Setting the scene

Quality of healthcare in NSW, in an international context

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

Evaluating and reporting publicly on whether the NSW healthcare system delivers high-quality care is important for three main reasons. First, it provides accountability to the taxpayers who substantially fund the system. Second, it is an essential first step in identifying opportunities to improve. Third, it acts as a call to action and a catalyst for change.

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.

Building on previous reports

Previous editions of *Healthcare in Focus* 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.[1,2]

International and national surveys from 2010 and 2011 show that most people in NSW report receiving excellent or very good healthcare (see page 54).[1,2] Yet when asked their views about the healthcare system more generally, a quarter of NSW adults (25%) indicated that the 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.[1]

This raises the question: is the system delivering consistently good performance or is there significant variation? Clinical variation 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 reporting variation within the state for 28 indicators.

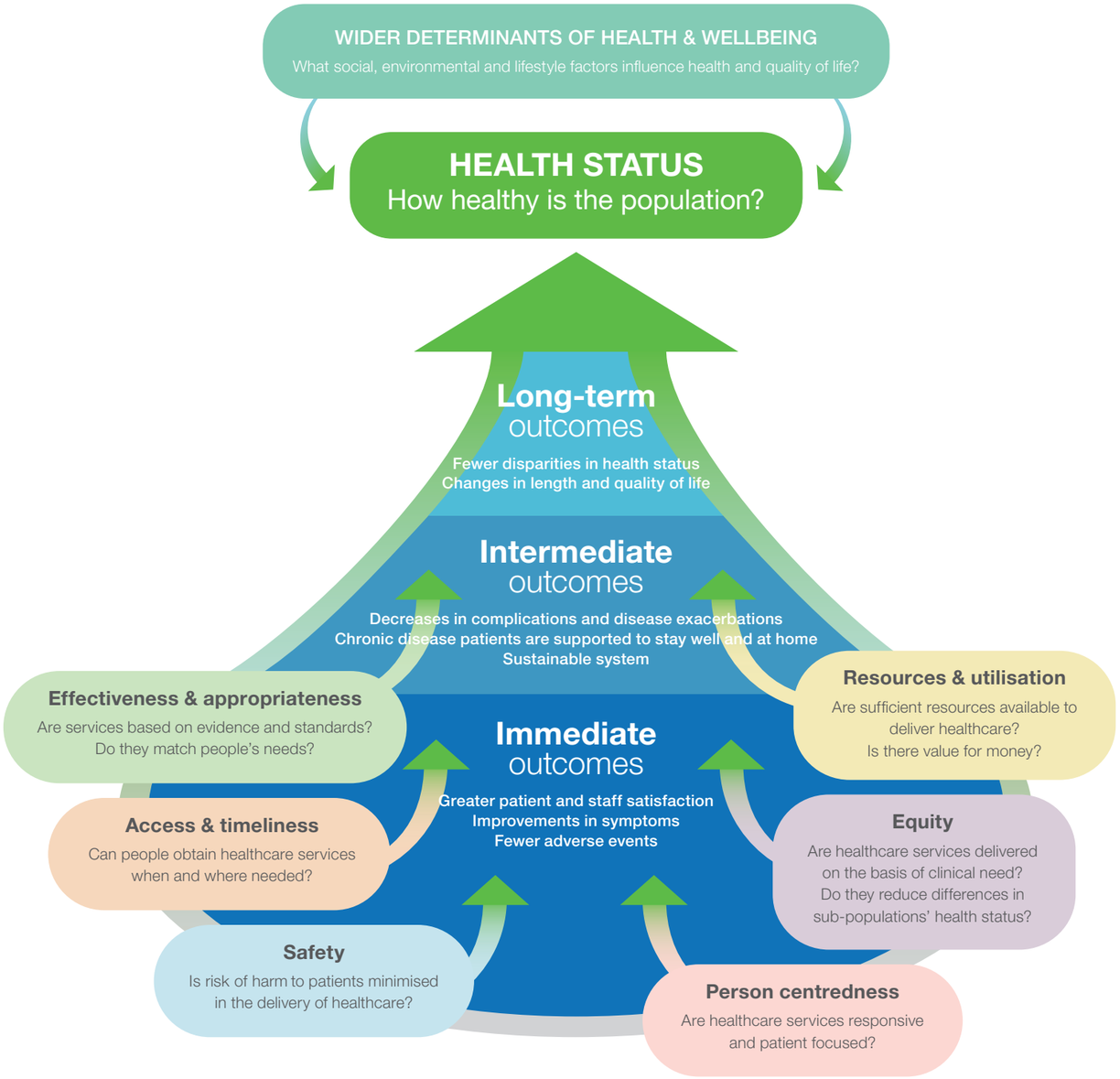
This 2012 edition of *Healthcare in Focus* provides new information on the performance of the NSW healthcare system. It includes some 100 indicators that measure performance in terms of:

