

Auditor-General of Queensland

Executive Summary

Report to Parliament No. 5 for 2009

Management of patient flow through
Queensland hospitals

A Performance Management Systems Audit



1. Executive Summary

1.1 Audit overview

Over the next 15 years the Department of Health (Health) predicts that the number of hospitalisations will double due to the increasing population and burden of chronic disease.¹ Managing this increase in demand is not just about providing additional resources, such as more beds, buildings and staff. Health services globally are looking at how they can reduce inefficiencies in systems to improve the smooth and timely flow of patients through hospital departments. This relatively new concept of patient flow has become increasingly recognised as important to help address the imbalance between hospital patient demand and capacity.

The objective of this audit was to determine whether suitable systems are operating across Queensland's public hospitals to ensure the efficient and effective management of patient flow including admission to, and discharge from hospital. The audit focused on the Queensland public hospital system with regard to inpatient flow, including its interaction with external health service providers, and the role of district and Health corporate offices. The audit did not specifically examine the ambulance service, emergency department systems or waiting lists. A full list of audit scope exclusions can be found in section 2.3.

1.2 Audit opinion

Health have recognised the importance of efficient patient flow, and have introduced a number of initiatives to improve hospital systems. Increased action is required to ensure these initiatives are implemented consistently across the state. In addition, the performance management system in place at Health requires further development to enable management to fully assess whether hospital patient flow processes across Health are efficient and effective.

Audit found that:

- while some statewide policies and frameworks have been provided to hospitals on patient flow, implementation by districts and hospitals has not been fully monitored at a corporate level
- while there are some mechanisms to identify and communicate proven initiatives and better practice across the state, some of the hospitals visited by audit were unaware of the positive initiatives being implemented at other hospitals
- Health has systems in place to measure a number of aspects of hospital performance and has been recognised as best practice in some areas
- there is no comprehensive suite of performance measures for inpatient flow and interaction with external health service providers that are used and monitored consistently across the state.

¹ Department of Health, *Queensland Statewide Health Services Plan 2007-12*.

While hospitals can develop and implement solutions individually to address patient flow challenges, maximum efficiency can be gained when Health takes a coordinated and holistic approach to improving systems and processes through sharing examples of better practice. A whole of system approach to address patient flow issues will reduce the ripple effect on patient care, such as ambulance waiting times and hospital capacity.

1.3 Key findings

Increasing demand pressures necessitate an increased focus on the most efficient use of resources. Health will need to provide strong governance through direction, coordination and support, and improve inpatient flow and performance measurement and reporting systems to ensure better practice is achieved consistently throughout the organisation.

Direction, coordination and support

There are a number of statewide frameworks that provide general guidance and minimum standards to facilitate patient flow through hospitals. However, audit found that application of these frameworks has not been fully monitored.

Although each district and hospital has its own population needs and service capabilities, efficiencies can be gained through statewide policies and procedures that provide guidance on specific processes to achieve effective inpatient flow. Statewide policies and procedures have been developed to address some, but not all aspects of patient flow.

A number of corporate initiatives have been developed to improve patient flow and interaction with external health service providers. However, initiatives were developed by a number of divisions within corporate, with little evidence of coordination to ensure all Health's processes are considered systematically and duplication is minimised. Additionally, many of these initiatives are relatively recent and have not yet been fully implemented or evaluated.

A number of local inpatient flow initiatives were identified at districts and hospitals visited. Although there were some corporate systems to formally identify and share the benefits and learnings from these initiatives across the state, some of the hospitals visited were unaware of the positive initiatives being implemented at other hospitals.

Patient flow through the hospital

Patient flow concepts and processes were observed at all six hospitals visited. Audit noted that the quality and application of practices varied across each hospital. Examples of positive initiatives and better practice are provided throughout this report.

The admission and discharge policies and procedures implemented by the hospitals audited were inconsistent between hospitals and did not always comply with corporate guidance.

Only three of the six hospitals visited had documented bed management policies and procedures. This may result in inconsistent bed management practices, especially where there is more than one bed manager. Relying on the knowledge and skills of individual staff members increases the risk of inefficient inpatient flow and prevents effective succession planning.

The capture of patient information on admission was adequate, however discharge planning did not always commence at the point of admission.

Initiatives which contribute to efficient patient discharge, including discharge plans, discharge coordinators and multi-disciplinary approaches, were observed in some hospitals visited. Audit noted the following barriers to timely patient discharge including insufficient discharge planning, not recording and updating estimated discharge dates, and limited out-of-hours discharges.

