

**INQUIRY INTO ENTERPRISING AUSTRALIA -
PLANNING, PREPARING AND PROFITING FROM TRADE AND INVESTMENT**

**SUBMISSION
BY
DEPARTMENT OF HEALTH & AGED CARE**

INTRODUCTION

The Department of Health and Aged Care actively promotes the export of health goods and services. It does this through acting as an advocate for the health industry and by fostering and maintaining international relationships with the health ministries of other countries, particularly in the Asia Pacific region. It has also used its participation in regional and international fora to promote the Australian health sector.

Australia is regarded as having a world class health and aged care system and we receive requests from regional governments for assistance in developing their health care systems.

At a national level the Department has worked with other internationally focussed agencies to support health industry exports and networks through various initiatives. In the past, the Department has also undertaken some relatively small scale export projects and consultancies in its own right through AusAID and multilateral development bank funding.

SUBMISSION

The Department submits the following information which addresses dot points 5 and 6 of the Terms of Reference.

- ***The adequacy of a skilled workforce in Australia particularly in new growth areas such as, though not limited to, financial services, information technology, E-business, education, pharmaceuticals and health care, and the competitiveness of that workforce.***

Australia has a highly skilled workforce in terms of the pharmaceutical industry and the health workforce. It also provides world-class medical education. Additionally, not only is the excellent standard of Australia's research workforce internationally recognised, but Australia is also a world leader in both the introduction and uptake of telehealth services. However, in some newly emerging fields, workforce capacity does not meet demand. These and other issues are discussed under the respective sub-sector headings.

Health Workforce - Medical Education

In order to maintain the excellence of our medical workforce and trainers, the Department provides funding and support to medical colleges and health agencies for trials and evaluations of community based training to supplement hospital training, and for innovative methods of delivering continuing medical education.

However, the supply of health workforce training places is determined by universities and these are largely driven by demand for training. In some cases shortages do occur. For instance, in the case of nursing, there is a limited intake by universities in response to a lack of interest in undertaking nurse education, thereby contributing to a shortage of nurses.

Health and Medical Research

Australia is at the forefront in the rapidly evolving world of biotechnology and biomedical research. This was confirmed in the 1999 Health and Medical Research Strategic Review -

"To date, enormous achievements have been made in health and medical research in this country. With 0.3 per cent of the world's population, Australia produces about 2.5 per cent of the world's health and medical research output. Australian researchers, institutions and companies are at the cutting edge of health and medical research. Over the past 50 years, Australian researchers have made major contributions to medical breakthroughs in penicillin, bionic ears, AIDS testings and SIDS (Sudden Infant Death Syndrome), melanoma and many other areas. (Health and Medical Research Strategic Review p. ii, 1999)."

Peter Wills
Chairman, Health and Medical Research Strategic Review
1999

In the 1999 Federal Budget, the government provided a massive funding boost to health and medical research within Australia. The government is committed to more than doubling the annual base medical research funding through the National Health and Medical Research Council (NHMRC) over a period of six years, from \$165 million in 1998-99 to more than \$350 million in 2004-05. The increase in funding over six years will total \$614 million. This massive increase in the research budget will enable Australia to conduct more research including priority-driven research.

However, there is a need for improvement in an increasingly competitive arena. Areas of importance in which expertise is lacking have been identified (for example, in the area of Bioinformatics). There is also the need to enhance development in other new sub-fields of research where international impact is high and local expertise is lacking.

We suggest the following avenues that can be explored in terms of developing/attracting the relevant skilled workforce:

- graduate and postgraduate training of researchers in these fields;
- encouragement of appropriately skilled migrants and the return of Australian researchers with appropriate skills; and
- offering enhanced opportunities for research in these areas to attract research scientists to the areas of research.

Increased public investment in research and the commercialisation of research creates opportunities for employment and hence encourage the development of a skilled workforce in the health and medical sub-sector.

The NHMRC works with the Australian Research Council (ARC) and the Department of Employment, Training and Youth Affairs (DETYA) to maintain expertise in this particular sub-sector. At present, the NHMRC responds by providing input and liaison, as required, to issues as they emerge. However, the NHMRC's Research Committee is currently examining further ways in which the NHMRC can take a more proactive role in collaboration with ARC and DETYA on this issue.