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

NSW results are reported alongside data for Australia and for 10 other countries (where available).

Indicators were selected on the basis of validity, relevance, comparability and data availability.

Figure 1.1: **The Bureau of Health Information's performance framework:** a guide for understanding and evaluating the NSW healthcare system



The Bureau of Health Information's performance framework

The Bureau, drawing on international and national efforts to define and measure *'high performance'* in healthcare, developed a conceptual framework to guide its evaluation of the NSW healthcare system.

The framework (Figure 1.1) considers the performance of the healthcare system using six key dimensions – effectiveness and appropriateness; access and timeliness; safety; person centredness; equity; and resources and utilisation.

At its core, it shows population health status, indicating that the overall goal of a healthcare system is to protect and improve health and wellbeing in the community it serves. It also acknowledges that wider determinants of health and wellbeing such as age, sex, socioeconomic circumstance and lifestyle choices impact on health. While these determinants can be influenced by public health and other community interventions, they are largely outside the control of the healthcare system.

Data sources

Healthcare in Focus 2012 draws on seven principal sources of data:

Organisation for Economic Co-operation and Development (OECD)

- provided mortality, hospitalisation, procedure and expenditure data for 11 countries.

Australian Bureau of Statistics (ABS)

- provided mortality and potential years of life lost for various causes, NSW and Australia. Data for 2009 are classified as *'revised data'* and 2010 data are classified as *'preliminary'*.
- provided survey data from the *2010–11 Patient Experience Survey* for NSW and Australia.

Australian Institute for Health and Welfare (AIHW)

- provided data on healthcare expenditure in NSW and hospital waiting times.

The Stroke Foundation's National Stroke Audit

The *National Stroke Audit* is used to examine how often evidence-based recommendations are undertaken in clinical practice in Australia. Clinicians at hospitals admitting and treating patients with acute stroke completed the audit between 1 March and 30 June 2011.

NSW Admitted Patient Data Collection

- The *Admitted Patient Data Collection*, administered by the NSW Ministry of Health, is a census of all admitted patient services provided by public and private hospitals in the state.
- For a subset of indicators, the Bureau accessed linked patient data, provided by the *Centre for Health Record Linkage* (CHeReL).

NSW Health Patient Survey 2011

Data from the *NSW Health Patient Survey* were analysed by Bureau staff to explore state-level variation in patient experiences and views.

Commonwealth Fund International Health Policy Survey

In order to try to place the *NSW Health Patient Survey* data in an international context, data from the *Commonwealth Fund International Health Policy Survey* are included. The 2010 survey included all adults and the 2011 survey was focused on ***'sicker adults'*** - people who met at least one of the following criteria:

- Described their overall health as ***fair*** or ***poor***
- Received medical care in the previous year for a serious or chronic illness, injury or disability
- Had been hospitalised in the previous two years (for any reason other than childbirth)
- Had surgery in the previous two years.

International Classification of Disease (ICD)

Much of the information contained in *Healthcare in Focus* relies on an international system for describing and classifying the reasons for hospital care. This system – the *International Classification of Disease (ICD)* allows for fair comparisons to be made across jurisdictions statewide, nationally and internationally. The tenth version of ICD coding (ICD-10) is currently in use throughout the Australian healthcare system.

Fuller descriptions of data sources and statistical analyses undertaken by the Bureau are available in the *Technical Supplement: Healthcare in Focus 2012* (see www.bhi.nsw.gov.au).

