### INTRODUCTION

This report has presented data and information illustrating the state of play of health sector performance indicators. As noted throughout, a considerable amount of work is required to make the indicators more useful, especially if they are to be used in benchmarking exercises.

In summary, there are four possible areas of development in order to complete a program specified by the terms of reference. The order below reflects in general terms a development timetable consistent with current activities and perceived national priorities.

- 1. Improve indicators reported in this first national report (12 months).
- Develop agreed indicators not reported in the first report (18–24 months).
- Extend the set of agreed indicators to cover all components of the framework, such as outcomes and locational disadvantage (18–24 months).
- Other activities, including facilitation of benchmarking networks, investigation of indicators to cover the continuum of hospital and non-hospital components of care, and investigation of options for international networks (18–36 months).

These development areas are discussed in the following sections, and possible sponsoring agencies identified.

# 5 WHERE TO FROM HERE?

In general, more consistent data would be available if definitions for all components of the indicators were in the NHDD, and jurisdictions were committed to using the definitions in the data collections.

## IMPROVE INDICATORS CURRENTLY REPORTED

## Increase coverage and disaggregation

A short-term aim of the continuing program should be to improve the coverage of the reported indicators in all States and Territories. Notable gaps exist in the waiting times data, casemix data and hospital morbidity data. In some of these cases, the data are collected but not made available; in other cases, new data collections may need to be established. The latter could take up to three years before valid data are available.

For a number of indicators, it would be desirable to report at the hospital level, or at least for groups of similar hospitals. Indicators that would be better reported at a lower level include all of the efficiency and productivity indicators, some of the quality indicators and the accident and emergency waiting times indicator.

This would require some data collections to be enhanced so that individual hospitals can be the unit of analysis. These enhancements could be effected almost immediately. The improvements suggested here require the commitment of each State and Territory health authority, with central agencies taking a facilitating and coordinating role in developing definitions and National Minimum Data Sets. The National Health Information Agreement and its related processes and committees have well-established mechanisms for furthering these activities.

## Increase usefulness of indicators at the hospital level

Related to the above development is making the indicators more useful to individual providers. If indicator results are available for each provider, and the provider is able to share information with other similar providers, then the basics of a benchmarking program are in place.

## Further develop risk-adjustment methodologies

As noted above, none of the indicators reported have been adjusted for severity of the patients treated. To some extent, severity is captured in the AN-DRG classification, though there is scope to improve this. It would be appropriate for this work to be part of the Casemix Development Program.

A risk-adjustment method for the quality of care indicators is being developed as part of the study into the validity and reliability of the indicators which was commissioned by the National Hospital Outcomes Program.

## DEVELOP INDICATORS NOT CURRENTLY REPORTED

## Quality of care and patient satisfaction indicators

### Quality of care indicators

The quality of care indicators have been developed to date as part of the National Hospitals Outcome Program. The development has moved into a new phase with the funding of a consultancy to assess the validity and reliability of the proposed definitions and to develop appropriate risk-adjustment methodologies.

After an open tender process, the consultancy was let to the Department of Epidemiology and Preventive Medicine, Monash University, in conjunction with the Eastern Health Care Network. The project is being overseen by a Steering Committee which consists of representatives from State health bodies and experts in epidemiology and health care.

The project will undertake a number of tasks:

- a comprehensive literature review relating to the validity and reliability of the proposed indicators and current methods of risk adjustment;
- 2. tests of the reliability of the proposed indicators, including:

- tests of inter- and intra-rater reliability;
- determination of sources of error in current data capture techniques; and
- review of current coding mechanisms;
- 3. assessment of the validity of the indicators, including:
  - epidemiology of the indicators;
  - explicit case review;
  - expert review; and
  - comparison with other indicators; and
- development of a risk-adjustment methodology; the final adjustment method developed will involve a linear or multivariate logistic regression technique using data on the most critical variables identified.

Having started in September 1995, the project is expected to be completed after 18 months.

### Patient satisfaction indicator

Another project funded under the National Hospital Quality Management Program, the Consumer Feedback into Hospital Management Project aimed to review, document and evaluate various methods of obtaining consumer feedback in hospitals. At the suggestion of the NHMBWG, the project was extended to define a core set of questions to be used in patient feedback surveys for national benchmarking purposes.

