



Commonwealth Department of  
Health and  
Aged Care

# **The Quality of Australian Health Care: Current Issues and Future Directions**

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Volume 6**

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Commonwealth Department of Health and Aged Care

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# Foreword

Much of the public focus on Australia's health care system is around issues of how to best provide high quality, accessible care at a reasonable cost. That is a discussion well worth having. Yet frequently that discussion is polarised around arguments about whether the health system as a whole, or at least important components of it, are 'in crisis' or 'unsustainable'. Concerns about public hospital waiting lists and the affordability of private health insurance are two examples of this manifestation. Against that, there are also many 'good news' stories about health: exciting new medical and pharmaceutical breakthroughs, or gains in public health through successful immunisation campaigns being examples.

The fascination about health issues and the debate about priorities and approaches is understandable and necessary. At one level, birth, sickness and eventual death are aspects of life that confront all of us. We want the best for our families and more generally for society as a whole. At another level, health accounts for about 8.5 per cent of Australia's Gross Domestic Product (ie almost one in every twelve dollars). The point is that we all have a keen interest in good health and in finding ways of better achieving it.

In Australia, we have a health system that serves us well, and compares well, on many key indicators, to overseas systems. While there is room for improvement, the complexity of the system makes it difficult to agree on where improvements are needed, what trade offs we are prepared to make in order to gain these improvements, and what changes will deliver the results we seek. Hence the presence of as many, if not more, 'solutions' in the debate as there are stakeholders.

This series of papers—coming out of the Department's *Health Financing Project*—is intended to contribute to the debate by providing data and analysis that is not generally easily accessible. The papers are by no means the last word on the subject; they do not seek to cover all perspectives, for that would be too big a task. This is the sixth volume in the series and considers issues associated with the quality of Australian health care services.

We hope that you will find the papers a useful contribution to the debate.

David Borthwick

Deputy Secretary

March 2000

# Contents

<b>Executive Summary</b> .....	<b>1</b>
<b>Introduction</b> .....	<b>3</b>
<b>What is quality?</b> .....	<b>5</b>
A systemic focus.....	5
<b>Why is government involved in quality?</b> .....	<b>9</b>
<b>Do we have a high-quality health system?</b> .....	<b>11</b>
Available data .....	11
<b>How does government intervene to support quality health care?</b> .	<b>19</b>
The national picture .....	21
Linking quality to funding .....	22
Accreditation .....	24
Workforce issues.....	26
<b>Where should we focus our ongoing efforts to improve health care quality?</b> .....	<b>29</b>
The safety of health care .....	31
What is the experience overseas? .....	32
<b>What are some next steps?</b> .....	<b>39</b>
Key focus areas.....	41
<b>Appendix 1 An overview of key Commonwealth and national initiatives</b> .....	<b>43</b>
Regulatory Approaches .....	43

Funding approaches.....	44
Accreditation Requirements .....	46
Advisory Mechanisms.....	47
Private Health Insurance Initiatives .....	48
Developing and supporting national infrastructure and approaches .....	49
Public Health Issues .....	59
<b>Abbreviations .....</b>	<b>63</b>
<b>References .....</b>	<b>65</b>

# Executive Summary

This paper considers issues associated with the quality of Australian health care services. It is part of a series of papers commissioned by the Commonwealth Department of Health and Aged Care Health Financing Working Group.

Health care quality is receiving increasing international attention as a central, rather than discretionary, function of health care systems. This reflects a number of factors, including the increasing technical sophistication of modern health care, the scope for patients to be harmed by health care interventions and the increasingly complex systems from within which health care is delivered.

The paper notes the complexity of defining 'quality' given its multidimensional nature and the differing views and emphases of stakeholders. There is continuing debate about the extent of the gap between existing and optimal levels of safety and quality in the Australian health care system. This is compounded by the availability of only limited data on the quality of the health system and its components and the challenges of achieving meaningful system wide performance measurement. This is a problem that has been experienced by all modern health care systems throughout the world.

The system within which health care is delivered is an important focus in its own right for improving the safety and quality of health care. Indeed, this paper emphasises the importance of a systemic quality and safety focus and collaboration with stakeholders, given the crucial role of health care professionals and consumers in achieving optimum quality in service delivery at a local level.

The paper canvasses some of the issues faced by government in intervening to best support high quality health care. A number of current Commonwealth government interventions are described across a range of regulatory, financing and research and development approaches. The range of national machinery to promote the quality of health care is also described.

Particular issues facing the health system are highlighted in relation to understanding and responding to variations in clinical practice and the safety of health care. The challenges for best use of current government interventions include discussion of accreditation systems, use of financing levers, use of information, consumer involvement and workforce issues.

Comparisons are drawn with experiences in the United States and United Kingdom and future directions and challenges in an Australian context. The importance of an ongoing active role for all governments and strong national commitment is highlighted, encompassing 'whole of system' thinking which builds on the support of

clinical professions, strengthens the capacity of consumers to play an informed role, focuses on providing information which promotes system learning and builds public confidence. This includes support for national mechanisms, such as the Australian Council for Safety and Quality in Health Care and the National Institute of Clinical Studies.

# The Quality of Australian Health Care: Current Issues and Future Directions

## Introduction

There is a growing focus on health care quality as a central function of health systems, not just an area of discretionary activity (President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry 1998; National Expert Advisory Group on Safety and Quality in Australian Health Care 1999). This focus reflects the increasing technical sophistication of modern health care, the scope for patients to be harmed by health care interventions and the complex systems from within which health care is delivered (Wellington 1999). Increasingly, quality is being viewed as an important arena of accountability and responsibility for policy makers, managers, clinicians, funders and consumers across the public and private sectors.

Traditionally, quality has largely been seen as a natural consequence of a sound medical education and good intentions on the part of medical practitioners. Values of professionalism, trust and clinical autonomy have been dominant (Leatherman & Sutherland 1998). Such values have underpinned a strong ethic of an individual doctor's responsibility for the patient, reinforced by the impact of the tort system which has tended to focus on the standard of practice of the person deemed immediately responsible for a treatment outcome (Leape 1994; Australian Patient Safety Foundation 1998). As such, the prevailing medical culture tends to personalise error and expect perfection in clinical care - and this is reinforced by public and media attitudes toward accountability of the medical profession, which tend to be individually focused, punitive and blame based (Wellington 1999).

In an Australian context, a system-wide focus on quality has been driven by a number of factors, notably the 1995 Quality in Australian Health Care Study which suggested a higher-than-expected number of hospital admissions were associated with adverse events (Wilson *et al.* 1995). There has been increased examination of unexplained variation in treatment patterns across a range of conditions and a concern about growth in the costs of health care (Richardson 1990). Ongoing media reporting on problems with the quality and safety of health care has also had an impact, although it is difficult to draw any definitive conclusions about this.<sup>1</sup> A five-nation survey examining public attitudes suggested there has been a 'substantial loss' of public confidence in the health care system over the past decade, particularly marked in Canada and Australia (cited in Donelan *et al.* 1999).

In the past eight years there have been a number of national reviews of current and future directions for quality and safety in Australia:

- In 1991, the Review of Professional Indemnity Arrangements for Health Care Professionals was established 'to examine the current arrangements relating to professional indemnity and current

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<sup>1</sup> The Commonwealth Department of Health and Aged Care is supporting a project examining community perceptions of adverse events and risk factors within the health system. The interim report of this project will be available in early 2000.

experience with compensation for medical misadventure' (Commonwealth Department of Human Services and Health 1995). When no information on the rate and cost of preventable of adverse patient outcomes could be obtained, the Quality in Australian Health Care Study (QAHCS) was commissioned in 1993.

- Following the release of the findings of the Quality in Australian Health Care Study, the Taskforce on Quality in Australian Health Care was established in June 1995 to consider these data and report to Australian health ministers on measures to reduce the incidence and impact of adverse events due to health care (mis)management in the Australian health care system. The Taskforce reported to health ministers in June 1996 (Australian Health Ministers' Advisory Council 1996).
- In March 1997, the National Expert Advisory Group on Safety and Quality in Australian Health Care was established to provide practical advice to health ministers on further steps to improve the safety and quality of health care services. The National Expert Advisory Group presented its Interim Report to Health Ministers in July 1998 (*Commitment to Quality Enhancement*) and final report in August 1999 (*Implementing Safety and Quality Enhancement in Health Care*).

Quality has also been an important element of other significant national review processes in specific health care contexts, for example, the General Practice Strategy Review in 1998 (General Practice Strategy Review Group 1998).

Improving quality represents a widely popular articulation of policy – as Leatherman and Sutherland (1998) note, it is, after all, rare to find anyone who is opposed to the notion of high quality. Within Australia, however, there has been little evidence that key stakeholders have a shared understanding of the concept of quality. There is an absence of agreed standards and a lack of explicit, agreed national goals for quality improvement (Australian Health Ministers' Advisory Council 1996; National Expert Advisory Group on Safety and Quality in Australian Health Care 1998). In a complex health care environment, this has made it difficult to drive forward a meaningful and appropriately integrated national quality agenda. This situation has been marked by continuing debate about the extent of the gap between existing and optimal levels of safety and quality in the Australian health care system (Wellington 1999).

## What is quality?

Quality is difficult to define because it is a broad term which of itself has little agreed meaning (Ibrahim *et al.* 1998). This means that stakeholders in the health system often have quite different perspectives on the characteristics of ‘good’ quality and have different uses for information about quality (National Expert Advisory Group on Safety and Quality in Australian Health Care 1998; General Practice Branch 1998). Leatherman and Sutherland (1998) suggest that quality needs to be understood as a concept with multiple stakeholder interpretations – with all the difficulties this implies.

The Institute of Medicine (cited in Boyce *et al.* 1997, p14) provides a widely cited general definition of the quality of health service provision:

The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.

The US Office of Technology Assessment (cited by James 1999) suggests a similar definition but adds the concept of ‘[and] reduces the probability of undesired outcomes’. Critics of such definitions note that they fail to articulate key components, for example, questioning whose ‘desired health outcomes’ and with what populations we are trying to achieve these outcomes (Boyce *et al.* 1997; General Practice Branch 1998). The definitions are also difficult to operationalise into specific improvement strategies.

In an Australian context, NSW Health has articulated a framework for managing the quality of health services which focuses on six dimensions of quality: safety, effectiveness, appropriateness, consumer participation, access and efficiency (NSW Health 1999).

For the purposes of this paper, while recognising that it can encompass a range of dimensions, ‘quality’ is defined in terms of effectiveness, appropriateness, safety, performance and outcome. These concepts, at their simplest, can be considered in terms of the following questions (Irwig 1993 cited in Ibrahim *et al.* 1998, p8):

- Was it the right thing to do? – effectiveness, (ie what works in the situation according to research);
- Was the right thing done? – appropriateness;
- Was the right thing done properly and well? – performance (safety and technical quality);
- Was the outcome satisfactory? – outcome (including acceptability).

## A systemic focus

In the past thirty years a framework which has been increasingly applied to understanding health care quality, encompasses consideration of three critical components:

- the *structure* of health care, which refers to the inputs to the care process (eg the conditions in which health care treatment is provided and the training of the provider);
- the *process* of care, which refers to characteristics of what is done in giving and receiving care; and
- the *outcome* of care, which refers to the effect of care on the health of patients and communities (Wilson & Goldschmidt 1995).

This has led to a growing interest in quality improvement and the adaptation of concepts of ‘quality assurance’, ‘total quality management’ and ‘continuous quality improvement’ from a range of other industries (Chassin 1998). These can be described as philosophies of continual improvement of the processes associated with providing a good or service in order to meet or exceed the expectations of customers (Shortell *et al.* 1998).

Experience with quality improvement, both in Australia and internationally, has underpinned a recognition of the importance of a stronger focus on the system within which health care is delivered for improving the quality and safety of health care.<sup>2</sup>

As Berwick and Leape (1999, p136) note:

If we can take any lessons from the stunning progress in safety in aviation and other high risk injuries it is that *fear, reprisal and punishment produce not safety but rather defensiveness, secrecy and enormous human anguish*. Scientific studies in human factors, engineering, organisational psychology, operations research and many other disciplines make it clear that in complex systems, (quality and) safety *depends not on exhortation, but rather on the proper design of equipment, jobs, support systems and organisations*. If we truly want safer care, we will have to design safer care systems. (Emphasis added.)

Such, a systemic focus recognises that health care occurs in dynamic and complex environments characterised by the interaction of a diverse range of factors - such as patients, their disease processes, medical and other staff, hospital and community settings, infrastructure, equipment, policies and procedures. As a result, health care is inherently risk laden. These risks need to be identified, understood, managed and, wherever possible, ‘designed out’ of system performance (National Expert Advisory Group on Safety and Quality in Australian Health Care 1998).

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<sup>2</sup> See for example, *A first class service, quality in the NHS* (United Kingdom Department of Health 1998), *Quality first: better health care for all Americans* (President’s Advisory Commission on Consumer Protection and Quality in the Health Care Industry 1998), the *Final Report of the Taskforce on Quality in Australian Health Care June* (Australian Health Ministers’ Advisory Council 1996 1996), *A Framework for Managing the Quality of Health Services in NSW* (NSW Health 1999) and *Implementing Safety and Quality Enhancement in Health Care* (National Expert Advisory Group on Safety and Quality in Australian Health Care 1999).

## An example of a systemic problem – Report on an investigation of incidents in the operating theatre at Canterbury Hospital, NSW

The NSW Health Care Complaints Commission investigated an incident in which a solution containing a caustic substance was incorrectly injected into patients undergoing endoscopic procedures at the operating theatres of the Canterbury Hospital, NSW, between 4 February and 7 June 1999. At the time this error was made public, it attracted enormous media attention and public outrage, primarily directed at the individual doctor involved.

The report of the NSW Health Care Complaints Commission found that there were a number of systemic problems which contributed to the incidents including:

- inadequacies in the computerised requisition system;
- inadequate training of staff in the hospital pharmacy to use the requisition system;
- the absence of a feedback loop in the requisition system to detect a significant change in a pattern of requisition, including a significant cost increase (\$7.50 for the correct solution; \$21 for the incorrect solution); and
- no health professional in the operating theatre adequately checked the solution before it was injected into patients.

The Health Care Complaints Commission made a series of recommendations to improve processes within Canterbury Hospital (for example, development of protocols and guidelines and improved monitoring systems) and also made recommendations about actions to be followed up at a statewide level (for example, review of requisition and supply systems and development of more comprehensive pharmaceutical policies).

Source: *Report on an investigation of incidents in the Operating Theatre at Canterbury Hospital 8 February –7 June 1999*, NSW Health Care Complaints Commission.

