

4 Monitoring performance in patient safety

At a glance

Background

Monitoring performance is an important, challenging task within the patient safety system. Counting clinical incidents does not necessarily demonstrate the level of safety, as increases in reported incidents may indicate that safety is deteriorating, or alternatively that incident reporting processes and cultures are improving.

Key findings

- Health services maintained clinical incident reporting databases to record and analyse clinical incidents. The data generated from these databases was also used to report performance.
- There was no statewide system that collated this data to monitor overall performance in patient safety. Victoria is the only Australian jurisdiction in this position.
- DHS is developing a statewide incident reporting system—the incident information system. The planned completion date for the IIS is December 2010.
- There were only limited accountability mechanisms in place, due largely to the absence of a statewide incident reporting system providing comprehensive data.

Key recommendations

DHS should:

- implement the IIS, or a similar system with statewide reporting and analysis, as a priority (**Recommendation 4.1**)
- establish a performance measurement framework to enhance internal accountability for patient safety (**Recommendation 4.2**).

4.1 Introduction

Understanding how well the patient safety system is performing, at both state and health service level, is essential. Performance monitoring enables the identification of areas of concern, provides information on the effectiveness of actions and interventions, and an evidence base for the provision of public assurance about the safety of Victorian public hospitals.

We expected that health services would report, at board level, collated and trended data on clinical incidents and the majority of VQC recommended indicators. We also expected that patient safety would be reported at a statewide level.

4.2 Performance monitoring frameworks

4.2.1 Health service performance monitoring

The five health services audited maintained clinical incident reporting databases to record and analyse clinical incidents. The data generated from these databases was also used to report performance to the health service's board as part of their clinical governance arrangements, although the extent to which this occurred varied. For example:

- one health service reported performance against 11 recommended performance indicators, while the other four reported against as few as eight of these indicators
- one health service provided collated and trended data on all clinical incidents to their board annually only, although trended reporting was provided monthly to the board's quality committee
- one health service's performance monitoring omitted near misses, which are the most prevalent type of clinical incident
- one health service only provided information on incidents resulting in serious harm, and for specific incident types.

Not all the health services used the same system to record clinical incident data, and some health services maintained incident reporting systems specific to defined clinical areas, separate to their organisation-wide clinical incident system. At two health services, staff groups used separate incident reporting systems, with incidents reported in the alternate system not guaranteed to also be recorded in the organisation-wide database. This compromises the completeness of data within the central system.

4.2.2 Statewide performance monitoring

There is no statewide system that collates data to monitor overall performance in patient safety, notwithstanding that health services monitor patient safety performance at the local level. Victoria is the only jurisdiction in Australia that does not have a statewide system to monitor the patient safety system performance.

DHS collects a range of statewide patient safety data, such as sentinel events, infection rates, pressure ulcers and cardiac surgery. However, this represents only a portion of the available patient safety data. These datasets are not linked and do not provide an overall picture of patient safety. Consequently, DHS is unable to measure the performance of the patient safety system as a whole.

DHS advised VAGO that it plans to develop a statewide incident reporting system, the IIS, by 2010, to address these limitations.

Incident information system

The proposed IIS, at an estimated cost of \$12.5 million, will establish a statewide incident reporting system for use by Victoria's public health services and other patient safety agencies. The IIS should deliver five outcomes:

- a statewide, standard methodology for the way incident information is reported within the public health system
- implementation of a mechanism to enable statewide aggregation, analysis and trends in multi-level clinical (patient) incident data
- a mechanism to evaluate the clinical incident data, identify trends and share relevant information so that quality improvements can be targeted and actioned
- deliver data to the Health Services Commissioner, WorkSafe Victoria and the Victorian Managed Insurance Authority (VMIA), who receive incident data from health services
- establish a safety culture in health services in Victoria.

DHS has identified a range of benefits from the implementation of IIS, including a safer and more efficient healthcare system, with improved patient outcomes. Specific anticipated improvements include:

- improved reporting rates
- better quality data
- reductions in the number of patients with extended hospital stays linked to clinical incidents
- fewer high-severity clinical incidents
- fewer unexpected complications.

The planning of the IIS is progressing; however, funding has not yet been confirmed, and there is no certainty that the project will proceed. In the interim, DHS advised that it is exploring how its existing databases can provide a more detailed picture of trends and patterns in clinical incidents.

Other statewide data and information systems

SQB maintains a range of patient safety-related databases, including those that collect health service data on sentinel events; cardiac and vascular surgery; pressure ulcers; and infection control. In addition, there are other datasets maintained throughout DHS for various clinical specialities, which include patient safety information.

The Victorian admitted episode dataset (VAED) is the main dataset for health service activity, from which DHS generates funding allocation. The VAED can be 'mined' for patient safety information to look at variance against expected mortality and other outcomes. DHS does not use the VAED to generate patient safety information, although it is conducting research on four different methods for applying the data to patient safety.

