### **Submission to**

## **Productivity Commission Review**

# Impact of Advances in medical Technology on Healthcare Expenditure in Australia

#### About the Australian Healthcare Association

#### AHA's role

The Australian Healthcare Association (previously the Australian Hospital Association) is the national industry body for publicly funded hospitals and healthcare organisations, including aged and extended care, primary and community health. AHA has been a major contributor to Australia's health policy for over 50 years. AHA's members include the governing bodies of Area and District Health Services, Regional Health Authorities, Community Health Services and Hospitals as well as a number of associate and individual members. AHA is governed by a National Council. Councillors are senior health care executives, clinicians, academics and industry leaders from across Australia.

AHA provides high-level advocacy and representation, publishes the Australian Health Review – a peer reviewed health policy journal and the Healthcare Brief newsletter. AHA also convenes an Annual Conference covering a broad range of health sector issues as well as other seminars and workshops on specific issues.

#### **AHA's Vision**

All Australians will have access to effective healthcare services, that are appropriate and responsive to their needs in all settings, delivered safely by capable personnel providing continuity across the spectrum of healthcare settings (home, residential facility or hospital). Those services must be efficiently delivered and adequately resourced to ensure their sustainability.

#### **AHA's Mission**

- To advance excellence in Australian public healthcare services in all settings by promoting the development and implementation of well-resourced evidencebased policies:
- To support a national industry network of hospital and healthcare organisations and to provide high-level representation and information for members;
- To be an independent source of advice, input and analysis for government agencies, media, other industry groups and the community on issues affecting the delivery of healthcare;
- To create a stimulating environment for analysis, review and development of health policy and practice through strategic planning alliances with stakeholders.

#### **AHA's Policy**

The Australian Healthcare Association supports the development of a health care system that:

- Aims for optimal health for every Australian
- Integrates curative with preventive health services
- Involves both the public and private sectors
- Results in an equitable provision of high quality services across the population
- Supports community involvement into priority setting and decision-making
- Focuses on prevention
- Supports the appropriate use of technology
- Promotes a multi-sectoral and multi-disciplinary approach
- Meets the specific needs of Australia's cultural diverse and Indigenous populations
- Is adequately funded and cost-effective

#### Problems with the current health funding system

AHA believes that the current health funding system has a number of problems, including the following:

- Inefficiencies, due to cost-shifting and funding duplication
- Lack of accountability for health funding
- Gaps in service provision due to cost-shifting and lack of integration across jurisdictions
- Lack of local involvement in priority setting
- Lack of coordination across health care settings and between health care professionals
- Inadequate funding in many areas, including hospital infrastructure, Indigenous health and aged care

#### Principles for a new system

The Australian Healthcare Association (AHA) supports the development of a new health funding system for Australia that meets the following criteria:

- Clear political accountability for adequate funding of healthcare
- Clear accountability of healthcare providers to funders
- Provision of incentives to ensure that care is provided in the most appropriate setting by the most appropriate provider(s)
- Integrated planning across jurisdictions, healthcare settings and professional groups
- Local involvement in priority setting
- Removal of incentives for cost-shifting
- Increased funding for areas of need and at-risk populations

## **AHA** response

#### Introduction

The Productivity Commission's research study to examine the impact of advances in medical technology on public and private healthcare expenditure and the associated costs and benefits for the Australian community defines 'technology' in broad terms, encompassing physical equipment, instruments and pharmaceuticals, clinical procedures, knowledge and support systems within which healthcare is provided.

The AHA presents the following submission based on a discussion with Productivity Commissioner Helen Owens and others on 7 December 2004. The AHA delegation was Professor Helen Lapsley, Professor Stephen Duckett, Ms Kerry Stubbs and Ms Prue Power. The submission does not attempt to address all the Terms of Reference of the Study, but discusses issues of particular interest to AHA members. The AHA intends to provide further input as the study progresses.

#### (a) Identify the key drivers of medical technology demand

Manufacturers, consumers and providers are the main creators of demand, but a key driver is the private to public sector 'push'. In particular, doctors who work in both public and private sectors cannot deny the latest technology to public patients if private patients are receiving these treatments. Senior medical staff form part of a global workforce that discusses the latest technology and promotes its introduction on basis of quality and safety. In other words, if doctors decide that it is no longer safe to use a treatment considered as outmoded they create a demand for newer alternatives. Current examples are brain stenting, gamma knives and robotics.