Systemic approaches to quality improvement are often not well understood and there is only patchy evidence of the application and integration of such approaches. Evidence to date would suggest that, on their own, formalised approaches to continuous quality improvement have not had an impact on care commensurate with their impact on critical processes in other industries (Shortell *et al.* 1998). This finding should be treated cautiously as there are considerable difficulties in assessing the impact of continuous quality improvement on clinical practice and outcomes of care. However, the effective transfer of concepts of quality improvement from broader industry to the health care environment is not straightforward and knowledge of how to most effectively use such tools to improve quality is still quite limited (Leatherman 1999).

The Taskforce on Quality in Australian Health Care (Australian Health Ministers' Advisory Council 1996) noted that, despite an increased emphasis placed on quality improvement in health care, activities labelled 'quality related' have in general been marginalised in the delivery of clinical care. Instances where this has not been the case have tended to reflect the self-motivated efforts of individual clinicians. Leatherman and Sutherland (1998) comment that in the United Kingdom the knowledge generated from quality improvement activities has been important, but has not led to systemic change. Lessons learned to date suggest: a need for meaningful clinical

involvement; an emphasis on clinical, patient-orientated improvement; investments in quality improvement and clinical information systems; appropriate training; and organisational support structures (Blumenthal *et al.* 1998).

A systemic focus has a number of implications for the pursuit of quality improvement. First, systemic approaches recognise that quality improvement needs to be built in to a number of levels within the health system - involving consumers and health care providers, through clinical units and facilities through to macroscopic health care system funding and design considerations (Leatherman 1999). As Buchan (1998) notes, the way in which quality is built in to a health care system is becoming the most powerful predictor of whether high quality care is delivered. For example, both the Taskforce on Quality in Australian Health Care (Australian Health Ministers' Advisory Council 1996) and the National Expert Advisory Group (1999) note that a large proportion of adverse events occur at the boundaries between providers, for example, discharge from hospitals to primary care services and providers.

Second, systemic approaches require integrated approaches to quality improvement involving active collaboration with a range of stakeholders, including consumers, clinicians, service providers, educators, health administrators, professional associations, accrediting bodies, policy makers, private health funds and government. A systemic approach recognises that no one group can improve quality on its own.

Third, systemic approaches require that authority and accountability for quality and safety improvement be clearly defined. This has contributed to an increasing acknowledgment that health care organisations have a governance responsibility for the quality of health care provided (United Kingdom Department of Health 1998, NSW Health 1999). In turn, this has given prominence to the concept of clinical governance, in a NSW and United Kingdom context defined as (Sally & Donaldson 1998, p62):

A system in which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish.

Caution needs to be exercised in ensuring that such an approach is balanced, for example, an over emphasis on accountability systems without adequate support for clinicians and managers to measure and analyse performance and manage risk may create perverse incentives and inadvertently reinforce a culture of blame. The NSW framework places responsibility on the chief executive officer of an Area Health Service for the presence of effective mechanisms to monitor and manage the quality of clinical care to meet identified standards and targets. This recognises the need for partnerships with clinicians (NSW Health 1999).

Finally, systemic approaches lead to an interest in equipping clinicians, health services and other stakeholders with the tools to improve the quality of care and move 'beyond blame' (National Expert Advisory Group on Safety and Quality in Australian Health Care 1999). These include evidence-based medicine, multidisciplinary pathways, variance analysis, decision support and information technology/information management support. As Enthoven and Vorhaus (1997, p56) note:

The important thing is to achieve a health care system that is empirically self critical, constantly learning and continuously improving.

## **Why is government involved in quality?**

Governments intervene in health care markets because there is substantial evidence that markets fail to operate efficiently when left to their own accord (Commonwealth Department of Health and Aged Care 1999b). The reasons for government intervention typically reflect a concern for ensuring equity of access to a satisfactory system that promotes good health at a low cost (Commonwealth Department of Health and Aged Care 1999c). Clearly, considerations of quality permeate such objectives including a desire for:

- a system in which Australians can access high quality services;
- a system in which consumers and providers have confidence;
- a system that through its interventions does not worsen consumer outcomes; and
- a system which makes best use of its resources.

Appropriate use of health care services is an important factor affecting quality. Overuse of health services is as much an issue of concern as underuse or misuse. While consumers incur significant out-of-pocket expenses in the health care system, their capacity to shape the type, quality and cost of health care products and services is different from their capacity in other markets in which they purchase goods and services (President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry 1998). Since consumers are not well placed to identify their health care needs and usually rely on advisers who are also their service providers, government involvement in ensuring the overall safety and quality of health care services is warranted to protect consumers (Commonwealth Department of Health and Aged Care 1999b).

However as Buchan (1998, p62) notes:

The problem for policy makers in any country is how do they intervene and to what purpose? Given the multiple components of quality, the need for trade offs between one dimension and another, the varying views of what is important and the relative power of different groups within the system, this is an area fraught with difficulty.

One of the critical ways that health markets can fail to achieve an appropriate level of quality is due to information problems. There is a large difference between the amount and kind of knowledge and information held by health service providers and consumers of services. Even though a large amount of health information is currently produced, many consumers feel under-informed about their health care (National Expert Advisory Group on Safety and Quality in Australian Health Care 1998). This asymmetry of knowledge and information between providers and consumers means that, without assistance, consumers may not be able to make health care decisions that are in their best interest. Moreover, it is often difficult for consumers to distinguish between different sorts of advice (Tasman Asia Pacific 1999). Poor provision of information across the health system may be a particular contributing factor in the occurrence of adverse events within hospitals and is a significant factor in determining patient satisfaction with hospital care (Final Report of the Taskforce on Quality in Australian Health Care 1996, TQA Research 1997).

Current circumstances would suggest there are continuing challenges in arranging access for consumers to timely and relevant information about expectations of service delivery, including information on specific conditions and

treatment options and services and their availability (Consumer Focus Collaboration 1998). In a private health care context, there are specific issues around the availability of accessible standardised information for consumers to assist in assessment and choice of health care services, facilities and insurance providers.

Other sources of potential market distortion include moral hazard (that is, the situation in which consumers obtain health care that may be unwarranted or unnecessary because of a lack of price signals and the presence of a third-party funder) and supplier-induced demand (for example, there may be perverse incentives such as throughput-based funding through which the suggestion of additional services creates additional income for the provider).

These factors create challenges for government in intervening in the health care market to achieve their quality objectives. Chassin (1998) suggests that quality problems can be classified into three categories:

- Overuse – providing a service when its risk of harm exceeds its potential benefit. A number of factors may contribute to this including: the perverse incentives created by fee for service payment systems; the enthusiasm of providers who advocate particular treatment options in a belief that they are good for patients; and patient expectations of active medical intervention;
- Underuse – failure to provide a service when it would have produced favourable outcomes. This may be due to access barriers but may also reflect the rapidly changing scientific evidence for what constitutes effective interventions and the increasing difficulty for providers of keeping abreast of this.
- Misuse – avoidable complications of appropriate health care.

As a result, Chassin (1998) proposes that government objectives can be described as striving, within available resources, to ensure that:

- effective care is always provided to those who need it;
- ineffective services are not provided; and
- preventable complications of health services are eliminated.

## **Do we have a high-quality health system?**

Australia appears to have a high-quality health care system and international comparison supports this belief. There is, however, limited objective evidence to demonstrate this (Australian Health Ministers' Advisory Council 1996, National Expert Advisory Group on Safety and Quality in Health Care 1998; Australian Patient Safety Foundation 1998; Australian Institute of Health and Welfare 1998) and, of course, there is always room for improvement (National Expert Advisory Group on Safety and Quality in Australian Health Care 1999) although the extent and nature of this is the subject of vigorous debate (Wellington 1999). This section of the paper outlines some of the data available across a number of dimensions of health service quality.

### **Available data**

#### **Health status**

From the perspective of global statistics, the level of health of Australians is very high. In the introduction to *Australia's Health 1998*, the Australian Institute of Health and Welfare (1998, p1) states:

Australia is one of the healthiest countries in the world and Australians are becoming even healthier. This is shown by declining death rates, increasing life expectancy, a low rate of life-threatening infectious disease and, for most people, ready access to health care when needed'. But there is still room for improvement: good health is not enjoyed by all, and the health of Aboriginal and Torres Strait Islander peoples is poor by any standard.

It is difficult, however, to attribute the general health of the population solely to the health care system, since other socioeconomic factors (such as income levels, education standards, employment rates, housing standards and prevalence of violent crime) significantly affect health status (Steering Committee for the Review of Commonwealth/State Service Provision 1999).

#### **Measuring quality of hospitals**

There has been continuing activity over the past few years to find a set of hospital-based quality-of-care indicators that could be used to collect information at a national level about the quality of the acute health care system in Australia. In October 1995 the Pilot Hospital-wide Clinical Indicators Project was commissioned to test the reliability and validity of a set of four clinical indicators used at the hospital level as national measures of the quality of care provided by hospitals. The second part of the project was to determine if the rates of these indicators were obtainable from routine data collections. The indicators were derived from the Australian Council on Health Care Standards (ACHS) hospital-wide dataset. These indicators and a patient satisfaction indicator were being considered for national use by the National Health Ministers Benchmarking Working Group (NHMBWG) and the Industries Commission (now the Productivity Commission) report on government service provision.

The project found that the set of indicators under review were unsuited to measuring the performance of the health care system at a national level because they were not a sufficiently accurate measure of quality. However, the continued measurement of these events was considered to be a worthwhile goal for local use (Ibrahim *et al.* 1998). Individual hospitals can use them for time series analysis in monitoring performance and for benchmarking between hospitals of similar patient mix to identify successful strategies for improving care.

Since the late-1980s, the ACHS Care Evaluation Program has been developing quality indicators across hospitals and in particular specialties and, since 1993, it has been collecting data from accredited hospitals as they become available. However, concerns about validity, reliability and relevance mean that these indicators are currently subject to review and more rigorous epidemiological evaluation. Difficulties with data - such as inconsistent interpretation of the data requirements for the indicators and inconsistent data collection methods - are specific causes of concern. The validity of several of the ACHS indicators has been questioned by Ibrahim *et al.* (1998). Wellington (1998) notes that action is only taken on indicator reports when the indicators are considered useful to and by the clinicians concerned.

Since its first report, the NHMBWG has used the proportion of hospital beds accredited by the ACHS as a general measure of quality. Accreditation requires demonstrated adherence to quality improvement practices. The voluntary nature of accreditation casts some doubt on its validity because some hospitals, especially smaller rural hospitals, decide not to pursue accreditation because of the costs involved. There has been discussion of this reporting of accreditation to be broadened to include other accreditation processes, for example, ISO 9000 (NHMBWG 1999).

## Measuring quality more broadly

In February 1997, the Australian Health Ministers Advisory Council agreed that the NHMBWG work on the development of performance indicators be broadened to the community health sector. A review examined work taking place to measure performance and assess the feasibility of developing and reporting performance indicators. The review found that community health is a complex and diverse sector and indicator development would need to reflect this. The consultants recommended extensive consultation about this development following the publication of the report in early 2000 (Primary Care Research and Development Centre *et al.* 1999).

In NSW, work has progressed on the development of a performance measurement framework which encompasses indicators relating to safety, effectiveness, appropriateness, consumer participation, access and efficiency (NSW Health 1999). In Victoria, the Acute Health Quality Committee considers a range of measures for assessing organisation-wide performance, including preventive care, access, clinical care, appropriateness, safety, effectiveness, continuity, satisfaction and organisational management.

## Consumer perspectives – acceptability

The traditional method to determine acceptability among consumer populations has been to conduct patient satisfaction surveys. One example at a statewide level is in Victoria. In 1997, a telephone survey was conducted across 92 hospitals using a modified version of the Picker Institute Survey Form (TQA Research 1997). The survey results highlighted strong performance in key areas including overall satisfaction, the attitude of hospital staff, most aspects of communication, courtesy of doctors and nurses and assistance provided to patients. Priority areas identified for improvement included: communication with younger patients (18 to 34 years); more complete information relating to discharge, surgery and tests; greater involvement of patients in decisions regarding their care; a more restful environment; reduced waiting times for same-day patients; and improved meals at some hospitals. The authors noted that a majority of respondents assumed that the ‘technical’ skills of medical staff were high and appeared to place more emphasis on the ‘personality’ aspects of the hospital.

Patient satisfaction surveys have been marked by controversy over the years as to whether they measure anything useful (Draper & Hill 1996). Often, they have focused on non-clinical services and provided little from which to judge the quality of care. Draper and Hill (1996) have also criticised the idea that the multiple elements of an episode of care can be reduced to a single dimension of satisfaction. Many health services and jurisdictions in recent years have used a range of approaches to assess acceptability among consumers to validate and supplement information obtained from satisfaction surveys.

As discussed earlier, Donelan *et al.* (1999) in their five-nation survey of public attitudes to the health system as a whole suggest that public dissatisfaction is evident in all the countries surveyed, with Canada and Australia showing a loss of public confidence. In an Australian context, waiting times for care and queues were particular concerns.

## Safety of hospital care

The Institute of Medicine (1999) suggests that a simple definition of safety refers to ‘freedom from accidental injury’. The definitional challenges in describing what constitutes an adverse event mean that it is difficult to accurately measure trends in rates of adverse events and the overall safety of the health care system. In practice, none of the monitoring systems currently operating in Australia to reduce the frequency of adverse events is capable of providing reliable rates that could be used for either benchmarking or trend analysis at a national or jurisdictional level (McNeil 1999). This limitation reflects that:

- types of adverse events can vary enormously;
- there is a degree of subjectivity in interpreting what constitutes an adverse event; and
- there is a reliance on voluntary reporting of adverse events.

Most available studies, while providing useful information about the type of adverse events, are not useful for estimating incidence because the population at risk (that is, the denominator) is generally unknown (Institute of Medicine 1999).

The Review of Professional Indemnity Arrangements for Health Care Professionals commissioned the Quality in Australian Health Care Study (QAHCS) in 1993 'to identify the nature and incidence of adverse events, their causes and contributing factors, the levels of disability arising from adverse events, and how preventable the adverse events were'. The Quality in Australian Health Care Study (Wilson *et al.* 1995, p459) defined an adverse event as:

An unintended injury or complication which results in disability, death or prolonged hospital stay and is caused by health care management.

The study found that 16.6 per cent of hospital admissions in the study were associated with an adverse event. Around half of the adverse events were considered preventable. When expressed as a rate of adverse events per admission, the rate was around 13 per cent compared to the rate of 3.7 per cent in the Harvard Medical Practice Study (Brennan *et al.* 1991) on which the QAHCS was modelled (Wilson *et al.* 1995).<sup>3</sup>

A Victorian study by O'Hara and Carson (1997), which recorded an adverse event rate of 5 per cent using External cause-code data from the ICD-9-CM, has been criticised on the basis of the less rigorous definitions of adverse events it employed and the significant under-reporting of injury that occurs using External cause-codes (Wilson 1997). Hargreaves and Madden (1997) believe that morbidity data currently lead to under-estimations and over-estimations of hospital-associated adverse events. They also believe that the ICD-10-AM could be developed so that, together with the Generic Occurrence Classification developed by the Australian Patient Safety Foundation (Runciman *et al.* 1998), it would allow annual hospital activity statistics to yield reliable data on iatrogenic injury.

