the nurse unit manager played a pivotal role in the process, with all incident reports forwarded to them in the first instance, before being forwarded to the health service quality manager for action.

Telephone and email reporting was also used to provide flexibility and further encourage reporting.

Collection of appropriate information. All health services we examined used incident reporting forms as the primary information gathering tool. All collected a mix of narrative (descriptive information on how the incident happened), categorical (classification of the incident into a category) and numeric (age of patient involved, time of event) data.

Where information was categorised, there was considerable variation in the categories of incident included on the reporting form. Some health services gave detailed incident types or categories. For example, when reporting a medication error, reporters would be asked to further classify the kind of error and tick choices such as "incorrect dose", "incorrect patient" or "prescription error".

Other health services used 4 or 5 broad categories such as "medication error" or "treatment issues". This limits their ability to produce useful data for trend analysis.

Timely reporting. All health services we visited supported the timely reporting of clinical incidents, with ready access to incident report forms on wards and on the health service intranet. Staff were also required to submit report forms within 24 hours of an incident.

Encouragement for anyone to report. While medical, nursing and allied health staff are urged to report clinical incidents, we did not identify any strategies to urge other staff (such as ancillary staff) to report incidents. Complaint mechanisms were available for patients, carers and visitors, with complaints feeding into the incident reporting system.

Statewide approaches to incident reporting systems

Responses to our survey indicate that 18 per cent of health services do not currently have reporting systems that ensure confidentiality for the reporter. Nine per cent of health services do not ensure confidentiality for patients or visitors who report clinical incidents. Twenty-two per cent of health services said they did not have systems that allowed anonymous reports.

The lack of anonymity and confidentiality can contribute to underreporting of clinical incidents where the reporter does not feel protected against a punitive response.

3.5.2 Incident recording databases

Incident recording databases make an important contribution to patient safety. They are an inexpensive way to get information about clinical incidents that can then be analysed and learnt from to prevent incidents recurring[9].

Incident recording systems need to record key data about the time, location, nature of the incident, who is involved, outcomes and level of risk of each reported incident. We expected that all health services would have a database to record reported clinical incidents, that the database would provide a central record of incidents, and that data would be analysed for trends and patterns to inform learning and responses.

We found that the 5 health services we visited used incident recording and analysis databases. Four of the health services operated proprietary risk management databases, while one used a spreadsheet to collate and analyse its clinical incidents. In recognition of the limitations of this approach, this same health service reported that it was moving to a proprietary risk management system.

While 4 of the health services we visited had a single incident reporting system, one operated 3 separate incident reporting systems using incident report forms. This approach was designed to encourage reporting within specific departments, however, the system was not designed to capture incidents centrally. This meant that the health service's quality and risk managers could not easily monitor these incidents for trends and could not readily decide whether causes had been adequately investigated and addressed.

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[9] Australian Council for Safety and Quality in Health Care2002, *Functional Specifications for Incident Reporting and Management Systems*.

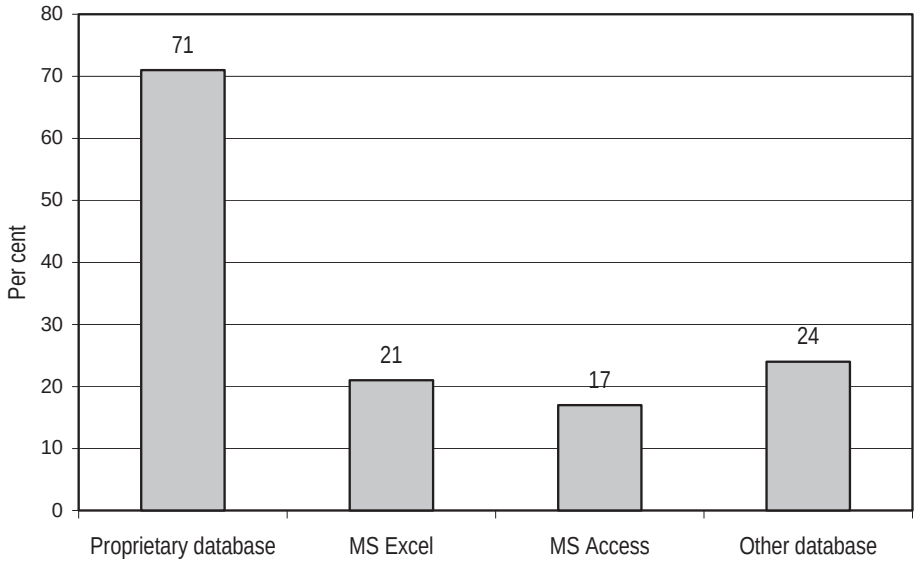
To date, DHS has not issued any instruction on the kind of incident data that should be collected (except in the case of sentinel events) or a minimum reporting dataset. The collection of the same minimum dataset across all health services, using consistent data fields, is essential if analysis for trends and patterns can inform learning at both the hospital level and state level.

Through the use of the same proprietary software, 4 of the health services visited used consistent data fields, while one health service used customised data fields.

Statewide databases for reporting incidents

Responses to our statewide survey showed a fragmentation of reporting systems.

FIGURE 3C: INCIDENT RECORDING AND ANALYSIS DATABASES USED



Source: Victorian Auditor-General's Office.

Health services were asked to identify all databases they used to record clinical incidents. As Figure 3C shows, many are using more than one. Potentially, this can give an incomplete picture of clinical incidents - especially if the systems are not linked. It may also lead to disjointed analysis, and can limit learning from, and responding to, incident trends.

Most of the health services we surveyed (71 per cent) reported using proprietary risk management databases designed specifically for recording clinical incidents. Sixty-two per cent reported using customised databases or spreadsheets to record their clinical incidents.

3.6 Conclusions

The strength of clinical risk management frameworks in health services is currently variable. The best have integrated their clinical risk management framework into their wider organisational risk management framework. This ensures that clinical risk receives the same priority as other risks such as financial risk. However, we were not satisfied that 2 of the 5 health services we visited had rigorous and accountable risk management systems. Given the legislative and accreditation requirements that such systems be in place, this reflects poorly on the governance structures within those health services.

All health services have strongly embraced the notion of health service quality and safety committees. They have committees in place, a clear line of accountability to the board and strong networks across organisational levels. This is an important step for building staff ownership and involvement in clinical risk management.

However, the quality of policies and guidelines in place to direct clinical risk management activities throughout the organisation was varied. This is a significant concern given that the importance of clear policies has been identified in a number of high-profile inquiries into patient safety failures.

Hospitals are gathering data about clinical incidents locally, however the absence of a consistent statewide dataset means that it is not possible to collate this body of information and identify statewide patterns and trends.

DHS has identified the importance of a consistent approach to clinical risk management with its intention, stated in the *2003-04 Departmental Plan*, to standardise clinical risk management activities across Victoria. Currently, more work needs to be done in this area.

One of the contributing factors in the hit-and-miss nature of work in this area appears to be the lack of clearly defined minimum standards from DHS. Further work needs to be undertaken in clearly defining minimum standards.

Recommendations

1. **Hospitals and health services should ensure that their clinical risk management framework is linked to their wider organisational risk management framework.**
2. **DHS should develop minimum requirements for the content of hospital clinical incident policies. Hospitals should regularly review these policies.**
3. **DHS should develop a recommended minimum data set for incident reporting in hospitals and health services.**
4. **Hospital and health service incident reporting systems should meet minimum guidelines outlined by the Australian Council for Safety and Quality in Health Care.**

RESPONSE provided by Secretary, Department of Human Services

Recommendation 1

The DHS agrees with this as a part of hospital and health services clinical governance framework.

Recommendation 2

DHS will undertake work to deliver a framework for minimum standards for clinical incident policies.

Recommendation 3

In order to provide guidance on these matter hospitals should be using a risk matrix. Monitoring and enforcing compliance in this area is again an issue to be resolved.

Recommendation 4

The DHS agree with this recommendation.

4. Are health service clinical risk management practices effective?

4.1 Introduction

Hospitals can have the most rigorous frameworks and systems on paper - but if the systems are not used in the way their designers envisaged, things can go awry. To find out how well health services manage clinical incidents, we asked:

- Can staff identify a clinical incident when it occurs?
- Do staff effectively report and record clinical incident data?
- Are health services using rigorous risk rating criteria to make sure responses to incidents are prioritised?
- Are incident investigations effective?
- Are responses to prevent incidents recurring effective and are they evaluated?

4.2 Identifying incidents

Identifying clinical incidents is the first step in the incident reporting process. For the health service or the Department of Human Services (DHS) to gather information on, and learn from, clinical incidents, health service staff must have the skills and knowledge to correctly and consistently identify clinical incidents.

We expected that all health service clinical staff would be able to state when a clinical incident had happened, and understand which incidents they were required to report.

We found variation in how well clinical incidents were identified by health service staff. Most clinical staff we spoke to across the 5 health services could name the common types of clinical incidents, such as patient falls, medication errors and pressure ulcers. However, apart from these very common kinds of clinical incident, there was a level of uncertainty about the type of clinical incidents they needed to report.