Systems for interacting with external health service providers are mostly adequate.

Other system-wide approaches which support an efficient inpatient journey include records management, monitoring of skill mix and staff training. The audit found that:

- manual clinical records management systems can contribute to delays - it is understood Health is examining options for managing records electronically
- there was no hospital-wide monitoring, analysis or reporting of the appropriateness of staff skill mix throughout hospitals and its impact on patient flow
- while most staff appeared to have general patient flow skills and knowledge, they may benefit from a better understanding of patient flow processes through regular training for all staff involved in the patient journey.

Performance measurement and reporting

Health has processes in place to monitor some aspects of hospital performance. However, there was no clear, consistent and well coordinated mechanism to guide performance monitoring and reporting across hospitals, districts and corporate for inpatient flow and interaction with external health service providers.

It is acknowledged that the Performance and Development Division has recently been established to develop an integrated governance and accountability framework, including performance measurement and reporting. However, at the time of the audit, this framework had not been developed.

While Health monitors some patient flow outcome measures such as access block (time delays in admitting patients from the emergency department to hospital wards), a comprehensive suite of outcome measures was not consistently used or analysed by district or corporate management.

A range of process measures for patient flow and interaction with external health service providers are used by individual hospitals, however their use was inconsistent across the state. This limits the ability to monitor and benchmark performance to identify both patient flow breakdowns and better practice.

Health has established balancing measures to ensure patient flow initiatives do not adversely affect patient safety and quality.

1.4 Recommendations

Direction, coordination and support

It is recommended that Health:

1. **monitor compliance with implemented patient flow frameworks, policies and procedures and take action to address non-compliance with approved policies**
2. **create greater consistencies and efficiencies by further developing systems to:**
 - **identify localised better practice on patient flow**
 - **assess whether identified better practice can be utilised more broadly across hospitals**
 - **communicate and implement relevant better practice.**

Patient flow through the hospital

It is recommended that Health:

3. **improve patient flow systems to reduce bottlenecks and delays, through:**
 - **reviewing discharge planning at all hospitals from point of admission, including the recording and regular updating of expected discharge dates to ensure consistency with policy and to further develop processes within relevant hospitals**
 - **investigating and developing, in conjunction with hospitals, systems which manage bed allocation and provide real time data that is readily available to staff to assist in bed management**
 - **ensuring that a system to monitor the staff skill mix is operating within individual hospitals to ensure rostering issues impacting on patient flow and out of hours discharge are promptly brought to the attention of management for appropriate remedial action**
 - **continue to deliver ongoing formal training on patient flow concepts and processes to all relevant staff.**

Performance measurement and reporting

It is recommended that Health:

4. **develop a suite of performance indicators for all aspects of patient flow and interaction with external health service providers to be reported against consistently by all hospitals and actively monitored by an identified corporate area.**

1.5 Department of Health response

The Director-General, in his response dated 16 July 2009 stated:

'The current challenge for the Queensland health system is to improve the delivery of health care while containing costs and maintaining quality of care. As a result, health care, including care in hospitals, has changed and will continue to change. As this change occurs, there is a need to create flexibility in the system to manage uncertainty and to use resources effectively, while maintaining the capacity to cope with variation in demand for services.

I note your acknowledgement of Queensland Health's recognition of the importance of efficient patient flow mechanisms, in particular, the existence of effective localised initiatives in Health Service Districts. Queensland's performance on patient throughput is amongst the very best in the nation. This has been confirmed through two separate reports which found that Queensland Health currently ranks first in terms of average length of stay for six of the top 20 high volume Diagnostic Related Group's and is consistently ranged in the top three for all 20 when compared with other states and territories.² Queensland Health has also consistently produced the shortest median waiting time for elective surgery.³

In 2008, a number of fundamental organisational reforms were made that have a direct bearing on the Queensland Audit Office audit findings. During the transition phase of these significant changes (1 September 2008 – 31 January 2009), Queensland Health identified a number of opportunities for improvement some of which have a direct impact on patient throughput in our hospitals. These changes were as follows:

- 1. In September 2008, a consolidation of Health Service Districts was undertaken reducing the number from 20 to 15. From a patient flow perspective, this led to a more appropriate configuration for developing service delivery models across the care continuum and reduced the layers of management making the District Chief Executive Officer's (DCEO's) directly accountable to the Director-General for implementation of Queensland Health policies.*
- 2. At the same time, the three Area Health Services were abolished removing one level of complexity in the policy development and implementation process. The three Area Health Services were the responsible corporate bodies for patient flow policy process implementation and monitoring. Unsurprisingly, there were different policies and practices across the three Areas.*
- 3. The changes in Districts both in number and structure necessitated new governance and accountability processes to be developed and implemented during the transition phase, which covered much of the audit period.*

