

Attachment 6 Funding and cost drivers for NSW Health

Table A6.1 Funding for NSW Health

	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	1996/97 –2001/02 Change
Total revenues*	809	803	902	974	1,012	1,069	32.2%
Recurrent appropriation	4,563	4,934	5,345	5,588	5,939	6,235	36.6%
Govt acceptance of employee liabilities	246	257	296	298	334	360	46.5%
Capital appropriation	356	294	308	314	378	434	22.1%
Total Govt contribution	5,165	5,485	5,948	6,199	6,652	7,029	36.1%
Operating and maintenance expenses	5,173	5,710	5,895	6,360	6,615	7,088	37.0%
Depreciation and amortisation	255	293	316	305	316	338	32.6%
Other expenditure**	545	490	767	528	575	589	8.1%
Total expenses	5,973	6,494	6,978	7,193	7,506	8,015	34.2%
Govt contribution as % total expenses	86.5%	84.5%	85.2%	86.2%	88.6%	87.7%	1.4%
Real total Govt contribution (2001/02 \$)	5,838	6,201	6,638	6,757	6,842	7,029	20.4%
Real recurrent Govt appropriation (2001/02 \$)	4,037	4,364	4,789	5,126	5,774	6,235	54.4%
Real increase in Govt contribution (2001/02 \$)	–	6.2%	7.0%	1.8%	1.3%	2.7%	–
Real increase in recurrent Govt appropriation (2001/02 \$)	–	8.1%	9.7%	7.0%	12.6%	8.0%	–

Source: NSW Health *Annual Reports*. All amounts expressed in 'million dollars of the day'.

* Revenue excludes loss/gain on the sale of assets.

** Grants and subsidies, finance costs and asset devaluation.

Table A6.2 NSW Health expenditure by category (nominal)

Cost category	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	Change	% of total change
Medical salaries	424,815	479,141	525,528	554,874	588,752	622,178	46%	10%
Nursing salaries	1,352,167	1,444,207	1,522,059	1,536,728	1,556,886	1,629,193	20%	14%
Administrative and clerical salaries	429,050	509,511	568,453	614,777	620,952	667,939	56%	12%
Ambulance uniformed officers salaries	131,671	156,037	166,857	174,010	185,114	194,918	48%	3%
Other salaries	911,452	1,015,589	1,044,225	1,055,093	1,072,419	1,126,943	24%	11%
Superannuation	252,375	254,274	293,344	295,995	330,211	363,507	44%	5%
Nursing agency payments	9,564	19,733	24,050	27,379	36,180	45,529	376%	2%
Other agency payments	1,477	2,686	2,726	6,586	11,998	13,608	821%	1%
Workers compensation	112,470	132,400	157,609	161,755	136,227	153,858	37%	2%
Payroll/fringe benefits tax	3,029	3,486	3,897	3,500	3,777	4,483	48%	0%
VMOs	260,857	286,643	299,007	290,923	292,358	320,271	23%	3%
Drugs	191,202	212,003	232,350	246,257	255,946	276,718	45%	4%
Medical and surgical supplies	229,247	238,868	275,438	293,287	313,342	346,715	51%	6%
Special service departments	123,727	119,963	118,426	125,305	133,691	150,595	22%	1%
Domestic charges	71,081	69,545	73,915	77,575	79,963	83,467	17%	1%
Food supplies	61,168	64,763	62,409	63,870	64,077	69,063	13%	0%
Fuel, light and power	55,815	52,959	47,912	52,100	54,368	56,304	1%	0%
Computer-related expenses	18,629	31,992	31,538	38,593	49,653	60,472	225%	2%
Travel-related costs	34,103	39,734	73,270	69,481	76,557	80,543	136%	2%
Postal and telephone	37,154	43,144	46,364	47,502	46,498	49,051	32%	1%
Staff-related costs	20,004	36,128	23,826	24,544	34,458	38,661	93%	1%
Insurance	47,933	57,614	66,030	71,086	93,868	138,316	189%	4%
Interstate patient outflows	64,404	66,201	69,696	87,101	91,994	88,426	37%	1%
Operating lease rental expense	8,339	–	–	12,900	32,525	36,408	337%	1%
Rental, rates and charges	17,869	28,881	26,330	24,418	21,036	23,680	33%	0%
Printing and stationery	27,187	30,421	32,658	33,211	34,970	40,007	47%	1%
Aircraft expenses	12,072	12,770	19,410	22,173	24,045	18,910	57%	0%
Contract for patient services	55,316	61,274	64,581	64,219	68,535	74,321	34%	1%
IPTAAS	6,140	6,132	6,834	6,701	7,272	6,551	7%	0%
General expenses	95,693	75,788	96,907	84,662	99,638	86,654	–9%	0%
Maintenance and repairs	162,744	158,123	189,071	193,508	197,815	220,662	36%	3%
Depreciation	254,941	293,186	316,287	304,821	315,558	337,988	33%	4%
Payments to affiliated health organisations	296,511	328,603	342,865	360,883	385,459	373,135	26%	4%
Other grants	120,948	135,809	142,323	156,364	180,104	206,378	71%	4%
Finance costs	10,196	11,580	11,116	11,113	9,824	9,352	–8%	0%
Other expenses	61,781	14,416	1,068	–	–	–	–100%	–3%
Total expenses	5,973,131	6,493,604	6,978,379	7,193,294	7,506,070	8,014,804	34%	100%

Attachment 7 Systems to ensure quality care in other countries

Developing effective systems to ensure quality care is clearly a challenge facing many countries. The following quote from a paper on patient safety prepared by the World Health Organization (WHO) for the fifty-fifth World Health Assembly⁵⁵ aptly describes the task involved:

Enhancing the safety of patients includes three complementary actions: preventing adverse events; making them visible; and mitigating their effects when they occur. This requires (a) increased ability to learn from mistakes, through better reporting systems, skilful investigations of incidents and responsible sharing of data; (b) greater capacity to anticipate mistakes and probe systemic weaknesses that lead to an adverse event; (c) identifying existing knowledge resources, within and outside the health sector; (d) improvements in the health care delivery system itself, so that structures are reconfigured, incentives are realigned, and quality is placed at the core of the system.

The paper also summarised several studies investigating adverse events in acute care hospitals between 1984 and 2000, undertaken in the US, Australia, the UK and Denmark. The adverse event rate varied between 3.2 per cent and 16.6 per cent depending on the methodology used. Two studies in Australia and the US using the same methodology had rates of 10.6 and 5.4 per cent respectively.

The WHO paper also reported on the financial costs of adverse events. In the UK, the additional cost of hospital care is estimated at 2,000 million pounds a year and annual litigation costs to the NHS of 400 million pounds. Hospital-acquired infections are estimated at a further 1,000 million pounds a year. In the US the total cost of preventable adverse events is estimated between US\$17,000 and US\$29,000 million year.

The UK's Bristol Report of 2001 was a critical point in the development of clinical governance. This report's key recommendations included the patient being at the centre of the health system, transparency, the impact of organisational systems, uniformity of standards and monitoring. The UK established a separate Commission for Health Improvement (CHI), which is being restructured into a Commission on Health Auditing and Inspection (CHAI). CHI's roles include reviewing clinical governance, investigation of serious service failures, reviewing implementation of standards set by other bodies such as the National Institute of Clinical Excellence (NICE), as well as new powers covering inspection, independent performance assessment, publishing comparative performance ratings, clinical audits, and patient and staff surveys.

The new CHAI will include CHI as well as value-for-money auditing and health care standards, the latter two functions will be transferred from other agencies. Other bodies include NICE for clinical and pharmaceutical guidance, the Modernisation Agency which advises on clinical practice, the Health Development Agency which provides clinical governance for public health programs as well as the Royal Colleges which set professional standards.

⁵⁵ World Health Organization, *Quality of care: patient safety*. Fifty-fifth World Health Assembly. Provisional agenda item 13.9, 23 March 2003.

In 2002, Scotland also undertook a review of its complex clinical governance structure. A discussion paper⁵⁶ proposed two new and consolidated bodies: a Quality and Standards Board for Health in Scotland, supported by a new partnership council; and the Quality Strategy Group. The Board's functions are extensive and include strategic and standards development, promoting clinical governance, inspection and monitoring of compliance, clinical audit, investigation of serious service failures, accreditation, professional performance, technology assessment, best practice, evidenced-based clinical guidelines, safety, information and communications.

The organisation would be governed by a board which would consist of non-executive and executive members. The council's role includes acting as a reference group on clinical effectiveness and quality, informing policy development, advising on clinical governance and quality, and supporting Quality and Standards Board. The Scottish model is a more integrated than the UK approach, even under their revised model. Given the size of the NSW system, a more streamlined model than applies in the UK is favoured, but not to the extent of having an all-embracing body as in Scotland. In particular, IPART believes there is a need to separate the implementation and inspection roles.

⁵⁶ *A Quality and Standards Board For Health in Scotland: Consultation Paper*, Minister for Health and Community Care, 1 March 2002.

Attachment 8 Inspirit report on benchmarking



Review: Using Information to Drive Change in NSW Public Hospitals

May 2003

For: Independent Pricing and Regulatory
Tribunal

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Scope:

Review and Report on the use of Performance Indicators in Hospitals

Review prior IPART and NSW Health reports.

Conduct informal interviews with 3 to 4 selected senior hospital executives from NSW hospitals covering key issues, current practice and innovations.

Conduct informal interviews with 2 to 3 senior hospital managers in other states in order to identify innovative practice. It would be possible to involve IPART staff in teleconference discussions if desired. It is intended to cover specifically the topic of innovations in the use of information in order measure and manage factors affecting performance.

Preparation of a high level report that focuses on public hospitals and outlines:

- how hospitals are currently developing and using performance indicators,
- the issues relating to the use of indicators at the public hospital level,
- possible principles for developing useful sets of indicators for hospitals to use to manage performance and drive change within their organisation,
- examples of relevant and useful indicators for managing hospitals,
- ways Area Health Services and the Health Department could use to performance indicators to monitor hospital's clinical, quality and financial performance.

Conduct Roundtable – “How to Drive Positive Change in Health”

Hold a one day workshop that would review identified innovations and consider, refine and set priorities for changing measurement practices for driving positive change in health in NSW

- Use outcomes from the above report to brief participants on issues and innovative ideas
- Involve IPART staff and NSW health representatives, and extend invitations to selected NSW and possibly interstate hospital Chief Executives (with a target size of about 30 people for the Roundtable)

Produce a written report that summarises the findings of the Roundtable stakeholders.

Executive Summary

1. There is no culture at the hospital level in NSW to use information to drive change. In general, hospitals tend to be reactive. Their use of information is driven by financial imperatives and requests for information initiated at Area, Department or Ministerial level.
2. Leading Hospitals in Victoria, Queensland, and South Australia, by contrast, use wide ranging clinical, outcome and quality information as well as financial information to manage and push change.
3. Developing an “information management culture” in the NSW health system will require devolution of accountability and responsibility for innovation from Area Health Services to Hospitals and to Clinical Units.
4. Understanding the differences between using information for accountability and using information to drive innovation is key to effectively using information.

“Accountability Measures” are needed to ensure that the health system is meeting public expectations. For example, the waiting time for surgery or in an Emergency department should be measured and subject to public scrutiny.

“Innovation Indicators” are also needed to allow managers to compare their performance with peers to identify opportunities for improvement. These indicators are often transitory, imprecise, and require collaboration amongst the peer groups to understand the underlying differences. Public scrutiny of these indicators and the use of the indicators for accountability are often self-defeating.

5. Accountability Measures can be used at all levels, from Health Department down to individual hospitals and clinical units. Financial, activity and quality based measures are commonly used to benchmark a hospital’s performance and in some instances; financial incentives and stretch targets have been tied to performance on these measures.

6. Innovation Measures must be “owned” by peer groups, and kept out of the accountability system to work effectively in driving change.

7. In most states, the hospital Chief Executive is seen as the key person to own the indicators and to drive change. The ‘CEO factor’ was felt to be most important. It was clear from leading hospitals that when the CEO does this, it rubs off onto senior managers and very quickly the whole organisation starts to pay more attention to the information available.

8. Internal disclosure of performance on both Accountability Measures and Innovation Indicators is crucial. Major hospitals all have intranets and this is the ideal environment to disseminate information to staff. Departmental and Unit managers need to be able to see the information for their department.

9. Peer-group comparisons are essential to challenge the “but, we’re different” culture that is used to insulate established practices from change. Consultation with those who provide the information is important. If an organisation, group or individual is to be expected to collect and use information.

What Needs to Happen

For NSW Health to establish a culture of using information to both manage and to drive change and innovation the following needs to happen.

10. Identify a small number (less than 20) Accountability Measures that cascade from the Health Department, to Areas, to Hospitals, and to Clinical Units and report them via a scorecard or dashboard. Accountability Scorecards should be made available to the public (as in the UK).

Information must be accurate and easily accessible.

Information systems need to be as integrated as possible.

Manually collected information should be avoided.

Definitions should be consistent, tight and workable.

Constant refinement of the measures will be needed, as creative interpretations and strategies develop as coping mechanisms

11. Empower peer-group collaboration on “Innovation Indicators” while avoiding imposition of specific data requirements and definitions. Simply requiring all health care organisations to work collaboratively with intra- and inter-state peer groups, and to report their successes should be sufficient oversight at the Area and Health Department level, provided that adequate resources are provided to collect data, identify opportunities, and implement change.

The main conclusion: Operational innovation and target attainment work best when responsibility for them lies with the operational entity.

1. Culture - NSW

There is no culture at the hospital level in NSW to use information to drive change. In general, hospitals tend to be reactive. Their use of information is driven by financial imperatives and requests for information initiated at Area, Department or Ministerial level.

A thorough review of how NSW hospitals and health services are currently using information was not within the scope of this Report. However, in establishing context for this review, a small number of hospitals were visited and the following observations were made.

Area Health Services and Hospitals in NSW vary greatly in how they use information.

While all collect the required information for The NSW Health Department (DOH) including the range of indicators specified by DOH, and also collect the data for the Australian Council on Health Care Standards (ACHS) EQUIP set of recently revised indicators, their approach to the use of information within their organisations is, in most cases, adhoc and reactive.

Most hospitals visited took a very traditional approach to information:

Hospitals do use and report information. But this information tends to be

- focussed on financial and activity measures,
- reviewed on a monthly basis and
- remains at the senior executive level of the hospital.

Individual hospital departments (particularly clinical departments) often collect their own information using local databases.

Sometimes these are commercial databases acquired by those departments and others are locally developed but in most cases they are single purpose databases where the data is used to measure and manage a specific project. These databases are usually standalone, i.e. not integrated with the hospital wide information system.

This should be qualified by noting that there are exceptions to this illation, for example Hunter Health are very strong users of information and have developed a culture of using information to drive change. Organisations such as Hunter Health may be used as models for other hospitals in NSW to follow.

2. Culture - Leading Hospitals

Leading Hospitals in Victoria, Queensland, and South Australia, by contrast, use wide ranging clinical, outcome and quality information as well as financial information to manage and push change.

Victoria

The Department of Human Services (DHS) has undertaken extensive research into how information could be used to provide an ongoing indication of the standards of care delivered in Victorian Hospitals as well requiring Hospitals (via Networks) to provide the regular financial, activity, clinical and quality based information.

In two Reports^{1, 2}, the Department has undertaken an extensive review of possible indicators, the implications and issues associated with their use, and the extent of use of similar indicators both in other States of Australia and Internationally. This included surveying hospitals across Victoria to understand the difficulties that may be involved in implementing the identified indicators and also the additional costs involved.

The indicators finally selected to monitor clinical and quality standards of care in Victorian Hospitals³ are listed in Appendix 4.

The Alfred Hospital, Melbourne

The Alfred has been producing and publishing on its intranet a “KPI Performance Report Card for the last 18 months. This Report Card identifies the Corporate Objectives and Strategies and then the measures (indicators) associated with each Strategy /Objective.

Examples of Key Performance Indicators associated with the objective/strategy of (optimising) patient care are listed in Appendix 5.

The Scorecard itself is very visual with ticks and crosses indicating results inside or out of benchmarks or targets. There is also the capability to drill down to investigate results and dig for possible reasons or locations where variances are occurring. The Scorecard can be viewed by Campus, Directorate and Unit levels of staff as well as by different time periods.

The Alfred views its current Scorecard as a prototype, evolving continually since its inception. Initially the concept of Key Performance Indicators was overwhelmed by the inclusion of Hospital Activity and Finance Reports. The concept is seen by some as evolving towards a “Management Portal”

¹ **Acute Health Division, Department of Human Services Victoria**, Acute Health Performance Indicators: Strategy for Victoria, 1997,

<http://www.health.vic.gov.au/clinicalindicators/strategy/>

² **ACHS Care Evaluation Program & Monash University Department of Epidemiology and Preventive Medicine** Acute Health Clinical Indicator Project Final Report, July 1999,

<http://www.health.vic.gov.au/clinicalindicators/clip/vol1a.doc>

³ *ibid*

providing centralised access to Key Performance Indicators, Finance, HR/Payroll, Quality and ad hoc reports.

At the end of 2002, there were over 250 active subscribers to the Alfred's Balanced Scorecard.

Austin Health, Melbourne

The Austin Health has an organised and well structured use of information to support its Management and Board decisions. Apart from the standard financial reports most hospitals prepare, Austin Health uses a 'traffic light' system to formally monitor the progress of the initiatives it introduces each year.

Austin Health also collects a set of non financial indicators broken down into the areas of acuity, efficiency, quality, occupational health and access. These indicators are reported graphically with trend data, an indication of whether the result is above or below benchmark and a brief commentary. These indicators are reported to the Executive and the Board and are available to staff on the hospital intranet. Staff can drill down to see the financial or non financial information (WIES, Bed Days, Length of Stay, patients booked) for their own department or clinical area (or any other department). There are targets set down to Unit level.

Austin Health has a formal process to review information and to highlight areas that need closer attention or remedial action as well as process to follow this through.

South Australia

Flinders Medical Centre, Adelaide

After attending a Health Roundtable on Key Performance Indicators, the Chief Executive Officer of Flinders Medical Centre decided to implement a Balanced Scorecard system at FMC.

Flinders was facing problems because their information system at the time was limited to financial indicators and data sources and collection points were extremely fragmented.

