australian nursing federation

Submission on the Impact of Advances in Medical Technology on Healthcare Expenditure

1. Introduction

1.1 The ANF is the national union for nurses in Australia with branches in each state and territory. The ANF is also the largest professional nursing organisation in Australia representing registered and enrolled nurses, assistants in nursing and personal care assistants. The ANF's core business is the industrial and professional representation of nurses and nursing in Australia.

1.2 The ANF's 140,000 members are employed in a wide range of enterprises in urban, rural and remote locations in the public, private and aged care sectors, including hospitals, health services, schools, universities, the armed forces, statutory authorities, local government, offshore territories and industries.

1.3 The ANF participates in the development of policy in nursing, nursing regulation, health, community services, veterans affairs, education, training, occupational health and safety, industrial relations, immigration and law reform.

1.4 The ANF represents Australian nursing internationally through links with other national and international nursing organisations, professional associations and international organisations.

1.5 The ANF recognises that medical and pharmaceutical advances are forcing changes in attitudes and values amongst Australians to their expected quality of life and expected quantity of years of life. But those advances are also creating dilemmas associated with resource allocation, access and cost. The focus must be on cost effectiveness as well as access to health enhancing initiatives. True analysis of new technologies must go beyond the fiscal elements.

1.6 This submission deals with only part of the terms of reference namely sections a), d) and f).

2.0 Terms of reference

2.1 Identify the key drivers of medical technology demand

2.1.1 Potentially, new technological advances could absorb unlimited funds. Products are marketed and profited from like any commodity and developers are often focused on trials and producing evidence of success for their products rather on appropriate or responsible use. The public often falls 'victim' to promotional campaigns, learning of new technological advances from these rather than from properly performed detailed analysis. This can have a direct impact on demand and expectations of treatment by the general public and can result in a lack of understanding regarding the existence of more cost effective alternatives.

2.1.2 The need for efficiency, improved communication and clinical risk management has seen the introduction of major technological advancements in information technology in the health sector. Electronic medical records, long distance diagnostics via telehealth technology and computerized medication management systems are but a few of the developments that have been embraced and utilised. As privacy and other legislative issues are worked through, demand for such technology will only increase.

2.1.3 People living longer with chronic disease, is both a result and a driver of demand for technological changes. As we maintain life longer the quality of life aspect becomes more important and new and better life enhancing techniques are desired and developed. The rural isolation of outback Australia alone presents as a major driver for technological advancements in chronic disease management.

2.1.4 There is increasing evidence that longer life expectancy and quality of life at older ages is increasing and that newer and more advanced medical treatments for older people are an important part of the reason for these increases. The ageing population has in particular been linked to the increased usage and costs of pharmaceuticals. It is probably fair to say that our ageing population is a driver of technological change, but not necessarily to the detriment of the public purse. This is further explored in section 2.3.

2.2 **Identify existing mechanisms and processes for ensuring cost effectiveness in the use of medical technology and any gaps in these processes**.

2.2.1 Technology and medical advancements will only increase total expenditure to the extent that spending decisions and methods of resource allocation allow it to. Notwithstanding the aforementioned drivers of technology, expenditure is not necessarily a 'force of nature' but can be a planned, policy driven economic process. Much of the actual spending on technologies occurs on a macro level of health policy, but also a great deal is accounted for at the micro level in hospitals and GP's surgeries etc. Any policy driven plan must allow for and impact upon decisions made at both levels.

2.2.2 Cost effectiveness is hampered currently on a number of levels in Australia. The current divide of State and Federal responsibilities for health care delivery has resulted in chronic cost shifting activities, duplication of services and lack of continuity and communication between services and across sectors. A piecemeal approach to health care provision generally does not lend itself to effective planning and utilization of technological advancements.

2.2.3 There are reported delays for approval of drugs to be available on PBS despite the TGA having approved their use.

2.2.4 There is also a seeming lack of review of technologies in any controlled or systematic manner. Many older therapies and treatments remain in use when their elimination from use could increase the cost effectiveness of newer more efficient technological advancements, or where large scale use has shown the technology to be less efficacious than first thought.

2.2.5 It is argued that often, "high-tech" initiatives are given priority over "low-tech" approaches to health care provision. The impact of effective primary health care in prevention of disease and the use of advances in areas such as smoking cessation initiatives cannot be underestimated and deserve as high a priority if not higher than the more expensive 'top of the range' advancements. The OECD has identified this last issue as one of major concern when assessing the impact of medical and health technologies on health care expenditure.[1]

2.2.6 The OECD also recognises the need for Health Technology Assessment techniques (HTA). The purpose of HTA is to "facilitate the allocation of resources in relation to the goals of the health care policy maker".[2] Depending on the policy to be informed, HTA can assess the technical properties of a technology, as well as its safety, its efficacy or effectiveness, its costs and other economic attributes as well as social, legal, ethical and political impacts.

