

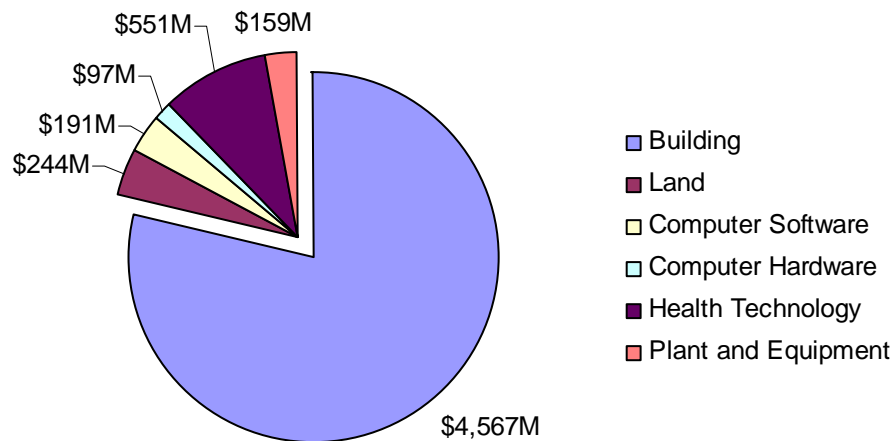
6. Terms of Reference 3 Review performance management systems

6.1 Asset management and capital works planning and delivery

6.1.1 Background

As at 31 March 2004, Queensland Health total asset base was valued at a \$5.8 billion, with a net value of \$3.5 billion. 79 percent of Queensland Health’s assets are buildings with health technologies accounting for 9 percent of the base.

Queensland Health Asset Base, as at 31 March 2004



Source: Queensland Health Asset Strategic Plan, 2004-05

Queensland Health’s asset management arrangements are underpinned by the Asset Strategic Plan, as required under the *Financial Management Standards 1997*. An Asset Strategic Plan is prepared for Queensland Health at the department level and is based on a consolidation of asset strategic plans prepared by district and business units.

Queensland Health’s capital budget in 2005-06 is estimated to be \$549 million. This includes approximately \$283 million in base capital funding (for depreciation and amortisation) plus funding to progress specific new capital projects under Queensland Health Smart State Building Fund (\$200 million over three years). The major focus of the 2005-06 capital program is community and hospital projects, health technology and information and communication technology infrastructure.

In 2003-04, Queensland Health completed the \$2.8 billion Statewide Hospital Rebuilding Program, which replaced and/or refurbished many of the State’s metropolitan and regional hospitals. This program was the second largest capital program in Australia, second only to the infrastructure developed for the Sydney Olympics. A further

\$1.52 billion (2005 dollars) investment is to occur over the next 20 years through the recently announced South East Queensland Infrastructure Plan.

Planned future health projects in South East Queensland

	Estimated cost \$ million	2005-06 to 2008-09	2009-10 to 2014-15	2015-16 to 2025-26
Western Corridor	290.0			
Health Hubs x 2 in areas such as Springfield or Ipswich	40.0		✓	
Ipswich Hospital redevelopment	250.0		✓	✓
Greater Brisbane	84.5			
Prince Charles Hospital: upgrade to General Hospital	84.5	✓		
Gold Coast	539.5			
Gold Coast: new hospital	500		✓	
Browns Plains Health Hub	13.5	✓		
Robina Health Hub	26.0	✓		
Sunshine Coast	607.0			
Sunshine Coast Health Hub	14.7	✓		
Northlakes Health Hub	22.3	✓		
Sunshine Coast: new hospital	500.0		✓	
Caloundra: expansion of existing facilities	50.0	✓		
Caboolture Health Hub	20.0	✓		
TOTAL	1,521			

Source: South East Queensland Infrastructure Plan 2005

Major asset delivery initiatives including building projects for Queensland Health are managed through the Capital Works and Asset Management Branch, including responsibility for the prioritisation and facility planning of health capital works generally. The Department of Public Works is responsible for managing procurement risk associated with the delivery of built assets on behalf of Queensland Health. This is in contrast to other Queensland Government departments where the Department of Public Works has primary responsibility for infrastructure delivery, including for Education Queensland and the Department of Corrective Services.

Asset maintenance expenditure in Queensland Health has a benchmark of 2.5 percent – 4 percent of the district operating budgets. The overall spend on asset maintenance within the districts varies considerably depending on the age of assets and geographical location. In 2002-03, Queensland Health spent 2.8 percent of its budget on asset maintenance. Interstate and industry benchmarks suggest that 3.5 percent of operational budgets should be spent on maintenance and repair⁷⁷.

Compared to other States, in 2003-04 Queensland had the second highest capital cost per case mix separation, reflective of the significant infrastructure investment in the hospital infrastructure over recent years.

⁷⁷ Queensland Health Asset Strategic Plan 2004-05.

6.1.2 Key findings

There has been considerable improvement in the quality of Queensland Health's asset base over the last 10 years, particularly following the completion of the Hospital Rebuilding Program. However, improving the link between health service planning and capital works planning has been identified as an ongoing issue for Queensland Health.