Where there was uncertainty, junior medical staff told us they relied heavily on nurse unit managers to guide them in incident identification. They also reported that their peers had different levels of understanding of what comprised an “incident”. Similarly, nurses we spoke to told us that identifying clinical incidents was subject to individual interpretation.

4.2.1 Defining clinical incidents

If clinical incidents are underreported, incidents may continue, get worse or increase. Clear statements that define and classify clinical incidents reduce the potential for significant underreporting. Consistent definitions also allow information to be shared. This means that wide-scale data on clinical incidents can be collated and analysed.

We expected that all health services would use the same definitions to guide their staff in identifying a clinical incident. We expected these definitions to be consistent with any given by DHS.

While DHS has defined "adverse event" and "near miss", this definition is not widely available. We found the key DHS information resources (the clinical risk management strategy and the clinical risk management website) do not provide definitions for "adverse event" or "near miss", although a definition for "sentinel event" is readily available. As a result, health services and hospitals we visited and surveyed defined an "adverse event", "sentinel event" and "near miss" differently.

A significant number of health services had either different definitions to DHS or no definition for the type of clinical incident. This was especially evident for adverse events and near misses.

Statewide we found 39 definitions of "adverse event", 20 different definitions of "sentinel event" (where DHS' definition was not used), and 46 definitions of "near miss".

4.2.2 Other ways of identifying incidents

Clinical incidents are not always identified at the time they happen. In some cases, staff fail to identify or to report them. But delays in identification also happen because some clinical incidents are not apparent until later - for example, a hospital-acquired infection that occurred because infection control processes weren't followed correctly. Similarly, some clinical incidents may not become apparent until after the patient is discharged from hospital. The absence of systems to identify clinical incidents at this stage means that many clinical incidents remain undetected and unreported by health services.

Identifying incidents only through reporting has limitations. We therefore expected that all health services we visited would have ways to identify clinical incidents in addition to retrospective incident reporting.

Limited Adverse Occurrence Screening

Limited Adverse Occurrence Screening (LAOS) is based on the system originally developed at the Wimmera Base Hospital in Victoria[1]. It involves screening the patient file (electronic or manual) for specific criteria that could point to the occurrence of a clinical incident (such as return to operating theatre within 7 days, cardiac arrest or transfer from general ward to intensive care unit). Medical staff review records that meet the criteria to determine if a clinical incident occurred.

DHS expects health services to screen all inpatient records against a minimum of 4 criteria to satisfy the requirements of this incident identification process.

While LAOS was widely used, there was variation in *how* it was used. Examples include using patient discharge summaries to identify any clinical incidents that may have happened during the patient's stay, analysing data held in the patient management systems and identifying incidents when health information managers code patient files.

This variation reflects the flexibility built into the DHS guidelines and practices, to suit individual health service needs.

Figure 4A outlines a comprehensive approach to medical record screening that has been implemented at one health service we examined:

[1] AM Wolf, "Limited adverse occurrence screening: using medical record review to reduce hospital adverse patient events", *Medical Journal of Australia*, 1996, p.164.

FIGURE 4A: USING MEDICAL RECORDS TO IDENTIFY CLINICAL INCIDENTS

One health service examined had developed a clinical information system that could be used for online notification and review of clinical incidents. The CORDis clinical information system was developed in 2001. It was originally developed as an electronic discharge summary[2]. However, special reporting functions allow it to be used as a systematic means of identifying clinical incidents. Criteria flagged in CORDis include all sentinel event criteria and events that might point to a clinical incident such as:

- Unplanned re-operation
- Complications requiring operative intervention
- Unplanned transfer from ward to ICU
- Unplanned readmission within 28 days
- Complication prolonging hospital stay longer than 7 days
- Length of stay longer than 21 days for acute care
- Medication error or medication event
- Unexpected cardiac or respiratory arrest
- Fall
- Pressure sore
- Hospital-acquired serious infection
- Equipment failure or malfunction
- Delayed or cancelled procedure leading to deterioration
- Hospital-initiated postponement of a procedure.

The health service has plans for further development that will link CORDis to its incident reporting database, giving seamless transfer of data.

CORDis provides an effective way to capture information relating to potential clinical incidents while minimising the need for clinicians to provide additional reports.

Patient complaints

The patient complaints process was also used to identify if a clinical incident had occurred. Patient liaison staff identified clinical incidents from the complaint and then told the quality managers. The effectiveness of this process relies on the patient liaison staff being trained to identify clinical incidents, which they are not.

Mortality and morbidity reviews and clinical audit

Mortality and morbidity reviews and clinical audits are also used to identify clinical incidents. Mortality and morbidity reviews are held by medical staff to discuss medical issues that arise during patient care; clinical audits report the outcome of certain procedures across specific specialities.

[2] A discharge summary is a summary of key information relating the patient's episode in hospital.

Mortality and morbidity reviews have a long history as a forum to discuss medical issues, and are a very useful way to share information and learning. However, it was not always clear how clinical incidents identified at these forums were reported centrally to the quality managers and aggregated with other clinical incident data.

Statewide approaches to identifying clinical incidents

Ninety-one per cent of hospitals are using LAOS as an extra source of information on clinical incidents. In 94 per cent of cases, hospitals reported using LAOS manually; just over a quarter also used electronic data interrogation techniques.

4.3 Reporting and recording incidents

Even when health service staff can identify that a clinical incident has happened and effective processes are in place to report that incident, there is no guarantee that it will be reported. Nationally and internationally, underreporting of clinical incidents is well documented; one study estimates that incident reports capture only 5 to 30 per cent of clinical incidents[3].

Several barriers have been identified to explain why incidents may go unreported, and these include:

- a lack of confidentiality in the incident reporting system
- no perceived benefit to the reporter, such as feedback and action
- low levels of training and education in event recognition
- lack of clarity about the standards, definitions and tools used for incident reporting[4]
- fear of disciplinary action (as a result of a blame culture) or of other people's reactions (embarrassment)
- perceived uselessness (a belief that management will take no notice and will not act)
- acceptance of risk (a belief that incidents are part of the job and cannot be prevented)
- practical reasons (too time consuming or difficult to submit a report)[5].

[3] Agency for Healthcare Research and Quality 2001, *Making Health Care Safer: A Critical Analysis of Patient Safety Practices*.

[4] Institute of Medicine 2000, *To Err is Human*.

[5] T Van Der Schaaf and L Kanse, "Checking for biases in incident reporting", *Accident Precursor Analysis and Management: Reducing Technological Risk Through Diligence*, 2004.

All health services we visited acknowledged that underreporting of clinical incidents was an issue. Two health services were addressing this through the use of reporting benchmarks. For instance, one health service monitors the percentage of reported patient incidents that result in serious injury. This encourages staff to report minor incidents, not just the most serious: the more incidents reported, the better the indicator is likely to look.

Health services also noted different reporting trends among employee groups. At all the health services we visited, nursing staff submitted most incident reports. We were told that if doctors were to report a clinical incident, it was more likely to be reported less formally. Reasons given for this included the fear of repercussions and blame, the time it takes to complete incident reports and also the failure to recognise that errors are made. Doctors were, therefore, more likely to report incidents through specific review meetings such as morbidity and mortality meetings, or verbally. We were told that where verbal reports were made, they were unlikely to result in an incident report form being completed.

Given the frequency of medication errors, we expected that health service pharmacies would promote the importance of reporting clinical incidents. We found that all health services had effective systems to identify medication-related errors. However, 4 of the 5 health service pharmacies told us that common incidents and near misses were not routinely recorded as incidents. Only the most serious incidents were likely to be reported centrally; other incidents were recorded within the pharmacy and not shared with the health service quality managers.

4.4 Incident risk rating

Incident risk rating means assessing each incident in terms of its actual or potential harm, and its likelihood of recurring in the future. In this way, response efforts can be prioritised to address those incidents likely to cause the greatest harm and/or have the greatest chance of recurring.

Not all health services had formal processes for incident risk rating and we found that only 3 of the 5 health services we examined used a risk rating tool to prioritise risks. These 3 hospitals used a risk matrix approach based on the national risk management standard[6]. The Incident Severity Rating and Risk Rating Matrix below provides an example (Figure 4B).

[6] AS/NZ Standard 4360: 1999 Risk Management.

FIGURE 4B: INCIDENT SEVERITY RATING AND RISK RATING MATRIX

One health service examined used a combined Incident Severity Rating (ISR) and risk rating matrix to enable a consistent approach to incident classification and risks across all sectors of the health service. ISR Level 1 always requires a Root Cause Analysis (RCA). The risk rating identifies the action required which correlates to the organisation's risk tolerance.

The health service has promoted and increased staff awareness of incident risk assessment and the risk rating matrix by issuing the matrix on a laminated ID-size card to all staff. On the reverse of the card is a key with the Likelihood and Consequence categories. This supports the health service's commitment to educating staff and increasing awareness of incident reporting.

