Summary

Communities want healthcare systems that provide high-quality and safe care in a sustainable way

Around the world, communities want healthcare systems that provide high-quality care in a sustainable way.

Determining whether high-quality care is being provided to the people of NSW requires attention to multiple aspects of healthcare, how it is delivered and the outcomes achieved.

The *Healthcare in Focus* series places NSW healthcare performance in an international context. Previous editions found that NSW gets good value for its healthcare dollar. No comparator country included in the 2010 and 2011 reports spent less per person and had lower rates of premature mortality.

This 2012 edition provides updated information on the performance of the NSW healthcare system. It includes some 100 indicators that measure performance in terms of:

- long-term outcomes (such as mortality and potential years of life lost)
- short-term outcomes (such as patient satisfaction and readmissions)
- process measures (such as compliance with evidence-based guidelines)
- structural measures (such as availability of required infrastructure and resources).

Overall, NSW performance in areas such as mortality, cancer survival and life expectancy is good in international terms. International and national surveys show that patients in NSW consistently report receiving excellent or very good healthcare. Yet when asked their views about the country's healthcare system, a quarter of NSW adults (25%) indicated that the healthcare system requires a complete rebuild. A similar proportion (24%) said the system works pretty well; and just over half (51%) said there are some good things about the system but it needs fundamental changes to work better.

This raises questions around whether the system is delivering consistently good performance or if there is significant variation. This is an area of work that, together with partner organisations, the Bureau will be focusing on in the future. *Healthcare in Focus 2012* makes a start in this area, reporting performance variation within the state for 28 measures.

This select set of indicators has been used as an initial exploration of variation. We present clinical variation information not as a definite indicator of hospital quality but to describe the scale of differences across NSW hospitals. Providing this information should encourage further investigation locally and where appropriate, prompt efforts to improve.

So what did we find?

Effectiveness & appropriateness

Premature mortality from cancer and circulatory disease (also called cardiovascular disease) in NSW is lower than ever before. Fewer years of life are lost in NSW than in almost any other country.

In terms of acute outcomes, 10% of people hospitalised in NSW for a heart attack died (from any cause) within 30 days of admission. This rate was lower than in other countries with comparable data, except New Zealand (9%). Within NSW, there is variation across hospitals in 30-day mortality rates (age, sex and comorbidity standardised) following hospitalisation for a heart attack, ranging from five to 26 deaths per 100 patients.

For acute outcomes in stroke, 15.5% of people hospitalised in NSW for an ischaemic (clot-based) stroke died within 30 days of admission. This is lower than in the United Kingdom (16.3%) but higher than the Netherlands (11.5%), Sweden (12.7%) and New Zealand (13.1%). Across NSW hospitals, 30-day mortality rates (age, sex and comorbidity standardised) following hospitalisation for ischaemic stroke ranged from eight to 31 deaths per 100 patients.

Haemorrhagic stroke (one caused by a bleed on the brain) is a more life threatening condition than ischaemic stroke. Among people hospitalised in NSW for a haemorrhagic stroke, 29.8% died within 30 days of admission. This was lower than in any country with comparable information, except Sweden (26.0%). Across NSW hospitals, 30-day mortality rates (age, sex and comorbidity standardised) following hospitalisation for haemorrhagic stroke ranged from 20 to 43 deaths per 100 patients.

There is a vast number of processes that shape outcomes such as mortality. Providing appropriate care means that services and treatments that are of proven value are given to those patients who will benefit from them. This year, *Healthcare in Focus* includes for the first time, data on whether recommended stroke care processes are provided to patients in NSW.

NSW is outperformed on most stroke process of care measures by the United Kingdom (the only comparator country that conducts a similar audit). More importantly, there is wide variation within NSW in terms of the care provided to stroke patients.

For diabetes, appropriate care processes and careful control of blood sugar levels, cholesterol, blood pressure and weight help prevent complications, disability and premature death. In 2009 (the latest year for which international comparisons are available) there were 23.1 hospitalisations for acute diabetic complications (such as ketoacidosis and diabetic coma) per 100,000 population - higher than in Germany (13.9 per 100,000 population), Sweden (14.9), Canada (19.1) and Norway (19.8).

Musculoskeletal disease places a relatively low burden on the people of NSW in terms of mortality - with 373 deaths attributed to it in 2010 (compared to 15,587 attributed to circulatory disease). However they still cause a significant health burden - one of disability, pain and loss of quality of life. Internationally, NSW has relatively low rates of hip replacement procedures and relatively high rates of knee replacements. The proportion of procedures that were revisions (or repeat procedures) for hip and knee replacements (10.5% and 6.3% respectively) were lower than in the rest of Australia.

For mental health, there are international data available to compare the rates of unplanned readmission to hospital within 30 days of discharge for schizophrenia and for bipolar disorder. NSW performs mid-range internationally. Supplementary data from the *NSW Mental Health Outpatient Survey* show that, in all facilities, a minority of mental health patients said they fully understood the danger signs associated with their condition to monitor after discharge.

Access

Three-quarters of emergency department (ED) patients in NSW (76%) are seen within recommended times and six in 10 (60%) have a length of stay in the ED of four hours or less. Within NSW however, there is considerable variation across hospitals in the percentage of ED patients with a stay of four hours or less (sometimes referred to as performance against the National Emergency Access Target, or NEAT).

Median waits for elective surgery in NSW public hospitals vary across different procedures. For example the median wait for a hysterectomy is 55 days while the wait for a total knee replacement is 295 days.

In 2011, *Healthcare in Focus* highlighted the important role that cost plays in preventing people in NSW from accessing health services. This year, results from the Australian Bureau of Statistics show that one-quarter of people (26%) delayed or did not access dental care because of cost, one in 10 (14%) did not see a medical specialist, and a similar proportion (9%) did not fill a prescription for cost reasons.

