

6 International developments in health sector performance analysis

Interest in the use of performance indicators appears almost universal across health systems internationally and nationally. This interest derives from a wide range of motivations including:

- promoting stronger governance;
- better accountability;
- improved community understanding of health systems;
- enhanced consumer influence within health systems;
- promotion of competition between providers and services; and
- service quality improvement.

International and national work on development of performance indicators has led to many performance indicator frameworks and an enormous proliferation of indicators. This chapter provides a brief overview of some key international developments.

World Health Organization

In the *World Health Report 2000 Health Systems: Improving Performance* (WHO 2000) the WHO attempted to make a major step forward in methods for assessing and comparing national health system performance. The report offered a performance framework (Figure 6.1) that articulated three core goals for health systems: improving health, responsiveness to the expectations of the population, and fairness in financial contributions. The report also identified four core functions of health systems: stewardship, financing, creating resources and delivering services.

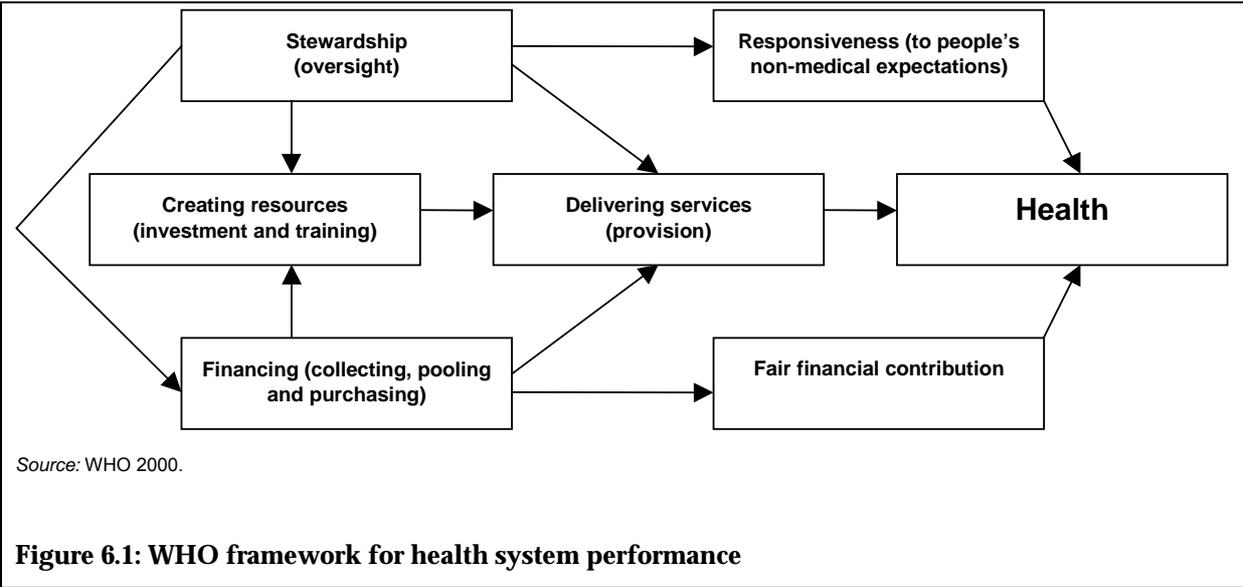


Figure 6.1: WHO framework for health system performance

The report developed a range of methods for assessing and ranking national health system performance. Although criticised, this report has been a catalyst for a close examination of the core elements of health system performance, and how these might be measured.

Through the international burden of disease project, the WHO has promoted the development of a range of summary measures of population health. Table 6.1 presents data on two summary indicators of population health from the 2002 *World Health Report* (WHO 2002b) life expectancy at birth and healthy life expectancy (HALE) at birth. HALE is the number of healthy years of life a person born in a particular year is expected to enjoy. On these measures, Australia ranks third or fourth among OECD countries.