The recent *Anaesthesia Related Mortality in Australia 1994–1996* report reported that between, 1994 and 1996, there were 135 deaths considered attributable partly or wholly to anaesthesia, representing 1 death per 63,000 procedures. The most frequently identified anaesthetic factors were anaesthetic technique (48), drug overdose (45) and inadequate pre-operative assessment (40). Inadequate supervision or assistance was identified in 19 of the deaths (Australian and New Zealand College of Anaesthetists 1999).

## Safety in other care settings

There are very few data on safety within primary health care in Australia. In a recent incident monitoring study involving 324 Australian general practitioners, of the 805 incidents that were reported 76 per cent were considered preventable and 27 per cent had potential for severe harm. The major contributing factors were poor communication between patients and health care professionals, actions of others, and errors in judgment (Bhasale *et al.* 1998).

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<sup>3</sup> Researchers at Harvard University have conducted a comparative review of the QAHCS and an unpublished equivalent study in the United States, the Utah/Colorado Medical Practice Study. It is expected that the results of this comparative review will be published in 2000.

## Appropriateness of care

Almost no national indicators of appropriateness of care are kept in the Australian context except for separations per 1,000 people and the separation rate for certain procedures (for example, caesarean section rates) which highlight geographical differences for further investigation. Wilson and Goldschmidt (1995) note the large amount of anecdotal evidence about inappropriate hospital services in Australia and the absence of measurement providing any objective evidence to substantiate this concern.

The Third National Report On Health Sector Performance Indicators (NHMBWG 1999) notes that there are significant differences across States and Territories in rates of surgery for sentinel events (that is, those surgical procedures which are most common in acute care hospitals) which are of concern, but there are insufficient data to support analysis of contributing factors.

A study of the relative utilisation rates of hysterectomy and links to diagnosis was commissioned by the Commonwealth in 1998. It found that for select diagnoses there was significant variation in the number of hysterectomies performed on women from urban or rural areas and a strong inverse relationship for socioeconomic status (Reid *et al.* publication pending). The results indicate that, for urban areas, hysterectomy is more common where people are poorer in material goods, education and occupational status. This is reflected in international studies also, although the cause is not clear. The authors suggest it may be due to the power differential between medical practitioners and women of low socioeconomic status, practitioners who are enthusiasts for the procedure or cost of alternate therapies. Further research is required to identify the causative factors for the variation in utilisation rates.

Variations in utilisation rates for 15 procedures in Victoria have been reported (Mooney & Scotton 1999) suggesting that significant overservicing and underservicing exists. This replicates an earlier study which shows similar variation for Australia (Renwick & Sadkowsky 1991). Richardson (in Mooney & Scotton 1999 p199) notes:

There is no mechanism for the systemic detection of such misallocations (of resources), nor incentive for their reduction. Except in the case of fraud, there has been no system of medical accountability to ensure that patients receive best practice or the most cost-effective care...the reform of financial incentives may achieve a correspondingly large improvement in allocative efficiency.

## Use of medicines

The Australian policy on the Quality Use of Medicines was developed in 1992 in response to increasing evidence that medications were being underused, overused, selected inappropriately, wasted and associated with a significant level of adverse effects (Commonwealth Department of Health, Housing and Community Services 1992). Indicators to monitor the quality use of medicine were subsequently devised and are at various stages of refinement and evaluation.

In late 1999, the first report of national indicators for the Quality Use of Medicines component of the National Medicines Policy was published (Commonwealth Department of Health and Aged Care 1999a). The report suggests that many activities have occurred to support quality use of medicines and that there is evidence of some improvements in medication use and health outcomes. For example, use of non-steroidal anti-inflammatory drugs (NSAID) has improved and there has been a reduction in hospitalisations associated with gastrointestinal ulcer. There continue to be concerns about the cost of the inappropriate use of medicines.

Specific problems and concerns with medication use have been established in relation to the use of NSAIDs, codeine combination analgesics, antibiotics and major and minor tranquillisers. Similarly, research studies have identified inappropriate selection by prescribers of NSAIDs, antibiotics, gastrointestinal agents, respiratory drugs and oral hypoglycaemics. Under-utilisation of medications for the treatment of depression in the institutionalised elderly, asthma in children and adults, hypertension, heart failure, post-myocardial infarction, gastric ulcer, diabetes and diseases preventable by immunisation have also been identified.

Effective monitoring of the quality use of medicines requires a detailed level of data collection. Ideally, information on prescribed medications should be linked to individual patient records and include details of medical history, particularly diagnoses, medications prescribed, the dose and frequency of administration and duration of use. There is not currently such a comprehensive source of data in Australia. There are, however, various sources of information that enable broad trends in medicines use and specific medication problems and concerns to be identified.

The Commonwealth Department of Health and Aged Care maintains a drug utilisation database through the Drug Utilisation Subcommittee of the Pharmaceutical Benefits Advisory Committee. The database provides an overall estimate of community prescription drug usage in Australia, enabling broad trends in prescription medication use to be monitored. This information is published annually by the Drug Utilisation Subcommittee in *Australian Statistics on Medicine* (Commonwealth Department of Health and Aged Care).

The database is, however, limited to prescription medicines and some medicines that require sale by pharmacists - making it inadequate for more sophisticated analyses. Information on public hospital drug usage, over-the-counter medications and complementary medicines is not included. Similarly, data are not collected on the reason for use, dosage prescribed or frequency of administration. The database is not patient linked and data are not available on medication use by age or gender.

The OPAL Return of Unwanted Medicines program also provides an indicator of inappropriate drug use in Australia. The program has been in operation for over a year and provides quarterly incineration weight data for unwanted and out-of-date medicines returned to pharmacists. It is estimated that, when the program is implemented nationally, around 200 tonnes per annum of expired and unwanted medicines will be returned to pharmacies throughout Australia for incineration. It is intended that in the future sample data will be available for medicine return type and reason(s) for return.

## Conclusion

As the experiences to date illustrate, Australia currently does not have a well-developed capacity to obtain information on the overall performance of the health care system or its component parts (Buchan 1998). Recognising the inherent sensitivity and complexity of quality measurement, limitations in terms of current performance information reflect:

- a lack of reliable and valid clinical data and limitations of available administrative data;
- a lack of clarity about specific measurement objectives at different levels of the health system. There is an ongoing debate about whether indicators can serve different and potentially incompatible objectives, that is, to judge, justify and improve (Buchan 1998);
- a limited understanding of the different audiences for information on quality, for example, the different needs of consumers, clinicians and funders. As discussed earlier, judgements about quality depend on the perspective from which one is assessing the quality of the system and the level of the health system at which the measurement is made. The Consumer Focus Collaboration has noted that the provision of performance information about health services and the health system more broadly is one of the key tools that may assist consumers to take part in decision making and quality improvement activities (Consumer Focus Collaboration 1998). A lack of reliable and accessible information is a significant limitation (Phillips Fox and Casemix Consulting 1999)<sup>4</sup>; and
- the existence of perverse incentives which lead to problems with accurate data collection – ‘quality measurement’ has often been perceived as performance measurement for primarily ‘top down’ accountability purposes rather than local level quality improvement.

Although Bodenheimer (1999) concludes that measurement of quality is an ‘elusive but achievable goal’, it is clear that Australia, like every other country, is at a very early stage in developing nationally applicable measures of quality in relation to health performance and health outcomes.

The limitations of current approaches to measurement of system performance are also reflected in the patchy use of data and information to support clinical review and improvement at a clinical level. Although different parts of the health system collect a great amount of data, these data are often haphazardly collected and there is little analysis of anything but information relating directly to financial requirements.

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<sup>4</sup> There are challenges in presenting this information in ways which limits confusion and misinterpretation and which encourages ongoing constructive dialogue with consumers and communities without discouraging the measurement of quality by clinicians and developing a ‘blame and shame’ approach. However, successful examples are available from overseas which suggest it is possible to provide meaningful and comparable public information without producing a defensive response from service providers and to achieve the dual goals of improved quality of care and public accountability. For example, in Massachusetts, a program has demonstrated a successful framework for measuring and disseminating comparative quality information about patient’s hospital experiences, building upon some agreed public release principles (Rogers and Smith 1999). In New York, the State Department of Health has implemented a program which

Two initiatives are particularly relevant in taking forward national work on information management and performance measurement:

- Australian health ministers established the National Health Performance Committee in August 1999. It has replaced the NHMBWG and has the responsibility to develop and maintain a national performance measurement framework for the health system, to support benchmarking for health system improvement and to provide information on national health system performance. The new committee will continue the work of the NHMBWG, which had initially concentrated on the acute health sector, and will have a broader focus of the whole of the health sector, including community health, general practice and public health; and
- The National Health Information Management Advisory Council (NHIMAC) has been established to facilitate collaboration between the Commonwealth, States and Territories and other key stakeholders to achieve a national approach to the development, uptake and implementation of new online technologies in the health sector.

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enables consumers to compare the performance of hospitals and surgeons in relation to coronary bypass procedures, although this has not been without controversy (Millenson 1997).

## **How does government intervene to support quality health care?**

There is a number of ways in which governments currently intervene in the health care market to offset perceived market failures and to achieve government policy objectives. The choice of levers to achieve policy objectives is underpinned by a variety of assumptions about what drives quality improvement. Leatherman (1999) suggests that such assumptions are often not well articulated but include beliefs about the relative importance of factors such as:

- knowledge – the importance of data and information about standards and how well standards are met to inform quality improvement;
- competition – an assumption that suppliers in the marketplace will continue to improve their services and products to maintain their market share;
- regulation – the emphasis which should be placed on the development and monitoring of rules and standards to ensure that quality meets acceptable standards;
- accountability – the importance of clear roles and responsibilities for quality improvement through, for example, corporate and clinical governance approaches, in ensuring quality;
- professional ethos – the importance of ensuring that health care providers are supported to continually improve the quality of their services and products; and
- consumers – the importance of a strengthened consumer voice in ensuring the quality of services and products.

Clearly no single lever represents a complete response (Institute of Medicine 1999). Indeed the way that the Commonwealth currently intervenes in the health care market reflects aspects of all these drivers. Commonwealth initiatives are described in more detail in appendix 1 and in broad terms include:

- regulation of health products and services to ensure that minimum standards of quality and safety are met. There is a long history of product and service regulations in many components of the health system in Australia, including regulation of hospitals, public health, food safety, drugs and medicines and health professionals and through industry self regulation (Tasman Asia Pacific 1999). The health sector's regulatory framework is complex and involves different spheres of government with the distinction between roles of the Commonwealth and States becoming less clear (Commonwealth Department of Health and Aged Care 1999c).

Examples of regulatory approaches include:

- the Professional Service Review Scheme, which focuses on a practitioner's conduct to determine whether the practitioner has inappropriately rendered or initiated services which attract a Medicare benefit or has inappropriately prescribed under the Pharmaceutical Benefits Scheme. Practitioners whose conduct may be examined under the scheme are doctors, dentists, optometrists, chiropractors, physiotherapists and podiatrists. The scheme is the Federal Government's primary means of investigating inappropriate practice.

- the Therapeutic Goods Administration, which provides quality and safety assurance within the Australian health care sector through its pre-market and post-market regulatory activities. The Therapeutic Goods Administration evaluates new therapeutic products, prepares standards, develops test methods, conducts testing programs and liaises with industry to ensure that the products on the Australian market are of good quality and are safe.
- other regulation, including the Commonwealth quality assurance confidentiality legislation (Part VC of the *Health Insurance Act 1973*) which was developed to assist health care professionals to participate in activities that examine the quality of care provided and which aim to improve that quality of care. To be subject to this legislation, an activity must be declared by the Commonwealth Minister for Health and Aged Care.
- use of funding levers to support the achievement of certain quality objectives. This can take a number of forms, including defining the scope, quality and price of individual services, agreeing in advance the total funding available for a group of services and defining the circumstances under which funding will be provided (Commonwealth Department of Health and Aged Care 1999b).

Examples of funding approaches include:

- the fee differential for general practitioners, where a higher scale of fees is paid for vocationally registered practitioners, as an incentive for practitioners to undertake additional training (mandatory for new practitioners from 1 November 1996) and maintain their participation in continuing medical education and quality assurance programs.
- payments through the Practice Incentives Program, which are conditional on practices meeting basic criteria (or being accredited) and are calculated in a manner which is intended to give greater rewards to ‘quality’ practices.
- setting requirements for access to Commonwealth subsidies through the Medicare Benefits Schedule and the Pharmaceutical Benefits Schedule. In relation to specific products and services, the Pharmaceutical Benefits Scheme, through the Pharmaceutical Benefits Advisory Committee, and the Medicare Benefits Schedule, through the Medical Services Advisory Committee, rely on systematic review of the evidence to ensure that drugs and procedures for listing address clinical need and are effective and cost effective. Setting additional listing conditions and restricting the subsidy of a drug or procedure to specific clinical circumstances may be (in part) mechanisms for promoting quality use of the products and services.
- setting requirements for quality objectives to be addressed through funding agreements, for example, the requirement for Quality Improvement and Enhancement Plans as part of the current Australian Health Care Agreements.
- cooperative agreements with groups of health professionals, for example, the General Practice Memorandum of Understanding and the Pathology Agreement.
- developing and supporting national infrastructure, including support for standard setting to directly (and indirectly) support the efforts of consumers and service providers and other stakeholders to improve the safety and quality of service delivery. For example, the National Prescribing Service, National Consumer Resource Centre, National Institute of Clinical Studies, development of a standards based health

information technology infrastructure platform and support for the Australian Council for Safety and Quality in Health Care and the National Mental Health Strategy; and

- commissioning research and development of demonstration and educational projects to illustrate new ways of doing things and to underpin a 'culture of quality' (Bodenheimer 1999). For example, the Royal Australian College of Physicians 'Clinical Support Systems Project' and the National Demonstration Hospitals Program.

## **The national picture**

It is beyond the scope of this paper to describe the range of activity being undertaken at a State and Territory level directed towards supporting the safety and quality of health care. At a national level there is a range of government and non government activities and initiatives, a number of which are detailed in appendix 1.

These current arrangements mean there is a broad and comprehensive range of stakeholder involvement in these activities and critical building blocks (and resources) are in place. The multi faceted nature of such arrangements reflects the complexity of the issues to be addressed and the absence of any simple 'magic bullet' solutions (Institute of Medicine 1999). This also underlines the importance of a clear objective, as there is a risk of a diffused focus on key issues because of the range of bodies involved – processing problems rather than preventing and solving them (Hunter 1999). It is also evident that there are a number of horizontal and vertical linkages which need to occur to make things happen and for making a real difference at a local level.