That was three years ago and at that time the hospital embarked on revamping their information system. They now have a Dashboard type system based on four quadrants:

- Quality, Safe Practice and Risk
- Financial
- Productivity and Efficiency
- Staff

Five or six indicators are collected for each quadrant. and these indicators are cascaded down to departmental level and available to staff on the hospital intranet.

Flinders rate the key features of a successful information system as being:

- Driven by the CEO
- Readily available to all staff
- Easy to maintain

Queensland

The Princess Alexandra Hospital information systems function in conjunction with the Queensland Health 'Measured Quality Program'⁴, a benchmarking program for all Queensland Hospitals. This is a state-wide benchmarking program in both clinical and non-clinical areas. Indicators were broken down into three main components:

1. Internal Business: Clinical Utilisation and Outcomes indicators
2. Financial Efficiency indicators
3. System integration and change indicators

These include a range of clinical indicators collected on a 6 monthly basis. Where hospitals do not meet the set standard they will be given a "please explain" (similar to other states). The information collected is considered very sensitive and not published.

Princess Alexandra Hospital, Brisbane

Princess Alexandra Hospital (PAH) uses information widely.

PAH uses a two pronged approach to managing using information. A Clinical Indicator Oversight Committee that includes as members, the Chairs of the Clinical Departments and the Clinical Services Evaluation Committee regularly meets and reviews indicators and action taken where indicators do not meet benchmark levels. Also the hospital uses its Health Information Management Service to follow up areas where information indicates action is necessary. This is a specialist department that has the capability and authority to review and undertake root cause analysis if necessary. All management level staff have clear targets and goals set as part of their regular performance review, these are measured using performance indicators.

⁴ Queensland Health, *Technical Supplement for the Measured Quality Health Report*, July 2002

3. Developing an “Information Management Culture”

Developing an “information management culture” in the NSW health system will require devolution of accountability and responsibility for innovation from Area Health Services to Hospitals and to Clinical Units.

DOH and Area Health Services have a need to use information to drive change at the State or Area Level. However, as DOH and Areas do not actually provide the service, they need to rely on the providers (i.e. hospitals, community health services, district nurses etc.) to implement and drive service provision change.

The desire to influence change can be confused with the accountability role that DOH and the Areas have in managing and funding the service providers. Because service providers in this environment will tend to focus on meeting targets and working within financial parameters this makes it more difficult to achieve change. It could be argued that DOH (especially) is too remote to attempt to drive change at, say the service provision level and rather should develop strategies to sponsor and encourage providers to do this themselves.

An organisation being directed is less likely to be fully committed to own and use the information to drive change. Whilst the information will be produced if it can be, the organisation is more likely to find reason why the information is hard to collect, or why there will be an additional cost and importantly the organisation is less likely to use that information itself.

Central authorities need to overtly devolve authority and responsibility to service providers to develop an information management culture.

Once the commitment to do this is made, strategies can be developed toward achieving devolution. These may include many of the recommendations in this report, for example:

- providing an environment and incentives for providers such as hospitals to use information.
- providing incentives by tying specific funding grants to the introduction of broad based service improvements
- setting realistic and achievable stretch targets against indicators for high priority service delivery areas for individual service providers set in the context of their own environment.
- encouraging service providers to participate in peer group collaboration in an environment free of influence from funding providers.

4. Accountability versus Innovation

Understanding the differences between using information for accountability and using information to drive innovation is key to effectively using information.

“Accountability Measures” are needed to ensure that the health system is meeting public expectations. For example, the waiting time for surgery or in an Emergency department should be measured and subject to public scrutiny.

“Innovation Indicators” are also needed to allow managers to compare their performance with peers to identify opportunities for improvement. These indicators are often transitory, imprecise, and require collaboration amongst the peer groups to understand the underlying differences. Public scrutiny of these indicators and the use of the indicators for accountability is often self-defeating.

Accountability	Innovation
Top Down	Peer to Peer
<ul style="list-style-type: none">• Indicators are mandated• Uniform data is assumed• Indicators are tightly defined• Score is “win/lose”• Denial by losers• Gaming the system• Auditors needed	<ul style="list-style-type: none">• Voluntary comparisons• Search for differences<ul style="list-style-type: none">⇒ Data methods⇒ Clinical practices• No “right” or “wrong”• Opportunity focus• Gradual fine tuning• Peer Managed

5. Use of Accountability Measures

Accountability Measures can be used at all levels, from Health Department down to individual hospitals and clinical units. Financial, activity and quality based measures are commonly used to benchmark a hospital's performance and in some instances; financial incentives and stretch targets have been tied to performance on these measures.

The traditional use made by DOH and Area Health Services of information is to measure accountability. The Health Department measures and compares the performance of Areas and Hospitals (and other services for which it is responsible) using indicators amongst a range of measures. It does this as part of its overall governance role. Similarly Area Health Services, hospitals and clinical units and departments all have a need to measure and compare the performance of services it delivers for the same reasons and often with the same, or similar, indicators.

Accountability measures are often seen as a 'control measure' and regarded by hospitals or other services as an imposition. Sometimes the measures are not felt to be relevant, sometimes the measures are felt to be poorly defined, and sometimes comparisons are felt not to be valid because of demographic or other differences.

Where a service is not achieving the benchmark result the central authority will approach this service with either a please explain or in more dire circumstances it may intervene and take some corrective action itself. Alternatively if the indicator highlights ongoing problems with a poorly run service, the focus may increase on that service and lead to its micromanagement by DOH, Area or Hospital.

There are ways to improve 'buy-in' from services that are being measured.

- **Involvement** of the users on the development of indicators is really crucial to obtaining 'buy-in'. This can be achieved through workshops or other forms of consultation (for example Hunter Health are running workshops with their staff develop both objectives and measures)
- **Feedback** to the information providers on a regular basis that is current and provided whether it is good or bad is also very important.

These also lead to benefits to the measuring organisation in obtaining real buy-in from the people providing the information; definitions are likely to be more robust, information is more likely accurate and more relevant.

6. Use of Innovation Measures

Innovation Measures must be “owned” by peer groups, and kept out of the accountability system to work effectively in driving change.

The closer change is initiated to where it occurs and impacts, the more likely it is to be owned and the more likely it is to be successful. It is human nature to be committed to something you do and want to see succeed; it is also human nature to be less committed to something you have been told to do without being involved in its inception.

Consider the likely difference in outcomes:

DOH decides that hospitals need to focus on reducing length of stay of fractured Neck of Femur patients. Clinical units are directed to review their cases and take action to reduce length of stay. Human nature and experience both say that the staff in the unit are likely to: Firstly, find reasons why their patients are different, and secondly, find ways to make it appear that their unit is performing better (gaming). They may, but are less likely to really look for ways to reduce length of stay.

Or,

A hospital or a clinical unit focuses on the length of stay of, for instance, fractured Neck of Femur patients. This may involve undertaking peer group comparisons and initiating changes to the care plan and treatment protocols and measuring the outcomes to determine if the change has been successful.

Experience with the Health Roundtable (Point 11) has shown that when hospitals and / or clinical units or departments identify issues and proceed to initiate change to improve the outcome, barriers are more likely to be overcome and effective and positive change occurs.

7. CEO Factor

In most states, the hospital Chief Executive is seen as the key person to own the indicators and to drive change. The ‘CEO factor’ was felt to be most important. It was clear from leading hospitals that when the CEO does this, it rubs off onto senior managers and very quickly the whole organisation starts to pay more attention to the information available.

Effective use of information must be driven from the top. In each of the observed organisations that were using information positively to manage and drive change, the CEO was the sponsor and ensured that all the staff were aware this was an initiative from the ‘top’.

When the Chief Executive is seen to be using the information regularly, and questioning managers about why a result is “too high” or “too low”, this will be contagious and managers and staff will want to be aware of the information and the reasons why results are as they are.

For instance, the CEO may ring or drop by departments and ask why their length of stay is higher than similar units, or what they are doing to lift their

DOSA (Day of Surgery Admission) rate above the 68% it is currently at, or raise questions about which departments are meeting their quality targets at the weekly executive meeting, or be seen logging onto the hospital intranet and checking a unit's sick leave rate.

It was clear from leading hospitals that when the CEO does this, it rubs off onto senior managers and very quickly the whole organisation starts to pay more attention to the information available.

The CEO can be the driver but **a champion is needed** to provide the impetus throughout the organisation, at least in the initial stages of implementing a new system.

The champion is needed to be the implementer, the person who ensures that the right information is available and staff have input and understand how to use the information they have available to them.

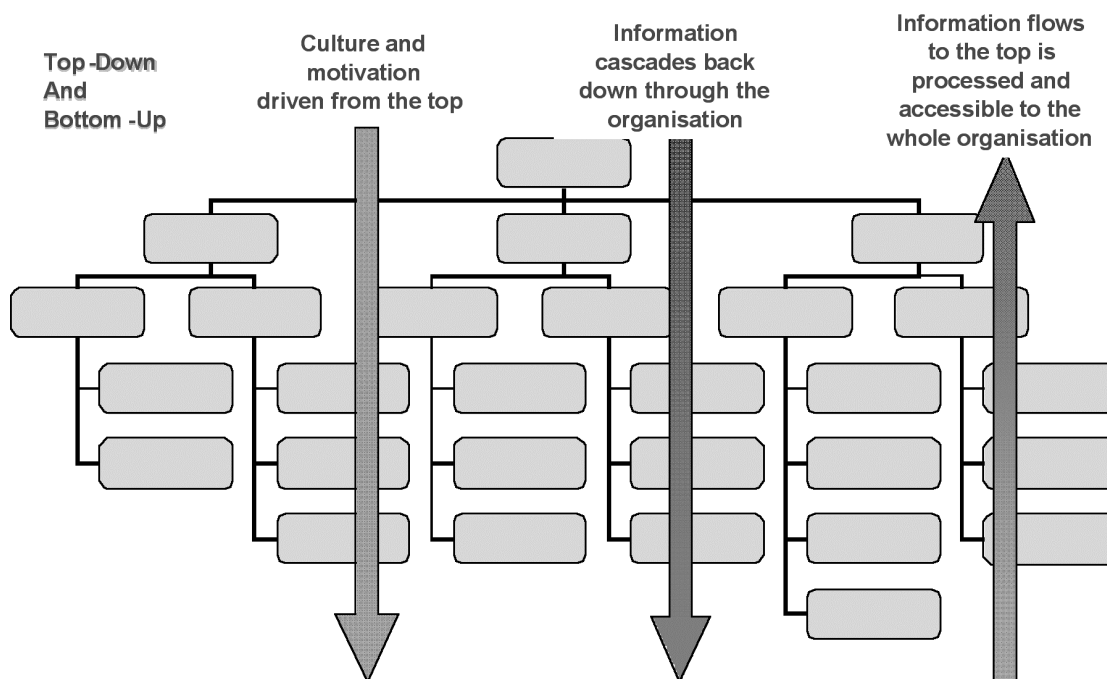
8. Internal Disclosure

Internal disclosure of performance on both Accountability Measures and Innovation Indicators is crucial. Major hospitals all have intranets and this is the ideal environment to disseminate information to staff. Departmental and Unit managers need to be able to see the information for their department.

Information needs to be available to all staff, as it is in the leading hospitals who presented their stories to the Roundtable Discussion. Major hospitals all have intranets and this is the ideal environment to disseminate information to staff. Departmental and Unit managers need to be able to see the information for their department. This could include financial, workforce, activity, quality and safety information. Comparative information is also important, i.e. managers need to see how other units and departments are travelling. This puts the onus on the organisation to ensure the information is correct and realistic.

The best way to do this is to cascade information to different levels of the organisation (it may be an Area or a hospital). This means that information is all derived from the same source, but is shown, for example, in greater detail for use by a Departmental or Unit Manager than it is for the whole organisation where the information is rolled up to present a broad picture of the whole organisation.

Hospitals that have successfully done this have also been able to demonstrate that they **do not need to invest substantial amounts of money toward information technology** in order to make information available throughout the organisation. Simple, cost effective and straightforward solutions have been able to provide full access including drill-down capability.



9. Consultation

Peer-group comparisons are essential to challenge the “but, we’re different” culture that is used to insulate established practices from change. Consultation with those who provide the information is important. If an organisation, group or individual is to be expected to collect and use indicators.

Information comes from all parts of the organisation, from the wards, admissions, outpatients, pathology, operating theatre and just about every other department or unit. Implementation of an information strategy should include progressively involving staff from wards, departments and units in workshops to develop indicators. This will also help them to appreciate the benefits of identifying the information they need to manage their own ward/department/unit and using information to assist both them and to the organisation.

The common response from clinicians, when presented with information about their service is to say “but, we’re different” “our patients are older”, “our patients are sicker”, “our cases are more complex”, “a higher proportion of our patients are admitted via Emergency Department”. Information does need to take all into account all of these consideration but there will be more commitment when clinical staff are involved and consulted and can see that information is accurate, and, for instance, is weighted to take into account their patient mix.

Part of this is to make the information needed easily accessible to all. Hospitals have been able to do this by using the organisation’s intranet and

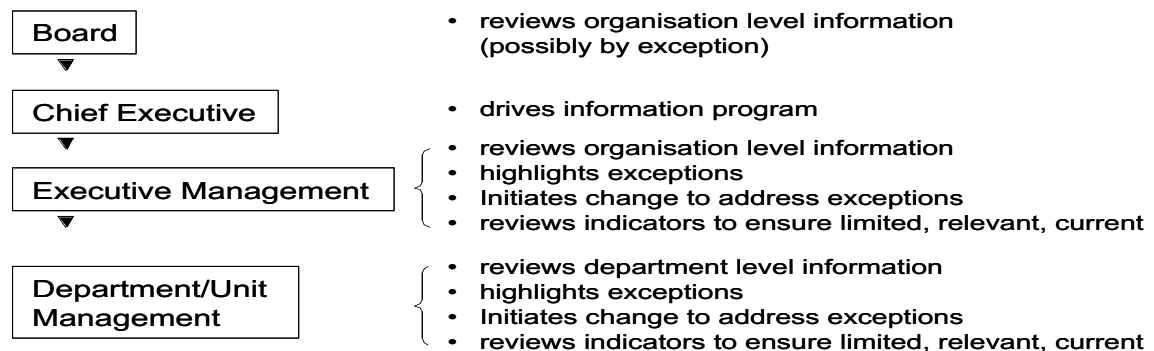
providing some form of drilldown database that allows the indicators used by senior management to be cascaded down to each department to be used in day to day management as discussed in Point 8.

Regularly Review Information and Take Action

Organisations successfully using information typically review information regularly at Board and Executive level. This may be by exception or it may include reviewing a limited set of organisation wide indicators designed to keep the organisation on track against its business plan.

Some organisations have in place a group of staff specifically established to review the organisation level indicators. An example of this is at Princess Alexandra Hospital Queensland where the Chairs of the hospital's Clinical Departments meet to review indicators, identify areas where some form of further review or action may be necessary and initiate and follow-up any changes to ensure targets are again met.

Out of sight – out of mind
Things must be measured to be
managed....



As well as reviewing information at Executive level, Departments, Wards and Units should be encouraged to put in place similar review and follow-up processes.

10. Identify a Small Number of Indicators

Identify a small number (less than 20) Accountability Measures that cascade from the Health Department, to Areas, to Hospitals, and to Clinical Units and report them via a scorecard or dashboard. Accountability Scorecards should be made available to the public (as in the UK).

- **Information must be accurate and easily accessible.**
- **Information systems need to be as integrated as possible.**
- **Manually collected information should be avoided.**
- **Definitions should be consistent, tight and workable.**
- **Constant refinement of the measures will be needed, as creative interpretations and strategies develop as coping mechanisms**

Both the literature and experience in hospitals indicate that a set of indicators totalling between 15 and 30 is optimum. Fewer than about 15 probably means that the view of the organisation being taken by the indicators is not wide enough to pick up all the areas that need to be watched. Greater than about 30 indicators increases the chance of missing an important signal just because of the sheer numbers of indicators that have to be reviewed or imposes such an additional workload that the use of information becomes a burden.

“Most of the performance indicators are quite sensible but there are just too many of them: it takes a huge amount of time to report the information, diverting clinicians away from more pressing clinical tasks.”

The Economist “NHS – A Solution?” 12/12/2002

The authors of *The Balanced Scorecard*⁵ and *The Strategy Focussed Organisation*⁶ stress the need to firstly develop and express strategy and business plans in operational terms and to directly align the information used within the organisation to these plans and strategies. This is a well documented process that will not be discussed further in this paper.

⁵ **Kaplan R, Norton D**, *The Balanced Scorecard: Translating Strategy into Action*, 1996, Harvard business School Press, Boston, Massachusetts

⁶ **Kaplan R, Norton D**, *The Strategy Focused Organisation: How Balanced Scorecard Companies Thrive in the New Business Environment*, 1996, Harvard business School Press, Boston, Massachusetts

Hunter Health

Hunter Health is an excellent example of an organisation working strongly toward a Balanced Scorecard approach to implement its Corporate Plan and Strategy and achieve its Vision⁷

The use of the Balanced Scorecard driven by the Hunter Health Service Corporate Plan provides a model that may be followed by other areas in NSW.

Over the past ten years the Hunter Health has been deliberately and progressively pursuing an information driven approach to the delivery of health care in the Hunter Region.

Initially Hunter Health implemented a range of clinical, quality and management indicators to assist the Executive to focus on day-to-day operational performance and in taking management decisions.

Over the past three years this approach evolved to a Balanced Scorecard approach enabling the Board, executive and senior management to focus on indicators tied directly to the organisation's Business and Corporate Plans.

Its Annual Report for 2001/2002 clearly demonstrates how effectively Hunter Health is using the Strategic Balanced Scorecard approach. Page 3 of the Annual Report visually outlines the Balanced Scorecard Strategy Map including its Vision Mission, the Strategic Themes and the Focus Areas each with specific Objectives identified. The Annual Report is structured on the Focus Areas in the Strategy Map and within those areas, reports based on balanced scorecard measures designed to evaluate performance at each dimension.

Hunter Health is currently undertaking a process of cascading the process down into the organisation to include clinical areas such as wards.

The Manager of the Performance Improvement Unit for Hunter Health, Dr McDonald highlighted an example of how this approach can assist to focus staff: One of the best opportunities health professionals have to assist people toward achieving a healthy lifestyle is when they are a patient in hospital. By encouraging ward level staff to measure how often they tell patients about the availability of healthy lifestyle services available in the community or offer assistance with specific issues while an inpatient, helps to keep the focus directly on the Mission of Hunter Health: "To improve the health of the people of the Hunter and those referred to us." This process is supported through exit questionnaires to patients by asking if staff offered healthy lifestyle advice.