Issues have been raised regarding the quality of health service planning which underpinned the Hospital Redevelopment program and the capacity of the new facilities to meet emerging and future demands, particularly in South East Queensland. In particular, there is a view that health planners who advocated the redirection of beds in metropolitan areas, to meet the increasing need for facilities in growth corridors seem to have underestimated the overall requirements to meet current and future need. Increases in the number of procedures which are able to be performed as day surgery and reducing overall lengths of stay do not appear to have yielded the benefits originally envisaged (see Section 4.2.2) reflecting a lack of planning to coordinate the capital works program with other service delivery initiatives.

A number of districts and clinicians indicated a gap in step-up and step-down facilities, for both acute and mental health conditions. Many considered that investment in these areas would ease pressure on acute facilities and improve continuity of care.

There are mixed views on the effectiveness of the Capital Works and Asset Management Branch to coordinate the planning, governance and development of new assets to meet service delivery needs and its interaction and engagement with the districts on current and future capital needs. The \$120 million residential aged care rebuilding program is considered to have been undertaken very well.

A number of concerns have been expressed regarding sufficient project management expertise at the local level for new capital works and more generally professional infrastructure planning expertise. Districts generally considered that Queensland Health needs to maintain specialist knowledge and expertise to develop agreed design requirements and guidelines for health infrastructure. This is crucial to the effective delivery of services, particularly in the acute hospital environment.

There was little evidence of consistent and comprehensive economic feasibility and post implementation review studies being undertaken for assessment of building capital and health technology particularly from a whole of life cycle perspective. The absence of planning and adequate assessment of projects is apparent with a number of issues identified with the capital stock.

Cost estimation for new capital projects has been an ongoing challenge for Queensland Health. Queensland Health has undertaken a number of reviews of projects where the final costs of capital projects has been significant greater than original estimates. The difficulties in estimating construction costs are partly due to inadequate scope definition and also by unprecedented increases in building costs over the last two to three years. This later cost escalation reflects the current construction environment across Australia.

Several districts have expressed concerns that on occasion preliminary capital funding estimates and placement decisions are made quickly to meet external time imperatives without detailed planning and costing information. Districts felt pressured to work within this preliminary estimate and design facilities to meet the original budget. Some districts

believed this compromised the functionality of the facilities and from a life cycle costing perspective, could cost more over the longer term in the operating costs of facilities or subsequent retrofitting of facilities.

In this regard, it was expressed to the Review Team that Queensland Health could establish agreed design guidelines and requirements, so that new facilities and buildings did not need to be designed from scratch each time a new facility was required.

Districts indicated there is limited service planning integration with capital works, with a concern that they could be progressing short term solutions which may not be compatible with what might be being planned at the corporate office level.

From an asset maintenance perspective, the quality of the Queensland Health building stock has improved significantly with the completion of the hospital rebuilding program generally. However, there are still areas of rural Queensland visited by the Review Team where further investment is required. (For example, Mount Isa Hospital is in need of significant refurbishment).

Many districts have indicated a gap between their asset needs and the annual capital works plan, with limited involvement of the districts in the overall capital planning and prioritisation arrangements. Plans have been developed to strengthen governance and planning processes for the 2006-07 Asset Strategic Plan.

The health technology replacement program, which is managed at a statewide level, is considered to have made improvements to the quality of medical equipment generally, although staff consider further investment is required. Queensland Health has been using the program to improve the standardisation of equipment across hospitals, however there have been mixed responses from the districts regarding the effectiveness of the bulk purchasing component of the strategy. Staff generally supported the need to move toward the use of consistent assets across and within districts. However, some staff expressed a view that the standardisation of assets did not always meet local needs or provide the most cost effective strategy when combined with other health technology assets in the district.

While the larger capital works projects are developed through the Capital Works and Asset Management Branch, smaller projects including management of plant and equipment and minor infrastructure works are the responsibility of districts.

A number of districts indicated they did not have sufficient budget capacity to fund routine replacement of assets including hospital beds and theatre lights, which are met from district budgets. Staff expressed frustration in some districts about the need to undertake business cases to have assets which were part of the clinical environment replaced.

Queensland Health is moving to improve planned maintenance arrangements and improve the balance between corrective and planned maintenance. Districts are in the process of implementing rolling condition based assessment programs for assets.

Asset management across Queensland Health is being assisted by the rollout of the Computerised Maintenance Management System (CMMS). The new system provides electronic recording of plant and equipment and electronic recording and tracking of maintenance which is occurring.

CMMS is considered superior to the previous paper based system. It has been suggested that more consistency was required in the roll-out of the CMMS application across the State, however, a number of implementation issues are now being addressed.

Clinicians expressed concern that, as with other systems they had difficulty in some cases accessing computers to log maintenance issues and the system provided no mechanism to advise of the status of maintenance jobs which had been logged. The Review Team understands that these issues are amongst the issues currently being refined for CMMS.

Issues regarding the adequacy of maintenance varied from district to district. In some districts staff expressed concern about the time taken for maintenance to occur which impacts on clinical delivery. Accessing tradesman to undertake maintenance is particularly an issue in rural and remote Queensland.

The need for a more integrated maintenance strategy to support remote districts is recognised and a pilot strategy for a whole-of-government solution has recently been introduced.