Although the WHO measure of HALE is enjoying wider currency, the NHPC has identified a number of important issues which are raised by the use of Burden of Disease measures such as HALE, Disability Adjusted Life Expectancy (DALE) and Disability Adjusted Life Years (DALYs), particularly when they are used as performance indicators in the Australian health service planning environment. These issues are discussed in Appendix 5 to this report. As stated in the Appendix, it is important that the values and assumptions underlying this methodology be understood and discussed by both the immediate organisational clients of the NHPC and by a wide spectrum of the general community. Comments on this Appendix would therefore be particularly welcome and should be addressed to the Executive Officer of the NHPC.

Table 6.1: Life expectancy and healthy life expectancy (HALE), total population, selected OECD countries, 2001

	Life expectancy at birth		HALE at birth	
	Years	Rank	Years	Rank
Japan	81.4	1	73.6	1
Switzerland	80.2	2	72.8	2
Sweden	80.0	3	71.8	3
Australia	80.0	3	71.6	4
France	79.3	6	71.3	5
Italy	79.3	6	71.0	7
Spain	78.9	10	70.9	9
New Zealand	78.5	12	70.3	13
Germany	78.2	15	70.2	14
Canada	79.3	6	69.9	18
United Kingdom	77.5	19	69.6	20
United States of America	77.0	21	67.6	22

Note: Rank is among OECD countries.

Source: WHO (2002b).

Organisation for Economic Co-operation and Development

International comparison of health system performance has been a focus over many years for the Organisation for Economic Co-operation and Development (OECD), originally through its role in compiling comparative health data, more recently in actively promoting the development of a framework and performance indicators. The OECD *Health Data Base* (OECD 2003b) is a rich source of international comparative data.

In 2001, the OECD embarked on a three-year health project focusing on measuring and analysing the performance of health care systems in member countries and factors affecting performance. The purpose of the analysis is to help decision-makers formulate evidence-based policies to improve their health systems' performance. One focus of the project is to develop indicators reflecting the technical quality of medical care. Six priority areas have been identified: patient safety, primary care, prevention/health promotion, mental health, diabetes, and cardiovascular care. Indicators under consideration for this project and their alignment with the indicators selected for the national health performance report are shown in Table 6.2. It is encouraging to see a high level of overlap between the two sets of indicators.

Table 6.2: OECD project draft indicators

Draft OECD indicators	Comparable indicators in this report
High priority (A List)	
Asthma mortality rate, ages 5–40	No comparable indicator
5-year observed and relative survival rates for breast, cervical and colorectal cancers	Indicator 3.09
Cervical cancer screening rate, age 20–69, within the past 3 years	Indicator 3.03
End-stage renal failure among diabetics	No comparable indicator
30-day (in hospital) mortality rate following acute myocardial infarction	Indicator 3.08
30-day (in hospital) mortality rate following stroke	No comparable indicator
Proportion of diabetics with HbA1c < 6.5%	Indicator 3.11 addresses
In-hospital waiting time for femur fracture surgery	No comparable indicator
Proportion of children completing basic vaccination program	Indicator 3.05
Incidence rates for pertussis, measles and hepatitis B	No comparable indicator
Lower priority (B List)	
Suicide rate for total population, population age 15–19 and age 20–29	Indicator 1.08
5-year observed and relative survival rates for non-Hodgkin's lymphoma, childhood leukaemia and lung cancer	Indicator 3.09
Mammography rate in past 3 years, age 50–69	Indicator 3.04
Vaccination rate for polio at age 24 months	Indicator 3.05
Vaccination rate for influenza, age 65 or over	Indicator 3.06
Liver, heart and kidney transplants—observed 5-year survival rates for each procedure	No comparable indicator

(continued)

Table 6.2 (continued) : OECD project draft indicators

Toe, foot, and lower extremity amputation rate for diabetics	Indicator 3.07
Smoking rates	Indicator 2.05
Revision rate after hip replacement	No comparable indicator
Rate of retinal examination in diabetics	No comparable indicator
Incidence of lung cancer	Indicator 1.02

Source: OECD (unpub.)