As the range of interventions and national bodies demonstrates, a number of assumptions about what drives safety and quality improvement underpin current Commonwealth and national approaches. To guide policy analysis and development, governments need to consider what mix of interventions may deliver the best outcome and decide where the emphasis needs to be. Given the inherently 'local' nature of health care quality, a key emphasis needs to be placed on:

- using available levers to strengthen the professional ethos of health care providers to continually 'do better', which reflects the importance of clinician leadership and ownership because the knowledge, judgement and skill of clinicians is a critical determinant of the quality of health care (Enthoven 1997); and
- strengthening the capacity of consumers to make informed choices at all levels within the health care system. Active consumer participation has been identified as critical part of ongoing efforts to improve the quality and safety of acute care services (Australian Health Ministers' Advisory Council 1996, National Expert Advisory Group on Safety and Quality in Australian Health Care 1999). Current debates on the role of consumers in improving the safety and quality of health care often focus on developing appropriate methods for facilitating consumer and community participation and feedback into health planning, monitoring, delivery and evaluation processes, improving access to appropriate consumer health information and improving service responsiveness and accountability to consumer views (Consumer Focus Collaboration 1998).

There are opportunities for all governments to better integrate work on quality reflecting the importance of taking a more 'holistic' focus across the continuum of care rather than pursuing improvement in isolation within different sectors or settings of the health system (while recognising that different sectors will have unique needs and characteristics).

There are also opportunities to make best use of significant new national quality infrastructure notably the National Institute of Clinical Studies and the Australian Council for Safety and Quality in Health Care.

## **Linking quality to funding**

There is a number of challenges for how governments best use financing and purchasing levers to improve the quality and safety of care. Historically health funders have undertaken a relatively passive role, retrospectively reimbursing service providers without any involvement in defining the quantity, quality, scope or price of the services to be funded (Commonwealth Department of Health and Aged Care 1999b). More recently, the Commonwealth (like other spheres of government) has diversified its role as a funder to include a 'purchasing' function.

Purchasing allows the Commonwealth to take a more active role by allowing financing arrangements to be used to achieve broader policy objectives generally related to desired outcomes in the system (Commonwealth Department of Health and Aged Care 1999c). For example, the quality of health care has been one of the areas of interest in cooperative agreements with the medical profession. The pathology and diagnostic imaging agreements led the way in this area, with more recent efforts centred on setting up a similar arrangement with general practice. See appendix 1 for details.

There are also similar trends in the private sector where in recent years, as a result of regulatory changes, health insurance funds have been able to move increasingly into the role of purchasers (Commonwealth Department of Health and Aged Care 1999c). This potentially entails consideration of the quality of services delivered to contributors by health benefits funds, the standards that providers must reach in providing care and the extent to which funds can impose quality standards on health care service providers. These measures are linked to the cost of private health services as the gap between provider fees and insurance benefits remains a significant issue for many private health consumers. See appendix 1 for details.

Some key challenges for effectively linking quality to funding arrangements include:

- There are difficulties in measuring quality, which mean it is difficult to define quality specifications of the product or service to be purchased. There is an ongoing quest to find universally acceptable, useful and measurable indicators of quality in treatment of individual diseases, health system performance and not least in the definition of outcomes that are meaningful as well as relevant to consumers and professionals alike. In part this reflects limitations in adequately capturing the multidimensional nature of health care performance which leads to problems with the validity of data. This leads to ambiguity in the interpretation of data in relation to establishing causal relationships and connecting performance data to clinical processes (Sheldon 1999; Thomas 1999). This is compounded by a lack of clear accountability and authority for health care quality (Buchan 1998);

There are also difficulties in addressing the multiple sources of variation which make comparative analysis difficult. For example, variance in relation to data definitions and collection methodologies and appropriate risk adjustment. The tools in this area tend to be very blunt (Sheldon 1999; Thomas 1999). For example, where benchmarking networks have developed in Australia they have concentrated on comparisons of administrative performance data – the clinical data and performance comparison is still technically too challenging;

- Perverse and unintended incentives can be created when data about quality are linked to accountability requirements as part of funding and purchasing arrangements. Accountability drivers can create perverse incentives for adversarial and defensive reactions to collecting and reporting on performance. Sheldon (1999) notes that ‘those being measured develop strategies to deal with being measured’ and that there is a tendency to be ‘seen to comply with measurement while preserving autonomy’. As noted earlier, there is often poorly acknowledged tension between ‘accountability’ and ‘quality improvement’ in measurement of clinical performance. This militates against better use of data to improve clinical practice as all levels of the health care system;
- There is uncertainty about the cost-quality equation and where the trade-offs might be in terms of greater technical and allocative efficiency. Governments have considerable interest in the cost-quality equation given their interest in providing the best health care possible for their citizens as well as to get the most value from the money available. However, the relationship between the cost and quality of care has been relatively untested in the Australian context. There are few measurable standards, and a framework for assessment to cover the range of treatment types across the range of services has not been developed (Steering Committee for the Review of Commonwealth/State Service Provision 1999); and
- There are limitations in analysing links between how funding is used, current practice and policy objectives. For example, the Commonwealth has a considerable investment in clinical training but because funding is not specifically identified – most is subsumed within the Australian Health Care Agreements – Commonwealth influence over training is reduced. In particular, as trainees are employed by hospitals, it is very difficult to assess what is a training cost as opposed to a service cost.

These issues suggest that there are ongoing challenges in using purchasing levers to drive health care quality improvement given that the ability to use incentives to encourage desired changes depends on having agreed measures of good performance (Buchan 1998) and a capacity to minimise perverse incentives. One view is that quality could be better driven by purchaser demands not only for information on outcomes if that is available and reliable but also for evidence that quality improvement processes are being implemented, evaluated and enhanced (Thomas 1999).

## The cost of poor quality

Although it may seem a 'leap of faith' to many, better quality services are more cost effective. Indeed, it has been commonly accepted that good quality care is also more efficient and cost effective. However, it is only in recent years that it has been more clearly demonstrated that cost and quality are inextricably linked (James 1999). Frequently, the benefits flow after the injection of initial funds to set up some quality improvement or risk management system. While it may cost money to implement many quality improvement initiatives, governments stand to make considerable savings or, equally, benefit more people for the same cost, if quality improves.

For example, hospital admissions data highlight the extent and cost of medication-related incidents in Australia. Inappropriate medication use results in at least 80,000 hospital admissions each year at a cost of around \$350 million (Roughead 1999). Estimates suggest that at least half of medication-related hospital admissions are potentially preventable. In addition, because many medication-related problems are dealt with in the community, it is likely that non-hospital costs are even higher.

Intermountain Health Care in the United States has demonstrated that substantial cost savings can be achieved for instance through the implementation of a computerised drug prescribing and monitoring system. Similar results have been achieved in smaller hospitals by including a pharmacist as a member of the clinical team on daily patient rounds (James 1997).

It has been estimated that preventable iatrogenic injury costs the taxpayer in the region of \$1.2 billion annually which is equal to the costs of all other forms of injury in Australia put together (Australian Patient Safety Foundation, unpublished; Rigby *et al.* 1999, p8). One example of strategies to address iatrogenic injury is the application of incident monitoring among anaesthetists in Australia. This has resulted in many simple design changes in anaesthetic equipment that has reduced the number of anaesthetic-related adverse events considerably (Australian Patient Safety Foundation 1998). These changes have been made at little or no cost to the health care system. The Australian Incident Monitoring Study in Intensive Care has also been able to make simple changes in procedures that have improved the quality of care also at little or no cost.

## Accreditation

Accreditation is often seen as an important mechanism to ensure the quality of health care. Ideally, accreditation needs to identify areas for improvement in health care services, provide accountability for quality of care and safety to governments and funders and give consumers an indication that a health service or provider meets accepted standards of performance in critical areas of service.

Measurement and assessment against a set of standards is well established throughout Australia in health care facilities through the work of bodies such as the Australian Council on Health Care Standards in the hospital sector, the Quality Improvement Council Program (formerly known as the Community Health Accreditation and Standards Program) in the community health sector, and the work of the National Association of Testing Authorities in pathology practices. In 1997, accreditation services were also offered to general practice. See appendix 1 for a description of pathology and general practice accreditation processes.

There is no national quality framework to guide an accreditation and certification process that delivers a drive to continuous quality improvement, value and accountability to consumers, governments and funders. In the hospital sector, there are no essential requirements of accreditation programs, with a variety of types of accrediting or certifying bodies vying to audit health services. There is a need for a generic quality framework that can harmonise the external quality review methods used in health care, but still enable differentiation of the products and organisations within the marketplace.

## Health care facilities

The *Final Report of the Taskforce on Quality in Australian Health Care* (Australian Health Ministers' Advisory Council 1996) identified a number of shortcomings in many approaches to accreditation of health care facilities, including an undue focus on structure and processes, that hospitals prepare for accreditation so the conditions at the time of survey may not reflect everyday practice, inadequate systems for ensuring that hospitals respond to any identified concerns and a lack of public reporting of information arising from the accreditation process.

There is a growing interest in approaches from other industries which are more generically focused but offer internationally recognised certification against standards (National Expert Advisory Group on Safety and Quality in Australian Health Care 1998).

The introduction of the Evaluation and Quality Improvement Program (EquIP) by the ACHS in late 1996 was a response to the need for a broader standards framework and a move away from a bricks and mortar approach. However, the introduction of EquIP has not addressed some key requirements in terms of comparisons with organisations outside the health industry, a more objective assessment by professional surveyors and the absence of a strong consumer focus (National Expert Advisory Group on Safety and Quality in Australian Health Care 1998).

The complexity and cost of accreditation are proving to be a disincentive for participation by health services in adopting a quality improvement framework. Governments have made accreditation of health care facilities mandatory in many States – either directly by legislation or through the requirements set out in organisational performance objectives. However, the limited availability of resources to commit to accreditation has driven many services to seek more affordable equivalents to accreditation – including the establishment of benchmarking networks.

This trend is of concern to funders and consumers because it reduces their capacity to assess and compare the performance of health services and brings into question whether health services could actually meet minimum standards. The search for alternative approaches also undermines the recent acceptance of continuous quality improvement, as health services consider the cost advantages of merely doing the barest essentials to comply with government and funder requirements.

## General practice

In a general practice context, some key issues for the profession regarding the further development of practice accreditation are: ensuring the Royal Australian College of General Practitioners Entry Standards are kept up to date; development of optimum standards (as opposed to entry standards); implementing and embedding a continuous quality improvement cycle which all accredited practices can operate and so gradually improve standards; and catering adequately for accrediting niche practices, for example, those where general practitioners provide services, such as sports medicine and Aboriginal Medical Services.

## Workforce issues

Adequate education at all levels is essential to prepare individuals to operate as high-quality health care providers.<sup>5</sup> In considering the capacity of the medical workforce to provide safe, quality care, some of the key issues include:

- length and content of training programs. Many of the current education and training processes have developed over time without necessarily being adequately grounded in the needs of patients and health services. There are also innumerable calls for doctors to have specific skills in particular problems or for experience in particular areas, for example, domestic violence, indigenous issues or rural health. The National Expert Advisory Group on Safety and Quality in Australian Health Care (1999) has particularly highlighted the need for schools of all health sciences to train all health care professionals to support their involvement in quality improvement within collaborative team environments;
- maintaining competence. There have recently been a number of moves towards establishing systems to ensure that professionals maintain their competence throughout their working life. In 1989, the government established vocational registration for general practitioners to encourage doctors entering general practice to complete appropriate postgraduate training and ensure that these skills were maintained through participating in the Royal Australian College of General Practitioners Quality Assurance and Continuing Medical Education Program. Such an approach is obviously based on the expectation that continuing education would maintain and improve standards – a proposition which makes sense but is difficult to prove empirically. A number of other medical colleges have implemented

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<sup>5</sup> Education encompasses the following elements although not necessarily across all disciplines:

- basic training leading to entry to particular professions, usually mandated via registration arrangements and occurring at undergraduate levels but also including postgraduate courses in some disciplines;
- pre-vocational training;
- vocational training; and
- continuing education.

In recent times, the Commonwealth through the health portfolio, has had varying involvement in these areas for the different disciplines. The major focus to date has been in support of specific programs (for example, general practice) rather than in education per se and largely restricted to medicine and nursing.

similar programs although these do not carry the penalties of vocational registration where a general practitioner can be removed from the register for failure to complete requirements.

These approaches are important but may not be sufficient by themselves. Through private practice, many doctors continue to work well past generally accepted retirement ages. In some countries, for example Canada, there are well-established recertification programs whereby doctors are required to undertake ongoing assessment to demonstrate their competency.

Recertification is discussed from time to time in Australia but has not been actively pursued. There is movement in some of the medical colleges to keep their members up to date through continuing medical education and maintenance of standards programs where fellowship is dependent on members meeting certain minimum requirements. The National Expert Advisory Group on Safety and Quality in Australian Health Care (1998, p16) supports the continuation of these programs although they have not fully demonstrated their effectiveness as yet; and

- working arrangements. There are times when the working arrangements of health services mitigate against quality. One example is the working hours of doctors within the public hospital system. The Commonwealth has been working with the Australian Medical Association to develop and establish agreed hours of work and workloads consistent with occupational safety standards and raise awareness within the community, the health industry and the medical profession of the need for such reform. The most significant achievement of the project is the *Draft National Code of Practice – Hours of Work, Shiftwork and Rostering for Hospital Doctors and Background Research*.<sup>6</sup>

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<sup>6</sup> The code draws upon other elements of the project, such as research into the impact of fatigue in other industries, and the effects of hours of work on the learning of doctors-in-training. The code draws upon research in other industries, such as road transport and airlines. The main feature of this draft code is a risk assessment checklist. It includes a number of defined operating standards which are recommended minimum standards. Where these minimum standards are not being met a higher risk exposure is possible. The Australian Medical Association is currently developing an implementation strategy. States and Territories will need to take responsibility for implementing the code, as they are the employer of public hospital doctors.



## **Where should we focus our ongoing efforts to improve health care quality?**

The issue of unexplained variation in clinical practice is a challenge in a number of countries. There is a growing interest in finding ways of differentiating between desirable and undesirable practice variation, and preventing undesirable variation (Buchan 1998), as well as in approaches to understanding and better addressing variations in treatment patterns for similar conditions through strengthening the practice of evidence-based medicine (Richardson 1990; Braithwaite 1997). In 1985, the United States Congressional Office of Technology Assessment estimated that only 10 to 20 per cent of clinical practice was supported by randomised controlled trials (Eddy 1984). In 1991, there was an estimate that as few as 15 per cent of medical decisions were based on the results of rigorous evidence (James 1999). Another analysis which approached the topic from a different perspective suggested that just more than 50 per cent of inpatient general medicine had level three evidence to support care provided in a hospital setting (Ellis *et al.* 1995).