6.1.3 Principles for consideration

- Strong links are required between service planning and asset planning at the local and statewide level.
- Service planning and asset capability planning needs the involvement of clinicians, the community, other health service providers and other government departments at the local, regional level and where relevant, statewide levels.
- Queensland Health needs good systems for estimating and planning the cost of new service delivery infrastructure, and robust systems for monitoring capital expenditure and ensuring project scope which aligns with service delivery need.
- Detailed design guidelines need to be developed to encourage and support fit-for-purpose and efficiency in infrastructure delivery.
- The asset management delivery model should be the most efficient approach to support health outcomes for Queensland.
- Specialist knowledge of health service infrastructure design requirements needs to reside with Queensland Health, including design knowledge to ensure new infrastructure best meets patient needs.
- Minor asset management and replacement needs to be managed locally and be adequately resourced to maintain service planning and delivery capability within the context of a Queensland Health wide asset management strategy and program.

6.2 Information management

6.2.1 Background

Information is a key enabler in the delivery of health outcomes within Queensland. Information management services within Queensland Health are governed and delivered at the corporate level by the Information Directorate. The Information Directorate is responsible for all information technology (IT) development and support functions across the state. This is provided by local Information Technology Support Units that are located in districts to support local infrastructure and systems, and a central IT group responsible for enterprise-wide infrastructure and systems. The Information Directorate also has responsibility for facilitating access to and the use of health information, for example from the health literature and statistical data.

The Information Directorate oversees a total budget of approximately \$191.5 million based on 2005-06 figures. This consists of an operating component of \$107 million and a capital budget of \$84.5 million and represents 3.6 percent of the total Queensland Health budget.

It is estimated that the total healthcare IT market in Australia is worth \$1.7 billion. Given total health system expenditure of approximately \$55.3 billion this represents an investment of approximately 3.2 percent in IT⁷⁸.

While Queensland Health compares well with the national average, it must be noted that benchmarks vary greatly in the health IT area ranging from 1.5 percent reported in the UK up to 6 percent reported in USA⁷⁹.

The Information Directorate has been recently formed in response to concerns regarding the current performance of the information management function in Queensland Health. These concerns include:

- long timeframes for applications development
- inability to deliver capital investments within desired timeframes
- high growth of local applications, potentially duplicating corporate investments
- no basis for benchmarking operational costs
- perceptions that the IT 'tail' wags the business 'dog'
- poor benefits realisation processes
- recurrent funding implications of the IT capital works program
- understanding the value of many IT investments
- a general focus on process not outcomes
- governance processes that may inhibit innovation
- unclear funding models leading to a variety of pricing approaches for cost recovery.

The Information Directorate has commenced the process of reforming its governance and service delivery capability in response to the concerns outlined. At the time of this review, the Information Directorate reform initiative had not reached a point where any

⁷⁸ Source: Fujitsu, Achieving Benefits from Investments in Health IT, 2003

⁷⁹ Source: Derek Wanless, Securing our Future Health: Taking a Long Term View, 2003

noticeable improvements would be visible at the district level. This is both acknowledged by Information Directorate and evident through the district consultation.

The following information systems were raised in district consultations and in many cases observed in operation.

Human resource, purchasing and budget systems

- Financial management system (FAMMIS)
- Human resource management system (LATTICE)
- Decision Support Service (DSS)

District wide systems

- Clinician Knowledge Network (CKN)
- Computerised Maintenance Management System (CMMS)
- Electronic Clinical Records Management System (ERIC)
- Queensland Health Electronic Publishing Service (QHEPS)
- Clinical Incident Reporting System (PRIME)

Hospital systems

- Pathology system (AUSLAB)
- Electronic Infection Control Assessment Technology (eICAT)
- Emergency Department Information System (EDIS)
- Environment for Scheduling Personnel (ESP)
- Hospital Based Corporate Information System eg admission and discharge (HBCIS)
- Operating Room Management Information System (ORMIS)
- Queensland Health Electronic Reporting Service (QHERS)
- Queensland Health Pharmacy Information Management System (QHPIMS)
- Radiology Information System
- Transition II (clinical costing system)
- TREND CARE (patient-nurse ratio calculation tool)

Community health systems

- Community Health Information System (CHIS)
- Aged Care Information Management System (ACIMS)
- Alcohol, Tobacco and Other Drugs Information System (ATODS)

Mental health systems

- Community Episodes of Care Information Library (CECIL)
- Client Event Services System (CESA)
- Mental Health Act 2000 Information System (MHA2000)
- Outcomes Information System (OIS)

Oral health system

- Oral Health Information System Project

In addition to these systems each district has a range of home grown systems.

6.2.2 Key findings

A detailed review of corporate information systems is in progress. District related observations are outlined below.

There is a perception that Queensland Health has many information systems providing a wealth of data yet little information to assist districts in service planning and performance evaluation. Some data systems appear to be developed without consideration of how the information will be managed and used. For example, there is little consideration as to the availability of staff who have the skills to extract and analyse the information in ways useful to clinical care.

“We are drowning in data but have no information.”

Gaps in information systems

Queensland Health does not have information systems for all of its major service delivery functions. For example, there is no comprehensive system for community health or allied health services. This impacts on the capacity of the organisation to plan and evaluate its services.

IT planning and system development

There is evidence of deficiencies in identifying requirements for IT systems. Staff reported systems being developed based on little analysis or redesign of business processes resulting in systems that do not fit with business processes. Systems have also generally been developed or designed with little clinical input resulting in systems that are not useful to clinicians or useful in limited ways.