International Health Policy Survey

Various non-government groups, such as the Commonwealth Fund of New York, have also promoted the development of comparative health system indicators (Anderson & Hussey 2002) and funding of international community surveys (Blendon et al. 2002, 2003). Since 1998, the Commonwealth Fund of New York has funded an annual *International Health Policy Survey*. The survey provides some unique insights into community experiences and perceptions of health systems in Australia, Canada, New Zealand, the United Kingdom and the United States. A selection of results from the 2001 and 2002 surveys are presented below.

Dissatisfaction with health systems is widespread in all countries, with a majority of respondents suggesting that health systems need fundamental changes or to be rebuilt completely (Table 6.3). Compared with other countries, slightly more people in Australia indicated that the health system needs only minor change. The survey points to some areas in which consumer experiences and perceptions may have contributed to dissatisfaction with the broader health system. Access to services is a major issue. Table 6.4 shows the percentage of adults who experienced problems in accessing a range of services because of cost.

Table 6.3: Satisfaction with health care system

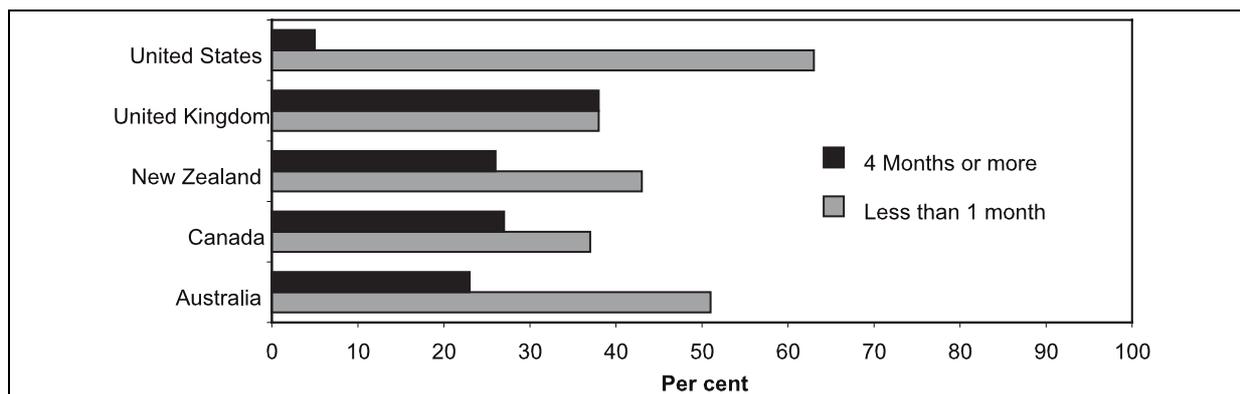
	Australia	Canada	New Zealand	United Kingdom	United States
Adults who responded that health system needs:			(per cent)		
Only minor changes	25	21	18	21	18
Fundamental change	53	59	60	60	51
To be rebuilt completely	19	18	20	18	28

Source: Blendon et al. 2003

Table 6.4: Access problems in the past year because of cost

	Australia	Canada	New Zealand	United Kingdom	United States
			(per cent)		
Did not fill a prescription	19	13	15	7	26
Had a medical problem but did not see a doctor	11	5	20	3	24
Did not get a test, treatment, or follow-up	15	6	14	2	22
Needed dental care but did not see a dentist	33	26	37	19	35

Source: Blendon et al. 2003.



Source: Blendon et al. 2002.

Figure 6.2 : Waiting time for elective or non-emergency surgery, by country, 2001

Figure 6.2 presents data on experience of accessing non-emergency surgery. Around 53% of respondents waited less than one month in Australia, which is slightly better than the experience in other countries with the exception of the United States.

Performance indicators in other countries

Many countries are developing national performance indicator sets. These sets are typically developed to provide publicly available information that complements other performance information used and published elsewhere. The development of indicator sets typically reflects particular issues for the local health care system.

As a unitary system which is largely publicly funded, the United Kingdom National Health Service has considerable scope to effectively use performance indicators in directly managing services performance. The United Kingdom National Health Service has developed sets of performance indicators to complement its *Performance Assessment Framework* (<www.doh.gov.uk/nhsperformanceindicators>; Smith 2002). The indicator sets include comparative information for the population of geographic areas and for service providers. Around 40 indicators are reported annually and publicly released. In addition, a star rating system is applied in rating overall performance of authorities.