These data suggest that a significant amount of clinical practice does not have an explicit evidence base. However, the extent of this is still being debated. This limits the effectiveness of tools such as clinical practice guidelines which have been developed to support clinicians to adopt evidence-based practices.<sup>7</sup> James (1999) estimates that only 10 to 20 per cent of guideline steps are covered by any sort of published research.<sup>8</sup> Further, individual patients often have complex histories and combinations of conditions that would have excluded them from the sorts of trials on which the evidence is based.

Of course, there can be no expectation that clinical practice is a 'one size fits all' approach. The relationship between the available evidence, clinical context, resource availability, patient preference and any accompanying conditions means the clinician needs to have a degree of flexibility in clinical decision making. In practice, clinicians need to exercise considerable judgment when making decisions about individual patients.

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<sup>7</sup> The Institute of Medicine defines clinical guidelines as 'systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances'. The primary purpose of clinical guidelines is to arrange knowledge in a way that is accessible, logical and based on the best available evidence. A secondary but important possible outcome is reduction in inter-practitioner variance in clinical decisions. Allied to this are the concepts of best practice, consensus statements, critical pathways and protocols. The terminology is often multiple and confusing. However, the underpinning context is that clinical decision making ought to be based on the best available evidence.

<sup>8</sup> The research effort is growing exponentially. The United States President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry reported in 1998 that randomised controlled trials had increased from 509 annually between 1975 and 1980 to 8,636 annually between 1993 and 1997.

Other challenges in using health care research evidence to strengthen evidence-based health care and reduce inappropriate variation include:<sup>9</sup>

- the inability of clinicians to access research evidence readily at the time of decision making has also been identified as a particular impediment (Australian Health Ministers' Advisory Council 1996). Attempts have been made to bring evidence to the point of decision making; for example, through the Cochrane Library and automation of information processes. However, systematic reviews would appear to be low on the priority list for clinicians as sources of information on new clinical developments (Phillips 1998). In large part, this reflects the relevance of the medium in which they have been provided;
- there is often resistance to changing accepted practice – practice often based on previous training and experience. Considerable cultural barriers are in place that require an understanding of the clinicians' perspective and recognition of the system changes that are required to support an evidence-based practice approach to health care; and
- the ad hoc collection and analysis at a clinical unit level of data relating to clinical management, performance measures, clinical outcomes, patient satisfaction and resource utilisation, means there is often little useful and timely performance feedback at a clinical unit level. Poor flows of clinical information across the continuum of care are also problematic. Good health care decisions depend on consumers and providers having quality information. However, information flows between providers tend to be very fragmented.<sup>10</sup>

The appropriate use of new clinical technology presents some particular challenges in terms of managing the diffusion of new medical services driven by industry promotion and marketing of new technologies and the introduction of new services via current Medical Benefits Schedule item descriptors, many of which are relatively broad. Key issues include: developing strategies to address the general insufficiency of data of a scientifically acceptable standard; promoting the establishment of more systematic links between clinical practice and data collection, for example, at present data collection initiated by craft groups may not include protocols to promote comparability with other local or overseas trials; and, minimising the time and cost involved in conducting systematic reviews so that an evidence-based approach facilitates and does not constrain innovation.

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<sup>9</sup> In terms of applications within a clinical care context, evidence-based medicine has been defined by Sackett (1996) as: 'the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients'.

<sup>10</sup> There are currently developments in the use of clinical information technology on many fronts, ranging from the trial of smart cards to hold patient information within a small defined area of practice, to the development of state-wide systems linking clinical and administrative patient based information. While the benefits of a continuous development in the field of clinical information technology are becoming more evident, there are as yet few means to consolidate and build on the experience and products resulting from the work dispersed throughout Australia. As Buchan (1998) notes much of the public debate about this has revolved around privacy and confidentiality concerns, rather than the risks of not using technology to improve the flow of information between providers and care settings.

The dynamic nature of the evidence base for health care and the complexity of clinical care means that strategies need to be developed which minimise negative impacts of this inherent uncertainty (Eddy 1984). In addition to the development of clinical policies, Eddy (1984) suggests that a higher priority needs to be given to collecting and evaluating information to understand and describe the consequences of medical practices. At a clinical level, this suggests that clinical units require:

- tools to measure and understand performance variation at a local level which utilise the evidence base but also work with agreed protocols to improve clinical practice; and
- decision-support advice that is comprehensive across a range of clinical decisions relevant to their practice.

By way of example, Intermountain Healthcare in Utah, United States, has achieved improvements in quality and reductions in health care costs through the incorporation of such an approach in routine processes of care (James 1993).

The National Institute of Clinical Studies (NICS) will have an important role to play taking forward work on these issues in an Australian context. The overarching goal of NICS is to continuously improve the quality and effectiveness of clinical practice throughout the public and private health sectors, encourage behavioural change by the medical profession and contribute to the Commonwealth Government's overall safety and quality agenda. NICS will pursue a systems-based strategic approach with an emphasis on identifying and encouraging adoption of best practice methodologies in clinical settings.

## **The safety of health care**

Concerns about misuse have contributed to a renewed focus on the safety of health care. As discussed previously, health care is delivered in a dynamic environment with complex interactions between patients, medical and other staff, infrastructure, equipment, policies and procedures. As such, it carries inherent risks and in reality is a system which is 'accident prone' (Institute of Medicine 1999). Indeed, Berwick and Leape (1999) suggest that on the available evidence the risk and harm to patients is 'startling'. For example, if the results of the QAHCS are extrapolated to the Australian hospital system as a whole, this translates into an annual estimate of 470,000 adverse events or 3.3 million bed days and an approximate cost of \$1 billion in 1992 (Wilson *et al.* 1999).

The Institute of Medicine (1999) suggests that a simple definition of 'safety' refers to 'freedom from accidental injury' and that a primary safety goal should be the prevention of accidental injuries. The available evidence would suggest that much can be done to improve the safety of health care by making systems of care more reliable. A significant finding of the QAHCS was that more than half the adverse events were considered preventable due to the presence of human causes and system factors. This included technical problems, failed care processes and infections (Wilson *et al.* 1999).

Concern about medical errors is often channelled through harsh forms of surveillance and punishment (Berwick and Leape 1999). The Institute of Medicine (1999) suggests that latent errors (that is, factors built into the system) are more harmful than active errors because of the built up capacity for harm and operator error. As

such, while human error is a significant factor in safety lapses, much greater attention needs to be paid to the complicated aetiology of error and the contribution of system factors. There are examples from a range of other industries from which to learn. As the Institute of Medicine (1999, p54) notes:

Health care has to look at medical error not as a special case of medicine, but as a special case of error, and to apply the theory and approaches already used in other fields to reduce errors and improve reliability.

As one example of a possible area of improvement, the National Expert Advisory Group on Safety and Quality in Australian Health Care (1999) also highlighted the importance of better use of information about adverse events. The group noted that greater links need to be made across Australia between the data collected by coroners, complaints commissioners, registration boards and health services so that mistakes are learnt from. This may require legislative change within jurisdictions.

The National Expert Advisory Group (1998) also comments on generally poor linkages between processes such as peer review, credentialling and recertification and systemic quality and safety improvement strategies.

The Australian Council for Safety and Quality in Health Care will have an important role in taking forward agreed national actions with a strong focus on the safety of health care. Agreed to by all health ministers in August 1999, the council will function as a national partnership between governments, health care providers and consumers and will set an agenda for health care safety and quality and provide national leadership to reduce the risk of adverse events occurring.

## **What is the experience overseas?**

Hunter (1999) notes a growing global convergence of health policy agendas across otherwise diverse systems of governance including in relation to quality issues. Both the United States and United Kingdom have recently undertaken major reviews (Presidents Advisory Commission on Consumer Protection and Quality In the Health Care Industry 1998; United Kingdom Department of Health 1998). Table 1 outlines some of the key points arising from these reviews. This analysis suggests that there is a high degree of consistency across the United States and United Kingdom in relation to the drivers for quality improvement and the analysis of current problem areas and challenges. This is also consistent with the picture in Australia.

Leatherman (1999) in her analysis of the United States and United Kingdom approaches suggests that the dominant belief in a United States context is about the importance of competition to improve quality; in the United Kingdom context it appears to be more about regulation and accountability. Both place a strong emphasis on better measurement. The United States approach appears to rely much more on strengthening the capacity of players within the health care market while the United Kingdom approach suggests a more prescriptive and interventionist role for government. Clearly in part these differences in approach reflect the different structures of the two health systems.

In December 1999, the Committee on Quality of Health Care in America of the Institute of Medicine released a report on health care safety which argues for an active national agenda for reducing errors in health care and

improving health care safety. Although the recommendations of this report are not included in Table One, the report includes recommendations about creating a set of national goals for improvement, national mandatory reporting of adverse events and legislation to protect certain types of peer review activities.

**Table 1: Key features of quality improvement frameworks in the United States, United Kingdom and Australia**

	<b>United States</b>	<b>United Kingdom</b>	<b>Australia</b>

<p><b>Why focus on quality?</b></p>	<ul style="list-style-type: none"> <li>• Inability to systematically measure health care quality.</li> <li>• A rapidly expanding evidence base combined with new technology increases the gap between best care possible and actual care delivered.</li> <li>• Changing nature of American health care industry – trends in managed care, changes in provider organisations, health innovation and technological changes.</li> </ul>	<ul style="list-style-type: none"> <li>• Fragmentation in decision making – ‘lottery of care’.</li> <li>• Well-publicised lapses in quality leading to lessening of public confidence.</li> <li>• Not meeting ‘modern’ expectations of rapid access to services.</li> </ul>	<ul style="list-style-type: none"> <li>• Concern about a higher-than-expected rate of adverse events in hospitals.</li> <li>• Inability to systematically measure health care quality.</li> <li>• Rapidly expanding evidence base.</li> <li>• Unexplained variation in clinical practice.</li> </ul>
<p><b>Key issues</b></p>	<ul style="list-style-type: none"> <li>• Wide variation in health care services.</li> <li>• Underuse and overuse of some services.</li> <li>• Unacceptable levels of errors.</li> <li>• Less access of uninsured people to health services.</li> </ul>	<ul style="list-style-type: none"> <li>• Unacceptable variations in performance and practice.</li> <li>• Delays in introducing proven new treatments and in discontinuing those which are disproven.</li> <li>• Inequalities in access and clinical outcomes.</li> </ul>	<p>Suggested national action areas include:</p> <ul style="list-style-type: none"> <li>• strengthening the consumer voice;</li> <li>• fostering best clinical practice;</li> <li>• learning from incidents, accidents and adverse events;</li> <li>• developing frameworks for quality improvement and management;</li> <li>• developing information systems to support quality; and</li> <li>• education and training for safety and quality improvement. (National Expert Advisory Group on Safety and Quality in Australian Health Care 1999).</li> </ul>
<p><b>Key national objectives</b></p>	<ul style="list-style-type: none"> <li>• Proposed overall statement of purpose for the health system: ‘...to continuously reduce the impact and burden of illness, injury and disability and to improve the health and functioning of the people of the USA.’</li> <li>• National aims for improvement:             <ul style="list-style-type: none"> <li>– reduce the underlying causes of illness, injury and disability;</li> <li>– expand research on new treatments and evidence of effectiveness;</li> <li>– ensure the appropriate use of health care services;</li> <li>– reduce health care errors;</li> <li>– increase patient participation in their care; and</li> <li>– address oversupply and undersupply of health care resources.</li> </ul> </li> </ul>	<p>Fair access to effective, prompt, high quality care wherever there is a patient treated in the National Health System.</p>	<p>A concern for ensuring equity of access to a satisfactory system that promotes good health at a low cost.</p>

**Table 1: Key features of quality improvement frameworks in the United States, United Kingdom and Australia**

	<b>United States</b>	<b>United Kingdom</b>	<b>Australia</b>
<b>Key national strategies</b>	<ul style="list-style-type: none"> <li>• National commitment (from president down) to health care quality improvement.</li> <li>• Establishment of an Advisory Council for Health Care Quality to identify national aims and objectives for improvement and track progress; track compliance with a Consumer Bill of Rights and Responsibilities.</li> <li>• Establishment of a Forum for Health Care Quality Measurement and Reporting to implement a plan for measuring and reporting health care quality.</li> <li>• Recommendations in relation to:             <ul style="list-style-type: none"> <li>– strengthening the market to improve quality through influencing the purchasing behaviour of group purchasers; improving consumer information; special attention to the needs of vulnerable populations; appropriate accountability for quality improvement and reducing errors and improving safety.</li> <li>– building the capacity to improve quality through research and evidence-based practice; adapting organisations for change; encouraging greater collaboration between health care worker and investing information systems.</li> <li>– addressing the basic access needs of the uninsured.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Clear national standards for services supported by consistent evidence-based guidance (National Service Frameworks).</li> <li>• Partnership between clinicians and government to marry clinical judgment with national standards – focus on clinical governance at the local level.</li> <li>• Standards monitoring also supported through a Commission for Health Improvement (rolling reviews and troubleshooting); Performance Framework to set and publish against objective performance criteria; National Survey of Patient and User Experiences.</li> <li>• Establishment of a National Institute for Clinical Excellence to produce guidelines for clinicians about treatment effectiveness.</li> <li>• Cultural change to encourage local ownership of quality improvement.</li> </ul>	<p>Some highlights include:</p> <ul style="list-style-type: none"> <li>• Establishment of an Australian Council for Safety and Quality of Health Care as a national partnership between governments, health care providers and consumers and to set the agenda for health care safety and quality and provide national leadership to reduce the risk of adverse events occurring.</li> <li>• Establishment of a National Institute of Clinical Studies to lead the research and adoption of evidence-based medicine principles and processes, with an approach that will engage researchers and health practitioners.</li> <li>• Funding through the Australian Health Care Agreements to States and Territories for quality initiatives. All governments have agreed that there is a need for national commitment, in partnership with clinicians and consumers, to health care safety and quality improvement.</li> <li>• Formation of a National Health Performance Committee to develop and maintain a national performance measurement framework, to support benchmarking for health system improvement and to provide information on national health system performance.</li> </ul>





## **What are some next steps?**

In bringing together this diverse range of issues, Bodenheimer (1999) suggests there are two main strategic threads to create the present and future agenda of quality: one is the work to inspire health professionals to create a 'culture of quality'; the other is the pursuit of purchasers to demand high quality care.