There are few clinical information systems which would assist clinicians to provide good quality care and monitor that care. Many clinicians who are entering data do not think that the information systems add value - “we are working for the system rather than the system working for us”.

There is a view that Queensland Health develops its own tailored IT solution and does it poorly, when there may be off-the-shelf solutions that meet requirements. For example many other states use AIMS for incident reporting. Queensland Health developed PRIME which is not viewed positively by a majority of interviewed staff in terms of operation (not information), to the point where there is concern that incident reporting has lessened. Another example is the ESP rostering system which interfaces with the human resource management payroll system, LATTICE. Unlike PRIME where the information is supported (ie incident reports), ESP is seen to be a redundant system which has required more staff to be employed to run it and is seen as an unsatisfactory solution to rostering.

There is a strong view that Queensland Health tries to include everything in tailor built systems rather than deciding what will be the most useful information with the minimum functionality. This results in some systems not being implemented (eg CHIME) and the performance of other systems being impacted on by the “nice to have” but not “essential” features.

System implementation

Queensland Health information systems are well intentioned to meet organisational needs but in many cases poorly implemented. Systems may be piloted but feedback from pilots does not appear to be incorporated. There is a view that Queensland Health does not learn from its past IT experiences.

There are inappropriate levels of staff training provided on new systems. For example, there is not enough training for some systems (eg one day training for rostering system) without any ongoing assistance and this training is often provided weeks before the system is available. For some systems there is too much training (eg 3 days training to learn how to release requisitions). Training needs to be timed to coincide with system implementation.

There is a general perception among staff that IT systems are implemented without the impact on local resources being adequately defined and planned. It is believed that this results in reduced quality of information as the data entry is reliant on already busy clinical staff. For example, the usefulness of some of the EDIS data is variable across districts as it relies on the accuracy of the data input by extremely busy junior doctors.

System integration

Many systems are not integrated and some are unable to be integrated therefore staff are duplicating time spent entering data into different systems (eg. rostering and payroll systems, mental health information systems). In many districts, there is no unique patient identifier for patients within a district and across districts. This is not unique to Queensland Health and is an issue being considered across Australia.

There are multiple medical records for individuals in some districts and this could potentially lead to poor clinical care. Patients expressed concern about missing medical records on several occasions.

Information systems are not connected to external providers such as general practitioners, private hospitals and non-government organisations. IT has the potential to streamline the management of consumers across the care continuum (eg electronic discharge summaries are not being routinely sent to general practitioners across the state). There is very strong support for an integrated information system. However, solutions need to comply with privacy legislation and this will require Queensland Health to determine and implement its privacy practices as a precursor to implementing information systems.

IT accessibility

Staff have limited access to information technology, especially clinicians. Districts restrict computer numbers because of the computer levy. This is a problem for staff that have to enter data into information systems on a routine basis. Limited access to printers results in wasted clinician time (eg the nearest printer may be on a different floor to the clinician's work area). Limited access to the internet hampers research into best practice interventions to assist clinician decision.

The Clinician Knowledge Network is seen by many staff as very useful. However, limited access to computers and printers and the internet was a barrier to staff using the network.

Some specialists, in particular visiting medical officers, reported difficulties accessing electronic patient test results especially at night and weekends. The difficulties appear to lie with computer passwords (eg some ward staff may lock up the system by failing to log off computers, staff may forget passwords etc). Importantly, despite specialists reporting difficulty accessing patient test results, no action seems to have been taken to address the issue.

IT responsiveness

Staff are concerned about the time that it takes to roll out systems, implement new versions of systems and update old systems. For example, EDIS remains only in select districts. Staff are also concerned about the time that it takes to update old systems, with an example being the replacement of HBCIS which has been under consideration since the late 1990s.

The helpdesk arrangement is not seen as a responsive system. Many staff reported waiting days and weeks for responses to computer problems. Often these were for simple requests such as password changes in order to access systems essential to their job. Many staff bypassed the system by contacting local IT personnel.

Data on fault resolution work time and fault resolution rate for Queensland Health, for the month of May 2005, are presented in the following table. The resolution rate is below the industry benchmark.

The Information Directorate is aware of these concerns and is implementing strategies to address them.

Zone	Fault resolution work time	Fault resolution rate
Northern Zone	2 min	45%
Central Zone	2 min	45%
Southern Zone	2 min	34%
Industry benchmark	-	59%

System standardisation

Some information systems are implemented in different ways across districts resulting in staff having to be retrained when transferring across districts. An example of this relates to HBCIS where key strokes for codes are different across districts meaning that zonal coders who travel between districts have to learn a variety of key strokes for the same code.

Ease of use

Many information systems are not easy to use. Paper based systems make data analysis and service planning difficult. Data entry into electronic systems is often time consuming. Limited access to computers exacerbates this issue. For staff who need to access a range of systems, multiple logins and passwords are required which leads to wasted time and frustration entering this information, particularly when various systems have short idle timeframes before an automatic log out occurs. There is currently a corporate project underway to implement a single sign-on.

Many staff are not advanced computer users but are increasingly being expected to use computers without necessary training which reduces their clinical availability.