Interpreting this report

Healthcare in Focus 2012 sets the performance of the NSW healthcare system alongside Australia and 10 other countries. While international benchmarks provide context to interpret NSW performance, there are a number of factors which must be considered in making international comparisons.[3] Figure 1.1 outlines those factors and approaches used in this report to minimise their effect.

The report illustrates the extent of variation across the state's hospitals. Data are standardised (on the basis of age, sex and in some cases, comorbidity) in order to make fair comparisons.

Taken together, the indicators in this report provide a multifaceted view of performance in the NSW healthcare system. Individually however, indicators are not diagnostic of quality. Where there are apparent differences in performance, either at state-or hospital-level, these should act as a signal that a problem may exist and further investigation is required.

Figure 1.1: Limitations of international health data comparisons and the approach taken in *Healthcare in Focus 2012*

Factors affecting international comparisons	*Healthcare in Focus 2012* approach to international comparisons
Inconsistent data definitions across countries may lead to misleading conclusions	Indicators were drawn from the OECD database and BHI analysis used data definitions published by the OECD.
Differences in data collection	Comparator countries, in general, use consistent data collection methods (e.g. mandatory death registration; administrative hospital databases).
Variation in data coverage	For measures based on hospitalisations, mortality, total expenditure and international surveys, data from the public and private sectors are included to ensure consistency with comparator countries. (Where possible, data are disaggregated into public and private sector within NSW).
Inconsistencies in time periods used for data collection / reporting	Small variations, such as variability in the definition of a financial year occur in the international data. There is often a 2–3 year difference across countries in the most recent available data. Such inconsistencies are clearly labelled.
Choice of comparator countries	Consistent with previous years, this report uses as comparators, the 11 countries participating in the *Commonwealth Fund's International Health Policy Survey*. All are ***'high income'*** countries with well developed healthcare systems.
Differences in age distribution	Where appropriate, NSW data were standardised to the reference OECD population, in the same way as all other comparator countries.

Health status

Circulatory disease accounts for most deaths overall and cancer for most years of life lost prematurely

Health status measures often reflect actions, behaviours and treatments that take years, or even decades, to have a discernible impact. Health status indicators include:

- *deaths*, life expectancy and mortality rates
- *health conditions*, such as prevalence of diseases, injuries or disorders
- *function*, such as activity limitations and restrictions
- *wellbeing* including physical, mental and social wellbeing.[4]

Health status is affected by the healthcare system but also by wider determinants of health and wellbeing. Health behaviours play a particularly important role in influencing the risk of developing a serious illness and preserving health and wellbeing. In NSW, patterns over time show an increase in rates of obesity and overweight. More positively, there has been an increase in self-reported levels of physical activity and a decrease in smoking rates.[5]

In 2010–11, according to the Australian Bureau of Statistics (ABS), six in 10 people aged 15 years or over (60%) described their health as excellent or very good, and fewer than two in 10 (14%) described their overall health as fair or poor (Figure 1.2).

People are living longer and mortality rates from the most common cancers and circulatory diseases (heart and blood vessel) continue to fall.[5] In 2010, circulatory diseases were the most commonly recorded cause of death, followed by cancer (Figure 1.3). In terms of premature mortality however, cancer caused the most potential years of life lost before the age of 70 years (Figure 1.4).

For comprehensive information about the health of the people of NSW, visit the *Health Statistics* page on the *NSW Ministry of Health* website (www.health.nsw.gov.au).

Figure 1.2: Self reported health status (people aged 15+ years), NSW, 2010–11 (ß)

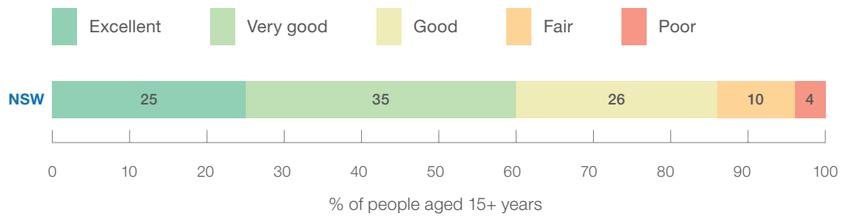


Figure 1.3: Most frequent causes of death (standardised mortality rates), NSW, 2010 (ΠΤ)