Data Accuracy

Accuracy of data is very important, as soon as accuracy is questioned, credibility of the information is lost and the confidence and support of those using the information is lost.

⁷ **Hunter Area Health Service**, *Annual Report*, p3 2001/2002

Data Accessibility

Data accessibility remains a problem in most hospitals. Information is often collected in standalone databases leading to difficulty in integrating that information centrally within the organisation. A quote from a recent Victorian report supports this: *“Victorian hospitals possess a large number of databases, half of which are not linked to the main administrative databases. Many of these are under-resourced and of uncertain reliability. There is a need to audit databases and train data collectors”*⁸.

Data needs to be accessible to obtain the information required. This can be achieved technically in a number of ways, however the point to make is that if staff have to go to a number of places to obtain the information they need it will increase the staff frustration factor and decrease the likelihood of the information being used effectively.

Integration of Data

Data collection systems need to be fully integrated. This should be a mandatory requirement in any software acquisition. This may seem to be stating the obvious, but there are still examples in all states where integration has not yet been fully achieved.

New software is often implemented without the capability to fully integrate to existing hospital systems (an example of this is the continued difficulties in fully integrating the Cerner PAS with the HIE leading to hospitals not being able to cost activity on any more than a modelling basis).

Automated Data

In some cases data is still collected manually. Data collection needs to be fully automated. At some stage much of the data will be entered into a computer and into a central repository, but this should be as part of a work process such as admissions. Manual collection jeopardises accuracy and leads to staff discontent.

Definitions

It is often said that most problems with information are easily resolved if the information is defined properly. In a perfect world proper definitions and data complying with those definitions will resolve many problems. However hospitals are complex organisations that have each evolved to do things slightly differently. Tight definitions may help to overcome many of these issues but organisational complexities and the human factor will always confound a proportion of situations.

The difficulties with definitions can best be shown using an example:

Average Length of Stay appears to be a simple calculation of the time a patient stays in hospital, but in practice it strikes many snags:

When is a person a patient?

- When a person occupies a bed? – or a couch? – or a chair?

⁸ ibid p76

- When a person receives treatment? A consultation? A service?
- When a person is public? Privately insured? Self payer?

When does stay start?

- Arrival in ED? In Ward?
- When admitted? What are the criteria for being admitted?

How do you count time?

- In days?
- In hours?
- In minutes?

When does stay end?

- When leaving the bed?
- When leaving hospital?
- When changing care type?
- Where does hospital-in-the-home fit?

What are the exclusions?

- Those who depart on the same day?
- Those pronounced dead on arrival?

What about multiple episodes for the same admission?

A systematic and clear approach to setting down definitions should be taken. It is also important to ensure the definitions are realistic and achievable given the data and systems associated with the information being processed.

*Unintended consequences
drive constant rule changes*

Regularly Review Indicators

A trap organisations commonly fall into is to accumulate indicators or just information until they have perhaps 50 pages of tightly spaced information to review each month. This makes it difficult, if not impossible, to distinguish between what is important and what has just been progressively added to the accumulation because someone felt it would be “interesting to collect”.

Organisations need to have in place a formal structure that regularly reviews the indicators collected for relevance as well as accuracy and currency. Such a review should be conducted regularly and separately to any review of the results of information. It would be useful to develop a set of principles to use as a guideline.

11. Empower Peer-Group Collaboration

Empower peer-group collaboration on “Innovation Indicators” while avoiding imposition of specific data requirements and definitions. Simply requiring all health care organisations to work collaboratively with intra- and inter-state peer groups, and to report their successes should be sufficient oversight at the Area and Health Department level, provided that adequate resources are provided to collect data, identify opportunities, and implement change.

Some hospitals have been successfully collaborating and sharing information for a number of years in an organisation called the Health Roundtable. The benefits of collaboration can be seen in this brief review of Roundtable activities.

Since its inception the Health Roundtable has worked with member hospitals providing benchmarking and operational review services to enable hospitals access to current comparative data and to use that data in a trusting environment to drive change within their organisations.

Casemix Benchmarking

The initial benchmarking services provided by the Health Roundtable allowed hospitals to compare their Casemix with other member hospitals. The data, supplied every 6 months, for the previous 6 or 12 months, provides hospitals with Casemix data from the organisation level to the DRG level with the capability to drill down if required. The data is weighted to take into account various factors such as age, co-morbidity, source of admission. It also takes into consideration services such as Dialysis and Chemotherapy that can greatly distort the overall position of a hospital. To ensure the accuracy and relevancy of the information provided, member hospitals meet after each data iteration to review methodology and results.

This allows hospitals to benchmark Casemix data with other peer hospitals in their Health Roundtable Chapter, to understand how their service provision compares with others and identify areas where their performance is below that of their peers.

Member hospitals with exemplar outcomes are asked to outline the reason they believe to be the success factors in achieving this outcome and this is discussed within the group. If other member hospitals decide that the success may be transferred to their organisation they are encouraged to seek further details.

Key Performance Indicator Benchmarking

Following on from the successful benchmarking of Casemix data, Hospital members of the Health Roundtable decided to collect and benchmark a set of Key Performance Indicators. The indicators collected currently are listed in Appendix 6.

Significant policy and procedural differences between the States have always meant that benchmarking of KPIs across Australia and New Zealand is complex and difficult. However, the principles followed by the Roundtable

have led to the successful use of Key Performance indicators and have made it possible to overcome many of these difficulties.

These basic principles include:

- **Keep it simple** – focus on a few important Key Performance Indicators
- **Regularly review the indicators and the process.**
Staff involved in the collection of the Health Roundtable Key Performance indicators meet six monthly to:
 - ◆ review the data,
 - ◆ consider whether the indicators are still relevant,
 - ◆ consider whether the definition adequately specifies the data needed, and
 - ◆ consider whether there are new indicators that need to be included.

CEOs and senior managers also review the indicators on an annual basis. In their review they look at ongoing relevance of indicators but as well, decide if new indicators are required and also discuss outcomes and reasons why some results indicate that particular hospitals are doing better than others in certain areas.

- **Limit the number of Indicators collected.**
This has always been considered to be important. The desirable number of indicators was felt to be about 15. The Health Roundtable currently collects about 30 indicators so whilst the HRT has not been able to achieve its objective (maximum 15), it is satisfied that the current number is workable and cannot agree on any indicators that should be removed. This said, if the indicators collected by the HRT are rolled up to highlight the efficiency of certain areas e.g. Emergency Department then they come much closer to the targeted number of 15.
- **Set Benchmarks as milestones.**
Up until recently the HRT members have compared their performance with that of peer hospitals and in some cases use an ACHS or other recognised benchmark (e.g. for Time to be seen by Triage Level in Emergency Departments). At a recent review meeting, HRT Chief Executives agreed to set broad benchmarks for all indicators, using the 25th percentile of all member hospital as a milestone target results where no recognised benchmark existed.
- **Keep Indicators at a 'high level'.**
There is always the temptation to go into more detail, for example, when monitoring the number of Cardiac Arrests, to separate out certain ward areas instead of just counting for acute patients.

Another example, with the indicator – “Percentage of Pressure Ulcers per Patients Admitted”, the group has resisted classifying the indicator

according to the grade of the pressure sore.

In both these cases, it was felt that the change would add complexity in collection where the raw number would be sufficient to highlight an unusual trend.

➤ **Take an organisation wide view:**

- ◆ Access via Emergency,
- ◆ Elective access (Wait List)
- ◆ Intensive Care
- ◆ Clinical Quality
- ◆ Human Resources

The Chief Executives initially decided to exclude financial indicators. The reason for that decision went back to the nature of these indicators, i.e. they are Australian & New Zealand wide so any comparison of financials may be distorted by State influences and it was felt that there was already sufficient focus on financial matters internally within their organisations. At the most recent review, the Chief Executive Officers reviewed this and decided to add several financial indicators (yet to be finalised).

➤ **Indicators not measures.**

The principle users of information need to keep in mind, is not to become obsessed with the detail of the indicator, but rather to treat the information for what it is – an indication that the organisation is performing well, adequately or otherwise against a benchmark that is set in collaboration with peer hospitals and used to assist to identify exceptions.

The main purpose of the indicators collected by the Roundtable Hospitals is to give CEOs an early warning system, an indication that some function, perhaps the Emergency Department, perhaps ICU or perhaps a workforce issue is developing.

Roundtable Clinical and Operational Workshops

The simple process followed by the Roundtable methodology allows hospitals to share ideas with their peers in an environment of trust where they can be confident that any shortcomings in their systems or their organisation will not be publicised or used against them.

When a particular clinical function or operational process is identified for review, a detailed survey is prepared that collects a range of information about that process or function. This provides participants with background for the workshop about the processes used by their colleagues in other hospitals, including similarities and differences in processes, staffing levels and categories, and outcomes. Hospitals are strongly encouraged involve staff of different disciplines, desirably including the Chief Executive or a member of the hospitals senior executive. The multidisciplinary approach encourages

openness and flexibility and the presence of a senior person encourages organisational buy-in and gives authority to any commitment.

Completing the Loop

Participants always conclude workshops by deciding on what they will take away and try to achieve in their hospitals. These actions are recorded and the hospitals asked to report back in the future on the success (or otherwise) of their implementation and on any barriers to success and how they were overcome.

Networking

Networking is one of the major benefits to come out of attending a Roundtable meeting. The opportunity to meet people in similar roles and share stories, find out how different hospitals are doing things and understand that other hospitals face similar issues and challenges is always reported as one of the major benefits of Roundtable workshops. There is also the spin-off that staff attending get the opportunity to spend several days with a member of the senior executive, allowing discussion, networking and relationship building that would not normally occur in the day-to-day hustle and bustle of hospital life.

Why has this Process been so successful?

The process is based on the reasoning that each hospital will be good at something (but not everything!) and each hospital can learn something from peer hospitals. The bond of trust between member hospitals means that any information shared will be used appropriately and positively.

As an autonomous group of hospitals, the Health Roundtable retains a small group of highly motivated and experienced professionals to facilitate meetings, process data and generally drive the whole process rather than do this themselves or rely on Government to their Health Departments to do it for them.

When hospital groups have attempted to undertake a similar process of grouping together and sharing information by organising it themselves, they have not been successful. Their lack of success has been largely due to the fact that they attempted to facilitate and drive the process themselves and they were diverted by the many other pressures they face on a day to day basis.

The process is owned by the hospitals and in particular the hospital's Chief Executive Officer.

Hospitals can only join if the CEO agrees the nominal member of the Roundtable (in the case of the founding Roundtable groups, the CEO's are the Board Members of the non-profit company that runs the Roundtable).

Bibliography

National Health Performance Committee (NHPC) (2002), *National Report on Health Sector Performance Indicators 2001*, Queensland Health Brisbane.

Guiffrida A, Gravelle H, Roland M, *Measuring Quality of Care with Routine Data: avoiding confusion between performance indicators and health outcomes*; BMJ vol 319,10/7/1999

National Health Service NHS Performance Indicators: February 2002
http://www.doh.gov.uk/nhsperformanceindicators/2002/trust_intro.html

Feachem R, Sekhri N, White K, *Getting more for their dollar: a comparison of the NHS with California's Kaiser Permanente* BMJ vol 234; 19/1/2002

McDonald R, *Overseas Site Visits Reports: Balanced Scorecard; private report*; November 2001

IPART, *Report to the NSW Treasurer and Minister for Health – A Review of NSW Health* July 1999 <http://www.ipart.nsw.gov.au/>

NSW Health Department, *Health Outcome Performance Indicators*, Feb 1998

Hunter Area Health Service Annual Report 2001/2002
http://www.hunter.health.nsw.gov.au/docs/HH_Annual_Report_2002.pdf

Kaplan R, Norton D, *The Balanced Scorecard: Translating Strategy into Action*, 1996, Harvard business School Press, Boston, Massachusetts

Kaplan R, Norton D, *The Strategy Focused Organisation: How Balanced Scorecard Companies Thrive in the New Business Environment*, 1996, Harvard business School Press, Boston, Massachusetts

Acute Health Division, Department of Human Services Victoria, *Acute Health Performance Indicators: Strategy for Victoria*, 1997,
<http://www.health.vic.gov.au/clinicalindicators/strategy/>

The Victorian Quality Council, *Strategic Plan 2002/2005*, 2002
http://qualitycouncil.health.vic.gov.au/vqc_strategic_plan.pdf

ACHS Care Evaluation Program & Monash University Department of Epidemiology and Preventive Medicine *Acute Health Clinical Indicator Project Final Report*, July 1999,
<http://www.health.vic.gov.au/clinicalindicators/clip/vol1a.doc>

Queensland Health; *Technical Supplement for the Measured Quality Hospital Report*, July 2002

Appendix 1: Workshop Outcomes

On 8th May 2003 a Workshop was held to allow a range of senior Hospital, Area Health Service and Health Department executives to participate in a Roundtable Discussion on Performance Indicators. The workshop consisted of presentations by several Chief Executives from leading interstate hospitals and interactive workshops by the participants.

THE WORKSHOP WAS CONDUCTED UNDER THE CHATHAM HOUSE RULE AND ACCORDINGLY NO INFORMATION IS ATTRIBUTED TO ANY INDIVIDUAL OR ORGANISATION

The Roundtable Discussion will be subject to the Chatham House Rule in order to promote a free, unencumbered discussion amongst all participants:

“Participants are free to use the information received during the discussion but cannot quote or attribute comments to their contributor outside the discussion. Neither the identity nor the affiliation of the contributors of comments can be revealed outside the discussion.”

A summary of the Plenary Reports follows:

How should ‘Good’ Clinical Units be using Performance Indicators to manage activities?

It was suggested that Indicators should be

- underpinned by a customer focus and business plan within the Clinical Unit.
- based on resourcing and activity, and
- should cascade down and so be consistent with information from the Area and the Hospital

It was agreed that definitions are important for Accountability Measures. There should be consultation mechanisms need built into the process and they should include clinicians and patients.

Budget performance measures should be based on:

- Activity
- Length of Stay (Efficiency)
- Flow Measure (Access Block, Throughput and Exit Block)
- Quality (Patient Outcomes)
- Clinical Costing (Episode Funding)
- Wastage (Variance) (Variance against benchmark, days above standard)
- Customer Outcomes

Measures for Innovation (Promote Cultural Change / Risk Taking) should be based on:

- Resources (Data management)
- Skills development
- Risk taking
- Research Activity

Organisations need to put in place appropriate benchmarking ideally including an external basis for comparison.

Indicators that are to be used for Innovation should be user friendly and transparent. A no-blame culture is very important.

What Information at a Clinical Unit Level could be used to assist Consumers?

The group identified a number of areas where information at the Clinical Unit level could be used to assist consumers. These issues included:

- access to clinical staff for consumers to talk to.
- access to the service itself
- access to information about services, care, specific clinical treatments

The group also identified the culture and quality of the service as being important to consumers. The point was made that if Clinicians are to lead then the system needs to be structured to allow that to happen.

How should 'Good' Hospitals be using Performance Indicators to manage activities?

The group felt that indicators should be positive rather than negative e.g. an Emergency Department indicator benchmark could be > 99% Open (rather than > 1% Closed)

Care is moving into the community so there should be a greater number of Community based indicators

Accountability indicators at a hospital level should measure:

- Financial
- Quality and Safety
- Efficiency

Indicators to achieve innovation at a hospital level should measure:

- Quality and Safety,
- Efficiency,
- Timeliness and
- Work Practice

To achieve this it is important that there be commonality of data and data transparency. It is also important that information be accurate, timely and easy to use and also be available across all staff.

Good management will also include provide feedback on actions and ensure that the change process is reviewed i.e. close the loop. Staff should be rewarded for good results.

What Information at a Hospital Level could be used to assist Consumers?

At the hospital level, the group felt that it was important to know how safe the environment was for the consumer. Also issues such as access to grounds and buildings and the level and quality of hotel services were important to the consumer. Communicating with the consumer is important at all levels.

How should 'Good' Area Health Services be using Performance Indicators to manage activities?

Accountability indicators at this level should measure:

- Safety and Quality
- Financial ↘ output/unit costs; total costs
- Waiting times
- Wait List Deferrals
- Staff sustainability
- Occupational Health and Safety
- Consumer Satisfaction
- Health Status
- Public Health / Network Coordination
- Targeted High Risk Groups

Indicators to achieve innovation should measure:

- Development of pathways
- Compliance with pathways
- New treatment regimes
- Individualised stretch targets

Appropriate systems need to be in place to collect and manage data. This would include skilled staff for input and analysis of the data, software and hardware capable of doing the job proper training and appropriate feedback. Decision making needs to be transparent and based on the data provided

External benchmarking needs to be facilitated.

The information needs to be readily accessible at all levels, clinical, frontline and executive.

Data collection needs to deliver information to improve performance.

The right incentives need to be in place – both carrot and stick.

What Information at an Area Health Service Level could be used to assist Consumers?

Access including transport

Safety indicators

Coordination of Care – i.e. effective information sharing between providers

How responsive is the service to its consumers?

To what extent do clinical outcomes meet expectations?

How responsive is the clinical unit to community needs?

What is the clinical staff ratio?

What is the health status of the community?

How can the community be better educated to use information?

Acute performance is being measured but not the General Practitioner disease burden that may convert to acute care.

How should ‘Good’ State Health Departments to be using Performance Indicators to manage activities?

Accountability indicators at this level should measure:

- Financial
- Quality
- Efficiency
- Access / Wait list
- Disaster planning

Performance should be cross dimensional, including input from the colleges, ACHS etc.

NSW should interface with Commonwealth and other states.

Indicators to achieve innovation should measure:

Efficiency – DOSA, Day Surgery, Substitution

Financial and other incentives are important – not just the big stick.

Consider using a rating system – three stars

The degree of intervention will also be important

Service enhancement seeding grants should be included

Controls can stifle innovation for example, forcing all hospitals to comply with EMU and DOSA may slow other ideas.

State Departments should avoid micromanaging if the Area/Hospital is performing well

What Information at a State Health Department Level could be used to assist Consumers?