District health information managers have skills that could be used more extensively to monitor care processes (eg monitor adverse events).

One positive innovation is the scannable forms for data collection and analysis used by the Collaborative for HealthCare Improvement program.

IT capability/communications

Bandwidth problems make systems slow which impacts on utility for staff eg in one district, staff are unable to send radiology scans electronically for review as the scans are too big.

Telehealth/videoconferencing technology

Telehealth and videoconferencing technology have excellent potential that is currently not being realised. This is mostly due to the lack of support for staff in metropolitan areas (on how to best use the technology) and staff in rural and regional areas (on how to prepare for and participate in the use of this technology). Staff reported that they needed time and resources to use the technology. For example, there was a perception that staff should participate in videoconferences in their own time. Some rural and regional staff also reported negative experiences in using the technology (technical difficulties) accessing this technology and had given up.

Systems identified as requiring change

Some systems are not well liked because they are time-intensive, difficult to operate and are of limited clinical value:

- Nursing staff view ESP as a redundant, cumbersome system that takes too much time and is a payroll system not a rostering system (nearly all districts continue to use EXCEL to roster resulting in duplication).
- While the purpose of PRIME is supported, its implementation is seen as problematic with inadequate training provided, data entry taking too long and limited access to computers making data entry difficult. These issues are contributing to failure to report incidents on the system.
- CHIS does not allow appropriate reporting.
- While the data collected by the four statewide systems for mental health is supported, they are not integrated and require duplicate entry across them.
- While Trendcare is not viewed as an effective system, this relates to the standards used to calculate nurse-patient ratios rather than the system. For example, staff believe that it does not include the time it takes for nurses to conduct quality and risk activities or time for patient and family involvement in their care.

There seems to be a culture within Queensland Health of blaming systems for not meeting requirements rather than business processes. For example the assets management system is a good system but is seen as ineffective as there is limited funding on budgets to act on asset replacements identified by the system.

6.2.3 Principles for consideration

- information systems should support and complement front line service delivery including information systems for centralised regulation and reporting
- Queensland Health needs to understand and streamline its business processes and invest prudently in this before information systems are built/bought. This will ensure that these systems support business processes and the maximise benefits available from the investment
- information requirements about major services provided by Queensland Health should be electronically collected and designed to support improved service planning and performance monitoring (eg community health, allied health). IT systems should support clinical care (eg electronic care plans and discharge summaries)
- a robust decision making process is required to balance the costs and benefits of implementing off the shelf solutions versus tailored solutions. More rigour is required in determining requirements to ensure that core needs are met in a timely manner and not overshadowed by “nice to have” features
- the organisation manages IT risk by developing or acquiring systems to address evidence based practice priorities, confirmed by health services, before committing to new concepts
- there should be ongoing evaluation of IT systems, particularly new systems, to ensure that the systems are operating as planned, benefits are being realised and the systems are not negatively impacting on staff. Evaluation findings need to be used in future IT purchase/development and implementation
- the implementation of information systems should be adequately resourced including data entry, analysis and reporting
- clinicians need to have access to basic information that will enable them to assess and review the quality and safety of interventions
- information collected by systems needs to be useful to clinicians and other end-users (eg HR staff). Staff need to be involved in the development of information systems and routine reports
- information systems should be integrated to minimise duplication of data entry and enable analysis across services. The introduction of a universal patient identifier would progress this integration
- information systems should be connected to external providers to facilitate patient management across the care continuum
- training needs to coincide with system implementation and onsite support needs to be provided during the early months of operation
- in an information age, staff should have adequate access to information technology including computers, the internet and printers
- corporate IT system development, rollout and updating needs to be more timely and implementation needs to be standardised

- information systems should be easy to use. Scannable forms should be used where appropriate. Touch screens would assist data entry, particularly by staff with few computer skills, and staff should have one log in for all systems they will require to do their job
- IT capability (eg bandwidths) needs to allow timely information transfer between services to improve clinical care
- telehealth technology has excellent potential and needs to be appropriately resourced (clinical time, staff training, IT hardware)
- clinicians need to be closely involved in the purchase/development of IT systems to ensure that the data collected will provide useful information that can be used in service evaluation and planning
- effective use of data collected will require dedicated staff who have the right skills to be able to extract, analyse, interpret and to use the data in the right context.

6.3 Monitoring health system outcomes

6.3.1 Background

Queensland Health routinely reports against hundreds of performance measures to the Commonwealth and State governments and also contributes performance data to many national reports. Some of the key external reporting requirements are listed in the following table⁸⁰.

Examples of external reporting requirements

	Reporting Requirement	Performance Measures	Reporting Period
State	Ministerial Portfolio Statement	52	Annual
State	Priorities in Progress Report	30	Annual
Commonwealth	Australian Health Care Agreement	45	Q'rtly/Annual
Commonwealth	Public Health Outcomes Funding Agreement	37	Annual

Queensland Health is required to report performance information using a number of performance frameworks. For example, Queensland Health reports data for use at the national level through the National Health Performance Framework. This framework (below) has three levels with a number of domains within each level.

⁸⁰ There are a range of additional external reporting in relation to Commonwealth grants and to contribute to national reports (eg data provided to the Australian Institute of Health and Welfare and Productivity Commission).