In addition to the dynamics created by public release of performance indicators, and the star rating system, the United Kingdom National Health Service links the indicators to a graded system of responses. Organisations with the poorest level of performance are required to produce a performance action plan and this plan is closely monitored. The best performing organisations can earn autonomy, meaning they will be subjected to less frequent monitoring, fewer inspections, retention of more of the proceeds of local land sales for re-investment in local services, extra resources for taking over and turning around persistently failing health care trusts, be able to establish private companies, and have greater opportunities to shape national policy.

The performance management system in the United Kingdom is supplemented by a variety of other strategies and indicator sets. For example, the responsibility of regulating public providers lies with the Commission for Health Improvement. A comprehensive and well-resourced system for technology and service delivery evaluation has been established

through the National Institute for Clinical Excellence. Other performance indicator sets have been developed for the United Kingdom National Health Service for a broad range of other purposes.

In other systems, performance indicators may not always have been used directly in performance management. In Canada, the Federal and Provincial governments have agreed on a set of around 40 performance indicators for public reporting. These will be used largely as a public accountability mechanisms, although individual Provinces may make more extensive use of these indicators in their local performance management processes.

In the United States, indicator sets have been developed for a wide range of purposes. There are four major national indicator sets: *Healthy People 2010*, Health Plan Employer Data and Information Set (HEDIS), the Joint Commission on Accreditation of Healthcare Organisations (JCAHO) core measures of performance, and the Agency for Health Care Research and Quality (AHRQ) quality indicators.

The headline indicators for *Healthy People 2010* (see <www.healthypeople.gov>) are mostly focused on population health issues including the health of the population and minorities, health determinants, health promotion and preventive strategies, and some indicators related to access to health services care and insurance are also included.

For many years the National Committee for Quality Assurance in the United States has promoted the development of a set of indicators (HEDIS) of the quality of services delivered through health maintenance organisations (see <www.ncqa.org>). HEDIS incorporates a range of effectiveness of care measures and also consumer assessment of care measures, covering the broad areas of staying healthy, getting better, living with illness and doctor communication and services. A key focus of HEDIS is to leverage competitive forces to promote quality. The indicators are published and made available to purchasers of health insurance plans (mostly employers) and consumers. Recently many United States government insurance plans, such as Medicare and Medicaid programs, have made the reporting of HEDIS measures mandatory, and there have been moves to extend HEDIS measures to other managed care and indemnity insurance schemes.

The Joint Commission on Accreditation of Healthcare Organisations (JCAHO) is a public/private United States agency concerned with accreditation of hospitals and other health care provider organisations. Recently JCAHO developed a set of core measures of performance, which it promotes across hospitals in the United States (see <www.jcaho.org>). These indicators were agreed following a rigorous review of evidence, extensive industry consultation and pilot testing. The indicators deal with specific aspects of treatment of some relatively high volume conditions: AMI, heart failure, community-acquired pneumonia and maternity services. Some measures align with the HEDIS set.

Further safety and quality indicators have been developed in the United States by the AHRQ (see <www.ahrq.gov>). These indicators can be derived from administrative datasets related to hospital care. There are three groups of indicators: preventable hospitalisations, hospital quality indicators and patient safety indicators. The indicators were developed following a systematic review of evidence, empirical testing of indicators and consultation with experts and clinicians. AHRQ emphasises that these indicators are screening tools and have known strengths and weaknesses.

Certain broad themes seem to be common amongst these international developments. There are strong efforts in most countries to coordinate and align indicator sets across national systems. At the same time, there is recognition that there is no single core indicator set that meets all purposes. There is an increasing emphasis on the public disclosure of indicators for sub-national organisational units (United States, Canada, United Kingdom). National

indicator sets are expanding to include indicators that reflect quality of clinical processes, in addition to indicators of access and broader health outcomes. There is an increasing recognition of the need for a balanced set of indicators, and of the dangers of focusing on particular aspects of performance over others. In addition, the evidence base for indicators is being rigorously and systematically reviewed.