Issues of access, quality and safety as they relate to the consumer are important

It is also important to report regularly to consumers updating them on how organisations within the health service are performing

There should be some measure of the level of consumer involvement

Appendix 2: Top indicators Identified at the Workshop

Efficiency

1. ***Length of Stay – overnight patients only***
2. ***Case-weighted cost per episode***
3. ***Activity case-weight per episode*** (for inpatient and outpatient)

Safety

1. ***Infection Rate*** (Out of hospital follow-up)
2. ***Adverse Events***: Medications / Falls / Sentinel events
3. ***Mortality Rate*** (risk adjusted – separately for ICU)

Effectiveness

1. ***AMI Outcomes***

Numerator: Survivors 30 days after presentation

Denominator: All AMI admitted patients

2. ***Unplanned Re-admission Rates***

Numerator: Unplanned re-admission within 28 days of admission via ED

Denominator: All overnight admissions

3. ***Clinical Outcome indicators versus expected outcome for each service***

Numerator: Number of successful outcomes

Denominator: Number for service category of inpatients

Consumer Participation

1. ***Communications survey to measure patient satisfaction***

Numerator: Actual score

Denominator: Possible score

2. ***Involvement in Policy Development and Decision Making***

Numerator: Number attended by at least 2 communication representatives

Denominator: Number of Meetings of Decision Making/Policy Meetings

3. ***Training of consumers***

Numerator: Number of completed accredited training programs

Denominator: Resident population

Appendix 3 - Workshop Participants

ORGANISATION	DELEGATE	POSITION
Central Sydney AHS	Peter Kennedy	Director Health Services
	Gary Miller	A/General Manager, Canterbury Hospital
Department of Health	Deb Hyland	
	Liz Martin	Manager Health System Performance Branch
	Jim Pearse*	
Hunter AHS	Bob McDonald	Manager Performance Improvement Unit
Independent Pricing & Regulatory Tribunal	Liz Livingstone	Analyst
	Steve Lyndon	Analyst
	Alex Oeser	Analyst
Northern Rivers AHS	Chris Crawford	Chief Executive Officer
Northern Sydney AHS	Frank Basik	Executive Director, Northern Beaches Health
	Stephen Christley	Chief Executive Officer
	Mark Parrish	Executive Director, Hornsby Hospital
South Eastern Sydney AHS	George Bearham	Director, Clinical Practice Improvement
	George Jepson	Executive Director, Prince of Wales Hospital
South Western Sydney AHS	Theresa Anderson	A/General Manager, Liverpool Hospital
	Andrew Bernard	General Manager, Bankstown Hospital
	Jennifer Collins	General Manager, Macarthur Health Service
	Stephen Johnson	Director of Planning, Liverpool Hospital
	Colin MacArthur	Director of Health Service Reform
	Ian Southwell	Chief Executive Officer
Sydney Area Health Service (Defence)	Douglas Menzies	Health Business Manager
Western Sydney AHS	Siun Gallagher	Director HSD
Austin Health	Jennifer Williams	Chief Executive Officer
Alfred Hospital	Kim Hill	Director Medical Services
Flinders Medical Centre	Bronwyn Masters	
Inspirit Management Services	David Dean	Workshop Facilitator
	Peter Reeves	Workshop Facilitator

Appendix 4 – Indicators Collected in the Victorian System

The indicators finally selected to monitor clinical and quality standards of care in Victorian Hospitals⁹ were:

Medical

Diabetes - post operative blood glucose monitoring
AMI – therapy times
Asthma – Documented assessment on admission
Colonoscopy - perforation

Surgical

Abdominal Aneurysm Repair – Mortality
Cholecystectomy laparoscopic – bile duct injury
Cholecystectomy open – bile duct injury
TUR - for benign disease – unplanned readmission with clot retention
Colon - anastomosis breakdown
Rectum - anastomosis breakdown
CEA - Stroke/Mortality
Tonsils & Adenoids – return to for bleeding in same admission

Gynaecology

Gynaecology operative procedure - Urinary tract injury
Gynaecology procedure - return to Operating Room

Day Procedures

Day Procedure – Unplanned overnight admission

In addition to this DHS has specified a number of ‘Demand Management Strategy’ measures that all hospitals are expected report on. In some cases ‘performance bonuses’ are applicable:

12 Hour waits
Ambulance By-pass
% Elective Cat 1 Admitted Within 30 Days (monthly)
Average Waiting Time of Cat 2 Elective Patients on Wait List (quarterly)
Number of Patients on Elective Surgery Waiting List (quarterly)
% Elective Cat 2 Patients Overdue On Waiting List (quarterly)
Number of Hospital initiated Postponements per 100 Waiting List Admissions (quarterly)
% CCU Transfers Due To Bed Not Available (6 monthly)
% ICU Transfers Due To Bed Not Available (6 monthly)
Day of Surgery Admission (DOSA) Rate (6 monthly)
Same Day Surgery Rate (6 monthly)

⁹ ibid

Appendix 5: Examples of Indicators collected at The Alfred Hospital

Associated with the objective/strategy of (optimising) patient care, the following Key Performance Indicators are used at the Alfred Hospital:

Performance Drivers:

- ▶ Complaints - % Resolved within 5 Days
- ▶ ED Admission Block by Unit
- ▶ Elective Surgery - Total Patients on Waiting List
- ▶ Elective Surgery - Total Cat 1 Patients admitted within 30 days
- ▶ Elective Surgery - Total Cat 2 Patients admitted within 85 days
- ▶ Elective Surgery - Proportion of Patients with two or more referrals

Performance Outcomes:

- ▶ Ambulance Bypass
- ▶ Elective Surgery - Average Waiting Time for Cat 1 Patients
- ▶ Elective Surgery - Average Waiting Time for Cat 2 Patients

Appendix 6: The indicators collected by the HRT

Group	Indicator	Description	Benchmark
Emergency Department	Triage 1 – Time to be seen	Patients seen immediately as % of all Category 1 patients	100%
	Triage 2 – Time to be seen	Patients seen within 10 minutes as % of all Category 1 patients	80%
	Triage 3 – Time to be seen	Patients seen within 30 minutes as % of all Category 1 patients	75%
	Triage 4 – Time to be seen	Patients seen within 60 minutes as % of all Category 1 patients	70%
	Triage 5 – Time to be seen	Patients seen within 120 minutes as % of all Category 1 patients	70%
	Triage 1 – Time seen to time to ward	Range of time for all Cat 1 patients, highlights median, mean, 25 th and 75 th percentiles	25 th percentile
	Triage 2 – Time seen to time to ward	Range of time for all Cat 2 patients, highlights median, mean, 25 th and 75 th percentiles	25 th percentile
	Triage 3 – Time seen to time to ward	Range of time for all Cat 3 patients, highlights median, mean, 25 th and 75 th percentiles	25 th percentile
	Triage 4 – Time seen to time to ward	Range of time for all Cat 4 patients, highlights median, mean, 25 th and 75 th percentiles	25 th percentile
	Triage 5 – Time seen to time to ward	Range of time for all Cat 5 patients, highlights median, mean, 25 th and 75 th percentiles	25 th percentile
	Time to Analgesia	Median time of sample of patients receiving narcotic analgesia in ED	25 th percentile
	Time from Triage to Admission to Ward	Mean of Medians of time from Triage to Admission to Ward	25 th percentile
	Time Triaged to Time Seen	Median, Mean, 25 th and 75 th percentile of the time Triaged to time Seen for admitted patients only by Triage Category	25 th percentile
	Time Seen to Time Admitted to Ward	Median, Mean, 25 th and 75 th percentile of the time Triaged to time Seen for admitted patients only by Triage Category	25 th percentile
	Waiting List Management	Waiting List Cancellations before admission by Hospital	Number of elective theatre patients on the Waitlist given a planned date (during the survey month) for surgery who had that date cancelled or changed by the hospital BEFORE their admission during the time period per Total number of elective cases actually performed
Waiting List Cancellations after admission by Hospital		Number of elective theatre patients admitted for a procedure, but whose procedure is cancelled (or whose procedure date is changed) by the hospital AFTER their admission during the time period per Total number of elective cases actually performed	25 th percentile
Operating Room List Cancellations		Any removal from the Operating Room theatre elective lists during the month for any reason per Final number of patients on Operating Room lists in the month.	25 th percentile
Waiting List Cancellations before admission by Patient		Total number of elective theatre patients who cancel, change, alter, or modify their elective procedure date from the date originally agreed with the Hospital PRIOR to admission during the time period	25 th percentile

Group	Indicator	Description	Benchmark
Intensive Care Clinical	Waiting List Cancellations after admission by Patient	Total number of elective theatre patients who cancel, change, alter, or modify their elective procedure date from the date originally agreed with the Hospital AFTER to admission during the time period	25 th percentile
	Readmission to ICU	Total number of patients returning to ICU within 72 hours per total discharges for period	25 th percentile
	Deaths requiring Review	All deaths likely to require review by total deaths	25 th percentile
	Inpatient Re-presentation to ED	All patients seen as Cat 1, 2, or 3 in ED within 14 days of discharge from hospital per all inpatient discharges.	25 th percentile
	Urgent Re-presentation to ED	All Triage Cat 1, 2 and 3 patients seen in ED within 24 hours of discharge from the ED per all ED presentations.	25 th percentile
	Returns to Operating Theatre	Number of patients returning to the Operating Theatre during the same admission per total number of operations.	25 th percentile
	Cardiac Arrests	Number of patients experiencing a cardiac arrest in ward areas per total inpatient bed days	25 th percentile
	INR Level < 5	Number of anticoagulation (INR) results found to be above 5.0 per total number of anticoagulation (INR) results	25 th percentile
	Pressure Ulcers Un-graded	Total number of patients found to have a pressure ulcer (raw figures) per total number of inpatient admissions	25 th percentile
	Workforce	Sick Leave Rate - Nursing	Total number of hours of sick leave by all Nursing Staff in pay periods totalling 4 weeks per total hours paid for all Nursing Staff
Sick Leave Rate - Other		Total number of hours of sick leave by all Other Staff in pay periods totalling 4 weeks per total hours paid for all Other Staff	25 th percentile
Resignation Rate - Nursing		Total number of Nursing staff who ceased employment per total number of nursing staff on payroll	25 th percentile
Resignation Rate - Other		Total number of Other staff who ceased employment per total number of Other staff on payroll	25 th percentile
Workers Compensation Claims - Nursing		Total number of new lost time claims received by the hospital from Nursing Staff per total number of Hours paid for all Nursing Staff	25 th percentile
Workers Compensation Claims - Other		Total number of new lost time claims received by the hospital from Other Staff per total number of Hours paid for all Other Staff	25th percentile

Appendix 7: Selection of Indicators from those currently collected

Indicator

Clinical Outcomes

Heart Failure - % Long Stay Outliers
Heart Failure -% In Hospital Mortality
Acute Myocardial Infarction - % Long Stay Outliers
Acute Myocardial Infarction - % In Hospital Mortality
Stroke - % Long Stay Outliers
Stroke - % In Hospital Mortality
Stroke - % Separations to Nursing Home
Pneumonia - % Long Stay Outliers
Pneumonia -% In Hospital Mortality
Asthma - % Long Stay Outliers
Asthma - Unplanned re-admission
Foot Ulcer -% Amputations
Foot Ulcer - % Long Stay Outliers
#Neck of Femur - % In Hospital Mortality
#Neck of Femur - % Complications of Surgery
#Neck of Femur - % Separation to Nursing Home
#Neck of Femur - % Long Stay Outliers
Hip Replacement - % Long Stay Outliers
Hip Replacement - % Complications of Surgery
Knee Replacement - % Complications of Surgery
Knee Replacement - % Long Stay Outliers
Colorectal Cancer Surgery - % Long Stay Outliers
Colorectal Cancer Surgery - % Complications of Surgery
Hysterectomy - % Long Stay Outliers
Hysterectomy - % Complications of Surgery
Hysterectomy -% U 35 Years
Hysterectomy - % Blood Transfusion
Standard Primiparae - % Caesarian Births
Standard Primiparae - % Induced Births
Standard Primiparae - % Severe Perinatal Tear
Maternal Postnatal Stay (Vaginal Births) - % Long Stay Outliers
Maternal Postnatal Stay (Caesarian Births) - % Long Stay Outliers

Live Singleton Births - % Small for Age
Low/very low birth-weight rates
Apgar score for infants 1000-2500 grams
Relative utilisation rates of targeted procedures (include cardiac-catheterisation, CABG, angioplasty, cholecystectomy, hysterectomy, laminectomy, caesarian section, prostatectomy,

Population Health

% smoking (16 years and over)
% alcohol risk (16 years and over)
% inadequate physical activity
% falls in elderly
% Immunisation risk
% at risk patients targeted for risk reduction

Standardised cardiovascular mortality rate/100,000 (25 - 74 yrs)

Standardised cancer mortality rate/100,000

% asthma morbidity (16 yrs +)

% diabetes (doctor diagnosed) morbidity (16 yrs and over)

Self rated health status (16 yrs and over)

Financial

Network operating Surplus(Deficit) as % of total Revenue (Before and after depreciation)

Surplus (Deficit) on Government Funded Services

Surplus (Deficit) on specified purposes segment

Surplus on capital fund

Return on total assets (Average)

Debt servicing coverage

Current Ratio

Depreciation Coverage

WIES per asset

% General expenditure split across budget programs

Average Casemix cost comparison to State average

Workforce

% Full Time Staffing

% Full Time Staffing - by Category

% Sick Leave

% Sick Leave - by Category

Cost of Sick Leave

Cost of Sick Leave - by Category

Cost of work cover

Cost of lost time injuries

% Resignations by category

Workers Compensation Claims

Hours of overtime

Hours of overtime by category

Cost of overtime

Cost of overtime by category

Activity

Occupancy rate

Length of Stay

Casemix adjusted ALOS

Theatre Cancellation Rate

Surgical WIES per resourced theatre

Average length of stay for top 20 ANDRGs

Discharge home < 56 days of emergency admission from home with stroke

Discharge home < 56 days of emergency admission from home with Fractured Neck of Femur

Access

Waiting times for elective surgery

U1/U2 Med/surg waits >30 days

Med/surg RCF > 12 months

Ratio of elective services

Accident & Emergency waiting times

% ED triage 2 treated within 10 minutes

% ED triage 3 treated within 30 minutes

% ED Triage 4 treated within 60 minutes

Emergency Services as a % of total WIES

Ratio of same-day patients to multi-day patients
Outpatient waiting times
#2624 in hospital awaiting placement
Physical access score (max 100)
% allied health patients first seen for assessment waiting outside of benchmark

Access to critical care beds
Ambulance bypass
Admissions Blocked
Operating Room Cancellations
% Not admitted within 8 hours (access block)
Variation in intervention rates
Separations per 1000 population
% separations of own residences
Waiting times in Emergency Department prior to emergency admission

Patient based reports of elective surgery, emergency and outpatient department waiting times and acceptability of these times to patients

Process

Total cost of catering
Energy consumption per square metre

Capability & Sustainability

Accreditation
Credentialing
% Staff nursing staff retention after one year
% Staff allied health staff retention after one year
Median age of nursing staff
Accurate hospital data submitted to Qld Health
Timeliness of data submitted to Qld Health
How late data submitted to Qld Health
Availability of electronic information
Collection and use of clinical information
Benchmarking in selected clinical areas
Internal benchmarking in selected clinical areas
External benchmarking in selected clinical areas
% Units carrying out regular consultation according to defined criteria

% consumers who perceive they are informed and involved
Partnership satisfaction score(VMOs/GPs)
% Performance agreement targets met

Continuity of Care

Extent of development and use of Clinical Pathways
- in surgical areas
- in medical areas
- in Obstetric and gynaecological areas
Use of pre-admission clinics for elective surgery
Provision of discharge summaries to GPs
Provision of electronic discharge summaries to GPs
Discharge protocols
Shared antenatal and postnatal care
Cardiac Rehabilitation
Usage of Tele-health

Efficiency

Cost per Casemix adjusted separation
Estimated fundable WIES per contracted amount
Cost of acute admitted patient per WIES
Cost of treatment per outpatient
Average length of stay for top 20 ANDRGs
Medical staff cost per WIES
Nursing staff cost per WIES
Non-clinical cost per WIES

Productivity

User cost of capital per Casemix-adjusted separation
Ratio for depreciated replacement value to total replacement value

Total replacement value per Casemix-adjusted separation
Labour costs per Casemix-adjusted separation

Quality

Rate of emergency patient re-admission within 28 days of separation

Rate of unplanned inpatient re-admission within 28 Days
Rate of hospital acquired infection
Surgical site infection by procedure
Rate of unplanned return to theatre
Rate of Patients receiving analgesia within 60 minutes - ED
Stratified mortality rates
Intra hospital mortality within 2 days of specified procedure
Death following AMI, PTC, CABG
Deaths in hospital within 30 days of Fractured Neck of Femur
Neonatal Mortality
Patient satisfaction
Patient Complaints
Proportion of beds accredited by ACHS
Complications within 24 hours of procedures involving Anaesthesia

Post operative LOS for CABG
Timing for thrombolytic therapy for AMI
Cardiac Arrests in Ward areas
INR > 5
Pressure Ulcers ungraded
Congestive Heart Failure
Post operative LOS for PTCA
Ventilated inpatients who develop pneumonia
Surgery for recurrence of hernia after previous surgery
Frequency of D&C in women < 40 years of age
Prosthesis replacement
Immunisation coverage rates 12-15 month olds
Percent of radiotherapy patients treated within targeted timeframe

Safety

Adherence to best practice guidelines
Observed to expected outcome ratios
Incident reports
Adverse events related to drug use in Hospital

Attachment 9 Suggested presentation of KPIs

This attachment provides the reader with an example of how the KPIs proposed by IPART should be presented. The attachment includes a full set of indicators and their presentation (levels 1,2 and 3) at the departmental level. Not all levels are provided for the AHSs and hospitals but their presentation should take the same format.

Please note that the actual performance and the target of the individual indicators do not reflect reality. They have merely been chosen to give the reader an impression of the proposed presentation of the KPIs.

The attachment also includes an example of a cascading indicator. This example shows how the strategic objectives and indicators are aligned across all levels of the organisation.

