



**Review of the Impact of Advances in Medical Technology on
Healthcare Expenditure in Australia**

Initial Submission

30 November 2004

Introduction

ACT Health has held initial discussions with a working group of clinicians and health service managers regarding the Productivity Commission's review of the impact of advances in medical technology on healthcare expenditure in Australia. These discussions have raised a number of concerns regarding current systems for introducing and regulating the use of new technologies in the Australian health system. Clinicians and managers commented that while many new technologies have the potential to improve health outcomes and achieve cost savings, current arrangements for their introduction and uptake often prevent achievement of these benefits.

Cost drivers

Working group members noted a number of factors driving expenditure on new medical technology. These included:

- the ageing population;
- strong pressure to introduce new technologies once the public becomes aware of them. Members of the public, especially those living with chronic conditions, are increasingly likely to investigate new treatments. Understandably, there is a tendency for the public to access information through promotional campaigns rather than formal studies of health outcomes and cost/benefit analyses. This can create considerable public demand for treatments that are not necessarily beneficial or cost efficient; and
- the changing outlook for diseases that were once relatively short term acute conditions to longer term chronic conditions with which many people may live for considerable periods. HIV/AIDS is one example of this shift from an acute to a chronic profile. There are indications that this shift is also occurring with certain forms of cancer.

Structural issues

Discussions revealed concerns that there are structural constraints to ensuring the introduction and uptake of new technologies in ways that increase the chances of attaining their potential health and economic benefits. These included:

- the current division of Commonwealth/State responsibilities for health services, which may create opportunities for cost shifting. Group members also stated that these divisions led to considerable duplication of effort in the introduction of new technologies with inconsistent uptake across the country and between sectors; and
- that technology developers are strongly focussed on developing evidence to support the introduction of new technologies while paying less attention to the appropriate uptake and use of those technologies.

Approval processes

A number of comments related to approval processes for new technologies including:

- substantial lags between approval of new high cost drugs by the Therapeutic Goods Administration and approval for the Pharmaceutical Benefits Scheme. These delays can force hospitals to carry considerable costs without compensation. Group members took the view that there should be some consideration of the possibility of retrospective compensation in these instances;
- a “turnstile approach” to the introduction of new technologies in Australia. While acknowledging that Australia has strong gate keeping processes for new technologies, group members commented that there are insufficient processes for the regular review of approved technologies to ensure their appropriate and effective use. Regulatory agencies were perceived as being slow to remove approval for technologies where new evidence demonstrated they were not beneficial or cost effective;
- a strong tendency to fail to realise potential cost benefits of new technologies because redundant and more expensive technologies are not being withdrawn. Group members also commented that payment standards (eg certain items in the Medicare Benefits Schedule) may not reflect the impact of new technologies. This can lead to situations where clinicians are gaining cost savings from new technologies but receiving payments at rates more appropriate for old technologies. In such cases, cost savings are not passed on. In addition, the working group stated that a failure to discontinue payments for old technologies reduces the incentive for those clinicians who are reluctant to update their work practices to do so; and
- a substantial number of old technologies that were introduced before the development of the current regulatory mechanisms have never been appropriately assessed. In effect, these technologies have been “grandfathered in” and should be reviewed to determine whether they should continue to receive approval.

Technological issues of particular concern

Group members nominated the following areas of technological advancement as offering substantial benefits if supported at a national level.

Electronic Medication Management Systems

Group members noted that new technology to support the management of medications offers considerable safety improvements, and that these safety benefits would also mean substantial cost reductions through reduced morbidity. Group members stated that current electronic prescribing packages widely used in general practice as failing to provide adequate prescriber support. The safety benefits of effective electronic medication managements systems would include:

- improved prescriber support in the management of drug interactions. The electronic prescribing systems currently in wide use list all known drug interactions irrespective of frequency or severity. Physicians tend to find the large volume of information presented through this approach to be unmanageable, with the result that this information is often ignored. Group members suggested that medication management systems should be developed that alerted physicians to the most frequent and severe drug interactions; and
- ensuring that physicians have ready access to information on newly approved uses for drugs. Dosages for different uses of the same drug can vary widely, and there is a need to develop a standardised system to support prescribers in this respect.

Group members stated there is a need to develop a standard national medication management system that is applicable across all sectors, and that it is unlikely that private providers can achieve this.

Electronic patient data management systems

Electronic patient data management systems are designed to reduce patient treatment errors where critical information is transferred within and between hospitals (and other healthcare settings). The working group commented that there is a need to implement these systems with standardised data protocols across Australia. There was a concern that disparate data formats and the subsequent need for translation programs could increase communication problems that this technology is supposed to reduce.

Readily available technology

Working group members noted that common technology solutions such as Personal Computers, web communications and data output from diagnostic equipment offered effective access for health professionals to up to date information. The group emphasised that these solutions should be integrated into Australia wide systems to achieve the greatest benefits.

Provision of new technology to people living in remote areas

The working group noted that there is a need to support technological innovations that improve service delivery to people living in remote areas. Group members commented that Australia is lagging behind other countries in this area. The Commission might consider international approaches to this issue.

Rehabilitation engineering

While noting that Rehabilitation Engineering is often seen as relatively “low technology”, group members commented that advancement in this area has the potential to achieve substantial health benefits and cost savings. Group members also commented that Australia has the capacity to be a significant source of innovation in this field.