The risk manager at the health service is notified via an automatic email alert of all Level 1 and 2 incidents, once they have been entered onto the incident reporting system. This allows the risk manager to check the incident has been correctly risk rated and the corresponding response actioned.

Risk rating	Consequences/incident severity rating (ISR)			
Likelihood	Catastrophic ISR 1	Major ISR 2	Moderate ISR 3	Minor ISR 4
Almost Certain (weekly)	1	1	1	3
Likely (monthly)	1	1	2	3
Occasional (annually)	1	2	3	4
Unlikely (2-5 per year)	2	2	3	4
Rare (> 1 per year)	3	3	3	4

Incident Severity Rating	Action required	Risk Rating	Action required (Unacceptable level of risk)
ISR 1	RCA investigation DHS notification	RR 1	Organisational practice improvement project
ISR 2	Divisional Case Review	RR 2	Divisional practice improvement project
ISR 3	Departmental Case Review	RR 3	Departmental practice improvement project
ISR 4	Line Case Review	RR 4	Monitoring only

Source: Victorian Auditor-General's Office.

At 2 health services we examined, there was no standard risk rating tool. The quality manager or clinical risk manager decided which incidents needed investigation. This means that the clinical risk manager or quality manager has to review each clinical incident in the hospital; this may delay the timeliness of any subsequent investigation. More importantly, this approach can lead to inconsistent and subjective risk rating as it relies on the knowledge and experience of individuals.

The use of a risk rating tool ensures consistency in rating incidents across an organisation.

4.5 Investigating incidents

We expected to find that reported incidents - both high-risk and lower-risk - would be investigated. We also expected that the level of investigation would be appropriate to the incident; investigations would be conducted by independent, properly-qualified people; investigations would be timely; and recommended actions would be documented.

4.5.1 Investigating high-risk incidents

High-risk incidents include all sentinel events, serious adverse events and serious near misses. For sentinel events, DHS requires all health services to conduct a Root Cause Analysis (RCA) to find out what led to the incident. The focus of these investigations is on the health service's systems and processes, and how they can be modified and improved to reduce the risk of incident recurrence.

We expected that all health services would use the RCA method to investigate serious clinical incidents.

We found that all health services we examined used RCA to investigate sentinel events (where they happened). While there is no requirement to do so, all health services also investigated serious adverse events using this method. Health services took a consistent approach that involved:

- interviews with staff directly involved in the incident and, where appropriate, the patient, family and carers
- review of the patient's medical record as a key source of information about events leading up to the incident
- comparison of what happened against existing clinical protocols, procedures or work practices to identify system deficiencies.

While near miss incidents that are not addressed may lead to actual harm, we found that RCA was rarely used to investigate serious near misses. One health service indicated that near misses were risk rated in the same manner as other clinical incidents. This is a sound process, which ensures that incidents with the potential for serious harm are considered. However, other health services only investigated near misses using RCA where the clinical risk manager identified a recurring theme. In 3 of the health services we examined, if the clinical risk manager saw a trend in lower-severity incidents, RCA was used to find any underlying system issues.

One major issue we identified was the limited resources allocated in health services to investigate and address reported clinical incidents. The RCA process, conducted properly, can be resource intensive, requiring time and expertise from a number of staff. Resource availability, not risk rating, often determined how many incidents were investigated.

Statewide approaches to investigating incidents

Survey responses showed that hospitals consider the following when deciding whether to conduct an RCA:

- severity of the impact on the patient (86 per cent)
- potential risk to the hospital or the patient (82 per cent)
- frequency of the incident type (75 per cent).

Around 20 per cent of hospitals surveyed noted other considerations. These included the fact that an RCA is a resource-intensive process and, as a result, is only performed on sentinel events (as required by DHS) and/or where the system is clearly at fault.

Medical records management

Root cause investigations rely heavily on the quality and completeness of medical records. As such, their quality is dependent on the health service having:

- a current and relevant *medical records policy* with documentation standards that properly support an investigation
- an *audit framework* that ensures regular checks of medical records to monitor quality and completeness.

The currency, relevance and completeness of policies supporting good medical record management varied significantly. Two hospitals had identified that their existing policies do not meet their requirements and are undertaking major revisions.

Audits of medical records monitor the quality and completeness of medical records and the extent of their compliance with policy and procedures. We found limited evidence of established audit processes. One hospital had an existing audit tool and a second was trialling a tool to monitor compliance and address gaps through staff education. However, most hospitals relied on random auditing by health information staff to make sure records are complete.

4.5.2 Investigating lower-risk incidents

In all health services, nurse unit managers or department heads investigated the lower-risk clinical incidents on their wards. However, none of the health services we visited had a documented procedure for investigating lower-risk clinical incidents.

This meant there was no consistent approach to lower-risk investigations across individual health services, and no strategies to reduce subjectivity in these investigations. While the clinical risk manager reviewed elements of the investigation, this was limited to checking the actions taken by the investigator to prevent recurrence. No review or quality assurance mechanisms were in place to make sure investigations were conducted effectively.

4.6 Responding to clinical incidents

In responding to clinical incidents, investigators need to develop action plans to reduce the risk of the incident recurring. Action plans should specify what needs to happen, who is responsible for it and when it will be completed. We expected that health services would complete action plans to reduce the risk of incidents recurring, check how those plans were carried out and review the plans' effectiveness.

We found that health services varied in how they responded to clinical incident investigation. Where lower-risk clinical incidents were investigated, actions taken to prevent recurrence were recorded on the incident report form and reviewed by the clinical risk manager. While health service staff told us they report on all recommendations and actions to relevant quality committees for further review, there was no clear process for ensuring that actions were monitored and evaluated for effectiveness.

For investigations into high-risk clinical incidents, health service staff adopted a more formal approach, aimed at preventing recurrence. As with the mandated investigations into sentinel events, DHS also requires that health services complete and submit a Risk Reduction Action Plan (RRAP) to address identified issues within 60 days.

At all health services we visited, quality committees played a key role in assessing how appropriate RCA recommendations were and how they should be prioritised. However, we found that only 3 health services had processes to monitor whether recommendations in RRAPs were acted on. They did this by adding actions to department or unit quality plans, which could then be monitored regularly.

Only 53 per cent of hospitals surveyed said that they document the follow-up of risk reduction plans.

Figure 4C outlines a system in place at one health service to ensure risk reduction responses are implemented.

FIGURE 4C: MONITORING RISK REDUCTION RESPONSES

One health service examined used a central database to ensure actions to address risk are recorded and monitored.

Actions planned are entered into the health service's integrated risk register database, which is used for monitoring to ensure all recommendations are implemented. It generates an automatic email to the person assigned responsibility for the action when that item is due.

The Integrated Risk Register describes all the major clinical and non-clinical risks to the organisation, with risks rated according to consequence and probability. The Quality and Risk Unit produces a 6 monthly report for the hospital Quality Council to monitor and confirm implementation of recommendations.

Source: Victorian Auditor General's Office.

4.6.1 Evaluating the effectiveness of responses

The importance of evaluating the actions taken to reduce risk cannot be overstated. Ineffective actions may not only continue the risk of harm, they may exacerbate it.

No health service could demonstrate strategies to check if their actions were reducing the risk to patients. Health services staff often assumed that if a clinical incident did not recur, their response must have been effective.

One of the major barriers identified in health services was the limited resources for incident investigation, response and prevention. In this environment, taking time to evaluate completed actions was seen as a lower priority than investigating incidents and implementing responses.

4.7 Conclusions

In examining how health services are putting clinical risk management into practice, we found significant variation on what to report, when to report, what to investigate further and how to conduct an investigation. There was no certainty that the same incident would be identified and treated consistently between 2 units in a hospital, nor between 2 hospitals. The current system relies too heavily on individual judgement.

A standardised risk assessment matrix would encourage a more consistent and objective approach to rating incidents and determining whether an RCA is needed. It would also support the development of a standardised organisational response. Without this, there is a potential for clinical risk management activities to be conducted according to time and available resources, not according to objectively assessed need.

While there is a wealth of guidance material on risk identification and risk rating available, it is not being used in many hospitals. DHS may need to issue more prescriptive guidelines on minimum standards for risk rating and assessment.

Even the hospitals that are making good progress in risk identification and consistent risk rating have work to do in improving their evaluation of actions taken. If health services do not evaluate their responses to critical incidents, they cannot be sure there are no unintended consequences and will be unable to learn from past events.

Recommendations

5. **Hospitals and health services should ensure that all clinical incidents from internal incident reporting systems are collated and reported centrally to the board and quality committee.**
6. **Hospitals and health services should ensure that investigations into lower risk incidents (those not requiring a full RCA) are conducted effectively and consistently. DHS should lead the development of guidelines in this area.**
7. **Hospitals and health services should implement standard risk rating methodologies for clinical incidents, in accordance with the Australian Standard AS/NZ 4360.**
8. **DHS should ensure that hospitals and health services adopt consistent definitions of adverse event, near miss and sentinel event in line with the Australian Council for Safety and Quality in Health Care definitions.**
9. **Hospitals and health services should develop strategies to ensure that responses to clinical incidents are reviewed and their effectiveness is evaluated.**

RESPONSE provided by Secretary, Department of Human Services

Recommendation 5

The DHS agree that hospital and health service internal reporting should be rolled up to Board level with consistent ways of reporting, analysing and responding.