- 1 User guide to visual mapping

- 2 Strategic map at departmental level
- 3 IPART KPIs, visual mapping presentation—Level 1
- 4 IPART KPIs, trends presentation—Level 2
- 5 IPART KPIs, detailed presentation—Level 3

- 6 Strategic map at AHS level
- 7 IPART KPIs, visual mapping presentation—Level 1
- 8 IPART KPIs, trends presentation—Level 2

- 9 Strategic map at hospital level
- 10 IPART KPIs, visual mapping presentation—Level 1

- 11 Example of a cascading indicator

When implemented the indicators set out below would use colour coding:

- green would indicate that the target has been achieved
- red would indicate that the target has not been achieved
- amber would indicate that the target has almost been achieved

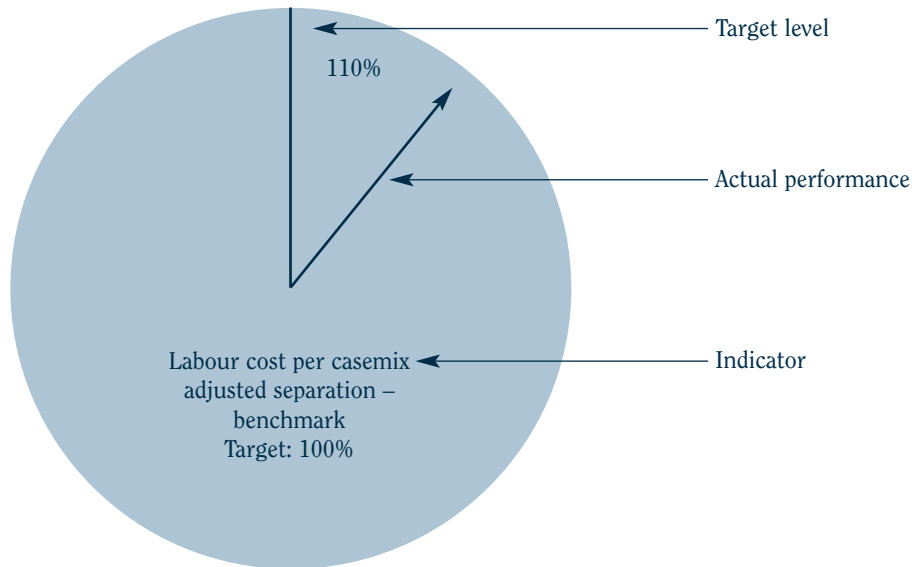
As this report has been printed in one colour, shades of blue have been used to indicate the respective outcomes. Dark blue indicates that the target has been achieved, light blue that it was not achieved, and white with a border that it has almost been achieved.

I User guide to visual mapping

The following examples shows how the visual mapping presentation should be used.

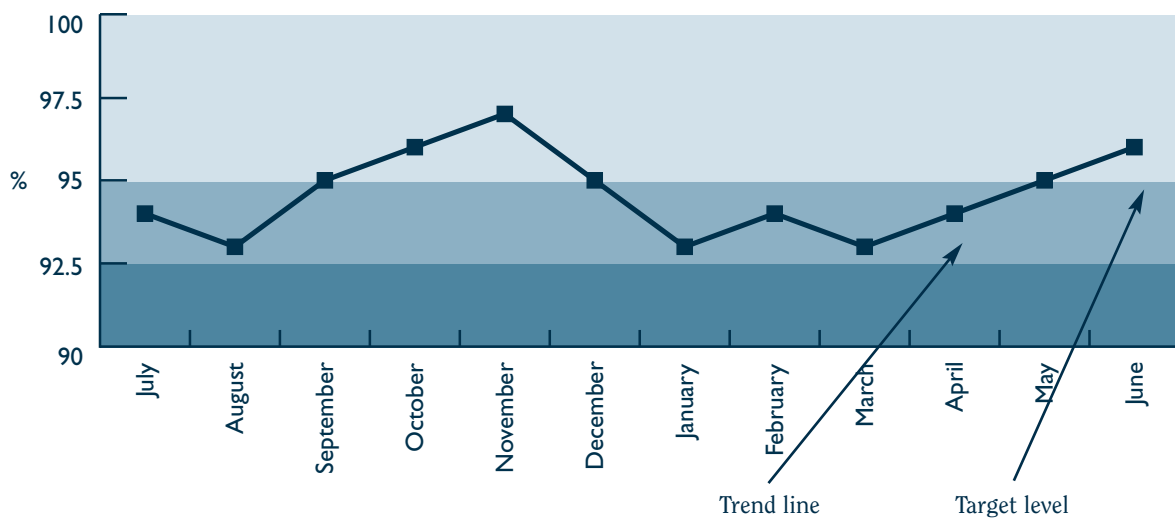
Level 1

The figure below explains how to read the dashboard indicators. The colour indicates if a target has been reached, has almost reached it or missed it. This set of presentations should be used first as the presentation facilitates discussion.



Level 2

This is the second level of presentation. It represents the trend of a particular indicator during the year. The colour scheme used in the graph shows the reader how the trend of the indicator has evolved during the year relative to the target level.



Attachment 9 Suggested presentation of KPIs

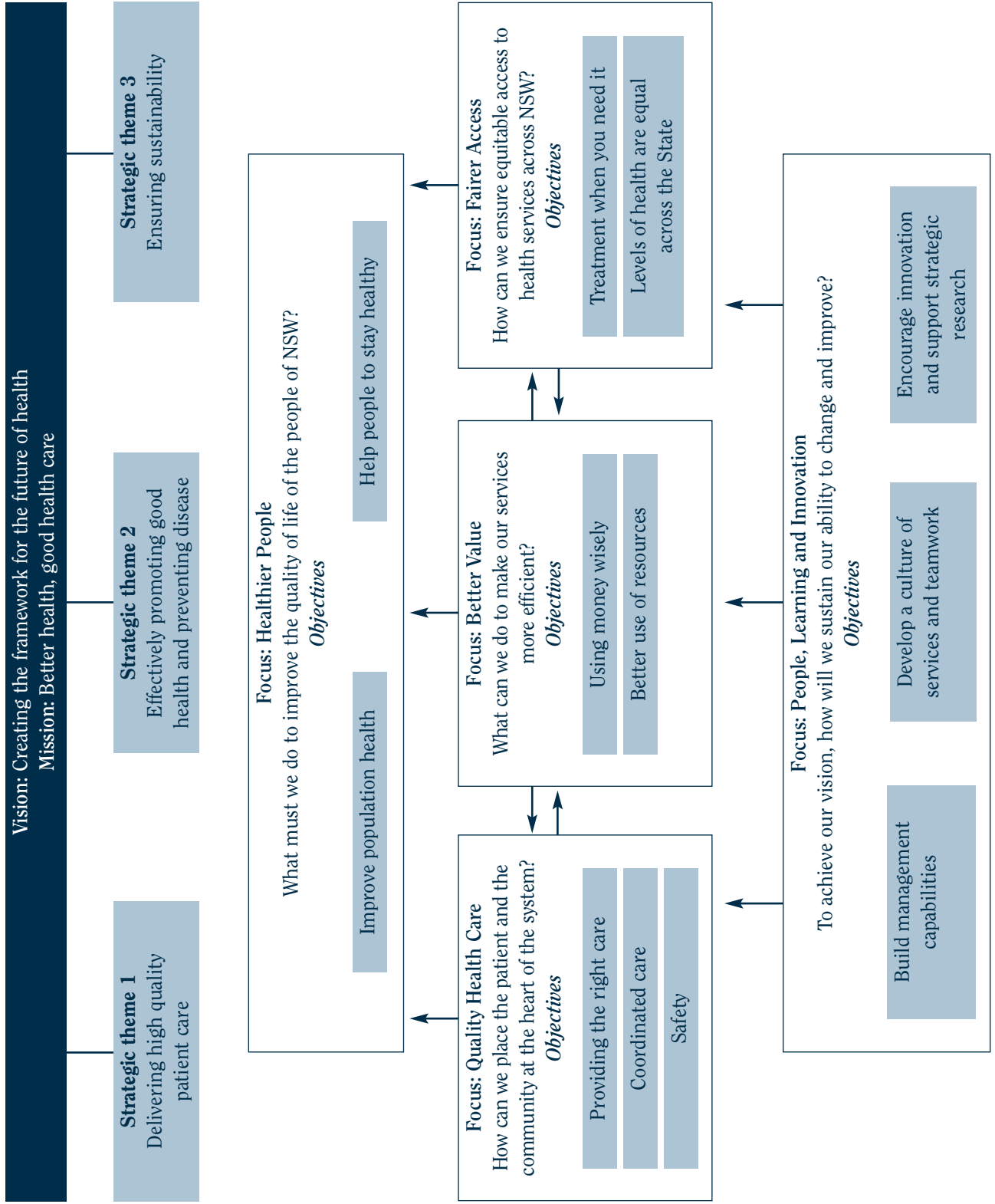
Level 3

The third level provides the reader with the details of the KPIs collected, the trend and, most importantly, it indicates who is responsible for the performance of a particular indicator.

Extract of third level presentation

Dashboard	Measure	Frequency	Actual	Target	Trend	Responsible
Potentially avoidable deaths	Age-adjusted rates of primary, secondary and tertiary avoidable mortality	x	97%	95%	↗	to be defined
Chronic disease index	% of the population with three or more chronic disease risk factors in NSW	x	20%	20%	→	to be defined
Antenatal visits before 20 weeks	% of confinements where first antenatal visit was before 20 weeks gestation	x	89%	95%	↘	to be defined
Self-reported mental health	K10 scores for adults	x	60%	75%	↘	to be defined
Child immunisation rate	Proportion of infants fully immunised at 12 to 15 months	x	96%	95%	↗	to be defined

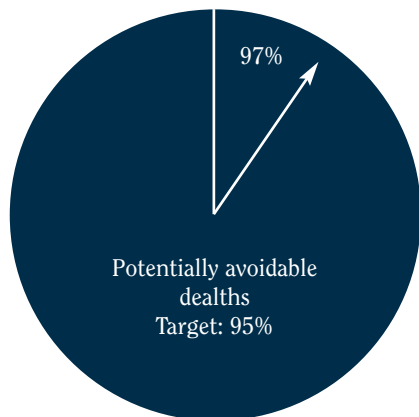
2 Example of a strategic map at the departmental level



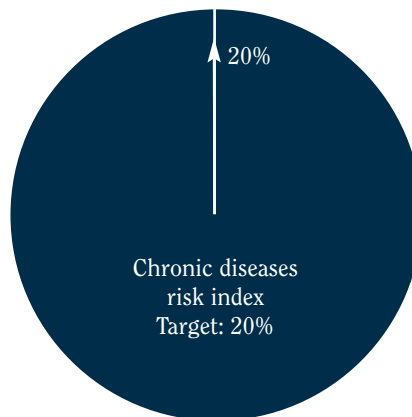
3 KPIs, first level–IPART dashboard indicators—to be used at departmental level