Health status and outcomes				
Healthy conditions	Human functions	Life expectancy and wellbeing		Deaths
Determinants of health				
Environmental factors	Socioeconomic factors	Community capacity	Health behaviours	Person-related factors
Health system performance				
Effectiveness Appropriateness Efficiency		Responsiveness Accessibility Safety		Continuity Capability Sustainability

Queensland Health is required to report data to the Queensland Government in two ways:

- The outcomes of its services, reported through the Government’s Priorities in Progress report series, using the following health status measures:
 - health and well being (life expectancy, mortality, health inequities)
 - health status (mortality, injury hospitalisations, cancer survival)
 - health services
 - health behaviours (health risk factors and health enhancing factors)
- The Department’s outputs, reported through the Ministerial Portfolio Statement (planned outputs) and the Annual Report (produced outputs). The outputs Queensland Health currently reports against are shown in the table below. Queensland Health recently reviewed these outputs and will in future report against revised outputs.

Existing outputs	Future outputs
Treatment and Management – Acute Inpatient Services	Protection, Promotion and Prevention
Treatment and Management – Non-Inpatient Services	Treatment – Specialised and Referral Hospitals
Integrated Mental Health Services	Treatment – Non-specialised Hospitals
Health Maintenance Services	Community Treatment and Care
Public Health Services	Long Term Accommodation and Care

Data is reported against these outputs for quantity, quality, timeliness and cost. Of note, there is disproportion in the number of measures reported under each (Quantity – 32 measures; Cost – 1 measure; Quality – 8 measures; Timeliness – 4 measures).

Queensland Health uses a different framework to monitor its performance internally. It used the balanced scorecard methodology to develop the Queensland Health Strategy Map. Performance measures have been developed to measure progress in the four perspectives of the Strategy Map:

- Shaping the workforce (6 measures)
- Internal processes (10 measures)
- Paying for health (3 measures)
- Consumers (10 measures).

Performance framework used in this report

Ideally, Queensland Health should report its performance using one framework that is robust and easy to understand. The framework used in chapter 2 to report on Queensland Health's performance is an amalgamation of the above frameworks. This framework is considered to be a useful way forward and is used as the reporting framework in this Chapter. The utility of the framework will be further investigated prior to final recommendations being made.

Queensland Health's performance is therefore reported in this report using the following seven categories:

- Service activity
- Service expenditure and efficiency
- Workforce
- Service quality
- Service responsiveness
- Service outcomes
- Service sustainability and continuity

Service activity, expenditure and efficiency

At the corporate level, the Queensland Health Annual Report and the annual Ministerial Portfolio Statement report on activity, budget (expenditure and revenue) and efficiency. District's monthly reports provided to zonal management units reflect this focus with the reports addressing activity and financial position (expenditure and revenue).

In most Districts, these monthly reports provided to zonal management units are discussed by District Executive. The focus of the monthly reports is on surgical waiting list activity rather than medical waiting list activity. There is no information system to measure medical waiting lists.

Community health services provide monthly reports to their District Executive on budget and in some cases on activity (episodes of care). Outcomes-type data for HACC services and mental health is also provided to the Commonwealth Government as per funding agreements. As little information is routinely and comprehensively collected on the type of services and activities of community health services, District Executives have little information about services provided by community health. This is despite the strategic intent of Queensland Health being to increase community-based services.

Allied health services are similarly not separately reported. They are rolled into either the community health services budget reporting or the hospital budget reporting.

In terms of efficiency, corporate office updates costing information in Transition II on a weekly basis through the Queensland Health Electronic Reporting Service. Data on cost per weighed separation data is therefore available to districts on a weekly basis.

At the District level, common measurement areas identified in strategy maps for internal purposes are: budget, revenue, optimum asset use and cost per weighed separation.

Workforce

At the corporate level, the Queensland Health Annual Report and the annual Ministerial Portfolio Statement report on staffing levels.

At the district level, common measurement areas identified in strategy maps for internal purposes are: staff satisfaction, staff with Performance Appraisal and Development (PAD) plans in place, staff retention and staff training. It is not clear how routinely districts review data on these measurement areas.

Service quality and responsiveness

At the corporate level, the annual Ministerial Portfolio Statement reports on quality and timeliness measures for outputs. There are eight measures of quality mostly dealing with facility/service accreditation status and five measures of timeliness dealing with elective surgery and emergency department waiting times and response times for public health issues.

The Queensland Health Annual Report describes consumer participation activities in terms of District Health Council activities, community and consumer involvement in policy development and local district activities. The involvement of consumers is particularly highlighted for service planning and evaluation for Indigenous communities and mental health services.

At the district level, common measurement areas identified in strategy maps for internal purposes are: consumer participation, programs for high priority issues, discharge summaries, and use of clinical pathways/evidence based practice.

Service outcomes

At the corporate level, the Queensland Health Annual Report and the annual Ministerial Portfolio Statement does not report on outcome measures such as mortality or functional capacity following interventions. However, as previously stated, Queensland Health provides data on outcomes of its services, reported through the Government's Priorities in Progress report series, using a number of health status measures (eg life expectancy, mortality, risk factors).