Recommendation 6

DHS can provide education on "lower level" adverse events as required. This will be built into the ongoing clinical risk management training.

Recommendation 7

DHS agrees with this recommendation.

Recommendation 8

DHS agree with this recommendation and will develop in consultation a range of definitions.

Recommendation 9

Agree.

5. Are people issues managed effectively?

5.1 Introduction

The effective management of clinical incidents needs the support of health service staff at all levels. Staff must know how to recognise, report and investigate a clinical incident. They also need to know that their input can lead to change; feedback is one important way to ensure continued support.

As well, the health service culture must support and encourage staff to report clinical incidents, and not blame staff for incidents that result from system issues outside their control.

Patients also have a role to play in hospital clinical incident management by taking an active role in their health care. For example, patients can make treating staff aware of other medications they are taking. They can be aware of what to expect in their treatment and recovery, and advise staff if they have concerns. In these ways, patients can reduce the likelihood of a clinical incident, and also ensure that any incident is identified.

To find out whether health services effectively managed people issues, we asked:

- Are health service staff adequately trained to manage clinical incidents?
- Is communication with staff and patients about clinical incidents effective?

5.2 Training staff to manage clinical incidents

Education and training is critical to successful quality improvement[1]. Health services that teach staff *how* to identify and report clinical incidents increase the likelihood of staff reporting such incidents[2].

The Department of Human Services' *Clinical Risk Management Strategy 2001* requires health services to educate new and existing medical and nursing staff on the aims and objects of their clinical risk management program. Health services are responsible for deciding the content and mode of this training.

[1] Victorian Quality Council 2003, *Issue paper on components of safety and quality education for health services*, p. 2.

[2] Institute of Medicine 2000, *To Err is Human*.

We expected that health services would give comprehensive training to all staff on how to recognise and report a clinical incident. We also expected that some staff would be trained to conduct both small and large investigations into clinical incidents as a core component of the clinical incident management process.

5.2.1 Training to identify and report clinical incidents

Formal training

All hospitals we visited gave some form of training to staff on their clinical risk management programs, although training varied in scope and content. At the health services we visited, training in how to recognise and report clinical incidents was only given to new junior medical and graduate nursing staff.

This training was mostly given during formal orientation. However, competition for presentation places at orientation meant little time for clinical risk management and patient safety training. Generally, no more than 30 minutes was allocated for the hospital's clinical risk management program. This covered what to report, how to report it and why. In one hospital, only 20 minutes training was given to new interns on clinical risk management; another provided 10 minutes.

As well as formal training during orientation, training in clinical risk management was given to new junior medical and nursing staff as part of ward orientation. This training was ad hoc, locally-based and had no set content. This approach relies on the individual skills and knowledge of nurse unit managers to impart the necessary information.

While patients may come into contact with many other hospital employees, few hospitals gave basic training in incident identification and reporting to ancillary staff such as orderlies, catering and cleaning staff, and hospital volunteers. Similarly, few hospitals trained senior medical and nursing staff, even if they were new to the hospital.

Staff who had not come through a formal orientation, were unlikely to have been trained. Across the hospitals we visited, several staff members of varying seniority confirmed that they had not received training in how to recognise or report a clinical incident. Nor had they been given training in clinical risk management generally.

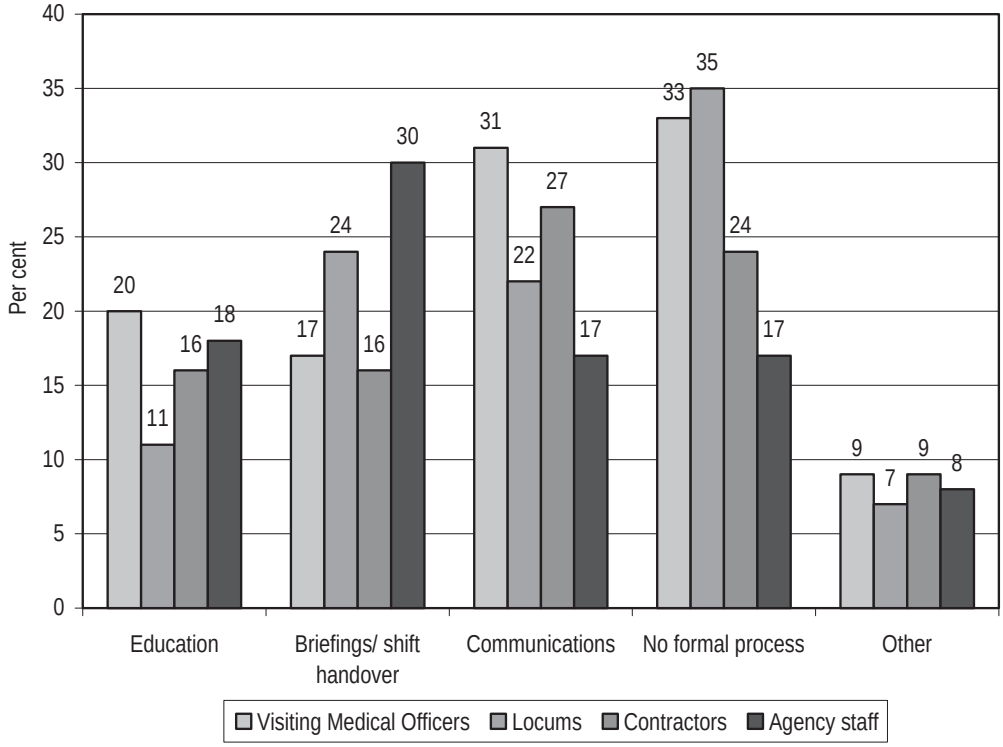
While an increasing amount of training in hospitals is delivered through self-paced and online modules, none of the hospitals we examined used this approach for clinical risk management.

Training agency and visiting staff

Some hospital staff (for example agency nurses, contractors, locums and visiting medical officers) are not permanently attached to a particular health service and may work across services.

Survey responses indicated that clinical risk management training for temporary staff varied significantly, as demonstrated by Figure 5A. As the data indicates, the use of training is limited, with a lack of formal processes evident for all staff groups.

FIGURE 5A: TRAINING OF AGENCY AND VISITING STAFF



Note: Respondents were able to choose all options that applied to their health service.
Source: Victorian Auditor-General's Office.

Content of training

Health services have developed their own training packages for in-house training on clinical risk management. We found significant differences in content. All focused heavily on the theory of clinical risk management rather than practical application within the health service.

Most packages covered what to report, although this was generally limited to clinical incident definitions. Only 2 of the 5 education presentations we reviewed gave information on how to report incidents and when reports should be made. All health services had information on how and when to report clinical incidents in their clinical risk management policies, yet this information was not included in the orientation information.

One health service used the slides of another health service during training. However, it had not amended the content to cover its own systems and processes. This meant staff were given incorrect information on local processes.

5.2.2 Training to investigate clinical incidents

Training in Root Cause Analysis

In 2002, DHS developed a statewide Root Cause Analysis (RCA) training program that was given to around 500 health care staff.

All hospitals we visited had formally trained their quality and clinical risk managers in the RCA method through the 2002 DHS statewide program (unless previously trained). Senior managers and clinicians from some hospitals had also attended this training.

Since 2002, 4 of the health services we examined have adopted a "train the trainer" approach to RCA training, with new staff members trained as they join investigation teams. One health service has since developed its own RCA training package and conducts formal 2- to 3-day training courses for staff.

However, staff training needs in relation to RCA were not formally monitored at the hospitals we examined. Staff were trained "as required". Hospitals did not monitor whether staff maintained their skills by participating in investigations.

DHS plans to implement a new RCA training package in 2005.

Training in investigating lower-risk incidents

Nurse unit managers or department heads conduct investigations into lower risk-rated incidents that happen on their wards. As discussed in Part 4 of this report, we found no documented investigation process for unit-level investigation of incidents that did not need an RCA.

Across all hospitals, we found limited documented guidance for line managers who conduct local investigations (although one hospital had a process for investigation of falls and pressure ulcers that result in Incident Severity rating 2 outcomes). If staff conducting unit level investigations are not RCA-trained, investigation rigour and the ability to diagnose the real issues may be limited.

5.2.3 Addressing the education gaps

The Victorian Quality Council (VQC) provides targeted education and training on safety and quality principles and practices.

In recognition of gaps in the education of some staff groups, the VQC recently invited tenders for a training program to be delivered to middle management in the health services, across the medical, nursing and allied health specialties. The core elements of the education package, which will apply to all staff levels, include:

- improving the patient journey
- understanding the nature of error
- recognising and managing adverse events, near misses and clinical risks
- building teamwork and communication
- improving safety and quality.

Nationally, the Australian Council for Safety and Quality in Health Care is developing an education framework for health service staff in clinical risk management. The framework will define competencies, knowledge and performance elements for staff in different roles and at different levels.