Doctors have to consider the legal risk whereas the cost issue is one for hospital management. Without evidence, hospitals have no real choice but to accept usage as a default measure of acceptability and quality.

The real impact is the tension created in the public sector. For example, 'remote surgery' will increase the demand for surgical interventions. On the one hand, this is likely to result in improved outcomes for the community but, on the other, it will generate high capital and ongoing costs.

Another cost driver is the escalating exploitation of single use devices, often simply a labelling ruse, rather than a safety issue, on the grounds of potential litigation.

The legacy of poor Commonwealth-state relations has an impact on costs of technology. For example, increased provision of MRI facilities in public hospitals would be cost reducing, alleviating expensive transportation of patients between hospitals and delays in assessing correct treatment regimes for patients. But the states will not fund MRI because its provision is perceived to come within the Commonwealth's responsibility for ambulatory care. While control of MRI [and PET] introduction was the correct policy initially, it is no longer effective or appropriate now that the technology has now matured.

Information and communications technologies [ICT] are promoted as having the potential to be cost reducing. An example is the potential for electronic medication management. It is estimated that 2-3% of Australia's 5.9 million hospital admissions are related to problems with medicines. This accounts for a fifth of all mistakes in the health care system in Australia, costing public hospitals \$380 million a year, according to the head of the Australian Council for Safety and Quality in Health Care,

Bruce Barraclough. Electronic medication management systems, by giving doctors immediate information about potentially dangerous interactions with other drugs and potential allergic reactions, have the capacity to significantly reduce the error rate and thus the costs, as well as improving outcomes. They also create a more efficient system for the interaction between physicians, nurses, pharmacists and other health-care providers. US studies have shown that, when an electronic mediation management system is implemented, the rate of adverse drug reactions is reduced by 40.9% and prescription errors by 99.4%. The systems can also be used to order X-rays, pathology, special diets and other services for patients.

However, correct planning is necessary before implementing ICT systems to ensure cost effectiveness. For example, the Alfred Hospital [Melbourne] implemented an ehealth 'metro-rural' initiative aimed at linking the hospital to Gippsland facilities. This was not effective due to lack infrastructure to support broadband. Good communication is one of the cornerstones of health care and access to broadband for data transfer in all rural and remote areas should be guaranteed by legislation.

In the case of the Alfred's initiative, an intra-metropolitan link between the hospital and Caulfield has proved to be cost-effective. In another example, St Vincent's Hospital [Sydney] is introducing an internal system to ensure coordinated ordering, with the expectations that there will be efficiency gains.

Workforce training is a significant driver of demand. This is because teaching, which is predominantly in the hospital environment, is culturally dominated. Doctors learn to practice in a high technological environment rather than in a variety of areas with different populations and different therapies.

In addition, the rigidity of the health workforce in the face of emerging technologies has the potential to drive up costs. For example, new imaging technologies require the skills of technicians rather than specialists.

#### (d) Some of the existing mechanisms and processes for ensuring costeffectiveness in the use of medical technology and any gaps in these processes.

The Commonwealth Government has structures in place to assess new and existing medical procedures and drugs; that is the Medical Services Advisory Committee [MSAC] and the Pharmaceutical Benefits Advisory Committee [PBAC]. AHA submits that the effectiveness of these bodies could be improved.

MSAC has been in operation for six years. It was funded in the 1997-98 Federal Budget to ensure that new and existing medical procedures attracting Medicare benefits are supported by scientific evidence as being safe, clinically effective and cost effective. MSAC's advice informs Commonwealth Government decisions on public funding for new and sometimes existing medical procedures.

The terms of reference of the Medical Services Advisory Committee are to:

- Advise the Minister for Health and Ageing on the strength of evidence pertaining to new and emerging medical technologies and procedures in relation to their safety, effectiveness and cost effectiveness and under what circumstances public funding should be supported:
- Advise the Minister for Health and Ageing on which new medical technologies and procedures should be funded on an interim basis to allow data to be assembled to determine their safety, effectiveness and cost effectiveness;

- Advise the Minister for Health and Ageing on references related either to new and/or existing medical technologies and procedures; and
- Undertake health technology assessment work referred by the Australian Health Ministers' Advisory Council (AHMAC), and report its findings to AHMAC.