Health Information

Health information technology is increasingly recognised as a fundamental part of the health system infrastructure. However, there is a shortage of experienced health IT personnel and recent reports from the Collaborative Health Informatics Centre (CHIC) and KPMG have identified the problem as a likely impediment to further development. One of the possible factors influencing the recruitment of people to the industry is the absence of professional structures, such as accreditation standards for training courses and a recognised professional body overseeing professional development for health-specific IT.

- ***Opportunities for encouraging inward investment and promoting export sales.***

Foreign investment in Australia's health services industry is subject to regulations by regulatory bodies, at federal and state level, which regulate the activities of this sector.

The Department has undertaken limited export activities. However, it has identified opportunities for the industry to market various health services and medical products.

A detailed discussion of these activities is provided below.

• **DEPARTMENTAL PRODUCTS**

The Department has had mixed success with its export activities. To date, these have involved two software packages: the AR-DRG "Grouper" software, and HealthWIZ. The Department's export opportunities provide a means of obtaining a return on the investment that has been made in the health sector.

AR-DRG "GROUPER" SOFTWARE

At the start, it should be noted that the Commonwealth is not actively looking for marketing opportunities for this software; rather, it is responding to requests from other countries. The Commonwealth's motivation for their supply is to support the ongoing development of improved health administration in other countries whilst seeking to recoup some of the Commonwealth's initial developmental costs.

The Department has recently commenced a review of its current contractual arrangements. The Commonwealth's position relating to the marketing of the software will be reviewed as part of the process.

The "Grouper" software has been developed to support Casemix in Australia. Casemix is a logical way of classifying and describing the mix of patients in a hospital or health care system such that those who belong to the same group have similar clinical conditions, and therefore should cost about the same amount to treat. The type of Casemix classification that is widely used is the Diagnosis Related Groups (DRGS).

The "Grouper" software consists of three related products: the AN-DRG, the AR-DRG and the AR-DRG Toolkit.

The first version, *Australian National Diagnosis Related Groups* (AN-DRG), was released in 1991. Intellectual property for the AN-DRG is jointly held by the Commonwealth and 3M Australia Pty Ltd (the firm that was contracted to develop the software).

The AN-DRG classification software was widely distributed by 3M in New Zealand and in the 2000 calendar year, the Commonwealth received royalties from New Zealand amounting to \$78,200, through 3M. In 1999, through 3M, the Commonwealth granted a license to Singapore to use AN-DRG. The Commonwealth received a one-off fee of \$A60,000. This agreement expires on 30 June 2001.

At present, AN-DRG is being phased out and new copies are not being supplied.

An updated version, the *Australian Refined Diagnosis Related Groups* (AR-DRGs) was developed and released in 1997. Intellectual Property for this classification vests solely in the Commonwealth. Recently, the Commonwealth formalised a one year Agreement with New Zealand to enable publicly-funded hospitals to update to the AR-DRG version for a whole of country annual fee of \$A60,000.

In November 2000, the Commonwealth entered into an Agreement with Germany to enable Germany to develop its own classification based on the AR-DRGs for a one-off fee of \$A200,000. In addition, some minor licences for rights to develop supporting materials are being discussed. Revenue from such licenses is expected to be approximately \$A10,000.

In 1995 the Commonwealth contracted an Australian company, Sytech, to produce an AR-DRG Toolkit which is used to create and update DRG classifications. Intellectual property for the Toolkit product is vested solely in the Commonwealth. Demonstration copies of the Toolkit are currently in Germany and Denmark but, to date, no sales have been made.

Following an open tender process the Commonwealth granted multiple licenses to software developers to develop and distribute "Grouper" software based on AR-DRG, in Australia.

Expansion of marketing activities would require the dedication of additional resources and, in view of the above Commonwealth policy, it is unlikely these additional costs could be justified.

Future Export Opportunities

The private companies who distribute AR-DRG "Grouper" software can promote their software overseas. There have been a number of initial inquiries from countries around the world. It is expected that New Zealand will move to introduce the next version soon after it is available.