5.3 Communication

5.3.1 Communicating with staff

Communicating with staff about clinical incidents is important for several reasons. For example, staff need an incentive to report clinical incidents and, for many, that incentive is seeing that changes are made to address the concerns they have raised. This requires more than feedback to staff on the progress of reported incidents. It means communicating with *all* staff about the lessons learned from investigations into clinical incidents, and what is being done to prevent recurrence.

We expected health services to have effective ways of giving feedback to individual reporters, and effective ways of telling all staff about formal responses to identified clinical risks.

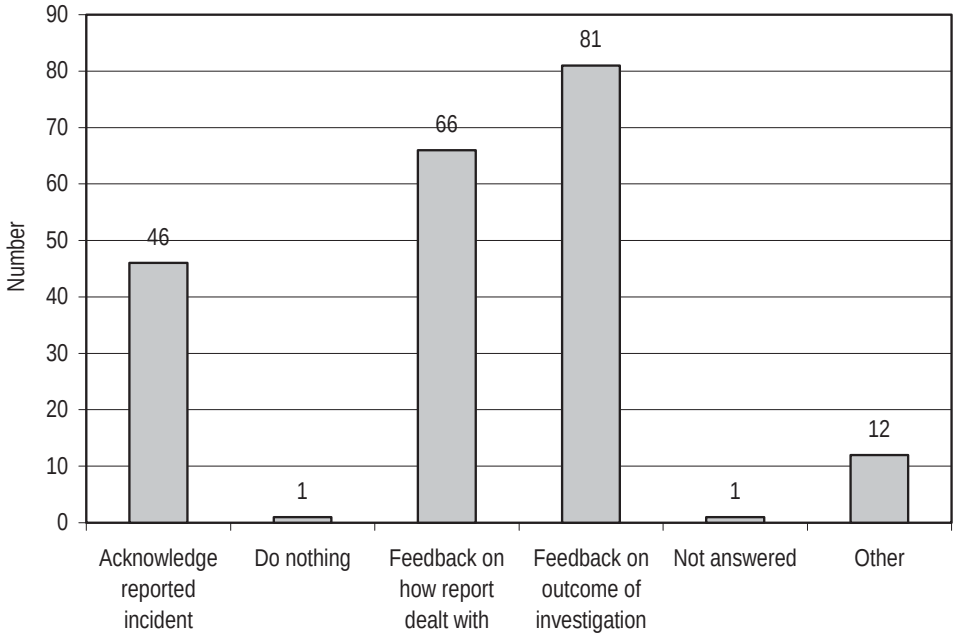
We found that health services varied in how they told staff about investigation findings and responses. Meetings were the main way of informing staff of the progress of, and responses to, investigations - although in many cases, this approach was problematic. Three of the health services identified that giving feedback in this way was ad hoc and depended largely on individual unit managers. Staff also said it was often difficult to get to meetings to hear the relevant information.

Only one health service had a formal feedback procedure included as part of its RCA method.

Statewide approaches to providing staff feedback

Survey responses also showed variety in the type of feedback given after an incident report was submitted, as highlighted by Figure 5B.

FIGURE 5B: HEALTH SERVICE FEEDBACK ON INCIDENT REPORTS



Note: Respondents were able to choose multiple answers.
Source: Victorian Auditor-General's Office.

Health services reported using multiple feedback strategies, most commonly that they advised staff on the outcome of the investigation after it was completed. Eighty-one per cent of health services gave feedback to staff at this stage. Sixty-six per cent of health services gave feedback to the reporting staff member on how the incident report would be dealt with. Forty-six per cent of health services acknowledged receipt of the incident reports. Only one health service said it did nothing to give staff feedback.

5.3.2 Communicating with patients

Patients need to be informed of their involvement in clinical incidents, and this needs to happen in a way that is immediate, open and honest[3]. While open communication with patients is sometimes hampered by medico-legal considerations and the impact of apologies, health service staff have ethical responsibilities "to maintain honest communication with patients … even when things go wrong"[4]. Given this, we expected - as a minimum - that health services would inform all patients who were involved in a clinical incident.

All 5 health services we visited said they had processes in place to tell patients when a clinical incident had happened, although not all had evidence of this. Three health services had developed guidelines about when and how to give this information to patients or their carers/relatives.

The remaining 2 health services said they had processes in place, but we were unable to identify any formal guidelines or policies outlining those processes. Staff told us they were confident "the majority of patients" were informed, and they had "reasonable confidence" that patients were informed. However, it is questionable that all patients at these 2 health services are informed of clinical incidents.

Statewide approaches to informing patients about clinical incidents

Only 16 per cent of health services advised us that they always informed a patient who had been involved in a clinical incident. Other strategies employed by health services, highlighted in Figure 5C, include telling patients where the severity of the incident warranted it, or where the patient was actually harmed from the clinical incident. Only 3 health services in our statewide survey reported never informing the patient of a clinical incident.

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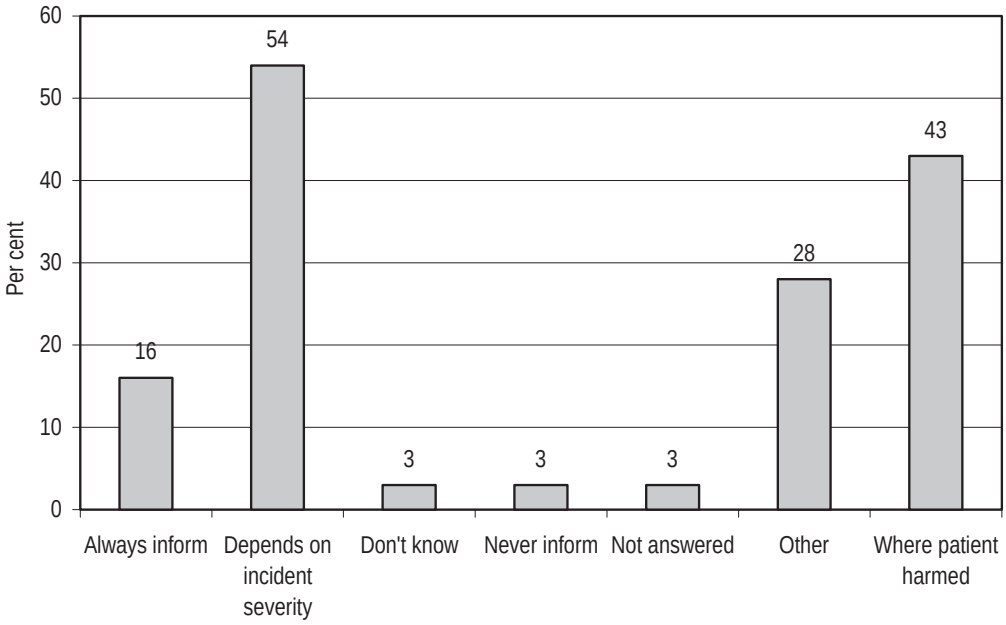
[3] Australian Council for Safety and Quality in Health Care 2003, *Open Disclosure Standard*.

[4] ibid.

FIGURE 5C: CRITERIA FOR INFORMING PATIENTS OF CLINICAL INCIDENTS



Note: Respondents were able to choose multiple answers.
Source: Victorian Auditor-General's Office.

5.4 Conclusions

Training for staff in the objects and conduct of clinical risk management programs is crucial if these programs are to achieve their aim of improving patient safety. Currently, the training programs in place have poor reach, and there is a lack of agreement on core training content.

Those staff who are trained in the principles of clinical risk management often get a cursory overview. This is likely to be limiting progress in improving patient safety, and the absence of self-paced training material presents a further missed opportunity for improvement.

The decision by the VQC to implement a trial of more formal education for health service staff is a positive step toward rectifying this weakness in clinical risk management programs. However, hospitals will need to make it a priority, as currently limited time is allocated to training in clinical risk management.

DHS' development and roll-out of RCA training for investigating serious incidents is a positive step. However, this training needs to be maintained through regular participation in investigations, and skill maintenance needs to be monitored.

Many staff currently conduct investigations into minor incidents without any training at all. A less intensive course may provide a cost-effective way of addressing this training need without requiring these staff to complete full RCA training.

Addressing clinical risk management training needs will require significant long- term commitment from DHS and hospitals. A strategic approach is needed to set priorities, decide on target groups and to explore new ways of delivering the training, such as self-paced and online options. DHS and VQC need to take the lead in this area, building on the work being undertaken by the Australian Council for Safety and Quality in Health Care in developing a national clinical risk management education framework.

Involving patients in clinical risk management programs is also an important step in improving patient safety. While progress is being made, some health services need to be more active when it comes to involving patients. Their policies and procedures need to reflect a commitment to patient involvement that can then be put into practice.

Recommendations

10. DHS should develop guidelines on recommended content of training for staff in clinical risk management.

11. Hospitals and health services should monitor whether staff who have completed RCA training maintain these skills through participation in investigations, and consider refresher training if required.