2.2.7 HTA needs to perform two functions to facilitate this role. "Firstly it must provide policy-makers with evidence on the relative effectiveness and costs of technology (knowledge generation), and secondly it must ensure that this information is used appropriately (knowledge utilisation)".[3] References on HTA techniques include Eisenberg (1999), Goodman (1998) and the OECD NEHRT (f2004).[4] The National Institute of Clinical Excellence (NICE) also has references to HTA, its development and use.

[1] OECD Health Policy and Data: The OECD Health Project relating to new and emerging health related technologies (NEHRT) at http://oecd.org/ 2004
[2] Ibid
[3] Ibid
[4] Eisenberg JM Ten Lessons for Evidence-Based Technology Assessment JAMA Nov 17 282 (19) pp 1865-9 1999 ; Goodman CS Healthcare Technology assessment: Methods, Framework and Role in Policy Making The American Journal of Managed Care Sep. 4 (SP) pp 200-16 1998 and OCED op cit.

2.2.8 Health Technology Assessment is not only a case of attributing preference to those innovations that generate most health for the available money, but rather allocation of resources that is governed by achieving the best overall return for society, economically and socially. It is necessary to produce policy that is based on evidence of cost effectiveness that is relevant to the greater number of stakeholders and which creates a health system environment where evidence based practice is encouraged through incentives and decision-making support.

2.3 **Investigate the net impact of advances in overall and individual health technologies on: economic, social and health outcomes, including exploring which demographic groups are benefiting from advances in health technology; and the overall cost effectiveness of healthcare delivery.**

2.3.1 Research on the benefits of technological advances in health care is still in its infancy. Yet Freund and Smeeding[5] found that recent research suggests that the net benefits of public health expenditures for research, new treatments and increasing access to high quality health care has produced gains in longevity in the US that are very cost effective.

2.3.2 A point in case and one of much concern is the rising cost of pharmaceuticals, especially when correlated with the ageing population. It has been found that a great deal of the increase in life expectancy is due to new drugs, and that life expectancy has increased with pharmaceutical innovation. Freund and Smeeding found, however that adequate data on which to predict future pharmaceutical expenditure is scarce and consequently empirical studies have been equally scarce or inaccurate.

In Australia it has been shown that predictions regarding the uptake and use of new pharmaceuticals are nearly always wrong.[6] Better data collection, centralized aggregation and analysis and thorough and transparent reporting are vital to adequately assess the impact of, and future requirements for, pharmaceutical use.

[5] Freund D and Smeeding M The Future Costs of Health Care in Aging Societies: Is the glass half full or half empty? Paper prepared for the Seminar: "Ageing Societies: Responding to the Policy Challenges" UNSW 2002

[6] Birkett et al A CE approach to drug subsidy and pricing in Australia, Health Affairs 20 (3) pp 104-114 2001

2.3.3 It is not necessarily the case however that increased pharmaceutical spending necessarily is unaffordable. Studies in the US regarding the increased drugs use by older people show that an increase in expenditure is offset by the saved health care expenses of a generation that is ageing healthily. The studies deal with health care costs and savings, but little account is taken of the quality of life that results as a benefit of improved health outcomes.[7]

2.3.4 Not all pharmaceutical therapies have been shown to be cost effective, however, therefore with all new treatments and new drugs, policies need to be rigorous in eliminating waste, and ensuring treatments are allocated to where they are most efficacious.

2.3.5 There has been criticism generally of the increasing trend to treat "at risk" patients with emerging technologies to ward off potential disease. Criticism is aimed at the cost of treating something that may never eventuate. One commonly cited example is the use of statins. Whilst it can be argued that other low-tech therapies such as diet modulation and smoking cessation could be equally as effective and less costly, it can also be argued that the use of medication is far more reliable and predictably successful. Again, the lack of empirical studies and rigorous analysis thwarts a suitable answer.

3.0 Conclusion

3.1 Technologies must be understood broadly, including in terms of their physical nature, their clinical applications and stage of maturity. New technologies do present challenges for regulators and consumers but the importance of well informed policy cannot be underestimated.

3.2 Australians should have access to health innovations that happen before they and their families are ill enough to become 'patients'. Hopefully there can be a focus on living well, reaching people through schools, workplaces and social services, and directly through quality communication that informs, educates and motivates healthy living.

[7] Freund D and Smeeding M op cit