The following fundamental reforms, which support consistent statewide delivery and monitoring of initiatives, including patient flow improvements, were then adopted:

- 1. The Performance and Accountability Division (PandA) was established in late 2008 to strengthen accountability and governance frameworks across Queensland Health to ensure alignment to the objectives of Queensland Health and to establish clear lines of accountability. The continuing work of PandA is*

² *The state of our public hospitals June 2009 Report, Department of Health and Ageing.*

³ *The state of our public hospitals June 2009 Report, Department of Health and Ageing.*

to develop and communicate a performance and accountability framework at both District and Corporate level.

- 2. Establishment of the Integrated Policy and Planning Executive Committee to guide and support development of formal mechanisms and initiatives which enable integration, coordination and endorsement of statewide policy development and implementation within Queensland Health.*
- 3. Queensland Health has produced a framework for the development of policy and associated documents across Queensland Health, inclusive of strategic, operational and clinical policy. The aim of this work is to ensure a consistent approach to the development and management of policy, strengthen accountability, ensure regular monitoring and review and periodic evaluation of the effectiveness of any policy in achieving its intended outcome.*
- 4. The Centre for Healthcare Improvement's operation plan for the Hospital Access Unit, entitled Access to Care Plan 2009-2012, ensures that Queensland Health delivers on the Queensland Government commitment to have the shortest public hospital waiting times in Australia. Implementation of this plan will enhance patient flow improvement activities across the major hospitals. The four initiatives that underpin the Access to Care Plan are:*
 - faster Emergency Care in Queensland Public Hospitals*
 - reducing the wait for surgery*
 - improving Specialist Outpatient Services*
 - expand Intensive Care Unit's*
- 5. At a senior management level, since the dissolution of the Area Health Services, there are monthly DCEO forums that provide opportunities to share and develop collaborations on best practice improvement. An example of this is the "emergency patient access collaborative".*
- 6. The Demand Management Steering Committee was established in November 2008. It has developed a multi-strategy multiphase program addressing many aspects of patient flow. The first phase is focused on acute care hospital substitution services and subsequent phases will include strategies on diversionary (avoidance) programs, post acute care, and preventative care services.*
- 7. Prior to the audit period, Queensland Health has recognised that arrangements with external health service providers could be enhanced. As such a pilot on service provision for transition care was commissioned in December 2008. The Register of Approved Service Providers will be available for use by Health Service District (HSD) transition care teams from August 2009 and will be communicated to HSD's through an improved web presence. If the transition care model of service procurement proves successful, it will be applied to other service areas.*

In recognition that the above reforms had been commenced prior to the audit period, I request that these initiatives be specifically referred to in the final report.

In response to the Auditor-General's specific recommendations, Queensland Health at corporate, district and hospital levels will continue to:

- develop statewide frameworks, policies and procedures to ensure a coordinated and standardised approach to patient flow*

- *monitor implementation of process use and develop appropriate escalation strategy for non-compliance*
- *identify local better practice and assess them for broader application*
- *develop a communication process to disseminate better practice*
- *review current discharge planning processes and where necessary, develop additional standardised procedures and documentation to improve coordination and consistency*
- *progress work on procuring appropriate off the shelf or current local in-house systems that manage bed allocation and develop an implementation strategy*
- *establish statewide rostering and skill mix guidelines that match the requirements for effective patient flow and discharge planning*
- *further develop and maintain a patient flow system improvement toolkit*
- *work on major flow process projects and provide a statewide forum to train key staff*
- *develop management process indicators to ensure that there is a consistent approach*
- *develop a minimum data set for comparisons for performance; and*
- *review performance, disseminate information on better practice and provide active intervention to support sub-optimal performance.*

Also, as discussed I request the following measures to ensure full transparency and accountability in implementing your recommendations:

- *quarterly meetings between senior officers of our respective agencies to report on and monitor Queensland Health's progress towards full implementation*
- *a formal Audit Office review in twelve months of Queensland Health's progress towards full implementation of your recommendations.'*

Auditor-General's additional comment

I acknowledge the department's commitment to implement the recommendations in the report. I agree to undertake early follow-up audit processes as the department develops and implements the specific actions required to address these recommendations.

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