12. DHS should develop a statewide clinical risk management training strategy, incorporating the work undertaken by VQC and the ACSQHC. This work should consider utilising online and self-paced training delivery options for relevant levels of staff.

13. Hospitals and health services should develop clear policies and procedures on disclosure of clinical incidents to patients, and ensure that all staff are aware of, and adhere to, the policy.

RESPONSE provided by Secretary, Department of Human Services

Recommendation 10

Agree.

Recommendation 11

DHS agrees with this recommendation, it should be a part of the ongoing credentialing of clinical staff. This is a part of the RCA training.

Recommendation 12

DHS agrees that a more interactive approach to training that better meets the needs of staff should be developed.

Recommendation 13

Open disclosure is being piloted in 12 Victorian hospitals consistent with the ACSQHC framework. This pilot is being supported nationally by an Australian Health Ministers Advisory Committee. However as a part of good clinical management patients should be kept informed of their condition.

6. Is patient safety performance monitoring and reporting effective?

6.1 Introduction

Monitoring and reporting on performance is important both for accountability and for performance improvement.

Accountability needs are met if health service boards and the Department of Human Services (DHS) have effective reporting systems in place to check that clinical risk management systems are adequate.

Performance improvement needs are met if systems can give a big data picture. Trends that are not apparent in a single incident or in reports from a single work area can be identified and analysed. As well, differences in performance between similar bodies can be identified. This is the first step to understanding the reasons behind those differences.

To find out if systems for monitoring and reporting on clinical risk management were effective, we asked:

- Do health service boards have adequate information to monitor the effectiveness of their hospital's clinical risk management?
- Does DHS have effective assurance and reporting systems in place to monitor whether hospitals are meeting departmental requirements for clinical risk management?
- Does performance reporting on patient safety give hospitals, DHS and the community comprehensive and useful information on clinical risk management?
- Does statewide information support performance improvement?

6.2 Health service reporting to boards

Health service boards are responsible for overseeing and managing hospitals and for ensuring that services follow legislation and the hospital's objectives. As part of this responsibility, they need to monitor patient safety with the same rigour and attention they give to corporate and financial performance.

Boards can only discharge these clinical governance responsibilities effectively if they are well-informed. For board members who may not have clinical training or experience, this can be challenging. They need to be given data that is clear, relevant, timely and correct. This data should be in a format that allows significant variations to be identified quickly and easily.

In 2003, the DHS governance reform panel reviewed clinical governance in the metropolitan and large rural health services, and recommended that boards should (as a minimum) use a standardised reporting template. The template would include a standard set of data and indicators to help boards focus on critical issues. It would also allow health services to assess and compare their performance with other services.

The Victorian Quality Council (VQC) and the governance review panel have both recommended minimum datasets for reporting to boards. They recommend that reports to boards should include key areas of risk such as adverse and sentinel events and near-misses, including (but not restricted to):

- medication errors
- patient falls
- infection control indicators
- blood and blood product use
- pressure ulcers
- pain management
- results of cleaning audits
- total number of adverse events
- death rates
- cases reported to the coroner
- sentinel events as defined by DHS[1].

We found that reporting to boards varied significantly in quality and detail. Statewide, we found that only 58 per cent of hospitals give regular statistical reports on clinical risk management to their board.

In the hospitals we examined in depth, the best gave reports on the key areas identified by the VQC, using performance indicators that had both a numerator and denominator (for example, instead of simply reporting on the number of patient falls in a month, they reported on the number of falls per bed day). These hospitals also included analyses of the frequency and type of clinical incidents by specialty and/or location.

Three hospitals gave regular reports summarising performance and trends in key areas. This kind of "scorecard" approach allows board members and senior management to see at a glance which areas may need further attention, and to decide if they should ask for more information. These hospitals also reported to their board on their progress in addressing previously identified risks.

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[1] The VQC suggests other areas to review include unplanned return to operating room for certain procedures, unexpected admission to the intensive care unit, unexpected deaths, and severe complications relating to procedures.

Some hospitals relied on board members reading committee minutes to monitor health service performance in clinical risk management. This meant that while board members were informed of issues under consideration, they did not necessarily have good information on trends or variations in performance.

None of the reports to boards that we examined were able to compare health service performance with state benchmarks. This data is not currently collected statewide. As a result, boards cannot assess how their health service's clinical risk management compares with the best-performing health services. Data from different hospital units - and between hospitals - are not always comparable unless they are risk adjusted. However, in spite of this limitation, benchmarks do allow staff to see different levels of performance and follow-up on the reasons why.

One health service examined uses a scorecard approach to reporting that allows board members to quickly assess performance and trends in clinical risk. Figure 6A gives an overview.

FIGURE 6A: USING SCORECARD REPORTING TO MONITOR CLINICAL RISK MANAGEMENT

A scorecard approach can quickly convey key performance information to staff and board members.

In one health service we examined, each department keeps a scorecard of their performance in key areas, consistent with a program-level scorecard and the service-wide scorecard. In their department-level reports, departments can include their own indicators as well as the required service-wide indicators.

A 2-page report lists monthly targets and actual performance. It also shows monthly performance and year-to-date clinical risk management indicators, including:

- falls per 1 000 bed days
- pressure sores per 1 000 bed days
- medication errors per 1 000 bed days
- percentage of reported patient incidents resulting in serious injury
- percentage of serious complaints
- infection control indicators.

The use of performance indicators with both a numerator and denominator, (incidents per 1 000 bed days) controls the data against variations in activity. Reporting on the *percentage of reported incidents resulting in serious injury* gives staff an incentive to report all incidents, not just the most serious.

Source: Victorian Auditor-General's Office.

6.3 Monitoring performance

6.3.1 Assurance systems

DHS is also responsible for statewide strategy, policy development, planning, resource allocation and performance monitoring in hospitals. While it does not have direct accountability for clinical risk management in hospitals, DHS has a general responsibility to provide high-quality and efficient health care services through the public hospital system. The *Health Services Act 1998* gives DHS powers to develop criteria or measures that enable comparisons to be made between health care agencies providing similar services, and to collect and analyse data.

DHS needs to be assured that effective clinical risk management systems are in place. It also needs access to performance data and trends in patient safety to inform its policy development role.

Accreditation

One of the assurance mechanisms DHS uses to ensure hospitals maintain sound clinical risk management processes is accreditation through the Australian Council on Healthcare Standards (ACHS).

Patient safety is a key part of the accreditation process, with the requirement that the health service's "governing body promotes the safety of all persons within the organisation by its proactive approach to preventing and managing clinical and non-clinical risks" [2].

The clinical risk management elements needed to achieve accreditation are summarised in Figure 6B. From 1 January 2005, an MA rating - or higher - is needed to achieve accreditation.

As a minimum, the ACHS requires every health service to have an organisation-wide risk management policy.

Health service assessments for accreditation are held in intervals up to 4 years[3]. Accreditation requirements changed in 2003, and we found one health service which was currently accredited but did not have a risk management policy. It would not, therefore, meet the current minimum standard for accreditation.

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[2] Australian Council for Healthcare Standards2002, *ACHS EQuiP Standards - 3rd Edition.*

[3] Length of accreditation is based on the scores the health service receives on mandatory assessment criteria. A score of LA means that the health service does not achieve accreditation; SA gives accreditation for 2 years. MA and above (EA, OA) gives a maximum of 4 years accreditation.

ACHS does not give any information on the findings of the accreditation reviews to DHS. However, hospitals must advise DHS of high-priority recommendations identified in the accreditation process. In the event of a high-priority recommendation, DHS also wants an action plan addressing the issues. From 2004, DHS has required hospitals to send reports from any accreditation inspections as they are conducted. This has been included in policy and funding guidelines.

However, DHS does not have accreditation information about hospitals whose inspections were conducted prior to this date. They know whether the hospital received 1 year, 2 year or 4 year accreditation, but do not have information on why accreditation may have been limited.

FIGURE 6B: ACHS ACCREDITATION ELEMENTS FOR CLINICAL RISK MANAGEMENT

Standard: The governing body promotes the safety of all persons within the organisation by its proactive approach to preventing and managing clinical and non-clinical risk				
LA - Awareness	SA – Implementation (LA plus the following)	MA – Evaluation (SA plus the following)	EA – Benchmarking (MA plus the following)	OA – Leader (EA plus the following)
There is an awareness of the need to manage risks throughout the organisation.	A risk management policy is defined and implemented.	The risk management policy reflects current standards.	The risk management policy is compared externally with other risk management policies to identify aspects that can be improved.	The organisation demonstrates that it is a leader in its approach to risk management.
Legislative requirements relevant to risk management are met.	The risk management policy is relevant to the organisation's context, goals, objectives and the nature of the business.	There is a system for management to evaluate if the risk management policy is understood, implemented and maintained by all levels of the organisation.		Commendations are received from third-party reviews.
There is an organisation-wide risk-management policy.	The risk management policy is endorsed by the governing body.	The risk management policy is reviewed regularly in line with the regulatory changes and relevant standards.		
The risk-management policy includes strategies for managing: • near misses • incidents • adverse events • sentinel events • communication with staff/consumers/carers.	Management has allocated resources to risk management.			
Staff are aware of the risk management policy				

Source: Australian Council on Healthcare Standards2003, *ACHS EQuIP Standards* - 3rd Edition.