Within such a framework, there is an important role for all governments incorporating:

- 'whole system thinking' taking into account considerations of how continuing improvement in quality and safety of health care are best built into system design and financing arrangements;
- building on the support of clinical professions recognising that effective quality is critically dependent on the support and involvement of those who provide services;
- strengthening the capacity of consumers to play an informed role in achieving health care quality (at all levels of the system);
- a greater focus on data support which promotes learning (at all levels of the system) rather than judgement; and
- building public confidence in the system through strong national commitment including support for national mechanisms such as the Australian Council for Safety and Quality in Health Care and the National Institute of Clinical Studies.

Greater clarity and consensus about the hallmarks of a high quality health system is an important foundation for building policy objectives, clarifying roles and responsibilities and identifying priority areas for attention. The importance of such a 'shared' vision has been highlighted in a number of reviews both in Australia and overseas (Final Report of the Taskforce on Quality in Australian Health Care June 1996, Interim Report of the National Expert Advisory Group on Safety and Quality in Australian Health Care April 1998, President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry 1998). The box: 'A Vision of Quality Health Care' suggests some of the possible characteristics of such a vision derived from similar work undertaken by the NHS in the UK.

## A vision of quality health care

Fundamentally, the drive to quality improvement should lead to better outcomes for consumers of health services recognising that the health consumer should be the primary focus of approaches to health care quality improvement (Australian Health Ministers' Advisory Council 1996, Consumer Focus Collaboration 1998, NSW Health 1999). Such a vision might include a health system in which:

- quality improvement processes are well integrated at an organisational and provider level and clinicians take a lead;
- evidence-based practice is in day-to-day use with the measurement and decision-support infrastructure to enable its effective implementation;
- the way services are financed supports the delivery of high-quality health services;
- tested good ideas and practice are disseminated with uptake across both the public and private sectors;
- the system readily and openly learns from adverse events and consumer feedback in a timely way and actively seeks to reduce risks;
- high-quality data is used to monitor and improve the quality of care at the right levels of the system.
- processes such as accreditation contribute to quality improvement;
- consumers are well informed to make health care choices and play an active and responsible part in their own health care and in health system improvement;
- consumers receive the services they need in a timely and appropriately coordinated way; and
- the 'blame' culture is a thing of the past.

(Enthoven and Vorhaus 1997, United Kingdom Department of Health 1998)

The rapidly changing nature of the health care system presents significant implications for the delivery of safe, high-quality care. As Buchan (1998, p66) notes:

High quality care, however that is defined, will be difficult to deliver in any country where the various components of the health care system fail to interact in a mutually beneficial way.

There are opportunities for all governments to better integrate work across these dimensions, reflecting the importance of taking a more holistic focus across the continuum of care rather than pursuing quality improvement activities in isolation within different sectors or settings of the health system (while recognising that different sectors will have unique needs and characteristics). This reflects both the trend towards more integrated care arrangements and a recognition that many safety and quality issues occur at the boundaries between different parts of the health care system.

In asserting the importance of better linkages, there is a recognition of a process of evolution rather than revolution, the need to avoid an overly prescriptive 'top down' framework and the opportunities for greater learning from activities which are addressing related quality-improvement issues across programs, for example, approaches to consumer participation and feedback and accreditation. As Leatherman and Sutherland (1998) note, we need to build on the 'legacy of the past' and capitalise on existing knowledge and new enthusiasm to bring a conceptual coherence to future directions.

## Key focus areas

The quality and safety of health care is receiving increasing attention in health care systems across the world (Hunter 1999). As this paper has outlined, most Australians generally enjoy good health and access to a range of high-quality and safe health care services. The Commonwealth is active in pursuing a range of interventions to underpin the quality and safety of the health care system. There are a number of national bodies in place to ensure a comprehensive response which is inclusive of key stakeholders.

This paper has identified a number of areas where there is scope to build a safer and better quality Australian health system. Some of the important themes include:

- recognition of the importance of *systemic approaches to quality and safety improvement* and the need to build in to the system a capacity to continually do better. This clearly has implications for how the Commonwealth targets its interventions across a range of levers, for example, use of incentives, clarification of roles and responsibilities, strategic research and development, support for national infrastructure and approaches to accreditation;
- a need to *review and improve approaches to measuring the overall performance of the health care system and its component parts*. There is a need for greater recognition of the complexity of measuring quality, including a need to more carefully consider the information needs of different audiences at different levels of the system and to recognise and better manage some of the unintended consequences of top down approaches to accountability which may militate against quality and safety improvement at the local level;
- an interest in *unexplained variation in clinical practice* and the need to better understand and address this. This leads both to an interest in ways of strengthening the practice of evidence-based health care and an interest in how to better equip clinicians with systems to support local level analysis and management of performance variation;
- an ongoing concern about the *safety of health care in particular preventable error* and the need to better identify and manage this within a risk management framework, including better use of data. The Institute of Medicine (1999) suggests that health care is a decade or more behind other high-risk industries in its attention to ensuring basic safety through systemic and risk management approaches;
- recognition of the need to carefully look at *how financing approaches can best be used to support quality and safety improvement at a local level*, for example, building on the important contribution of cooperative agreements with professional groups and the Australian Health Care Agreements;
- a need to *strengthen the opportunities for consumer and community involvement* in the health system to improve the capacity of consumers to contribute to quality and safety improvement at all levels of the health system; and
- a need to ensure that the *health workforce is appropriately equipped* and supported to enable the achievement and maintenance of better quality and safety.

Leatherman and Sutherland (1998) note in their comments on the state of quality in the NHS:

The overall message is one which urges coherence in approach; recognition of quality as a concept with multiple stakeholders and the difficulties that this implies; regard for the many processes of quality necessitating coordination and integration and acknowledgment of the importance of values, attitudes and commitment of people who work within the health system.

This statement has considerable resonance for the Australian health care system in our continuing efforts to build and maintain a high quality health care system.

## **Appendix 1 An overview of key Commonwealth and national initiatives**

This appendix provides an overview of a number of key Commonwealth and national initiatives which contribute to the quality of health care in Australia. The description of these initiatives is grouped to illustrate different types of mechanisms and levers which are used to contribute to Commonwealth and national policy objectives (although it should be noted that a number of the initiatives described utilise more than one type of lever).

### **Regulatory Approaches**

#### **Therapeutic Goods Administration**

There are more than 32,000 drugs and 23,000 medical devices recorded on the Australian Register of Therapeutic Goods. The Therapeutic Goods Administration (TGA) has the responsibility to ensure their quality, safety and efficacy, and timely availability at a standard at least equal to that of comparable countries. This is achieved through a risk management approach.

In broad terms the TGA provides a quality and safety assurance within the Australian health care sector through its pre-market and post-market regulatory activities. The TGA evaluates new therapeutic products, prepares standards, develops test methods, conducts testing programs and liaises with industry to ensure that the products on the Australian market are of good quality and are safe.

The TGA undertakes licensing of Australian manufacturers of therapeutic goods and audits manufacturing premises to ensure compliance with good manufacturing practices. It selects samples of goods on the market for testing to establish compliance with agreed standards. It also investigates products that have been the subject of a consumer complaint, adverse report or adverse reaction. If products fail to meet standards or safety-related problems are identified, the TGA can instigate recall procedures.

#### **Professional Services Review Scheme**

The Professional Services Review Scheme is founded on a process of peer review which focuses on a practitioner's conduct to determine whether the practitioner has inappropriately rendered or initiated services which attract a Medicare benefit or has inappropriately prescribed under the Pharmaceutical Benefits Scheme. Practitioners whose conduct may be examined under the scheme are doctors, dentists, optometrists, chiropractors, physiotherapists and podiatrists. The Scheme is the federal government's primary means of investigating inappropriate practice.

The review process has three distinct and independent processes: referral by the Health Insurance Commission of a practitioner to the Director of Professional Services Review (DPSR) for review where there is concern about his or her practice; the hearing of, and reporting on, the referral by a Professional Services Review Committee;

and the making of a determination on the appropriate sanction to be applied by an independent determining officer currently located in the Department of Health and Aged Care. Appeals are permitted to an independent Professional Services Review Tribunal and on points of law to the Federal Court.

## Quality Assurance Declarations - Part VC of the *Health Insurance Act 1973*

The Commonwealth quality assurance confidentiality legislation (Part VC of the Health Insurance Act 1973 – [the Act]) was developed to assist health care professionals to participate in activities that examine and aim to improve the quality of care provided. To be subject to this legislation, an activity must be declared by the Commonwealth Minister for Health and Aged Care.

A declaration under the Act provides protection from subpoena and confidentiality for information, that identifies particular individuals, that becomes known through declared quality assurance activities. The public interest in providing this confidentiality is balanced with the public interest in openness by requiring disclosure of non-identifying information about the activity, in a manner specified in the declaration. Thus, it seeks to increase the availability of useful quality information – information that can be used to prevent adverse patient outcomes and improve the quality of health care.

## Funding approaches

### General Practice Memorandum of Understanding

The General Practice Memorandum of Understanding (MoU) was agreed between the Commonwealth and the medical profession (as represented by the Royal Australian College of General Practitioners, the Rural Doctors Association of Australia and the Australian Divisions of General Practice) on 6 August 1999.

The MoU states that the profession and the Government share a commitment to work jointly over the life of the MoU on quality initiatives. Productivity gains linked to improvements in quality will be shared with and reallocated to general practice through mechanisms agreed between the parties. The Government and the profession will work together to develop a range of quality measures to encourage the implementation and measurement of best practice. These will include, but not be limited to, the use of public resources under the doctor's control, which are earmarked for health care. The general practitioner share of productivity gains will be added to the funding available. Programs relating to the quality use of pathology, diagnostic imaging and pharmaceuticals will be integrated with other quality initiatives for both requestors and providers of these services. Any initiatives must not compromise 'best practice'.

The profession and the Government will also work together on other quality improvements including the following:

- development of a program to enable general practitioners to undertake population health activities;

- development of a generic patient/doctor charter, which outlines the rights and responsibilities of each, to be approved by the General Practice Partnership Advisory Council, suitable for display in all GP surgeries;
- further investigation of the scope for payments for tele-medicine consultations; and
- mechanisms, in the first year of the MoU, to improve access for patients to a wide range of vaccines at the doctor's surgery.

## Pathology Agreement

The first three-year pathology agreement successfully capped growth in Medicare outlays on pathology at an average annual rate of 6%. The recently negotiated second year agreement has discounted that average annual growth to 5%. While these agreements have guaranteed an agreed level of growth and stability for the sector, utilisation is driven principally by requests from general practitioners and to a lesser extent, specialists. This means that pathologists have no control over growth in utilisation of pathology services.

While the actual growth rate in Medicare outlays is the key measure of the success or otherwise of the agreement, there is a recognition that this is dependent on how well medical practitioners order and use pathology, as well as supply and consumer demand factors. This possibly accounts for the agreements combining financing and quality measures, in recognition that one without the other is unlikely to lead to sustained changes in behaviour.

Under the first agreement, there was a focus on understanding ordering practices, both appropriate and inappropriate. This included developing a stronger capacity to analyse utilisation data at the macro and micro levels, and understanding the links between clinical presentation and pathology ordering. There is data to suggest that this nexus is not optimal. This provides a firm base on which to build during the second agreement, specifically to bring together medical practitioners and pathologists to work jointly on ways they can improve the use of pathology in the diagnosis and management of ill health. An incentives program that includes financial and non-financial components will be used to encourage wider adoption of appropriate practices.

A Quality Use of Pathology Committee has been established to jointly develop strategic initiatives that will assist with future quality and cost effective use of pathology services. Key focus of activities include: undertaking research in the determinants of pathology use; working towards further enhancement of pathology guidelines; exploring further the role of electronic ordering of pathology; and exploring opportunities which could be provided through near patient testing.

## Quality Improvement and Enhancement Plans - Australian Health Care Agreements

Commonwealth funding for public hospitals is provided through the 1998-2003 Australian Health Care Agreements (AHCAs). These are five-year bilateral agreements between the Commonwealth and each of the State and Territory Governments. The current Agreements came into effect of 1 July 1998. The Agreements are

a vehicle for both committing Commonwealth funds to public hospital services delivered by the State and Territory Governments, and instigating reform in the funding arrangements for acute health services.

Over the life of the Australian Health Care Agreements, about \$660 million is allocated to the States and Territories to fund and support quality improvement and enhancement practices in hospitals. This requires Ministers to agree on a bilateral basis, a strategic plan for quality improvement and enhancement during the term of the Agreement. Progress under each plan will be reviewed during the 2000-01 financial year.

The following major areas for inclusion in the quality strategic plans have been multi-laterally agreed:

- consumer/community involvement in decision making;
- fostering clinical best practice;
- measuring quality and outcomes;
- strengthening accreditation;
- promoting accountability for quality;
- enhancing innovation; and
- supporting information systems for quality.

## **Accreditation Requirements**

### **Accreditation of General Practice**

Practice accreditation involves two aspects: the accreditation standards and the accreditation process.

The Royal Australian College of General Practitioners (RACGP) publishes "Basic Entry Standards for General Practice". The second edition of these standards will be published later this year. Australian General Practice Accreditation Limited (AGPAL) and Quality Assurance Services provide an accreditation service to General Practices against the RACGP standards.

Joint Accreditation Services – Australia and New Zealand (JAS-ANZ) is finalising a procedure for accrediting accreditation providers against the ISO G62 standard - the general requirements for bodies operating assessment and accreditation of quality systems.

Accreditation enables practices to be eligible for the Commonwealth Government's Practice Incentive Program.

### **Accreditation of Pathology**

Quality assurance programs have a long history in pathology practice and have a significant role in day to day pathology practice. It is a requirement that laboratories participate in quality assurance programs for all tests they perform, which are funded via Medicare. There are a number of bodies that run these programs, but the RCPA, as the professional arm of the profession, is the most significant. If there are no formal quality assurance programs, laboratories are expected to work with another laboratory that performs the same tests to exchange specimens to check that there is an acceptable level of quality of testing. The government has supported work in

this area by funding the establishment of quality assurance programs in a number of new areas in advance of the profession taking these up, for example, in viral load testing and nucleic acid amplification testing for chlamydia. These programs provide feedback to participants on their individual performance and performance relative to others.

The Health Insurance Commission (HIC) assesses annually applications for Approved Pathology Authorities, Accredited Pathology Laboratories and Approved Pathology Providers. For the private sector, the HIC also administers the Licensed Collection Centre (LCC) Scheme, a system for regulating the specimen collection centres. These approvals are prerequisites for Medicare benefits claiming purposes.

From 1 July 2000, the LCC scheme will be replaced by a system of accreditation of collection centres and individual pathology episode activity. This will place a greater focus on the quality of collection centre operations. The standards are being developed by RCPA, the Australian Association of Pathology Practices (AAPP) and NPAACHIC also has a monitoring and audit role that includes an element of feedback on the appropriateness of the tests selected by the pathology provider in response to the request for pathology. In some cases, this may extend to the requesting doctor.