The project was conducted by the Royal Melbourne Institute of Technology and a final report was available in late 1995. The project has identified several key areas of concern to consumers, including:

- communication between staff and consumers;
- good teamwork and communication among staff, good communication between professionals, and continuity of care;
- being treated with respect;
- discharge planning;
- being informed on all aspects of the hospital stay and being involved in decision making; and
- access issues and information about waiting.

The development of measures and indicators may involve further projects to test survey instruments and test validity and reliability.

## Waiting times for accident and emergency

Draft definitions for accident and emergency waiting times are being used in a number of hospitals, and recently the definitions became part of the ACHS accreditation program.

These definitions would need to be included in the NHDD and be specified for the National Minimum Data Set before nationally consistent data are available for reporting. A project led by the Australian Institute of Health and Welfare is developing agreed entities, attributes and data definitions to reflect persons receiving emergency services. This project is expected to finalise proposals for inclusion in version 6.0 of the NHDD (effective July 1997).

## Cost per outpatient occasion of service

This indicator relies on the development of a classification system for ambulatory care services, which in turn relies on the development of a national minimum data set and associated definitions for ambulatory care.

A project commenced in late 1995 aims to develop a strategic level model for institutional-based ambulatory care services. Such a model will provide the framework for the development of national definitions and will facilitate the development of more flexible contracting and costing mechanisms.

The project, funded by HSH with the NSW Health Department as the lead agency, plans to have pilot data definitions available for version 6.0 of the NHDD. Data collected according to these definitions may be available late 1997 and could be reported as preliminary or pilot data.

Development of costing systems for ambulatory services is another priority activity required to enhance the data quality for this indicator. The project currently under way to implement a national standard hospital chart of accounts will contribute to this development.

### Waiting times for outpatients

As for outpatient costs, this indicator will benefit from the work on developing definitions for ambulatory care services. Other definitional development work is required for basic issues such as urgency categorisation, and this could be sponsored by the Ambulatory Care Data Working Group convened by HSH. Parallel with the definitional development activities, information systems will need to be established that enable the collection of appropriate data.

The lead time for these activities is considerable, and it is not expected that consistent data will be available before the second half of 1998.

## **EXTEND THE SET OF INDICATORS TO COVER THE FRAMEWORK**

#### Health service outcomes

The focus on health outcomes has intensified over recent years and it is appropriate that performance indicators for outcomes be developed: outcomes are now a key component in policy statements of the State and Territory health authorities, the Commonwealth Department of Human Services and Health, the Australian Health Ministers' Advisory Council (AHMAC) and the Council of Australian Governments.

There is no internationally agreed definition of health outcome, but one widely adopted in Australia is: 'A health outcome is a change in the health of an individual, or group of people or population, which is attributable to an intervention or series of interventions' (AHMAC 1993).

The interest of the NHMBWG is in developing indicators for health outcomes. Armstrong (1994) described an outcomerelated performance indicator as '...a statistic or other unit of information which reflects, directly or indirectly, the performance of a health or welfare intervention, facility, service or system in maintaining or increasing the wellbeing of its target population.'

There are many projects that relate to health outcomes presently being conducted in Australia. A registry of these projects is maintained and promoted by the Australian Health Outcomes Clearing House.

A research consultancy has recently been commissioned under the National Hospital Outcomes Program to investigate the status of development and use of health outcome measures in Australia and overseas. The consultant will recommend key areas for implementation and further development of national health outcome measures in the Australian context, helping to lay the foundation for further work in this area.

One of the key programs is the National Health Goals, Targets and Strategies for Better Health Outcomes for Australians. The targets set in this program are 'benchmarks' for system performance into the next century. Specific goals relating to the hospital component of care have been set by some jurisdictions and may form the basis of hospital performance indicators.

In more general terms, the Better Health Outcomes Overseeing Committee is coordinating the prioritisation of targets and indicators, and will further the development of best practice guidelines for conditions that draw significantly on hospital resources.

The Better Health Outcomes Overseeing Committee has recommended to AHMAC that future development of indicators for the monitoring of outcomes against National Health Goals and Targets be undertaken under the auspices of the National Health Information Management Group.

Given the complexity of health outcomes issues, the development of performance indicators will need to be guided by a long-term strategic plan, and nationally consistent data would probably not emerge before the end of 1998.

### **Physical access**

Physical access is seen as one component of the equity of access to health services.