6.3.2 Reporting to DHS

DHS receives reports on hospital performance that cover a large number of areas[4].

The overall reporting requirements on hospitals are significant and, in 2003, the health service governance reform panel identified a need to reduce the amount of reporting by metropolitan health services. In response, DHS implemented a review of the amount of reporting required.

Hospital reporting on clinical risk management programs

DHS requires hospitals to report on specific elements in their clinical risk management programs. These requirements have varied since reporting requirements were first implemented in 2001. While reporting on sentinel events has been consistent, other elements have varied.

Many of the reports that DHS has asked for have been heavily descriptive and text-based. DHS has not produced any combined reports, nor conducted any analyses.

Reporting requirements are advised each year in DHS quality and funding guidelines for hospitals. However, possibly because of the number of changes in requirements since 2001, we found hospitals were not always clear on what to report to DHS, when and why. Some hospitals were still forwarding reports that DHS no longer needed.

In its 2004-05 quality and funding guidelines, DHS advised hospitals that it had replaced the previous clinical risk management reporting requirements with a requirement that hospitals develop an annual patient safety plan and report. In February 2005, the specific requirements for this report had not been developed. DHS advise that this work has now commenced.

Hospital reporting on sentinel events

Since 2001, DHS has required that hospitals report sentinel events to it. From 2004-05, DHS has also required hospitals to report serious near-miss incidents.

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[4] Current reports that relate to patient safety include VICNISS Hospital Acquired Infection Surveillance (to monitor the rates of hospital-acquired infection); data about cardiac surgery and vascular surgery; intensive care data (individual performance against a set of standards including mortality and length of stay is reported by individual hospitals and referenced against state and national performance levels); anaesthetic morbidity and mortality data and maternal and perinatal mortality.

Health services must tell DHS within 15 working days of a sentinel event happening. They must also conduct a Root Cause Analysis (RCA) and develop a Risk Reduction Action Plan (RRAP) listing the risk reduction strategies being considered and the likely implementation date for each action item. Both of these must be sent to DHS within 60 days of the event.

We examined the records of RRAPs sent to DHS and found that many were not received within the required period. In 2003-04, 85 sentinel events were reported to DHS, and only 35 per cent of these were followed-up with a timely RCA[5]. Some RCAs and RRAPs were up to 255 days late.

DHS sends the RCAs and RRAPs to expert bodies for assessment and, if appropriate, recommendations for action. Hospitals we visited advised that DHS feedback on sentinel event RCAs and RRAPs was intermittent.

In June 2003, the DHS Clinical Risk Management Reference Group[6] noted that hospital compliance with sentinel event reporting and uptake of distributed recommendations varied, and departmental audit systems were needed to make sure this was addressed. To address this need, DHS held a sentinel events workshop during 2004.

Where a sentinel event leads to a patient's death, the coroner may investigate the circumstances and make recommendations for changes to procedures and practices. DHS is working in collaboration with the coroner's office to ensure that all parties are aware of recommendations made through the various processes.

Integrated Performance Report

In 2004-05, DHS introduced a Statement of Priorities for the major metropolitan and rural health services. The Statement of Priorities is an agreement between the minister and hospital boards on key deliverables and performance priorities for the year, and includes key performance indicators.

[5] Prior to 2004-05, health services were required to submit RRAPs within 45 days. In recognition of the time needed to complete investigations and RRAPs, in 2004-05, DHS increased the time available to 60 days.

[6] The DHS Clinical Risk Management Reference Group is an expert body advising DHS on strategic directions and policy development with respect to DHS' Clinical Risk Management Strategy.

Each month, performance against targets agreed in the Statement of Priorities is summarised in the Integrated Performance Report. This report, which is for limited distribution to the CEO and board chair, gives a summary of the health service performance. It includes a health service benchmark report covering financial performance and shows a ranking compared with other public health services. It also reports on key measures of access such as percentage of time on hospital bypass, and waiting times for category 1 and 2 elective admissions.

The quality and safety indicators in the current Integrated Performance Report change each month, and include:

- results from the Pressure Ulcer Point Prevalence Survey
- information from the Victorian Patient Satisfaction Monitor
- trauma indicators
- percentage of occupied neo-natal beds
- reports of internal monitoring of hospital cleaning outcomes against standards for Victorian public hospitals
- data from the VICNISS hospital acquired infection system
- adult intensive care mortality rates and average length of stay in intensive care units (ICU) for each hospital
- cardiac surgery indicators.

We found that the reporting on patient safety currently contained in the Integrated Performance Report could be improved in the following areas:

- The changing focus month-to-month does not allow the parties to easily identify and monitor trends in indicators.
- All elements from the minimum dataset for reporting recommended by the DHS governance reform panel and VQC are not currently included.
- Some of the information reported summarises existing published material. The Integrated Performance Report is a confidential document for the board chair and CEO, and the inclusion of previously published information wastes an opportunity for DHS to share useful but perhaps potentially more sensitive information. This is the approach taken to financial reporting in the Integrated Performance Report.

6.3.3 Reporting on patient safety to the community

Quality of Care reports

Since 2001, hospitals have also had to publicly report each year on how they carry out their clinical risk management programs. Quality of Care reports are key public reporting documents that tell the community about a health service's progress in this area.

Metropolitan and large regional hospitals must report on processes, actions and outcomes in the areas of infection control, medication errors, falls monitoring and prevention, and pressure wound monitoring.

We examined the Quality of Care reports for the 5 hospitals we visited and found that they provided information about these areas, with clear summaries of the key issues and descriptions of the actions they were taking to improve patient safety in these areas. The best also provided data showing performance trends by month or quarter, and comparisons with previous years.

Sentinel event reports

DHS also produces a sentinel events report each year in which de-identified data is collated and reported. The report includes an analysis of the major kinds of sentinel events that have been reported, as well as contributing factors, case studies and information on prevention.

Currently, Victoria and New South Wales are the only states to report publicly on sentinel events. As well as providing useful information, this kind of public reporting assists in building a culture of openness around clinical incident management.

6.4 Performance improvement

Currently, with the exception of sentinel events, Victoria's clinical incident monitoring and reporting systems are at hospital level. As we described in earlier parts of this report, 2 major barriers work against the collating of statewide data: variable definitions in health services on what to report, and variable incident reporting systems. This means different information about incidents is gathered, and data formats are incompatible.

A number of states in Australia, including Western Australia, New South Wales and South Australia, are implementing statewide incident monitoring and reporting systems for adverse events. These programs aim to build better statewide information about the nature and causes of adverse events. They also aim to facilitate a collaborative approach to interventions to reduce the number of specific event types. These larger, collated datasets mean emerging trends (which may not be apparent at hospital level) can be identified early.

6.4.1 The way forward – building better data to improve performance

Victorian Admitted Episodes Dataset

DHS gathers data on every single episode of inpatient care in the Victorian Admitted Episodes Database (VAED). This includes data that may indicate an adverse event has happened - for example, haemorrhage, tracheostomy malfunction and infections of surgical wounds. This data is currently gathered to support the casemix funding system, however, studies have used this data to identify possible clinical incidents in hospitals.

This kind of review cannot show the responsibility for, cause of, or preventability of, incidents. However, it is a relatively low-cost way of screening large numbers of records to get a high-level picture of adverse events. Diagnosis groups can identify trends, and comparisons can then be made between like hospitals and similar units within hospitals.

Analysis of VAED data could also let hospitals identify their most likely complications of care. This information could then be used as the basis for training and preventative action.

VAED data is regularly provided to DHS by hospitals, and the quality of the data is regularly audited. It offers a relatively high-quality, accessible data source that could provide better information on clinical incidents without the need to implement additional systems or processes in hospitals.

DHS does not currently do any routine data analysis or reporting of identified incidents from VAED. DHS advised us it has conducted a number of specific studies on particular areas as resources allow (for example, looking at the outcomes of particular types of surgery and investigating the reasons for variation in performance between different hospitals).

Victorian Managed Insurance Authority

As well as reporting clinical incidents to DHS, if hospitals believe litigation to be a risk, they report the incident to the Victorian Managed Insurance Authority (VMIA). The VMIA advises that it currently receives data on around 100 000 clinical incidents in the Victorian health system each year (from sub-acute facilities as well as hospitals)[7].

[7] Less than one per cent of these reported incidents are litigated, with under 300 writs each year.

The VMIA conducts some analysis of incidents by specialty and by hospital. The VMIA advised us that it is currently piloting a project in a small number of hospitals to gather data via the internet from hospital incident reporting databases.

Currently, the information gathered by VMIA is not made available to DHS even in de-identified form.