## **Advisory Mechanisms**

### **Medicare Services Advisory Committee**

The Medicare Services Advisory Committee (MSAC) was established in April 1998 to advise the Commonwealth Minister for Health on the evidence base of new medical technologies and procedures before they are considered for funding under Medicare. This is a major structural reform promoting systematic review processes similar to those applying to pharmaceutical products funded under the Pharmaceutical Benefits Scheme.

A key objective of the reform is to foster a strong quality culture through:

- inclusiveness: representation on MSAC from key medical disciplines, health administration and planning, epidemiology, health economics and consumer bodies helps to ensure funding decisions based on circumspect and balanced consideration of all relevant social, economic and clinical factors;
- a predominate clinical focus that builds on evidence-based medicine principles pioneered and supported by the international medical community, and which promotes the credibility and legitimacy of funding decisions;
- a transparent and systematic assessment process;
- encouraging greater involvement and ownership by medical, industry and consumer stakeholders in funding decisions relating to new medical services, while also informing and educating stakeholders on the complex issues at play;
- signalling government commitment to promoting a culture among medical professionals based on evaluation and quality principles;

- assisting planning by the medical industry and profession by making explicit government expectations with respect to technology assessment while also facilitating the provision by industry of quality data.
- wide dissemination of the outcomes of systematic reviews;
- creating process links between clinical research and practice; and
- reducing information asymmetry and empowering consumers to adopt a more participative role in the management of their health care. Informed consumer opinion is also a potent lever with respect to changing medical practice and patterns of use.

## Pharmaceutical Benefits Advisory Committee

The Pharmaceutical Benefits Advisory Committee is an independent statutory body established in 1954 under section 101 of the National Health Act 1953 to make recommendations and give advice to the Minister about which drugs and medicinal preparations should be made available as pharmaceutical benefits. No new drug may be made available as a pharmaceutical benefit unless the Committee has so recommended.

The Committee is required by the Act to consider the medical effectiveness and cost effectiveness of a proposed benefit compared to alternative therapies. In making its recommendations the Committee, on the basis of community usage, recommends maximum quantities and repeats and may also recommend restrictions as to the indications for which subsidisation under the Pharmaceutical Benefits Scheme (PBS) is available. When recommending listings on the PBS, the Committee provides advice to the Pharmaceutical Benefits Pricing Authority regarding comparison with alternatives on their cost effectiveness.

## Private Health Insurance Initiatives

The Private Health Industry Branch in the Department of Health and Aged Care is committed to increasing the attractiveness of the private health insurance industry through a number of quality initiatives:

- the development of the Private Health Industry Quality Strategy, in consultation with the industry and consumers. The strategy will include an analysis of quality improvement systems and methods implemented in the private health industry. It will build on the principles of evidence based medicine, strengthening of accreditation mechanisms and consumer and industry participation. In the long term, the Strategy will be supported by necessary regulatory activities. Relevant industry self-regulatory mechanisms will also be considered;
- a strategy to improve quality and cost-effectiveness of care by encouraging the development and implementation of evidence-based clinical practice guidelines suitable for the private health sector. The guidelines will operate as statements of 'best practice' to assist clinicians and consumers to make best evidence based health care decisions;
- initiatives designed to enhance consumer choice to facilitate strengthening confidence in private health insurance products include:
  - Key Features Statement for products offered by the health funds, developed in conjunction with the Australian Consumer Association (ACA) and the private health insurance industry. During 2000,

- the Key Features Statement will be disseminated and monitored by the private health industry and the ACA; and
- the development of a proposal for industry benchmarks for products and services offered by both private health insurance funds and private hospitals;
  - industry reforms to improve care and funding arrangements for long stay patients (ie Nursing Home Type Patients) include:
    - conducting a review of long-standing care and funding arrangements for private nursing home type patients (patients in hospital longer than 35 days who are no longer receiving acute care) accommodated in private hospitals. The review will consider the arrangements for the major categories of long stay patients including the frail elderly, those undergoing treatment for mental illness; rehabilitation; alcohol and drug treatments and palliative care. It is expected that firm proposals for reform will be available by June 2001;
  - new arrangements for the management of Schedule 5 (Benefits Payable for Surgically implanted prostheses and human tissue items) are being phased in during 2000 and will come into full effect by February 2001. An expert committee comprising senior members of the medical profession, the manufacturing industry, consumer groups and registered health benefit organisations will be advising on the new arrangements. New arrangements also allow market forces to apply in the sector, hopefully introducing more competitive pricing of products.

## **Developing and supporting national infrastructure and approaches**

### **ASERNIP-S: The Australian Safety and Efficacy Register of New Interventional Procedures – Surgical**

The aim of ASERNIP-S is to determine a mechanism for collecting peer reviewed literature and audit data concerning the safety and efficacy of selected new surgical procedures.

Procedure assessment at ASERNIP-S is initially by systematic literature review, which includes evidence from an international perspective. This is supplemented, where possible, by the collection of available data from surgeons currently performing the procedure in Australasia. Based on this evidence, ASERNIP-S produces a review, recommendations and a safety and efficacy classification for each procedure that is assessed. The classification indicates whether a procedure is considered safe or unsafe to use should be used with or without continuing audit, or if a more fully controlled evaluation is necessary.

If so, ASERNIP-S supports establishment of a data collection system, which is preferably internet-based, but also allows for manual data entry. Procedure reviews are updated after 12 months, by assessing further literature published to date and reporting on the outcomes of data collection.

The ASERNIP-S project is overseen by a Management Committee made up of surgeons, and others members representing groups such as the Cochrane Collaboration, the National Centre for Classification in Health, the Australian Council on Healthcare Standards and the Consumers Health Forum of Australia. The Committee is

responsible to the Royal Australasian College of Surgeons Council for overseeing the management of the project and associated activities.

## Clinical Support Systems Project

The Royal Australasian College of Physicians (RACP) has been awarded a consultancy for a Clinical Support Systems Project (CSSP) by the Commonwealth Department of Health and Aged Care to focus on the measurement and improvement of clinical care through the implementation of clinical support systems. The College is working with innovative and leading clinicians and hospitals to explore whether combining the use of evidence with a systemic approach to clinical practice results in more effective and efficient health care with a view to improving patient outcomes (Royal Australasian College of Physicians 1999).

The CSSP seeks to integrate the two main parallel movements that aim to improve the quality of care in Australian hospitals namely:

- **Clinical Practice Improvement (CPI)**, which uses the management of clinical practice, including tools such as clinical pathways, outcome and performance indicators, clinical measurement and review and consumer pathways in a continuous improvement cycle supported by appropriate information systems; and
- **Evidence-Based Medicine (EBM)**, which involves incorporating best available evidence, based on scientific research, into the clinical decision making process using tools such as clinical practice guidelines, peer reviewed clinical research and direct clinical measurement.

CSSP promotes multi-disciplinary leadership and supports the clinical practice, cultural change, organisational development, technical capacity, and consumer involvement required to affect systemic changes to patient care.

The outcomes of the project will inform the development of principles and processes to facilitate the transfer of sustainable best practice in CPI and EBM to other hospitals and settings. The CSSP focuses on the clinical unit in acute care settings and the levels of management which support the implementation and maintenance of clinical improvement practices.

The Project aims to examine whether an improvement in the quality of care can be achieved by:

- a transparent system of quality improvement based on CPI and EBM that allows clinicians greater knowledge and understanding of the nature of clinical practice;
- a collaborative approach between clinicians, healthcare consumers, managers and administrators; and
- the use of available evidence, guidelines and comparison with the practice of others to improve the effectiveness of CPI as an objective basis for the quality improvement cycle.

## Consumer Initiatives

The Consumer Focus Collaboration (the Collaboration) is a national body consisting of representatives from consumer organisations, professional associations, health care complaints commissions, state and territory health

departments and the Commonwealth. The Collaboration's aim is to strengthen the focus on consumers in health service planning, delivery, monitoring and evaluation in Australia.

During 1998 the Collaboration undertook a strategic planning process resulting in the development of the Collaboration's Strategic Plan. The goals outlined in the Strategic Plan are:

- to improve the accountability and responsiveness of the health care system to consumers;
- to facilitate the provision of health information to consumers in appropriate formats;
- to facilitate active consumer involvement in health system planning, delivery, monitoring and evaluation; and
- to promote education and training that supports active consumer involvement in health service planning, delivery, monitoring and evaluation.

Ongoing research and development work is occurring in each of these goal areas, with links to the National Resource Centre for Consumer Participation.

## HealthInsite

Funded under the 1998-99 Federal Budget, *HealthInsite* aims to provide Australians with the most current and reliable information from reputable leaders in the national and international health fields using the Internet as the delivery mechanism. *HealthInsite* is more than an Internet site – it is a web-based facility, with navigational and search infrastructure, providing links to reliable and relevant health information.

Content will be provided through 'Information Partnerships' established between *HealthInsite* and peak health organisations, government agencies and educational institutions. All content accessed via *HealthInsite* will be clearly identified with its source and branded with the *HealthInsite* logo.

*HealthInsite* supports the Government's health policies by allowing health information to be provided to all Australians either directly or through health professionals and service providers.

## Initiatives in Health Information Management and Information Technology

The Commonwealth Department of Health and Aged Care is working with the health sector to improve the delivery of health care and achieve better quality of care and health outcomes through effective and innovative use of health information. The development and implementation of a national approach to the uptake of information management/information technology advances in the health sector will allow for improved efficiency and effectiveness in the delivery of health care, with better quality of care and health outcomes. Key initiatives include:

## **The National Health Information Management Advisory Council (NHIMAC)**

NHIMAC has been established to facilitate collaboration between the Commonwealth, states and territories and other key stakeholders to achieve a national approach to the development, uptake and implementation of new online technologies in the health sector.

## **Health Online: A Health Information Action Plan for Australia**

*Health Online* has been developed under the auspice of NHIMAC and in consultation with stakeholders as a national action plan for the health care sector. *Health Online* aims to provide a basis for a national strategic approach to using information in the health system to build a better health care system and to promote new ways of delivering health services.

## **The Electronic Health Records Taskforce**

The Electronic Health Records Taskforce has been established to define the preferred direction and specifications for the development of a national framework for electronic health record systems. Electronic health records, compared to paper based records systems, have the potential to improve efficiency, safety and quality of care in the health sector, through the use of computerised clinical information systems that will allow access to appropriate information at the time of care delivery.

## **Telehealth**

The Government is working with State and Territory Governments through the Australian New Zealand Telehealth Committee to establish frameworks for the development and implementation of national telehealth policies and standards that are aligned with good clinical practice and business objectives. This initiative is to ensure that affordable access to quality telecommunications services is available for the health sector and consumers in rural and remote Australia.

## **E-commerce**

Projects are underway to advance the use of electronic supply chains in hospitals, increase the level of electronic transactions for Medicare and the Pharmaceutical Benefits Scheme and increased uptake of simplified billing.

## **Standards**

The Commonwealth is collaborating with Standards Australia and other key stakeholders in developing a national plan of action for health information standards in Australia. This plan will identify the core standards needed to underpin health IM/IT initiatives and the developmental work required.

## **National Demonstration Hospitals Program (NDHP)**

The National Demonstration Hospitals Program (NDHP) is a Commonwealth funded program, involving groups of lead and collaborating hospitals. During Phase 1 the lead hospitals and their 32 collaborating hospitals made

changes to clinical practice and their organisational structures that led to reductions in waiting times for elective surgery.

NDHP Phase 2 focused on integrated bed management, identified by clinicians and hospital managers as a barrier to further reducing waiting times for elective surgery. NDHP Phase 3 began early in 1999 with a focus on those public hospitals that are implementing best practice models to improve the coordination and integration of all services provided by the acute health care sector - including developing links with primary and community health providers.

## National Health and Medical Research Council

The objective of the National Health and Medical Research Council (NHMRC) is to advise the Australian community on the achievement and maintenance of the highest practicable standards of individual and public health, and to foster research in the interests of improving those standards.

The Council pursues its objective and its overall functions through a network of committees. In so doing, the quality of its advice and activity is enhanced by the contributions of a wide range of people and organisations both in Australia and overseas.

The NHMRC continued its three primary programs in the triennium - advice, ethics and research - and these programs will be managed by the following four principal committees:

- Health Advisory Committee;
- Australian Health Ethics Committee;
- Research Committee (Public Health and Medical) [The Medical Research Committee]; and
- Strategic Research Development Committee.

The NHMRC's strategic plan outlines the *modus operandi* under which the Council will set priorities and coordinate its activities.

## National Health Performance Committee (NHPC)

Australian Health Ministers established the National Health Performance Committee in August 1999. It has replaced the National Health Minister's Benchmarking Working Group and has the responsibility to develop and maintain a national performance measurement framework for the health system, to support benchmarking for health system improvement and to provide information on national health system performance. The new committee will continue the work of the National Health Minister's Benchmarking Working Group, which had initially concentrated on the acute health sector, and will have a broader focus of the whole of the health sector including community health, general practice and public health.

## National Institute of Clinical Studies

The overarching goal of the National Institute of Clinical Studies (NICS) is to continuously improve the quality and effectiveness of clinical practice throughout the public and private health sectors, encourage behavioural change by the medical profession and contribute to the Government's overall safety and quality agenda. NICS will adopt a non-prescriptive approach to quality reform, and act to lead the research and adoption of evidence based medicine principles and processes, with an approach that will engage researchers and health practitioners.

A resource allocation of \$20.6 million over four years was made in the 1999-2000 Budget, to fund the establishment and operation of NICS over four years. The Institute is expected to be operating by mid-2000.

## National Prescribing Service

The National Prescribing Service (NPS) was formed in March 1998 and has operated since May 1998. The Government committed \$3 million to the establishment of the NPS and \$6 million per annum over three years to operate the service. A current funding agreement in place between the Commonwealth and the NPS ceases in July 2001.

The NPS is an independent public company, operating within the framework of the National Medicinal Drug Policy. The goal of the NPS is to improve the health outcomes of the community through quality (judicious, appropriate, safe and cost-effective) use of medicines. Members include peak medical, pharmacy, nursing, pharmaceutical industry, consumer and hospital organisations.

The main objective of the NPS is to provide national leadership in the facilitation and promotion of quality use of medicines in partnership with relevant stakeholders. This is currently being achieved through facilitation of effective quality prescribing initiatives; provision of quality prescribing information including feedback to prescribers; quality prescribing policy development; and evaluation of prescribing strategies. Savings to the PBS as a result of prescription analysis have totalled more than \$11 million to January 1999.

Four therapeutic topics have been addressed in 1998/99: H.pylori eradication; non-steroidal anti-inflammatory drugs in osteoarthritis; antibiotics for upper respiratory tract infections; and benzodiazepines. National strategies have included Prescribing Practice Review (feedback); NPS Network News; case histories and clinical audit. These have been complemented by Practice Visits (academic detailing) and small group education in Divisions of General Practice.