Possible indicators could include:

- estimated average travelling time for hospital admission;
- number of people living more than 1 hour from a public hospital; and
- welfare loss resulting from less-thanideal location of public hospitals.

Models have been developed previously for planning purposes, but any indicators developed would need to provide useful information about the access to health services. For example, States with low population density will likely have high values for the first two indicators listed above, and this does not provide any information on the performance of the system.

Further research is required in this area, though it is a complex task and will require intensive efforts in the short term.

#### Human resource management

The cost per separation indicator reported above includes a component of human resource management, namely labour costs. Other indicators may be constructed from present data collections that will relate to performance in human resource management.

One of the projects funded by the Best Practice in the Health Sector Program is looking at organisational health in hospitals. Conducted in a consortium of hospitals in Melbourne, the project is evaluating a number of quantitative and qualitative measures of organisational health. Some of the measures are:

- per cent of sick leave taken by staff;
- workers' compensation time lost in hours;
- injury rate;
- unscheduled staff turnover; and
- industrial disputation work ban hours.

Another project, sponsored by the Health Department of Western Australia's Coordinating Panel on Employee Relations (COPER) is looking to develop benchmarks that address a range of management needs. The project identified 41 potential indicators in the areas of work organisation, leadership, availability for work, utilisation of people and performance development.

The results of these projects may be considered by the NHMBWG, and indicators may be adopted or adapted for national collection.

### **OTHER ACTIVITIES**

#### Covering the continuum of care

Measuring the performance of the hospital system provides information on only one component of care, rather than on the whole continuum of care from primary care intervention (screening, GP attendance, etc.) to reintegration into the community. Indeed, the performance of the system may be affected by the care patients received prior to entering the hospital. At the other end, the 'here-andnow' nature of the indicators developed

to date may fail to measure the impact of the hospital care on a patient's continuing recovery in other settings.

The non-hospital indicators reported in Chapter 2 are only substitutes for the measures required to properly assess the performance of the system as a whole in relation to its goals, namely maintaining and improving the well-being of individuals.

A major study addressing these issues, as well as some of the complex methodological issues, was recently begun in the Australian Capital Territory. The project, known as the Care Continuum and Health Outcomes Project, will provide key insights into the development of appropriate measures for health outcomes across the continuum of care. Preliminary results of the study should be available in early 1996.

## Facilitation of benchmarking partnerships

### Within the health sector

As noted above, the exchange of information is crucial to a successful benchmarking program.

To facilitate this, there may be a need to develop a national education program, so that organisations can gain a common awareness of the processes, advantages and pitfalls of benchmarking activities.

In the short term it would be useful to survey health service professionals and

managers to ascertain the general level and commonality of awareness of benchmarking in the health sector. The results of such a survey would provide the basis for the development of an appropriate education strategy.

### Outside the health sector

In the longer term, consideration also needs to be given to the establishment of benchmarking partners outside of the health sector. This is consistent with the higher-level benchmarking demonstrated by industry leaders (as reported by the AMC study referenced above).

Generic benchmarking has been encouraged through the Best Practice in the Health Sector Program and a number of health organisations funded under the program have successfully developed Again, significant developments in aligning basic data items would need to occur, but such issues could be discussed now in the many international forums in which Australian health professionals, managers and policy makers participate.

### CONCLUSION

The preceding sections have outlined a number of activities that would increase the usefulness of health sector performance measures in Australia.

If the health sector collectively is serious about achieving world-class outcomes, then the profile of performance measurement and benchmarking probably needs to be raised. benchmarking partnerships with outside industries. For example, Maryborough District Health Service is benchmarking with other service industries in the areas of sick leave, staff/patient accident rates and organisation of their engineering department.

Significant developments would need to take place before this could feasibly be done, but such developments should be placed on the agenda now if results are to be seen within five years.

### International benchmarking

By definition, benchmarking has an international scope. Consideration needs to be given to the establishment of international benchmarking partners inside and outside the health services industry.

Allied with this, there needs to be a coordinated approach to integrating the many activities currently under way in the areas of best practice, quality improvement, health information development, health sector reform, and so on.

Benchmarking, in conjunction with other best practice management tools, is essential for maintaining and improving performance: the evidence from the industry sector is that it gets results. This report has shown that there is a long journey ahead in implementing a fully effective benchmarking program in the health sector. The journey, it seems, is worth making