Victorian Quality Council

One of the Victorian Quality Council's (VQC's) goals is to "establish processes to collect, review and respond to targeted, purposeful and beneficial data as the basis for improving health care performance"[8]. Performance measures established in 2002 included:

- effective statewide safety and quality data collection, management and reporting systems
- removal of barriers preventing collection and use of important data
- regular benchmarking and follow-up among health services
- a health care culture that supports open disclosure
- improvements arising from reliable data collection.

In August 2004, the VQC launched a data directory of Australian safety- and quality- related databases. As well, the VQC has undertaken a major study into pressure ulcer prevalence, providing valuable and rigorous data on one of the more prevalent clinical incidents. This study is described at Figure 6C.

[8] Victorian Quality Councill, *Strategic Plan 2002-05.*

FIGURE 6C: THE POWER OF STATEWIDE DATA - THE PRESSURE ULCER POINT PREVALENCE SURVEY PROJECT

Pressure ulcers are an internationally recognised patient safety problem, causing considerable harm to patients and an accumulated cost to the health system. In 1997, pressure ulcers were reported to cost $350 million a year nationally[9]. They are also largely preventable.

In 2003, the VQC undertook the Pressure Ulcer Point Prevalence Survey (PUPPS). The object of the survey was to investigate and establish the prevalence of pressure ulcers in Victorian hospitals. The study identified a mean prevalence of pressure ulcers of 26.5 per cent (ranging from 5.6 per cent to 48.4 per cent). Around 68 per cent of the identified pressure ulcers had been acquired in hospital.

The study also considered the clarity of organisational policies on pressure ulcer management, access to wound care consultants, staff knowledge and use of appropriate pressure relieving devices.

The study was conducted according to a consistent, validated method, which enabled the results to be compared with international and national data on pressure ulcer prevalence. The results showed a higher prevalence of pressure ulcers in Victoria than in Europe (where a study in 2000 reported an incidence of 18 per cent) and the USA (15.4 per cent in 2000 and 14.8 per cent in 2001). The results for Victoria were comparable with a national study.

In response to the study, in 2004-05, DHS policy and funding guidelines included a $2 million initiative to fund a pressure reduction foam mattress replacement program. VQC has developed a core competency program for clinical care staff. The survey will be repeated in 2004-05, and DHS has established a target of 50 per cent reduction in the prevalence rate. It has also required health services to monitor pressure ulcers in the areas of high-risk identified through the survey.

The PUPPS project showed the power of gathering and sharing data about patient safety statewide. Participating hospitals were able to see how they compared with other hospitals in Victoria, other states and internationally. At the state level, by quantifying the scale of the issue, the project gave the impetus for policy initiatives to address a cause of harm which may have seemed relatively minor as a single incident, but which was clearly a major issue for the state system as a whole.

Source: Victorian Auditor-General's Office.

6.5 Conclusion

Performance monitoring in health services and hospitals is highly variable. Hospital boards are responsible for making sure that effective and accountable systems are in place for patient safety. Currently, however, few hospitals have effective systems in place for reporting on their clinical risk management performance. Without these systems, boards cannot be sure that they are discharging their clinical risk management responsibilities.

[9] Victorian Quality Council 2003, *Pressure Ulcer Point Prevalence Survey (PUPPS) Report*.

The requirement that hospitals be accredited by ACHS is one of DHS' major assurance mechanisms. However, up until the start of 2005, accreditation requirements relating to clinical risk management were not mandatory. With this change, a number of hospitals that have previously been accredited in spite of weak clinical risk management processes will need to undertake substantial work in the area to retain accreditation.

Reporting requirements that apply to hospital clinical risk management programs have not always been clear. As a result, DHS compliance monitoring is not fully effective. DHS needs to decide what it wishes to achieve through hospital reporting on clinical risk management activities, and give clear statements of its requirements. Without this clarity, hospital commitment to such reporting will be minimal.

Together with health services and stakeholders such as the VQC and the VMIA, DHS needs to develop a long-term strategy that will give clear and consistent statewide datasets about clinical incidents. Currently, incident data on adverse events and near misses are not collected or classified consistently at hospitals. Significant work needs to be done before statewide data collection will yield valuable information, but this needs to be a priority.

Projects like the Pressure Ulcer Point Prevalence Survey show the power and value of statewide data collection. Purposive studies such as these inform both practice and policy development. They need to continue, and the information they give needs to be supplemented with comprehensive performance indicator data, gathered on a regular basis.

There is no statewide picture of the nature and number of adverse events and near misses in Victorian hospitals. While sentinel events are reported to DHS - and it is leading the nation by reporting these publicly - sentinel events are only a small fraction of all clinical incidents. As a result, their value in identifying emerging issues, and for trend analysis, is limited. Data will improve from 2004-05 with the inclusion of serious near-misses as reportable events, however, information about the bulk of reported incidents will still not be available at state level.

Any statewide data gathering efforts must be aware of the substantial reporting task already faced by hospitals. However, better use can be made of existing datasets and systems. Hospitals currently record substantial data about patient outcomes in the VAED. This can be mined to give hospitals better performance information and to help them identify emerging issues, trends and benchmarks.

The VMIA receives reports on around 100 000 clinical incidents each year. However, this information is currently not available to DHS. The web-based system linking Riskman data recorded in hospitals - currently being trialled by the VMIA - may improve statewide information on performance and trends. Even so, greater coordination of data collection systems, and collaboration between DHS and the VMIA will be needed for this system to reach its potential.

The weakness of our picture of state-level performance in patient safety is consistent with the national picture: there is little systematic information by which the quality and safety of health care in Australia can be evaluated. However, some other states are more advanced than Victoria in building statewide datasets about clinical incidents. A priority is to develop systematic information based on consistent definitions, minimum datasets, performance review criteria, information management systems and standards. DHS needs to take the lead in this, supported by the VMIA and the VQC.

Recommendations

14. **Hospital boards should ensure that they regularly receive key performance data enabling them to monitor local performance in patient safety. Areas to be reviewed routinely should include the minimum reporting datasets recommended by the DHS governance reform panel and the VQC.**
15. **The Integrated Performance Report should include regular reporting on the minimum reporting datasets recommended by the DHS governance reform panel and the VQC.**
16. **DHS should develop a strategy to collect and analyse data to encourage safety and improvement in quality. This should consider:**
    - **whether it is beneficial to link current hospital level reporting systems to provide state-level data**
    - **utilising routinely reported datasets such as the VAED to obtain information about clinical incidents**
    - **exploring opportunities to share information with the VMIA.**

RESPONSE provided by Secretary, Department of Human Services

Recommendation 14

DHS agrees that the topics recommended by the governance reform panel and the VQC should be regularly reviewed by Boards.

Recommendation 15

DHS agree that a number of key clinical performance indicators need to be a part of the Integrated Performance Report.

Recommendation 16

DHS agrees that VAED has the potential to be a rich source of information about clinical indicators however this is still to be demonstrated. Confidentiality issues will need to be resolved in relation to sharing information with VMIA.

Glossary

Accreditation

Being granted recognition for meeting designated standards.

Adverse event

An incident in which harm resulted to a person receiving health care.

Clinical governance

The system by which the governing body, managers and clinicians share responsibility and are held accountable for patient care, minimising risks to consumers and for continuously monitoring and improving the quality of clinical care.

Clinical incident

Incidents in a health care setting that resulted - or could have resulted - in unexpected harm to the patient.

Clinical risk management

An approach to improving the quality and safe delivery of health care by placing special emphasis in identifying circumstances that put patients at risk of harm and acting to prevent or control those risks.

Governance

Accountability for standards and performance in the delivery and aspects of business including the quality of service provided.

Harm

Death, disease, injury, suffering and/ or disability experienced by a person.

Incident

An event or circumstance, which could have or did lead to unintended and/ or unnecessary harm to a person, and/ or complaint, loss or damage.

Limited Adverse Occurrence Screening

The extraction of patient histories based on the presence of one or more of eight screening criteria, with review by clinicians for the presence of an adverse event.

Near miss

Unexpected or unplanned events in the provision of care that could have, but did not lead to harm, loss or damage.

Patient safety management system

A series of cross-organisational processes designed to protect against risks. The processes are used to identify, classify and manage risks to the safety of an organisation's operation. They are an integral part of an organisation's risk management framework.

Quality Committee

The Quality Committee is the peak patient safety and quality committee in the organisation, however named, and takes an active safety and quality planning, monitoring and evaluation role on behalf of the board.

Risk management

The systematic application of management policies, procedures and practices to the task of identifying, analysing, assessing, treating and monitoring risk.

Risk reduction plan

The product of a Root Cause Analysis that identifies strategies the organisation intends to implement, to reduce the risk of similar incidents occurring in the future.

Root Cause Analysis

A systematic process whereby the factors which contributed to an incident are identified.

Safety

A state in which risk has been reduced to an acceptable level.

Sentinel event

Events in which death or serious harm to a patient has occurred.

Separation

The process by which an episode of care for an admitted patient ceases.

System

An interdependent group of items forming a unified whole.

Victorian Admitted Episodes Database

Morbidity data on all admitted patients from Victorian public and private acute hospitals including rehabilitation centres, extended care facilities and day procedure centres.

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