Safety

Safety data are not straightforward to interpret. Data are impacted by variation in willingness to report safety incidents and in attribution, coding and recording of safety related events.

Information from administrative databases show that in 2010–11, the NSW rate of hospitalisations for complications of medical and surgical care was 306 per 100,000 population. This was a relatively high rate in comparison to other countries. The most commonly recorded complication in NSW hospitals (public and private) was wound infections (4,564 hospitalisations).

International comparisons for records of particular serious events (such as failure to remove instruments or swabs after a procedure) and adverse events (such as pulmonary embolism and deep vein thrombosis) show NSW to be mid-range.

In 2010–11 there were 495 cases of post-operative sepsis recorded in NSW at a rate of 779 per 100,000 hospitalisations. While this was lower than the United States and New Zealand it was a higher rate than recorded in Canada and European comparator countries. Survey data show that in terms of patient-reported handwashing by NSW healthcare providers and staff, there was significant variation across hospitals.

Person centredness

In international surveys, NSW patients consistently rate the quality of healthcare they receive highly. Within the state in 2011, 34% of overnight patients, 38% of day-only patients and 27% of ED patients rated the care they received as ***excellent***. The proportion of patients that rated care as ***excellent*** varied considerably across the state's hospitals. For overnight patients excellent ratings ranged from 20% to 60%, for day-only patients they ranged from 20% to 65% and for ED patients they ranged from 14% to 45%.

The majority of NSW patients report ***always*** being treated with respect and dignity by different healthcare professionals. There was however variation across public hospitals. For patients who were admitted overnight, the percentage saying they were ***always*** treated with respect and dignity by hospital staff ranged from 68% to 98%, for day-only patients it ranged from 69% to 100%, and for ED patients it ranged from 64% to 91%.

Most patients want to be given information about treatment options and for clinicians to take account of their preferences. Some wish to be an active participant in decisions about their care and treatment. Patient survey data for NSW public hospitals show almost a two-fold variation in the percentage of patients indicating that they ***definitely*** had enough say about their treatment.

In terms of patient-professional communication, the majority of NSW patients say the healthcare professionals they saw ***always*** spent enough time with them, and listened carefully to them.

Equity

Although the overall health and wellbeing of NSW people is high compared with other countries, there are considerable differences across groups within the state.

Aboriginal people in NSW have lower life expectancy and higher rates of infant mortality than non-Aboriginal people. However, the ***'gap'*** in infant mortality between Aboriginal and non-Aboriginal babies is shrinking.

Health statistics published by the *NSW Ministry of Health* clearly demonstrate the role that socioeconomic circumstances, and rurality play in the health of the population. Generally speaking, there is a correlation between socio-economic disadvantage and poorer health and between increasing rurality and poorer health.

This year's *Healthcare in Focus* looked at equity issues in a new way. Taking the 30-day mortality data for heart attacks and strokes, we examined whether there was a relationship between socioeconomic status or rurality and the likelihood of dying from a heart attack or an ischaemic stroke within 30 days of hospitalisation. For heart attack, the data show that among those admitted to hospital for a heart attack, people from different socioeconomic groups or from different degrees of rurality, were equally likely to survive for 30 days.

For ischaemic stroke, there was a small increase in 30-day mortality with increasing deprivation and increasing rurality.

Resources & utilisation

In 2010–11, total health expenditure in NSW was almost $41 billion ($28 billion publicly funded and $13 billion privately funded).

This funds a huge amount of activity, including:

- In the public hospital and community care sector:
  - Almost 900,000 overnight hospital admissions
  - Over 700,000 day-only admissions
  - Around 2.5 million ED visits
  - Approximately 19 million outpatient and other non-admitted patient occasions of care.
- In the private hospitals sector:
  - Almost 300,000 overnight hospitalisations
  - Over 700,00 day-only hospitalisations.
- In primary care:
  - Approximately 43 million general practice (GP) visits.

Hospitals consumed $15.5 billion in 2010–11 ($12.6 billion public and $2.9 billion private) and are the most cost intensive encounters with the healthcare system.

In 2010–11, of the 1.2 million overnight stays in public and private hospitals, the most common reasons for hospitalisation were: injury and poisoning (122,948 hospitalisations, 10.6% of total), pregnancy and childbirth (114,152 hospitalisations, 9.9%) and circulatory disease (113,500, 9.8%).

People were in hospital for a total of 6.8 million bed days with more than eight in 10 of those bed days (82%) for acute care.

In 2010–11, 764,511 people (11% of the population) were admitted to hospital for an overnight stay. There were 84,966 people (1% of the population) who were hospitalised three or more times. They accounted for 2.9 million bed days (43% of total bed days for the year).

There were 699,179 surgical procedures performed in 2010–11. Less than half (42%) were performed in public hospitals.

In 2010–11, 1.3 million people (18% of the population) visited a public hospital ED (with electronic data collection). There were 163,784 people (2% of the population) who visited the ED three or more times. They accounted for 696,408 (33%) of all ED visits.

What's next?

Healthcare in Focus 2012 highlights how well NSW does on the international stage. The people of NSW are living longer. Premature mortality from cancer, from heart disease and from stroke continue to fall. The majority of people describe their overall health as excellent or very good and rate their experiences of the healthcare system positively.

Within the state, the report shows that performance varies ***between hospitals*** in terms of outcomes, processes and experiences of care. The Bureau plans in 2013 to undertake further in-depth analysis of hospital-level variation to explore the factors that contribute to excellence – allowing the system to learn from success and to consider whether there are areas of care that need improvement.