The VMIA also collects a range of patient safety data from health services relating to medical insurance claims. Despite receiving around 100 000 incident reports each year there are limitations in the way this data can be used to improve the patient safety system. This includes inadequate analysis of claims data and poor consolidation and use of clinical incident information. VMIA advised that through its newly developed CRM strategy it aims to improve the quality, frequency and analysis of incident reporting by:

- supporting the design, development and implementation of the IIS
- developing a VMIA incident reporting capability, including incident benchmark reporting
- working with agencies to gain access to available sources of risk information, such as performance against benchmark data
- supporting and promoting initiatives that contribute to a culture of improvement such as open disclosure and no blame.

4.3 Accountability mechanisms

In line with the Victorian Government's policy commitment to provide high-quality health services, Parliament and the public expect that health services and DHS will be held accountable for performance in relation to safety and quality.

There were only limited accountability mechanisms in place, due largely to the absence of a statewide incident reporting system providing comprehensive data. However, there are a range of internal and public mechanisms contributing to accountability.

4.3.1 Internal accountability

The key state-level performance monitoring tool is the Integrated Performance Report (IPR). DHS requires each health service to report against the IPR, which contains 22 key performance indicators.

Following VAGO's 2005 patient safety performance audit, the Minister for Finance informed Parliament that there would be greater patient safety reporting in the IPR. Clinical performance indicators that the government planned to include were:

- Australian Council Healthcare Standards accreditation status
- clinical incidents reported per 1 000 bed days
- inpatient falls that result in fractures per 1 000 bed days
- pressure ulcer prevalence rates per 1 000 bed days
- surgical site infection rates.

Only one of the proposed indicators, accreditation status, has been included in the IPR. The two other quality and safety indicators currently included in the report are cleaning standards, and submission of data to VICNISS—the infection control database. VICNISS data has been included only since 2007–08. The remaining 19 indicators relate to finance and access.

DHS acknowledged that the three quality and safety indicators do not adequately measure patient safety performance. It is developing a new internal performance reporting tool, the performance measures framework, to better monitor patient safety performance. The performance measures framework may include indicators originally planned for the IPR, such as the number of clinical incidents reported and the number of patient falls per 1 000 bed days. Responsibility for this framework sits outside SQB, and the project has not progressed far. It is still unclear what DHS will include and when it will be completed.

4.3.2 Public accountability

DHS publishes public reports that address, in some way, patient safety. These include the *Your Hospitals* and the sentinel event reports. DHS also requires health services to publish quality of care reports.

Quality of care reports

All Victorian health services are required to publish quality of care reports annually. Health services use the reports to inform the community of their quality and safety systems, processes and outcomes. Accreditation and clinical risk management outcomes are reported, and health services must identify at least four key quality and safety measures to report on, such as:

- infection control and cleaning
- medication errors
- falls monitoring and prevention
- pressure wound monitoring and prevention
- clinical indicators for dental services.

There is no requirement for health services to provide broader patient safety data, such as the total number of clinical incidents, even though health services collect and collate this information already.

DHS advised that for 2006–07, all health services met the requirements in relation to patient safety and quality.

Your Hospitals

The main public report of health system performance is the *Your Hospitals* report. This report details performance against the key performance indicators (KPIs) for health services. Of the three KPIs for quality and safety, only cleaning standards are reported against, and only a small selection of health services' results is provided. DHS advised that while only a selection of health services was included in the report, all health services met the cleaning standards KPI.

Sentinel event report

The key statewide, publicly reported patient safety performance data is for sentinel events. DHS produces an annual report that identifies the total number of sentinel events reported in that year, the types of sentinel events, specific case details and lessons learnt.

While sentinel events are the most serious clinical incidents, they represent only a very small proportion of the total estimated clinical incidents. In 2006–07, there were 97 reported sentinel events, with an estimated 135 000 clinical incidents in the same year.

4.4 Conclusions

Health services have introduced local clinical risk management strategies, which include education strategies and monitoring and reporting (local) patient safety performance at board level. This is an improvement since the 2005 audit.

Performance data are a crucial element of continuous improvement, without which the ability to improve the patient safety system is significantly diminished. There has been progress in developing a statewide performance monitoring framework. The new performance monitoring framework, currently being planned, should address the gap in statewide patient safety data. However, aside from the long timeframe for completion, the framework has not been assured funding, and recent IT implementation within DHS suggests the risks of delays are high.

DHS needs to take account of the previous lessons in IT implementation. Health services have independently purchased and/or developed incident reporting systems tailored to their individual needs. There are resource implications for changing systems, and likely stakeholder resistance to change, which may affect the take-up rate. These issues will present significant challenges for DHS.

The lack of a statewide incident reporting system has diminished the accountability for patient safety. While internal and public accountability mechanisms exist, their scope is limited. DHS has options to increase the meaningfulness of internal reporting; however, it is heavily reliant on health services adopting consistent definitions to improve the robustness and comparability of performance.

Much more also needs to be done to improve public reporting for safety and quality. While this may increase the reporting burden for health services, the community is entitled to expect comprehensive and effective accountability frameworks. The ability to provide meaningful public reports, however, will continue to be a significant risk in the absence of a statewide incident reporting system producing robust data.

Recommendations

DHS should:

- 4.1 implement the IIS, or a similar system with statewide reporting and analysis capability, as a priority
 - 4.2 establish a performance measurement framework to enhance internal accountability for patient safety.
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