NPS has agreements with 23 Divisions of GP and DATIS to provide local NPS programs. These agreements make local NPS programs available to more than 25 per cent of general practitioners.

## National Resource Centre for Consumer Participation in Health

The National Resource Centre for Consumer Participation in Health (the Resource Centre) has been funded by the Commonwealth government for three years. It is being established to assist organisations to improve their

strategies for involving consumers in health service planning, delivery, monitoring and evaluation. The Resource Centre aims to provide consumers and health service providers with easy access to published research and projects about methods for obtaining consumer feedback, associated tools and their cost; strategies and approaches to consumer participation, and associated organisational change processes.

The Resource Centre is being managed by a consortium comprising the Health Issues Centre, Women's and Children's Hospital Adelaide and La Trobe University. In the second and third years of its operation, the Resource Centre will also work with health service providers and consumers to develop, implement and evaluate feedback and participation methodologies.

## National Health Priority Initiatives

The National Health Priority Area (NHPA) initiative was established in July 1996 to provide a mechanism for coordinating effort across the nation in areas that have a significant impact on the health of Australians, and that offer potential for significant health gain. The identified priority areas are Cardiovascular Health, Mental Health (see above), Diabetes Mellitus, Injury Prevention and Control and Cancer Control, with Asthma recently announced as the sixth health priority. As at August 99 Australian Health Ministers had launched baseline reports on the first five priority areas.

The NHPA initiative is overseen by the National Health Priority Committee (NHPC), who takes an interest across all the priority areas. NHPC and relevant experts met in August 99 to consider the findings of the recent review of the NHPA initiative which points to a refocussing of NHPC effort away from reporting and monitoring towards an action focus. A range of issues were discussed some of which have particular relevance to quality, including clinical practice, structural barriers, jurisdictional levers, system reform and consumer engagement. NHPC's response to these will be developed over the coming six months with a view to presenting a workplan to Health Ministers in 2000.

NHPA specific strategies are detailed below.

### **Cancer Control**

To better coordinate cancer control in Australia, a National Cancer Strategy is being developed by the Cancer Strategies Group (CSG), a sub-committee of the National Health Priorities Committee. The Strategy will aim to ensure equitable access for all Australians to high quality cancer control programs and services that are efficient, economical and based upon the best scientific evidence available.

The National Cancer Control Initiative (NCCI) provides expert policy advice on cancer control to the Commonwealth and manages a range of projects. Many of these projects are aimed at improving the quality of clinical care. They include:

- improving general practitioners' diagnostic skills for skin cancer – this project seeks to trial a method of improving general practitioners' skills in diagnosing skin cancer so that they remove more melanomas and reduce the number of non-cancerous lesions they remove;

- developing and implementing colorectal cancer guidelines. The guidelines were recently endorsed by the National Health and Medical Research Council;
- reviewing evidence for colorectal cancer screening – a workshop of key experts was held in June 1999 to review the evidence for screening for colorectal cancer;
- coordinating familial cancer activity – the National Cancer Control Initiative is working towards coordinating the management of familial cancer (cancer which has a direct family link) in Australia; and
- reviewing cancer control practices for which there is little evidence will soon be undertaken.

The NHMRC National Breast Cancer Centre, established in 1995, aims to improve outcomes for women with, or at risk of, breast cancer. The Centre has had a significant impact on changing approaches to breast cancer care, particularly in the areas of improving treatment, disseminating information to women and health professionals and monitoring outcomes.

### **Appropriateness of cancer treatment**

Specific examples of activities aimed at ensuring that cancer treatment is appropriate and in accordance with best practice include:

- a breast cancer management survey conducted by the National Breast Cancer Centre (NBCC), which explored the degree to which clinical practice accords with national recommendations for treating with women with early breast cancer. Several issues were identified, including differences in care in rural and urban areas, and low participation rates in clinical trials;
- a standardised surgical audit, for breast surgeons from Australia and New Zealand was launched on 30 April 1999 at the release of breast cancer management survey report. The audit is an innovative program that enables breast surgeons to compare their treatment practices against national standards through a surgical audit. It will also provide aggregated data to be used to analyse trends and outcomes of breast cancer surgery in Australia and New Zealand; and
- a colorectal cancer patterns of care survey managed by the National Cancer Control Initiative (NCCI). This survey will identify and measure current variations in clinical practice in relation to the NHMRC guidelines for the prevention and management of colorectal cancer, and provide baseline data for measuring the impact of the guidelines on Australian clinical practice.

### **Diabetes**

The National Diabetes Strategy launched in August 1999, aims to ensure effective high quality management of diabetes, research on which to base clinical and financial decisions, and establish effective partnerships between governments, health care professionals, non-government organisations, consumers and carers.

Activities currently underway to improve the quality of clinical care and effectiveness of services include:

- the development of clinical practice guidelines for Type 1 and Type 2 diabetes;
- a research project to obtain prevalence estimates of diabetes, and data on associated conditions such as insulin resistance and hypertension, and their relationship with environmental risk factors;

- the Vision Impairment Prevention Program (VIIPP) to improve screening, education and appropriate referral and treatment for diabetic retinopathy;
- a Community Awareness of Diabetes Strategy (CADS) for type 2 diabetes to create an awareness of the seriousness of the disease and its widespread distribution in the community aimed at both the community and health professionals;
- research projects being undertaken by the AIHW to obtain longitudinal data;
- a National Diabetes Register; and
- a diabetes monitoring system.

## **Injury**

National efforts aim to reduce the incidence, and impact on health, of injury in the Australian population. Activities have been undertaken, or are planned to establish quality standards for programs and strategies for injury prevention include the following:

- *National Injury Prevention Strategic* plan to focus national resources and expertise on the implementation of evidence based “best buy” interventions for priority injury areas has gone to NPHP for consideration and endorsement;
- as part of the *Falls Prevention for Older People* Budget initiative, a guideline/protocol will be developed to assist GPs and primary health care givers to advise on integrating falls prevention programs for active elderly in the community and will cover assessments; tailoring proven interventions such as environmental modification, medication management and gentle exercise for the individual;
- a national stocktake of existing falls prevention programs, research and projects to ensure coordination of resources and minimisation of unnecessary duplication;
- piloting and evaluation of best practice, proven interventions;
- a trial of the Public Health Planning and Practice Framework will be conducted in collaboration with NPHP;
- continuing surveillance, monitoring and support for strategic research and development to support evidence based interventions for injury prevention;
- a stocktake of information and data sources audit of multiple, complementary sources of information and data relevant to public health, occupational health, work organisation and workplace relations;
- Kidsafe Australia funded to develop the Australian Nursery Products Code of Practice. This code is being developed by Kidsafe and the Infant Nursery Products Association of Australia to incorporate features known to reduce injuries to young children;
- Monash University Accident Research Centre in association with Kidsafe funded by the Commonwealth to investigate additional pharmaceuticals warranting child-resistant packaging;
- funding support for the *National Poison Information Register*, a national database containing information on the chemical composition of poisons and advice on appropriate emergency management;
- establishment under the auspice of NIPAC of the Standards Working Group (SWG). The SWG aims to ensure that injury prevention experts are consulted in the development and review of relevant Australian and international standards including building codes and consumer protection; and

- consultation with OATSIH for the development of injury prevention strategies for Indigenous people.

## **Mental Health**

Since the commencement of the National Mental Health Strategy in 1992, substantial changes have occurred in the delivery of mental health services across the country. In particular, there has been a decrease in the number of stand-alone psychiatric hospitals and an expansion in the delivery of integrated community-based and inpatient care.

Specifically, the following activities have been undertaken to establish quality standards for service delivery and effectiveness in Australian mental health services. The activities include the development of:

- National Standards for Mental Health Services which identify 11 standards for consumer rights, service integration, and delivery of care;
- a review tool for use by mental health services to undertake continuous quality improvement activities and monitor service responsiveness, titled 'Tools for Reviewing Australian Mental Health Services';
- discrete modules within the accreditation tools of the ACHS and the QIC specific to the mental health sector which include consumer surveyors;
- standards for the training and continuing education of primary care service providers; and
- development of clinical practice guidelines for major mental illnesses.

Current work is focussing on developing agreed benchmarks for monitoring consumer outcomes and national performance indicators for mental health services. A detailed work plan for the above activities has been endorsed by the AHMAC National Mental Health Working Group (titled Mental Health Information Development Plans).

In addition, under the Second National Mental Health Plan (1998-2003), the States and Territories are working to develop systems for the routine consumer outcome measurement. This includes the development of a national training network to support clinicians and other health professionals in the use of the outcome measures. Related to this is the establishment of a national bureau for the collection and analysis of outcome data and the development of performance benchmarks. Both activities support self-assessment and peer review by clinicians.

## **Quality Use of Medicines**

Australia has a well-established national policy on the quality use of medicines (QUM). The policy focuses on an evidence-based approach, with an emphasis on appropriate, safe and efficacious use. Inappropriate prescribing, adverse drug reactions and non-compliance all contribute to increased morbidity and unnecessary hospital admissions.

The aim of the policy is that all medicines should be used:

- judiciously (that is, medicines, whether prescribed, recommended, and/or self-selected should be used only when appropriate, with non-medicinal alternatives considered as needed);

- appropriately (choosing the most appropriate medicine, taking into account factors such as the clinical condition being treated, the potential risks and benefits of treatment, dosage, length of treatment, and cost);
- safely (misuse, including overuse and under-use, should be minimised); and
- efficaciously (the medicines must achieve the goals of therapy by delivering beneficial changes in actual health outcomes).

To achieve quality use of medicines, people must be provided with the most appropriate treatment, and have the knowledge and skills to use medicines to their best effect. Health practitioners have a particularly important role to play in promoting the quality use of medicines, through good treatment choices, good communication with consumers, collaboration with other health practitioners, including across professional boundaries, the development and implementation of models of best practice, and maximising professional roles to provide optimal contribution from the various health practitioners.

To achieve optimum use of medicines:

- consumers and health practitioners should have timely access to accurate information and education about medicines and their use;
- public health and health education programs, and other programs relating to quality use of medicines (eg development and implementation of guidelines, implementation of schemes for the disposal of unwanted medicines) should be coordinated between Commonwealth and State/Territory Governments as well as others in this partnership;
- industry and health practitioners should contribute through appropriate information, education and promotion activities; and
- issues relating to use of medicines should be reported accurately and responsibly by the media.

Quality use of medicines depends on committed teamwork between all members of the partnership on behalf of the Australian community. It follows that all members must be committed to ensuring exchange of relevant information between involved groups and members of the community to ensure they are able to make informed decisions.

## **Public Health approach**

Public health focuses on the determinants of health – that is those factors that cause illness or improve health. It covers the prevention of illness and promotion of health across the whole population and/or in particular population groups. Quality and safety issues are central to public health although the commitment to quality in public health reflects the diversity of the sector and service systems through which programs are delivered.

Political commitment to quality in the public health sector at the national level was provided by the Australian Health Ministers' Conference (AHMC) when it established the National Public Health Partnership (which brings together the Commonwealth, the States and Territories, the NHMRC and the AIHW). The Partnership aims to

clarify the role of the States/Territories and the Commonwealth in public health and develop a national framework for future public health action across the country.

The Population Health Division (PHD) is working closely with the Partnership to progress quality in the public health arena in Australia. This work is at an early stage and among other things may involve the development of a national quality in public health framework or a national quality improvement system for public health agencies and service providers.

More broadly, the Partnership and PHD are also working to improve:

- national public health information collection;
- national public health research and development;
- national public health workforce development; and
- national planning and resource allocation for public health activity.

At the Commonwealth level, quality systems have been introduced or are being developed for specific public health programs, including:

- BreastScreen Australia, which has an accreditation system for the delivery of breast cancer screening services in Australia;
- a Quality Assurance Working Group (QAWG) has been established as a subcommittee to the National Advisory Committee for the National Cervical Screening Program;
- as of July 1999, performance measures for cervical cytology became mandatory. Work has commenced within the National Cervical Screening Program on the development of national guidelines for histopathology and standards for colposcopy and related services;
- the Public Health Education & Research Program (PHERP) Quality Enhancement program, a peer review process for participating tertiary institutions;
- the National Methadone Policy and recently introduced national funding arrangements for methadone services, which stipulate quality requirements for methadone service providers;
- the Immunisation Handbook, which provides best practice guidelines to Australia's General Practitioners and other immunisation service providers, and the *Immunise Australia: Seven Point Plan*, which aims to improve immunisation coverage rates in Australian children; and
- the Population Health Evidence Based Advisory Mechanism (PHEBAM) is being developed. PHEBAM will systematically review the evidence concerning health impact and cost effectiveness of population health interventions and encourage the adoption of cost-effective interventions through the development of guidelines, evidence dissemination and uptake strategies, pilot projects, and incentive funding.

In addition, the Public Health Outcome Funding Agreements (PHOFAs), which are broadbanded funding agreements between the Commonwealth and the States and Territories, were introduced in 1997/98. Over time, PHD is developing improved performance and outcome reporting systems for the PHOFAs as the major mechanism for ensuring that within broad parameters, the States and Territories are using Commonwealth funds to pursue agreed objectives and outcomes.

All of these activities contribute to improving quality outcomes in public health.

Although much work has been undertaken in progressing quality in public health, the Partnership and the Commonwealth recognise that there are significant gaps in relation to quality systems for public health and that addressing these issues will pose an interesting challenge. The complexity of Australia's public health infrastructure, the variety of quality and accreditation systems currently serving public health, and the intersectoral nature of public health suggest that a comprehensive approach to quality in public health will take time to develop, building from core public sector activity and establishing linkages to related sectors as it grows.



## **Abbreviations**

ACHS	Australian Council on Health Care Standards
ACSQHC	Australian Council for Safety and Quality in Health Care
AGPAL	Australian General Practice Accreditation Limited
APSF	Australian Patient Safety Foundation
ASERNIP-S	Australian Safety and Efficacy Register of New Interventional Procedures – Surgical
CSSP	Clinical Support Systems Project
EquiP	Evaluation and Quality Improvement Program
MSAC	Medicare Services Advisory Committee
NHIMAC	National Health Information Management Advisory Committee
NHMBWG	National Health Ministers Benchmarking Working Group
NHMRC	National Health and Medical Research Council
NHPA	National Health Priority Area
NHPAC	National Health Priority Action Council
NHPC	National Health Performance Committee
NHS	National Health Service
NICS	National Institute of Clinical Studies
NPHP	National Public Health Partnership
NPS	National Prescribing Service
NSAID	Non-steroidal anti-inflammatory drug
PBAC	Pharmaceutical Benefits Advisory Council
PHI	Private Health Industry
QAHCS	Quality in Australian Health Care Study
QUM	Quality Use of Medicines



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