MSAC complements the work of the Medicare Benefits Consultative Committee, the Pathology Services Table Committee and the Consultative Committee on Diagnostic Imaging.

PBAC is an independent statutory body established on 12 May 1954 under section 101 of the National Health Act 1953 (amended 1987) 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 effectiveness and cost of a proposed benefit compared to alternative therapies. The committee cannot list a pharmaceutical product that is substantially more costly than alternatives unless it provides "a significant improvement in efficacy or reduction of toxicity over the alternative therapy".

The current interpretation of the Act by the Federal Court allows a role for the PBAC in considering total costs to the community, including the financial impact of "leakage" (wide prescribing for patients not covered by the listed indications). When recommending listings, the Committee provides advice to the Pharmaceutical Benefits Pricing Authority (PBPA) regarding comparison with alternatives or their cost effectiveness.

These important committees deal, in large part, with the introduction of new technology. Rarely, if ever, do they consider when the new technology could be a substitute for existing or 'nearby' alternative technologies.

AHA submits that these committees should be given the responsibility to undertake a broad review of the efficacy and value to the community of existing items on the Medical and Pharmaceutical Benefits Schedules, contemporaneously with the examination of new technologies, and to recommend appropriate funding. Whereas a total review of the efficacy and funding all existing items on the Schedules would be too resource intensive, the same goal could be achieved over time if the scope and capacity of existing technologies/items were undertaken; for example, intraocular lens versus laser treatment.

In addition, there should a mechanism to fund additional research through; for example, through the NHMRC.

Furthermore, stem cell therapy and gene therapies will blur the boundaries between diagnostic and treatment technologies, requiring closer coordination between MSAC and PBAC.

The processes would have to be transparent in order to gain the respect of state jurisdictions and other stakeholders.

Currently, the limitations in the powers of PBAC and MSAC mean that public hospitals become the 'residual providers' of treatments not funded under the MBS or PBS and state governments will be forced to determine which new technologies to introduce. Already NSW and Victoria are establishing committees and/or processes

to do this, whereas it would be preferable for national standards, in both the public and private sectors, to be generated from MSAC and PBAC decisions.

In summary the current processes provide a good basis, but improvements are needed to deal with future

(e) Examine the impact of changes in medical technology on the distribution of costs and financial incentives across different parts of the health system, including whether advances in one technology area result in reduced costs in others

The net impact of the costs and benefits of new technologies very often crosses jurisdictional or sector boundaries, such as Commonwealth-state or acute-residential. In other words, many cost-increasing technologies in one sector are also cost-decreasing in another.

#### For example,

- The Commonwealth has responsibility for the PBS but the newly funded anaesthetic agents allow increased capacity for same day surgery and reduced need for post-operative care; therefore less need for nursing care;
- Hip replacement generates costs in the acute system but savings are realised in the aged care sector
- Tangible savings of early discharge not realised at hospital level but will have an impact at the wider state level;
- Improved anaesthetic agents reduce LOS but also increase utilisation, so costs are increased but not for the same product;
- Nanotechnology is cost decreasing per unit but gives the system the capacity to treat more 'units';
- Cardiac surgery has decreased as interventional cardiology has increased in line with surgeons adopting new technologies.

These situations create significant difficulties for rational forward planning and decision making at senior levels of management.

Sometimes measurement of efficiencies is difficult. For example, radiology at the Alfred Hospital [Melbourne] introduced technology that provided the capacity for a film-less environment and this was cost neutral [eg cost of equipment versus reduced staff]. But further savings were unable to be measured such as the hidden savings of no longer having lost films.

Quality of life benefits are also difficult to quantify. For example, increased PBS costs may improve quality of life and generate savings in other sectors; for example, the use of immuno-suppressive drugs. However, St Vincent's [Sydney] is revising its costing of the heart-lung transplant unit. Because survival rates are longer, costs are increasing, particularly as a result of co-morbidities and side effects of drugs eg immuno-suppressants.

Prue Power Executive Director