Healthier People

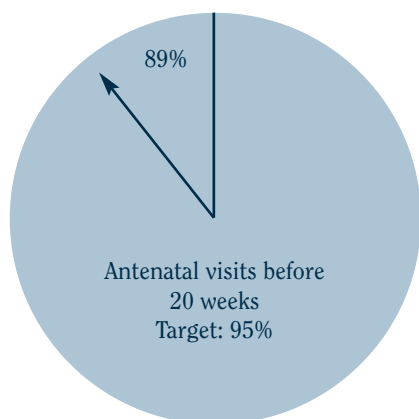
Objective: Improve population health



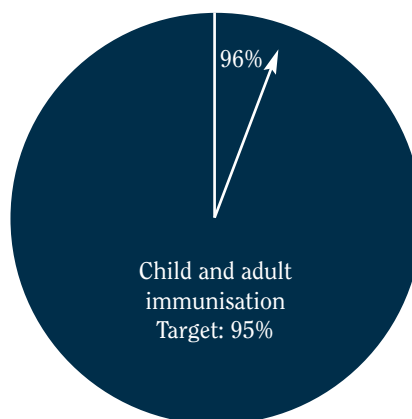
Objective: Help people to stay healthy



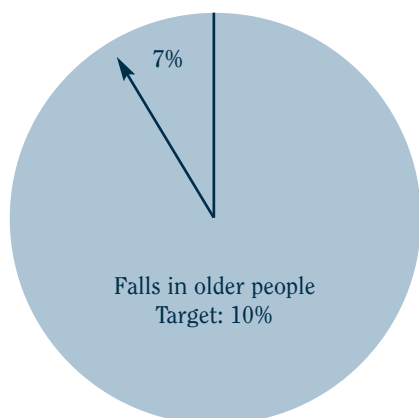
Objective: Help people to stay healthy



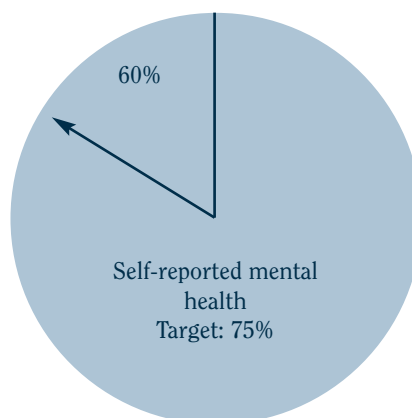
Objective: Improve population health



Objective: Improve population health

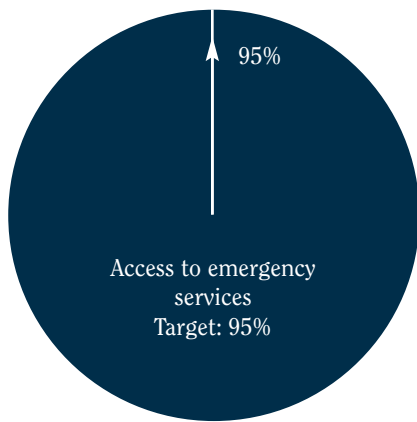


Objective: Help people to stay healthy



Fairer Access

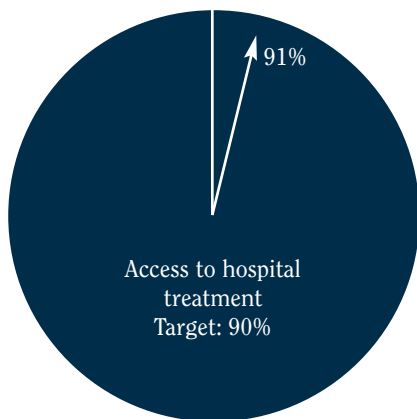
Objective: Treatment when you need it



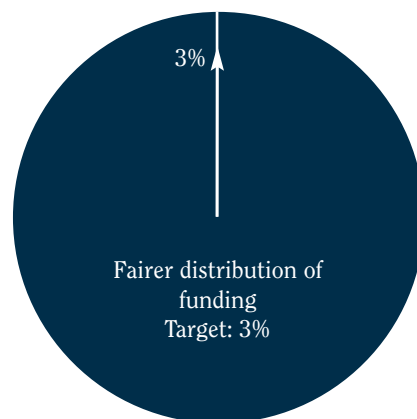
Objective: Treatment when you need it



Objective: Treatment when you need it

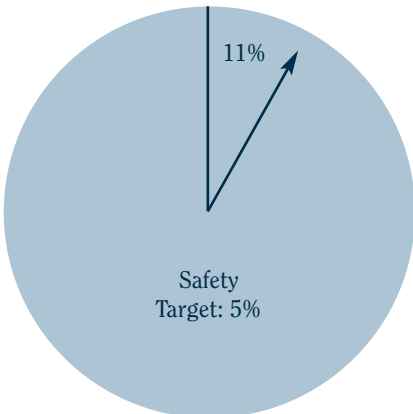


Objective: Levels of health are equal across the State

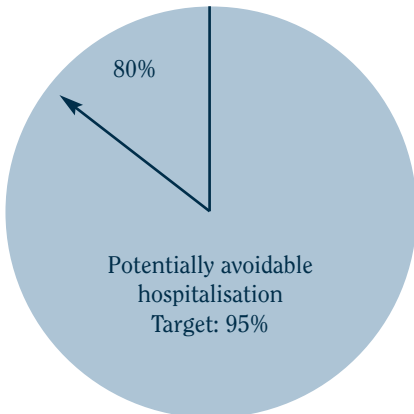


Quality Health Care

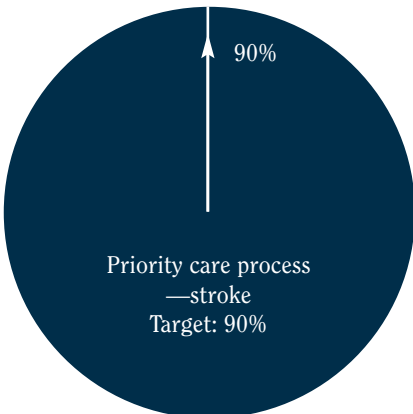
Objective: Safety



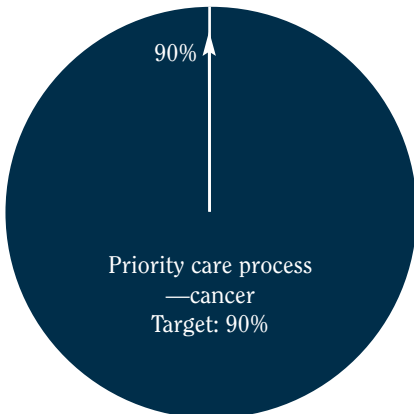
Objective: Coordinated care



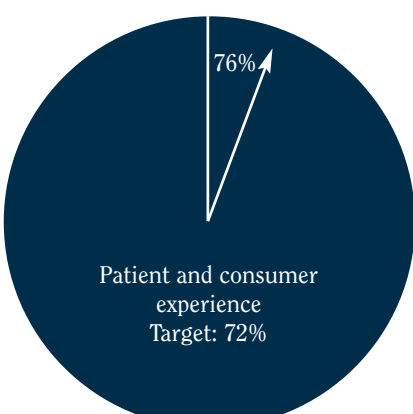
Objective: Providing the right care



Objective: Providing the right care

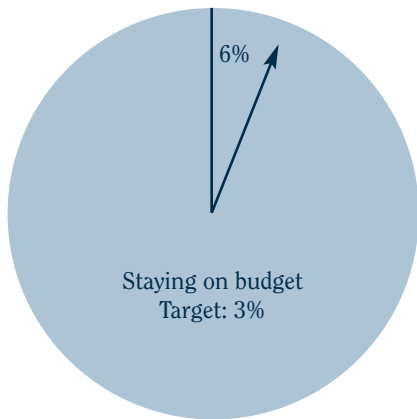


Objective: Providing the right care

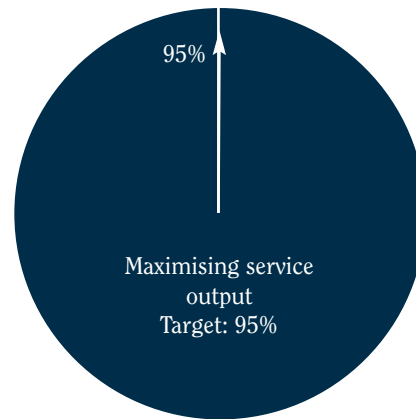


Better Value

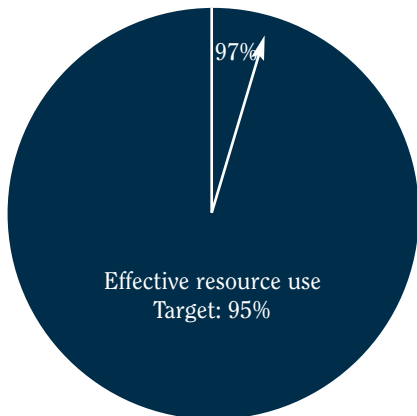
Objective: Using money wisely



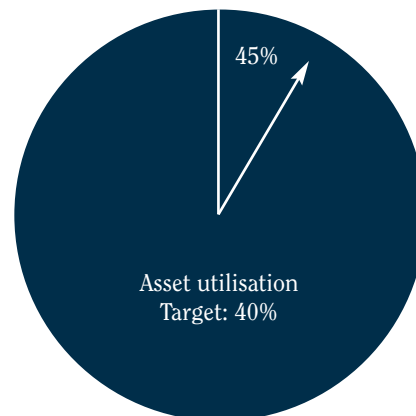
Objective: Better use of resources



Objective: Better use of resources

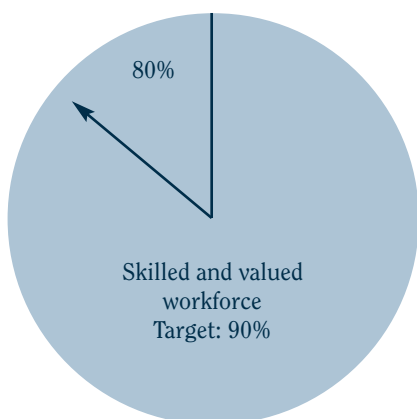


Objective: Better use of resources



People, Learning and Innovation

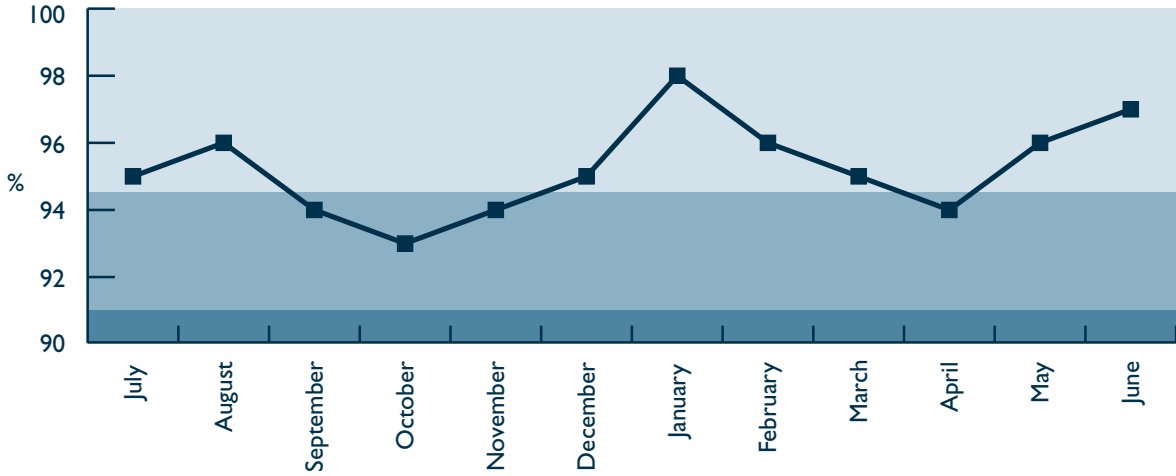
Objective: Develop a culture of service and teamwork



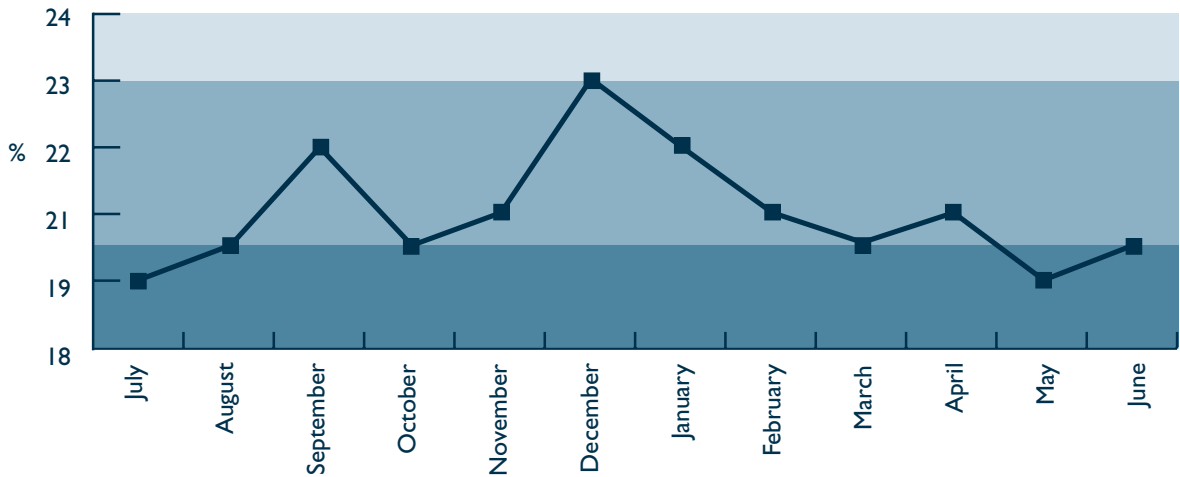
4 KPIs—second level presentation of IPART KPIs—to be used at departmental level

Healthier People

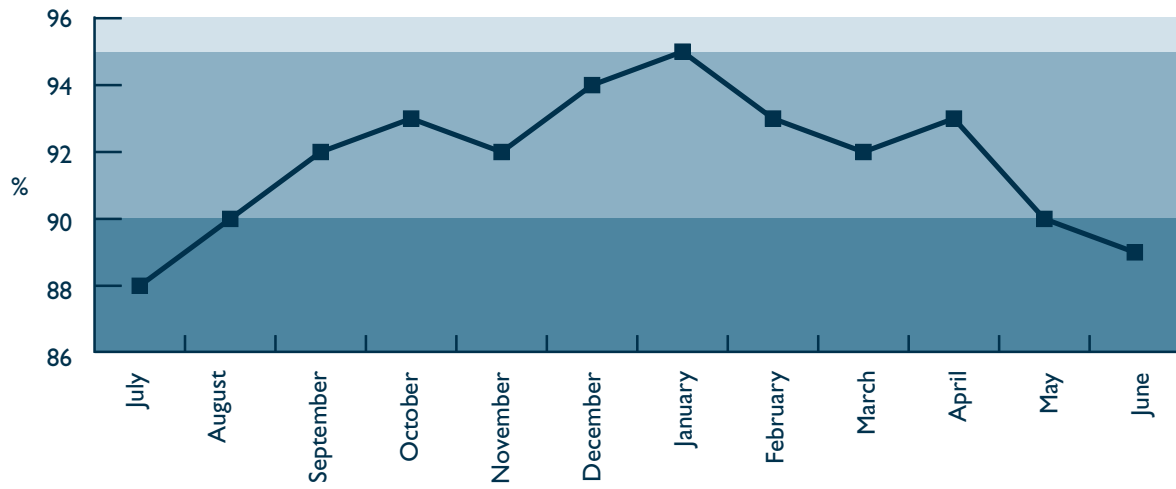
Objective: Improve population health
Potentially avoidable deaths



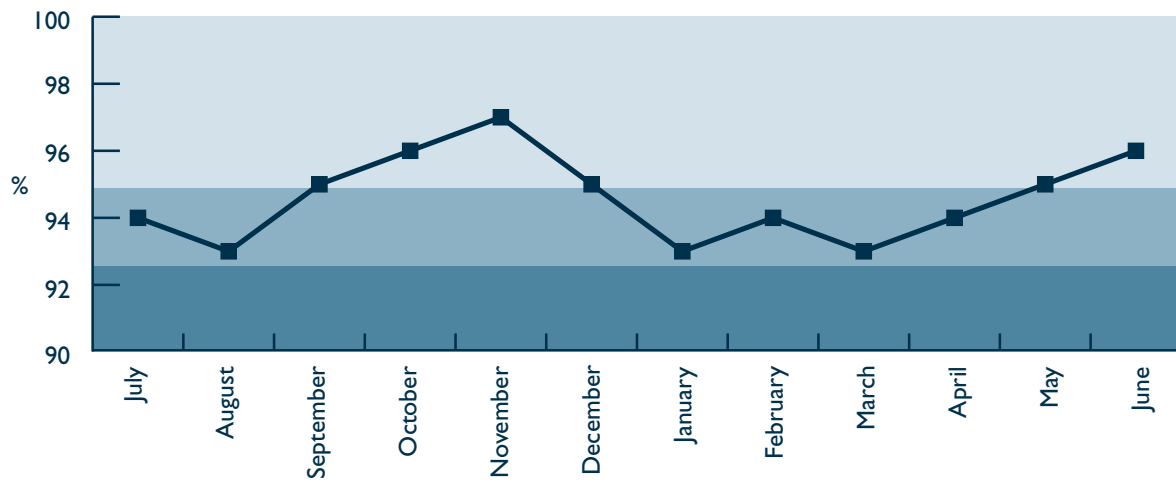
Objective: Help people to stay healthy
Chronic disease risk index



Objective: Help people to stay healthy
Indicator: Antenatal visits before 20 weeks

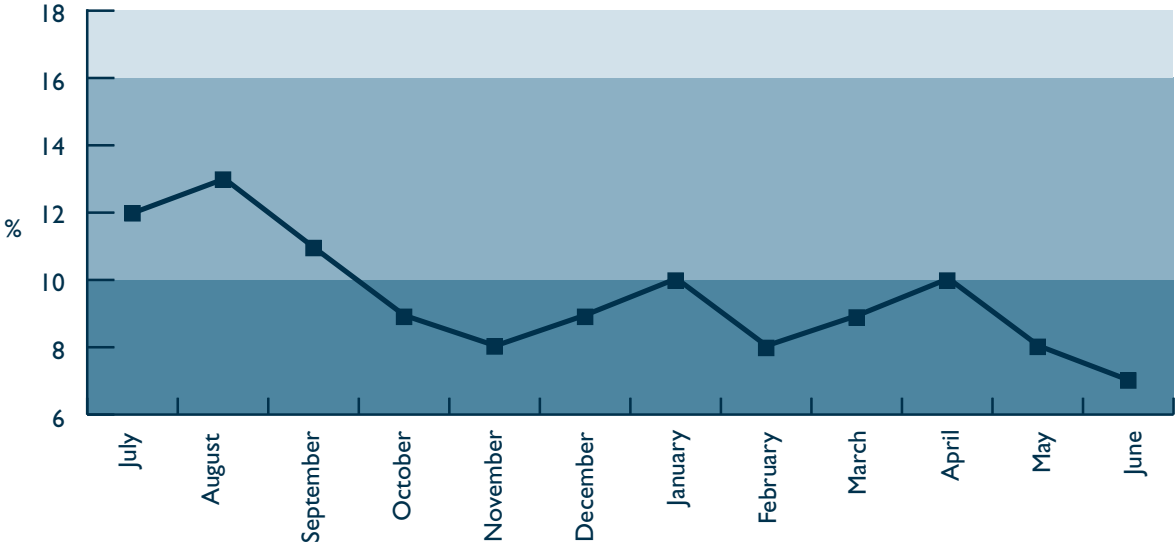


Objective: Improve population health
Child immunisation rates

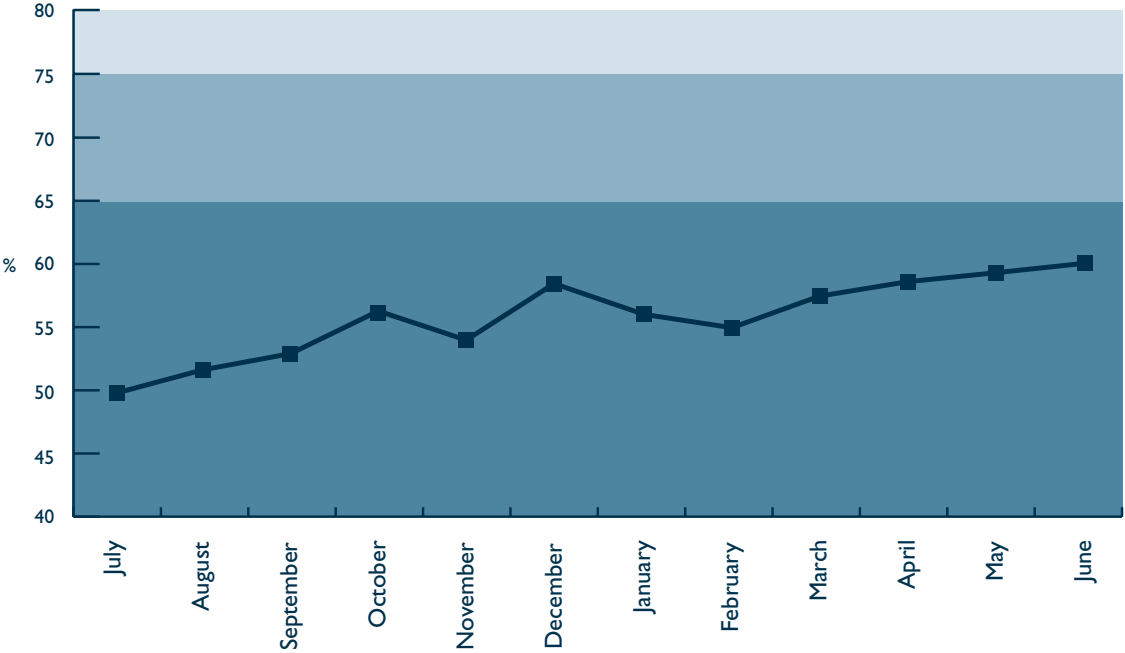


Attachment 9 Suggested presentation of KPIs

Objective: Improve population health
Falls prevention in older people



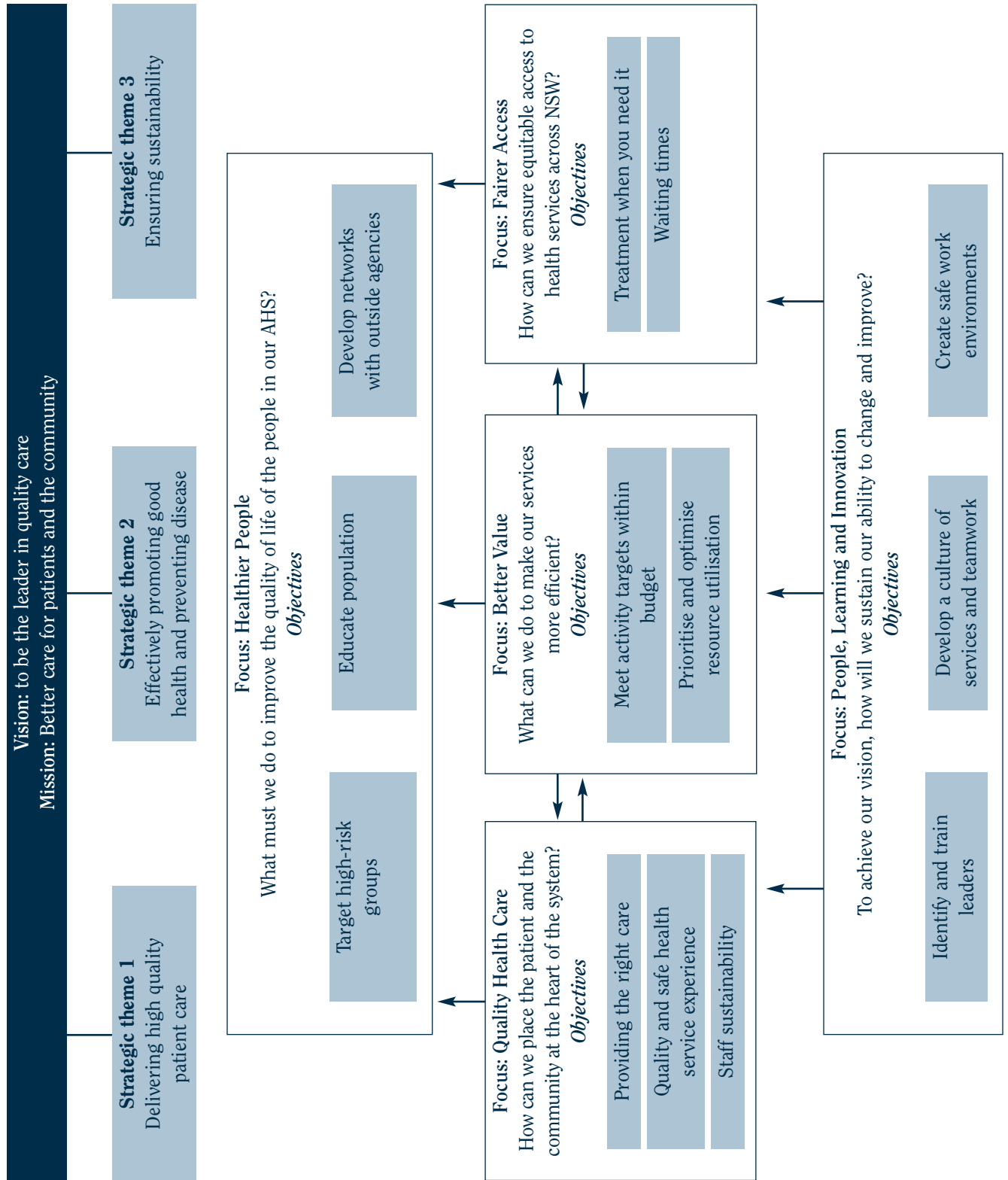
Objective: Help people to stay healthy
Self-reported mental health