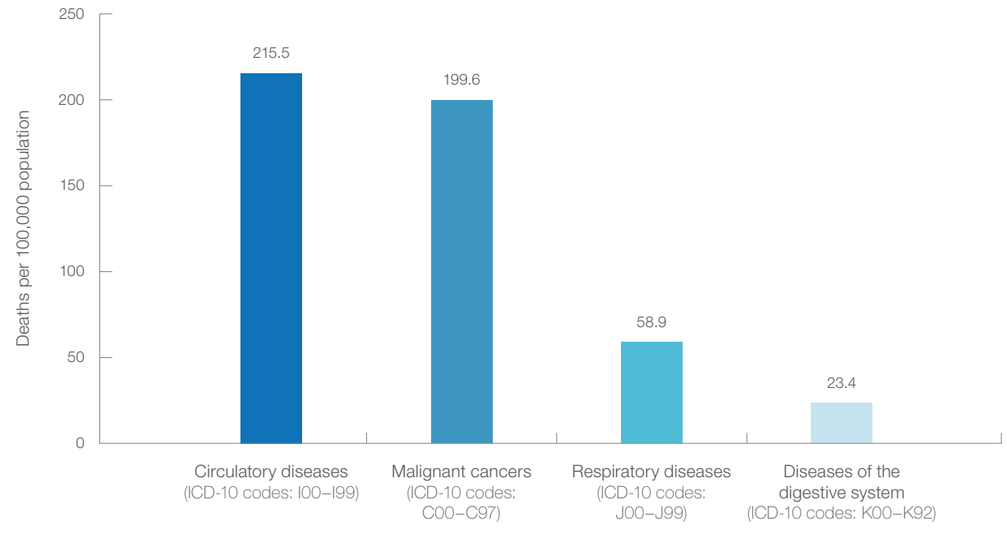
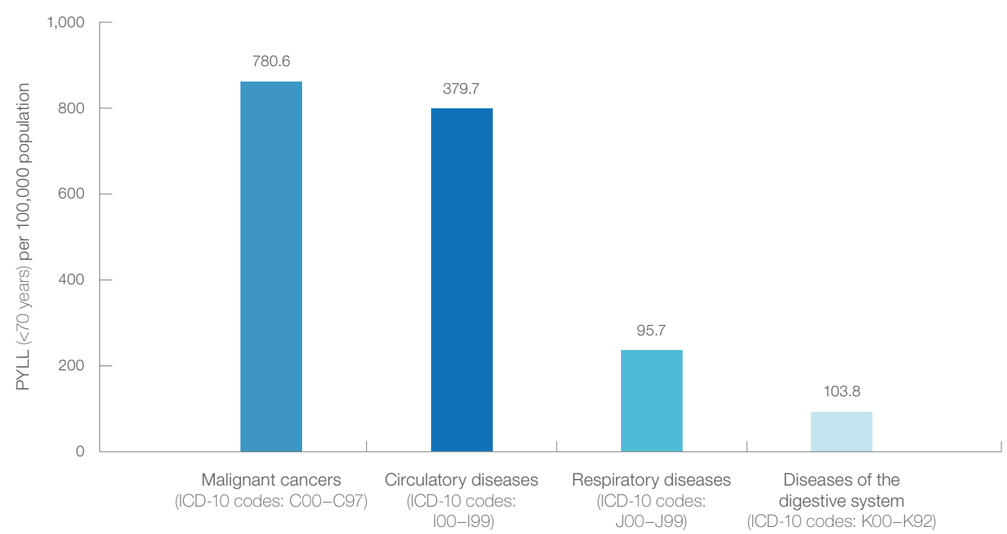


Figure 1.4: Most frequent causes of premature mortality, measured as potential years of life lost, NSW, 2010 (ΠΤ)



(ß) Australian Bureau of Statistics, *Patient Experience Survey, 2010–11*.

(ΠΤ) Australian Bureau of Statistics 2010 figures are subject to further revision. Data are age and sex standardised to the 2010 OECD population. Potential years of life lost is a summary measure of premature mortality, calculated by totalling differences between the age at death and any remaining years of life up to a selected age limit, which for OECD analyses is 70 years.