At the district level, common measurement areas identified in strategy maps for internal purposes are: readmissions, avoidable admissions for chronic disease, self management programs and health promotion programs. Customer satisfaction, waiting times and incidents are also common outcome measurement areas but these would be defined as quality measures by the framework used in this chapter. It is not clear how routinely districts review data on these measurement areas.

Service sustainability and continuity

At the corporate level, the Queensland Health Annual Report provides information about collaboration and partnership development with stakeholders. The Queensland Health Strategy Map includes measures relating to partnership development and research capacity. The Measured Quality Program also included information on system integration and change including collaboration with external stakeholders.

At the district level, there was little identification of partnerships as an area to be measured. However, many districts identified research capacity.

6.3.2 Key findings

Performance reporting culture

Corporate attempts to monitor service performance have focussed on hospital services. The Measured Quality Program was the first corporate attempt to encourage hospitals to consider their performance in comparison to their peers. Most districts consider the Measured Quality reports as being of limited use as the data was two years old and the data was confidential. In addition, there are pockets of concern about administrative data (from HBCIS) being used for clinical benchmarking, appropriate risk adjustment, diagnostic related groups (DRGs) being used for grouping (“DRGs are too blunt”) and the lack of linkage to clinical teams who are responsible for implementing service improvements.

There is some concern from regional and rural hospitals about appropriate benchmarking groups. Some staff consider that hospitals with very different circumstances are being compared. For example, Rockhampton and Ipswich hospitals are in the same grouping but Rockhampton acts as a referral base (eg patients from Longreach etc) while Ipswich provides a district service.

District approaches to performance reporting seem to be manager – dependent. For instance, most tertiary hospitals had District Managers that wanted to participate in benchmarking activities and some middle managers of rural facilities benchmarked with like rural facilities.

District performance is generally not discussed with staff below middle management level and sometimes, but not routinely, with the middle management level.

Activity, Expenditure and Efficiency

The focus in all districts is on monitoring activity and budget integrity. There is a strong bias towards hospital activity, particularly elective surgery waiting lists. There seems to be a culture of acceptance of not looking at the quality of care provided which is evident in the absence of systems to capture data that could provide information to evaluate service delivery.

Some staff are reviewing activity data to understand bed block issues. This is particularly the case in emergency departments. However, staff often do not have the statistical tools or time to be able to make sense of the data.

Workforce

Staff across many districts visited and community representatives reported a culture within Queensland Health of not managing staff performance issues. Key factors in this appear to be:

- the length of time that it takes to manage non-performance (eg 12- 18 month process)
- lack of expertise among managers in managing non-performance
- limited access to training for these managers
- lack of expert and timely advice from Human Resource personnel
- attempts at managing non-performance leading to accusations of bullying and workplace health and safety claims.

Many staff reported examples of managers failing to take action against staff who were not performing. The impact of this failure to manage non-performance included an “unhappy workplace”, low staff morale, high absenteeism and people on long term ‘stress’ leave.

Many staff considered that staff performance issues should be resolved in a more timely way. Many staff reported a perception that non-performance was managed by transferring staff or promoting staff.

For staff performance to be managed, all staff need to have a PAD in place as a benchmark from which to rate performance. The number of staff who had PADs in place varied across and within Districts. For example, some districts reported 85% of staff having PADS completed while in others, few staff who attended forums reported having them in place. In one district 100% of staff in oral health services had a PAD in place while in another district few community health staff had a PAD in place.

Regardless of the number of staff that had a PAD in place, most staff including those in management positions did not find PADs to be useful: “a complete waste of time”. Key factors in this seemed to be:

- the limited access staff had to the training identified in the PAD “training goals are set but I can’t get to training as can’t get a replacement”.
- if staff did have access to training as per PAD, the training was “mandatory training” rather than training they considered clinically relevant

Some staff believe that District Managers should have 360 degree performance assessment so that relationships with clinical and other staff is built into performance assessment.

Staff across a number of districts raised a concern about junior medical staff not having performance management arrangements in place. Junior medical staff (interns) have performance management arrangements as a part of their student placement in Year 1. However, there is no performance management arrangements in place for the next five years or until junior medical staff begin a training program for specialisation.

Concerns were also raised about the performance management arrangements for senior medical staff. While professional colleges have performance assessment requirements, not all staff are members of professional colleges. The credentialing and privileging process looks at the credentials of medical staff but not at their performance on a regular and routine basis (eg 6 monthly). Some medical staff reported that this lack of performance plans made it “difficult to deal with an underperforming peer”.

Many staff across districts reported that managers in general do not communicate well with staff. This was thought to reflect the recruitment of middle managers with for

example, communication listed after content expertise in many position descriptions. Staff considered that communication should be the highest priority in position descriptions. Some staff also thought that managers should have access to experiential training on communication in a similar way to clinicians having access to training on clinical skills.

Human resource (HR) areas are required to provide a monthly report to the Shared Services Provider as per the operating level agreement. However, there is no feedback provided on the information contained in the report. The performance system seems to be focused on the production of a timely report rather than the performance of the HR unit. Some districts do not report all of the required information and there is no consequence for not reporting. This leads HR staff to query the value-add of the report. HR staff generally do not find the reports useful at the district level.

Some HR units send a regular HR performance (medical/nursing staff report) to the District Executive. Those that do so receive little feedback. There seem to be no performance targets set for HR.