5 Level 3—Dashboard indicators at departmental level

Focus	Objective	Dashboard	Measure	Frequency	Actual	Target	Trend	Responsible	
Healthier People	Improve population health	Potentially avoidable deaths	Age-adjusted rates of primary, secondary and tertiary avoidable mortality	x	97%	95%	↗	to be defined	
	Help people to stay healthy	Chronic disease risk index	% of the population with three or more chronic disease risk factors in NSW	x	20%	20%	→	to be defined	
	Help people to stay healthy	Antenatal visits before 20 weeks	% of confinements where first antenatal visit was before 20 weeks gestation	x	89%	95%	↗	to be defined	
	Improve population health	Child and adult immunisation rate	Proportion of infants fully immunised at 12 to 15 months	x	96%	95%	↗	to be defined	
	Improve population health	Falls in older people	Age-standardised hospitalisation rates for fall injuries in people aged 65+	x	7%	10%	↗	to be defined	
	Help people to stay healthy	Self-reported mental health	K 10 scores for adults	x	60%	75%	↗	to be defined	
	Fairer Access	Treatment when you need it	Access to emergency services	% of patients treated within benchmark times	x	95%	95%	→	to be defined
Treatment when you need it		Access to targeted treatments	Treatment rates for coronary revascularisation, hip replacement and radiotherapy waiting times	x	86%	90%	↗	to be defined	
Treatment when you need it		Access to hospital treatment	% of ready-for-care patients waiting for booked treatment	x	91%	90%	↗	to be defined	
Levels of health are equal		Fairer distribution of funding	Average distance from RDF target for AHSs	x	3%	3%	→	to be defined	
Quality Health Care		Safety	Safety	Incidence rates for acute separations	x	11%	5%	↗	to be defined
		Coordinated care	Potentially avoidable hospitalisations	Rates and associated bed days of potentially avoidable admissions	x	80%	95%	↗	to be defined
		Providing the right care	Priority care process—stroke	Snapshot analysis of stroke patients analysed across each aspect of the dashboard	x	90%	90%	→	to be defined
	Providing the right care	Priority care process—cancer	Snapshot analysis of cancer patients analysed across each aspect of the dashboard	x	90%	90%	→	to be defined	
Better Value	Providing the right care	Patient and consumer experience	Patient satisfaction survey	x	76%	72%	↗	to be defined	
	Using money wisely	Staying on budget	Net cost of services variance from budget	x	6%	3%	↗	to be defined	
	Better use of resources	Maximising service output	Health service output measure	x	95%	95%	→	to be defined	
	Better use of resources	Effective resource use	Effective resource use index—comparison against benchmark	x	97%	95%	↗	to be defined	
People, Learning and Innovation	Better use of resources	Asset utilisation	Asset depreciated value/weighted output measure of service	x	45%	40%	↗	to be defined	
	Develop a culture of service and teamwork	Skilled and valued workforce	Staff motivation score (job satisfaction)	x	80%	90%	↗	to be defined	

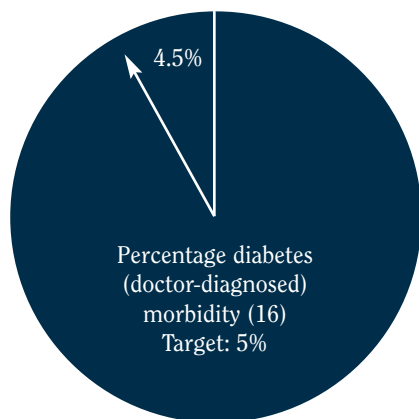
6 Example of a strategic map at AHS level



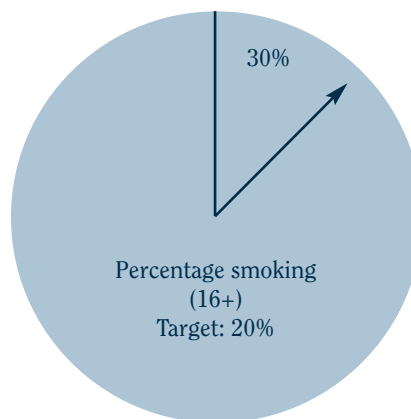
7 KPIs—IPART dashboard indicators—to be used at AHS level (developed at an AHS level)

Healthier People

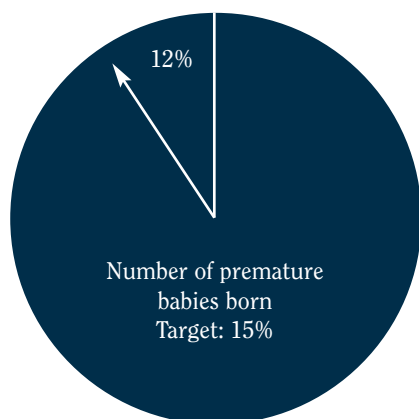
Objective: Target high-risk groups



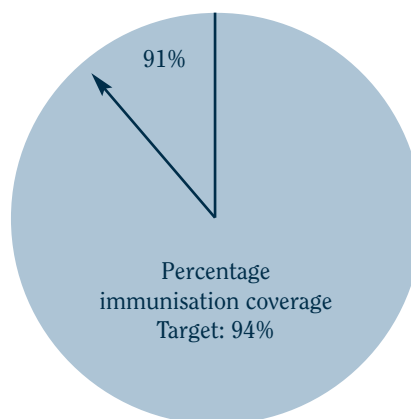
Objective: Educate population



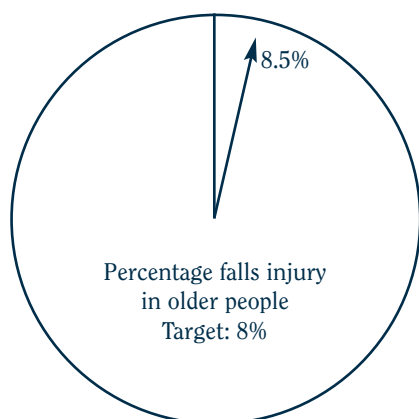
Objective: Educate population



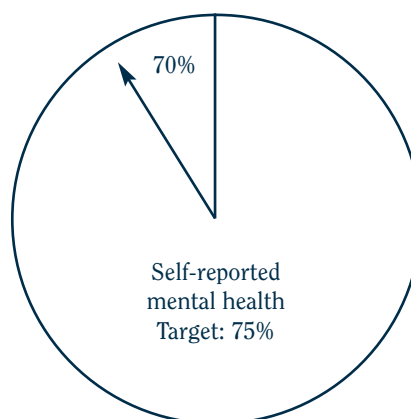
Objective: Educate population



Objective: Target high risk groups

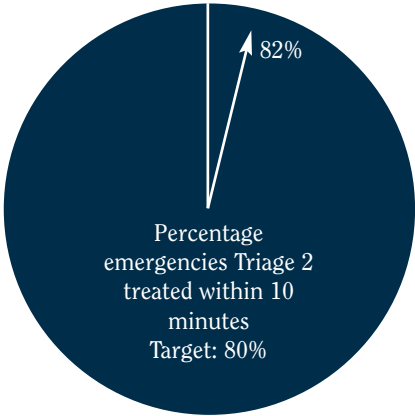


Objective: Develop networks with outside agencies

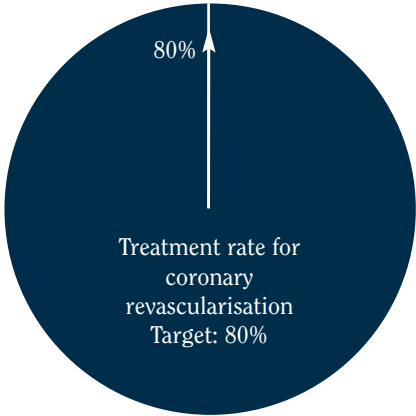


Fairer Access

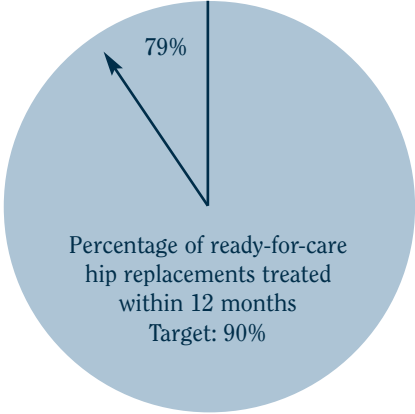
Objective: Waiting times



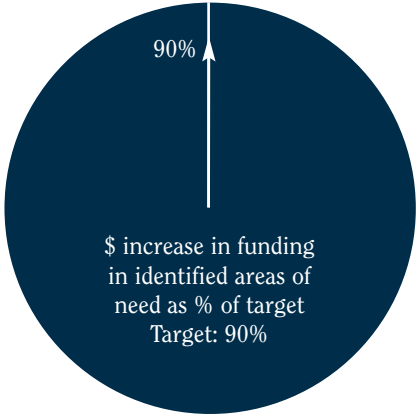
Objective: Treatment when you need it



Objective: Waiting times

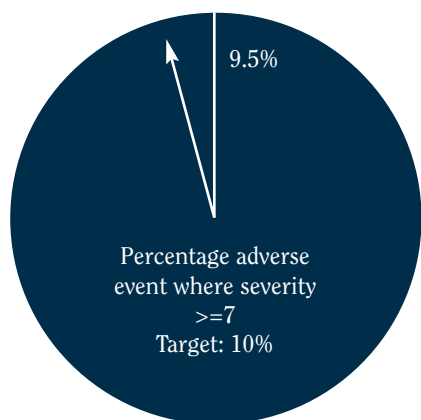


Objective: Treatment when you need it

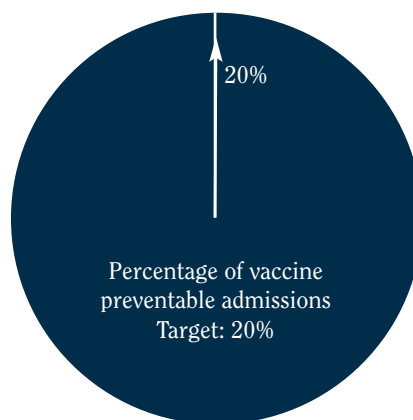


Quality Health Care

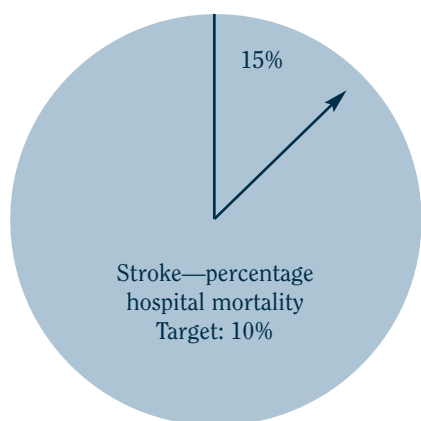
Objective: Quality and safe health care experience



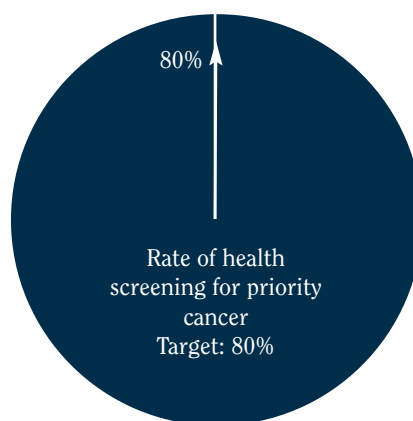
Objective: Providing the right care



Objective: Providing the right care



Objective: Providing the right care



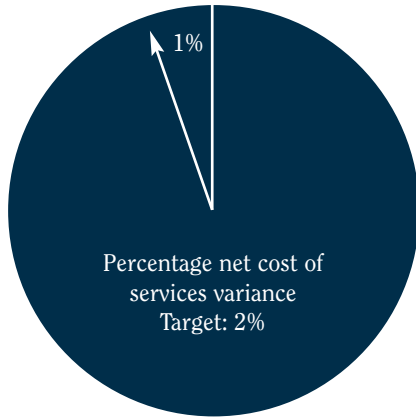
Objective: Quality and safe health care experience



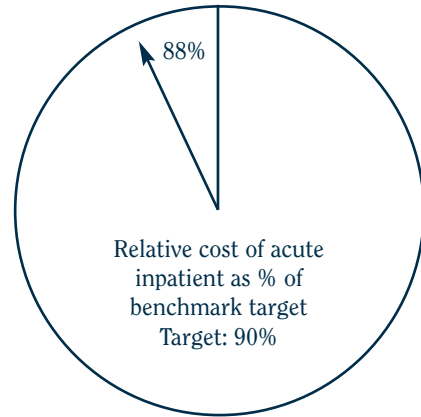
Attachment 9 Suggested presentation of KPIs

Better Value

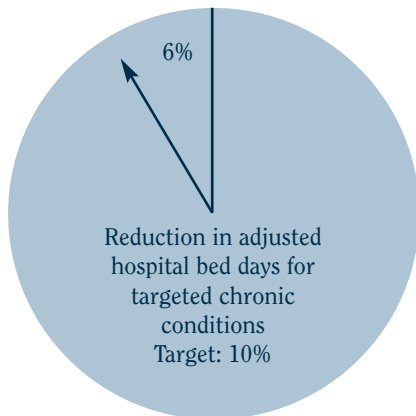
Objective: Meet activity targets within budget



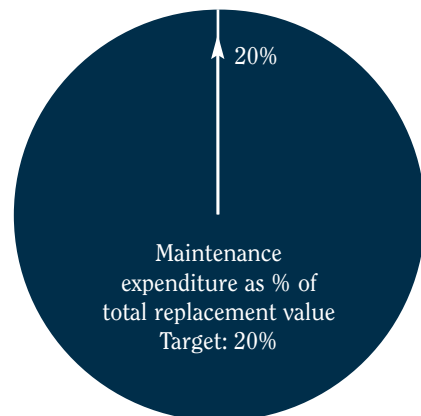
Objective: Prioritise and optimise resource utilisation



Objective: Prioritise and optimise resource utilisation



Objective: Prioritise and optimise resource utilisation



People, Learning and Innovation

Objective: Develop a culture of service and teamwork

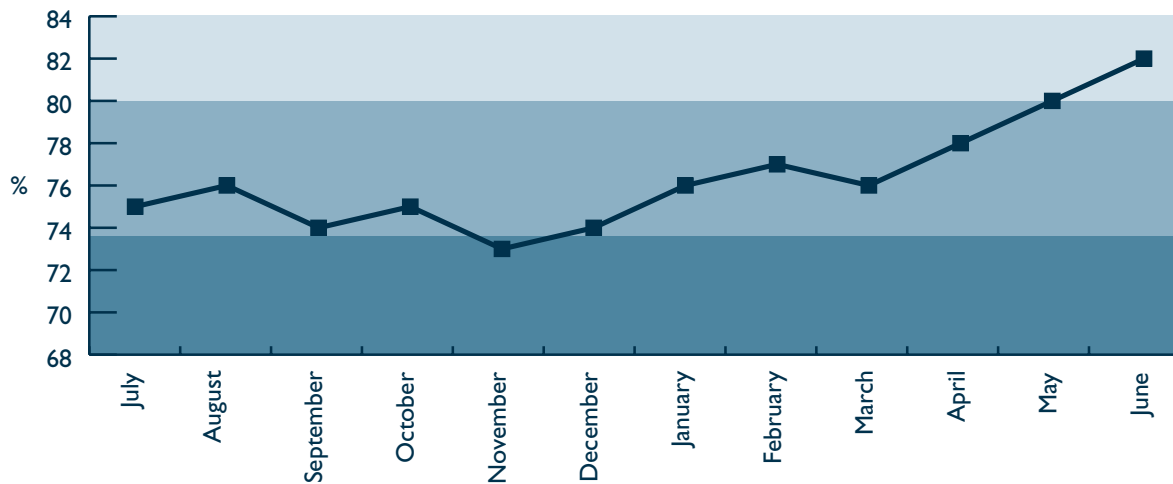


8 KPIs—second level presentation of IPART KPIs—to be used at AHS level

Fairer Access

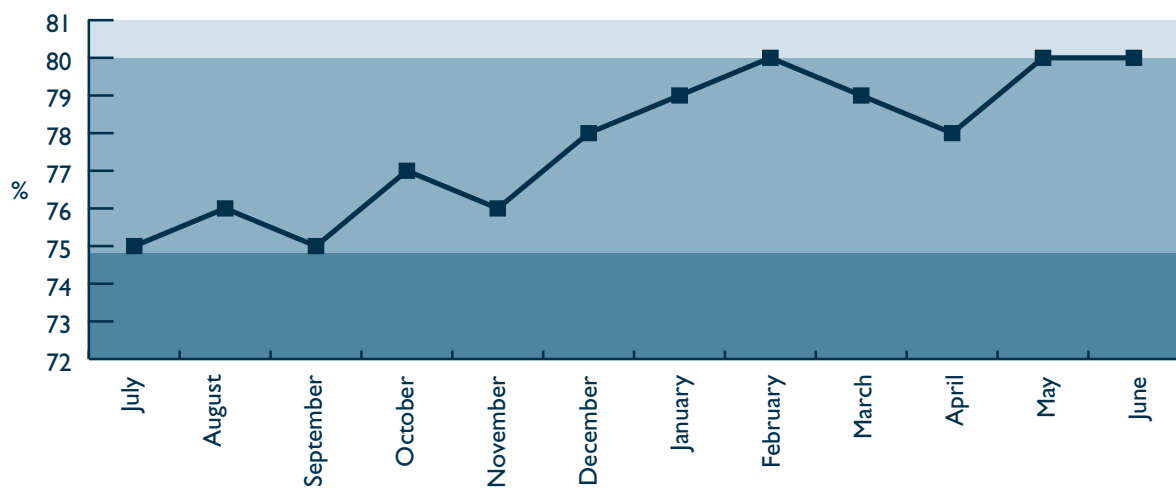
Objective: Waiting times

Percentage emergencies Triage 2 treated within 10 minutes



Objective: Treatment when you need it

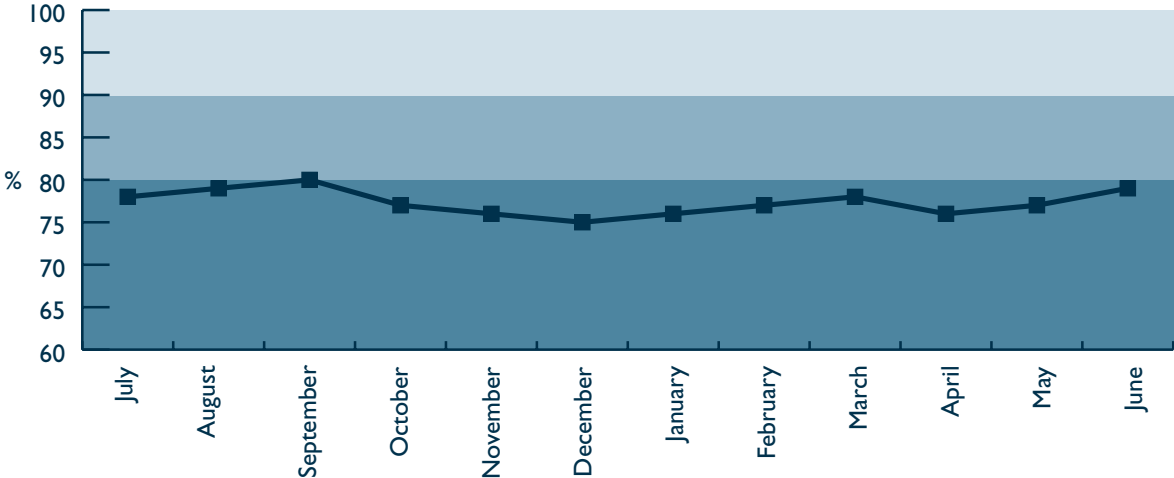
Treatment for coronary revascularisation