HEALTHWIZ

HealthWIZ, the National Social Health Database, is a PC-based software program supported by datasets that aims to provide an innovative data storage and delivery system which enables access to health and other social and demographic data. It is produced by Prometheus Information Pty Ltd on behalf of the Commonwealth Department of Health and Aged Care. Within Australia, HealthWIZ is being distributed as a Community Service Obligation product.

New Zealand, Canada and Malaysia have expressed interest in HealthWIZ - an indication that there may be a larger overseas market, particularly for the HealthWIZ software. However, there has not been any systematic attempt to promote this unique product overseas.

Preliminary steps that have been taken to promote the HealthWIZ product overseas include demonstrations of the product at the following occasions:

- Ministry of Health, New Zealand;
- International health conferences held in Australia; and
- Foreign delegations to the Department.

There is currently no price for the overseas sales of HealthWIZ, particularly the software component. However, efforts are being made to address this limitation.

• **HEALTH SECTOR**

MEDICAL SERVICES AND EDUCATION

There are current and potential opportunities for the export of medical services and medical education in the Asia-Pacific region. There is a high demand among overseas students for educational and training opportunities in Australia, to the extent that some Australian universities are exploring the feasibility of setting up off-shore medical schools. Malaysia and Brunei are the expected locations of the first schools.

The Australian Medical Council, which is partially funded by this Department, will be accrediting the expected medical schools in Malaysia and Brunei and is participating in world and regional committees that may result in further commissions over time.

HEALTH INFORMATION

An important opportunity for encouraging inward investment in this sub-sector is through positioning ourselves as the hub for exports into the Asia region for companies based in Europe and the United States. This is already happening - for example, the successful Australian company, MIMS Data Systems (a medication management software developer), is now the local base for the multinational company, HAVAS MediMedia. Within two years MIMS Data Systems' labour force increased from 10-20 to about 80.

Currently, the overall approach of the Australian health care sector to developing export opportunities is fragmented and uncoordinated. To progress Australia's export of health information and communication technology in terms of goods and services, a concerted national approach is required. Such a move would reduce the significant amount of duplicated time and resources required in seeking overseas markets.

HEALTH AND MEDICAL RESEARCH

International collaborative research projects may provide enhanced opportunities for the development, commercialisation and marketing of medical products, procedures and technologies.

The National Health and Medical Research Council (NHMRC) in the Department is currently involved in the NHMRC/Juvenile Diabetes Research Foundation Program grants scheme, an international collaborative venture. The NHMRC has also identified a number of opportunities for international research and these are under consideration for possible action. They include opportunities for the NHMRC to provide policy advice and participate in assisting the World Health Organisation to establish health research platforms which support strategic directions of research in different countries/regions, and to share experiences in developing performance measures to measure the outcomes of health research systems. The NHMRC has also been approached by Consortium for Plasma Science (a limited liability company offering research funding to individuals and organisations) about a possible joint program in Australia.

AGED CARE

Australia is being recognised around the world for its high quality aged care system and there are opportunities for Australia to export its aged care services and products. Avenues that are currently being explored include individual initiatives to promote aged care activities (eg via the internet) and partnerships with industry and other government agencies, such as trade missions.

As part of its initiatives to develop the international competitiveness of this sub-sector, the Department has undertaken the following trade missions which were led by the Minister for Aged Care, the Hon Bronwyn Bishop MP:

- 1999: Trade Mission to Hong Kong and Japan; and
- 2000: Trade Mission to Singapore and Malaysia.

The ageing population, greater consumer expectations and a cultural shift is fuelling a pent up interest in the provision of quality aged care services in our near neighbours, in such areas as:

- Education
- Nursing and care models, including assessment and dementia care
- Development of different service levels and care needs in facility planning
- Architectural services
- Building and furnishings
- Operational management
- Combined service approach – Design, Build and Service, and
- Research activities.

Members of the trade missions (who are residential and community care providers, training consultants, and financial services providers) have reported that by participating in a mission, they had either developed a new export focus for their organisations or assisted to expand existing relationships.

A key element of the trade missions was the trade mission seminars. These were well received and there has been a range of follow-up actions by individual trade mission members.

The Department will also have opportunities to promote the aged care industry through its participation in a number of international forums on ageing.