There is no systematic assessment of staff satisfaction. Where staff satisfaction surveys are conducted, the attitude of staff towards the survey depends on whether or not action is taken. For example, where no action has been taken staff generally see the survey as a waste of time.

Service quality and responsiveness

Staff across many districts consider that Transition II had potential to be used for performance monitoring. Transition II pulls together diagnostic and treatment details about each patient through interfaces to hospital systems such as pathology, emergency, pharmacy, radiology, theatre management and HBCIS. It provides hospital and state level clinical costed information that aims to enable benchmarking and service improvement at individual hospitals.

Transition II is not currently being used for clinical performance monitoring due to the capacity of the staff within Clinical Benchmarking Units (few staff in units) and the competency of staff within those units.

Transition II is being used on an ad hoc basis with Clinical Benchmarking Units being requested to provide data for business cases seeking increased funding.

There are pockets of performance monitoring activity using Transition II. For example, Redcliffe DHS has established a number of service improvement groups which work with the Clinical Benchmarking Unit to review service quality. Over the previous two years, the District has reviewed emergency departments and paediatrics and implemented changes based on data.

Staff participating in the Collaboratives for Health Care Improvement are able to monitor performance through the Clinical Indicator Analysis Tool provided as a part of participation in the collaborative.

The Measured Quality Program reported survey findings on the use of evidence-based guidelines by individual hospitals. There was large variation in the use of guidelines with 48 percent of large hospitals using them and 18% of small hospitals using them. There are few statewide clinical pathways available which prescribe evidence based practice.

There is no formal requirement that clinicians use these pathways and no monitoring of the use of pathways was revealed during consultations.

PRIME is the incident monitoring system being rolled-out statewide. However, in areas where PRIME is operational, many staff have reported a reduction in incident reports. This seems to be related to the amount of information collected by PRIME and limited access to computers.

A statewide survey is undertaken on hospital patient satisfaction through the Measured Quality Program. Many districts have stopped local satisfaction surveys because of the statewide survey. However, clinical staff at one hospital consider that patient satisfaction needs to be done at the clinical unit level to be meaningful.

Many Districts consider accreditation to be the measure of “performance” and most staff consider that this is the only performance monitoring undertaken. Even this approach is of limited value, with many staff considering that the information collected for accreditation (eg clinical indicators) is assessed only for accreditation rather than as a quality practice that could be routinely conducted.

Service outcomes

As described above, there are pockets of clinical performance monitoring within districts but little routine formal assessment of clinical performance (eg complications, readmissions). Only one district has measured functional outcomes for patients following acute interventions. This was a pilot project and there are no plans to continue this measurement or expand it statewide. Mental health services report outcomes data to the Commonwealth Government. A statewide implementation of the oral health information system will enable outcomes reporting.

There appears to be variable formal review of patient morbidity and mortality within Districts. Some districts have a committee structure to do this but the wider sharing of the information discussed at morbidity and mortality meetings can be limited. There is no requirement for districts to have a routine morbidity and mortality review process.

Service sustainability and continuity

Apart from research capacity, there was very little evidence of performance monitoring and reporting at the district level of measures of sustainability and continuity.

The lack of performance reporting and lack of feedback on the activity based reporting is seen by some stakeholders as a fundamental reason for lack of intersect between corporate strategic intent and local activity. The current performance indicators in the strategic plan are not seen as relevant to business processes.

6.3.3 Principles

- the performance of services provided by Queensland Health should be routinely assessed
- a performance framework should be developed for districts which measure the things that count. This should include activity, expenditure, efficiency, staffing, quality,

sustainability, continuity and importantly, patient outcomes. Targets and benchmarking should be key elements of this framework

- performance assessments of service delivery quality and outcomes should be spread as wide as possible – all parts of the system need to know how they are performing relative to the whole and all communities have a right to know how their system is performing relative to the whole, especially with respect of patient care and safety and the range of services that realistically can be delivered
- there should be regular direct discussion between districts and Corporate Office on performance and the actions to be taken to address any service areas requiring improvement
- there must be systems to respond to performance reports so that critical local decisions can be made. For example, if service rationing is necessary at certain times, these decisions need to be made and communicated to the community
- there must be realistic health service capability decisions made in respect to efficiency of service delivery based on performance reports. This will mean rationalisation of certain hospital's influence and the location of hospitals
- patient outcomes should be routinely assessed. Methodologies to perform this assessment on a cost-effective basis need to be developed
- this framework should also include the routine assessment of good processes such as the use of evidence based practice
- clinicians need access to analysis tools or support to monitor clinical performance eg Statistical Control Processes
- feedback on district performance reports must be made by those receiving the reports (eg District executive, zonal units, corporate office)
- a key performance indicator for staffing should be that staff feel valued. This should be measured on a routine basis
- all staff should have meaningful regular performance discussions with their supervisor or manager and have a performance appraisal and development plan in place. Strategies should be put in place for these plans to be useful and effective for an individual's development
- clinical quality and safety data should feature in the review of performance of clinical staff in a blame free way
- issues of clinical competence need to be dealt with in a framework which is appropriate for both the clinician and the community
- the process for managing staff that are not performing needs to be streamlined and timely
- key staffing indicators need to be routinely assessed at both corporate and district levels (ie strategically and operationally) including vacancies/turnover and absenteeism