Attachment 9 Suggested presentation of KPIs

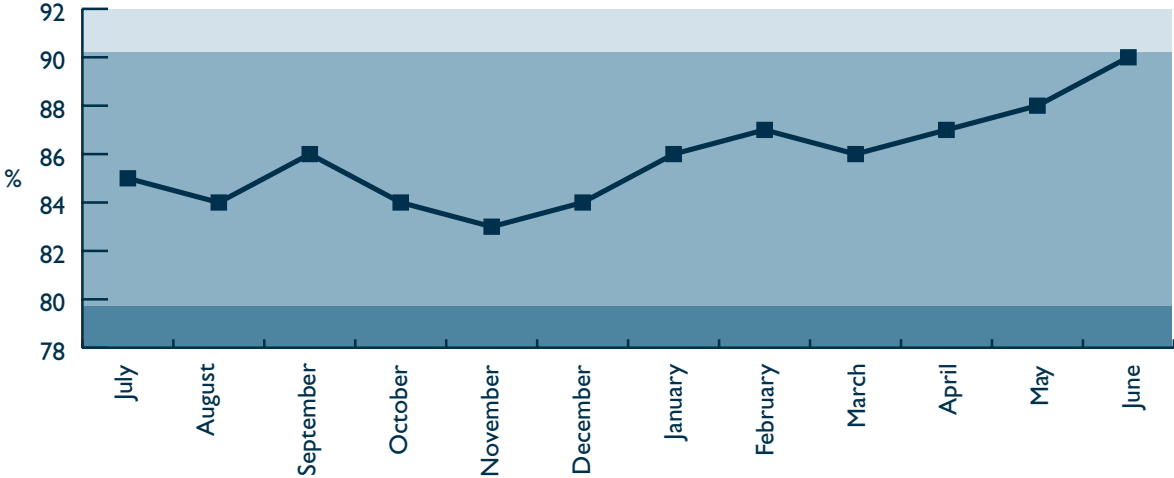
Objective: Waiting times

Percentage of ready-for-care hip replacements treated within 12 months



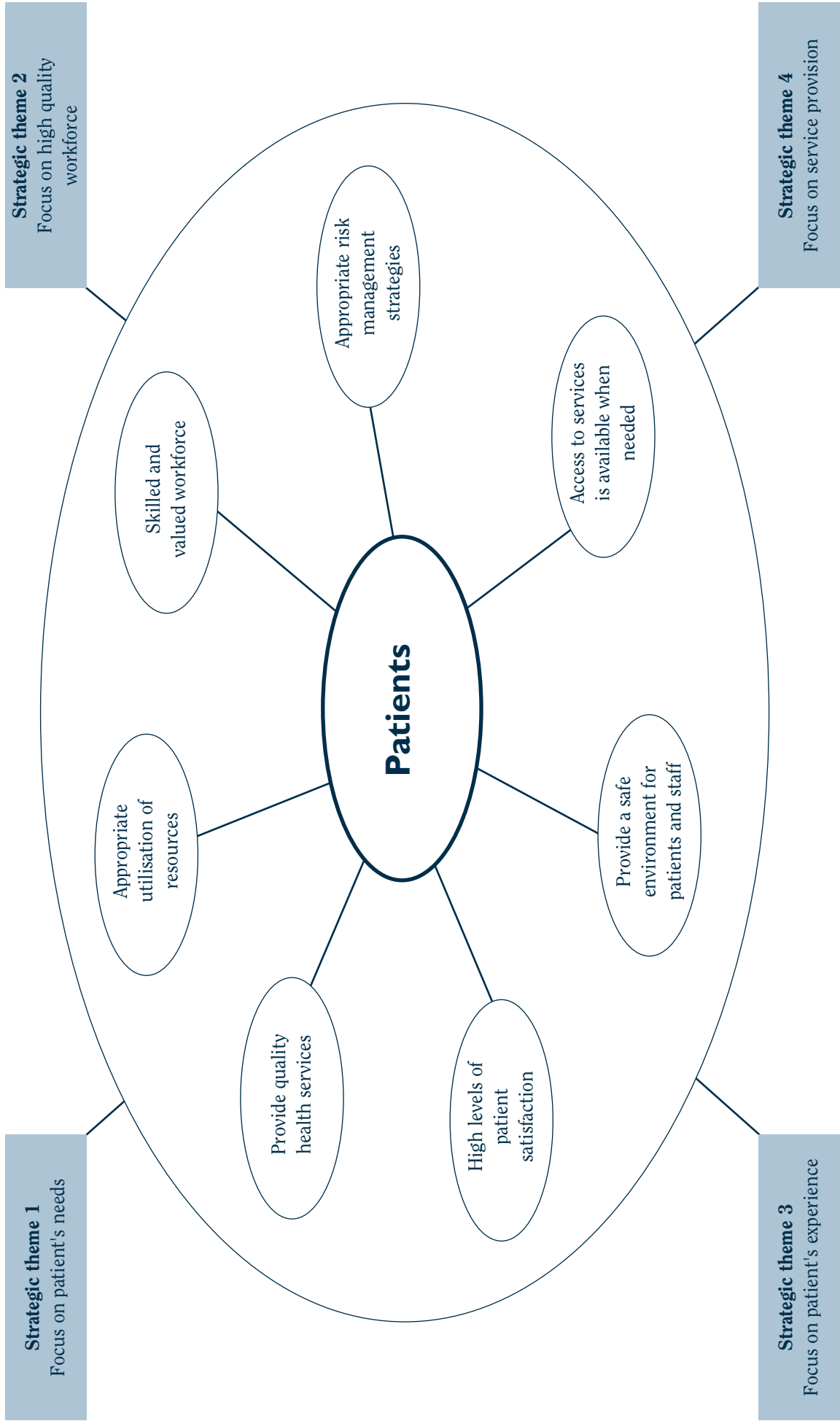
Objective: Treatment when you need it

\$ increase in funding in identified areas of need as % of target



9 Example of a strategic plan at the hospital level

Vision: Creating a culture of best quality care
Mission: To ensure best possible health outcomes in a safe environment

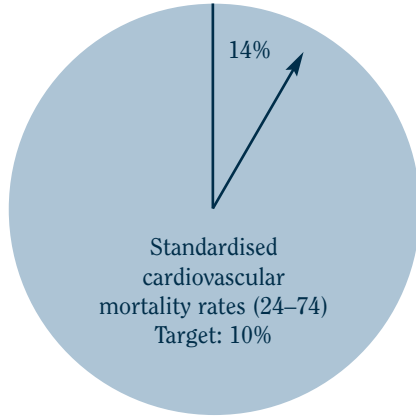


Attachment 9 Suggested presentation of KPIs

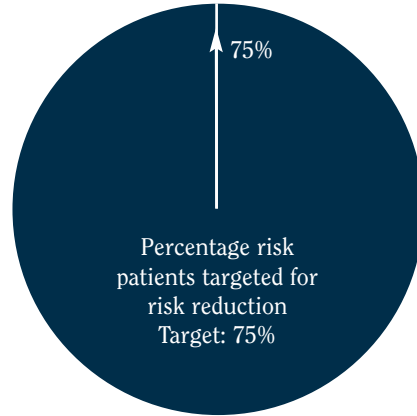
10 KPIs—IPART dashboard indicators—to be used at hospital level (developed at a hospital level)

Focus on Patient's Needs

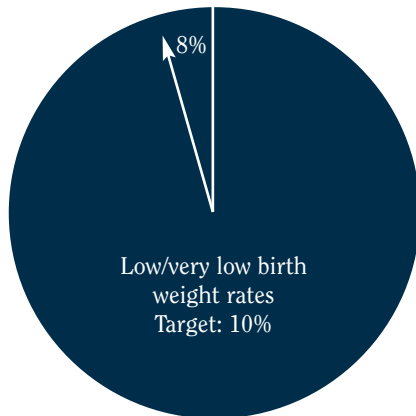
Objective: Provide quality health services



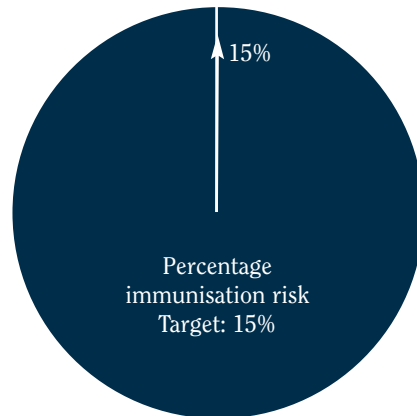
Objective: Provide quality health services



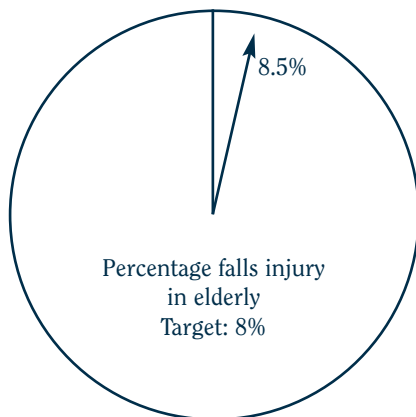
Objective: Provide quality health services



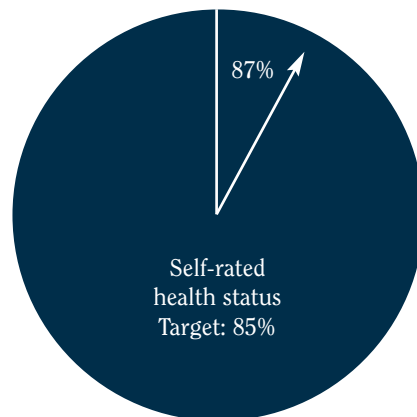
Objective: Provide quality health services



Objective: Provide quality health services

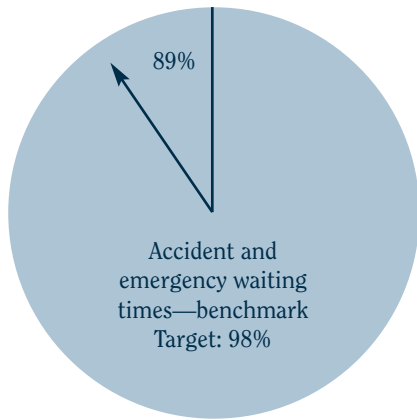


Objective: Provide quality health services

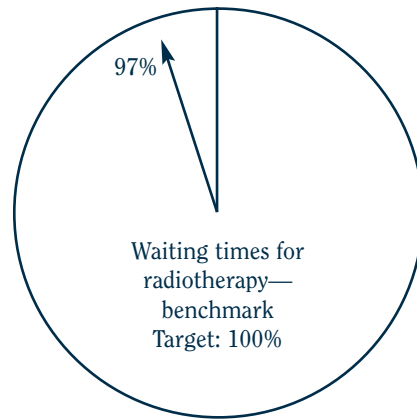


Focus on Patient Experience

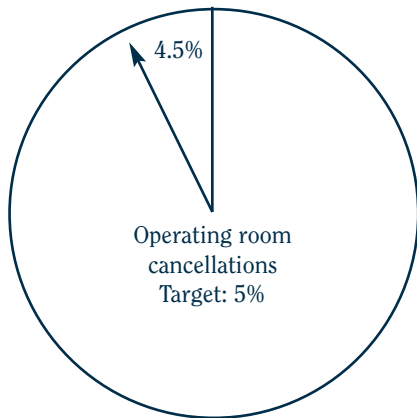
Objective: Access to services is available when needed



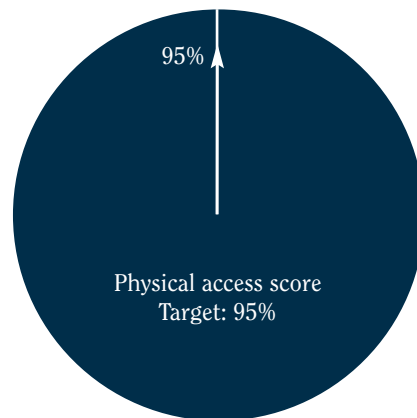
Objective: Access to services is available when needed



Objective: Access to services is available when needed



Objective: Access to services is available when needed



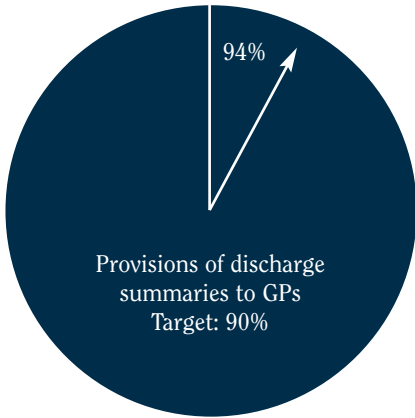
Attachment 9 Suggested presentation of KPIs

Focus on Quality

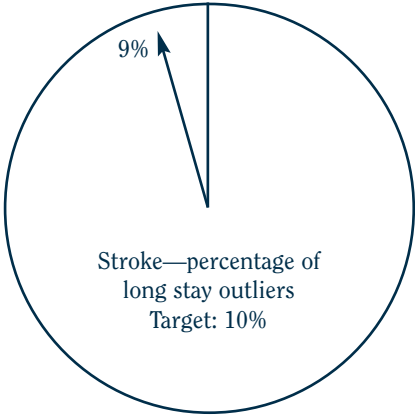
Objective: Provide a safe environment for patients and staff



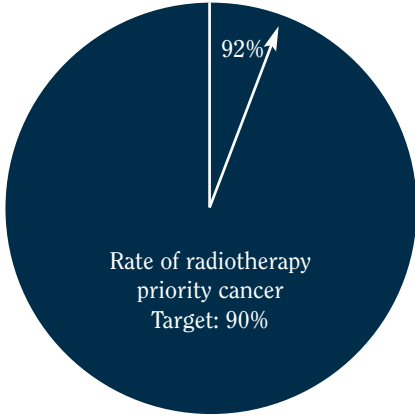
Objective: Provide quality health services



Objective: Provide quality health services



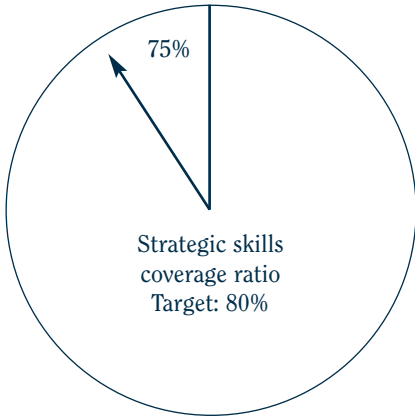
Objective: Provide quality health services



Objective: High levels of patient satisfaction

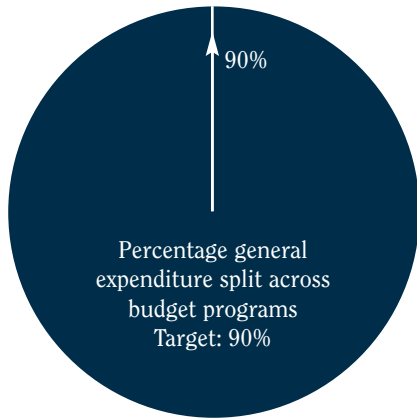


Objective: Provide quality patient services

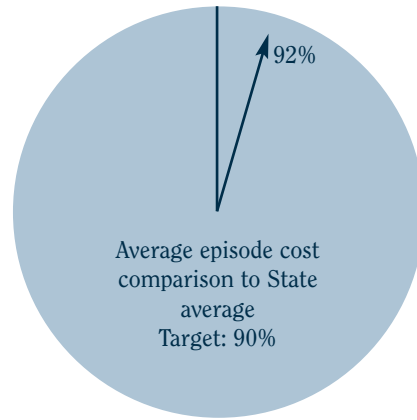


Focus on Service Provision

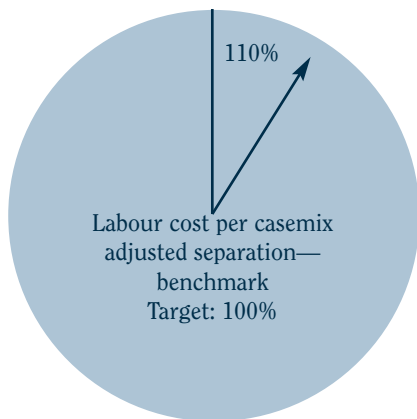
Objective: Provide quality patient services



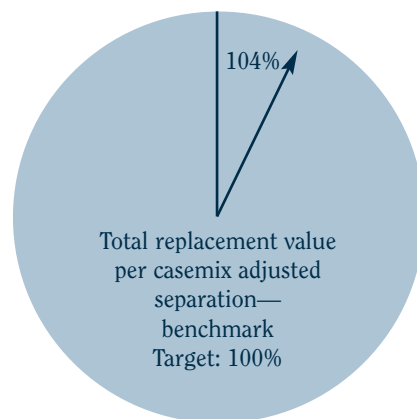
Objective: Appropriate utilisation of resources



Objective: Appropriate utilisation of resources



Objective: Appropriate utilisation of resources



II Example of a cascading indicator

