MEDICINES Australia
BETTER HEALTH THROUGH RESEARCH AND INNOVATION

Kieran Schneemann
Chief Executive Officer

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Australia's Demographic Challenges
Social Policy Division
The Treasury
Langton Crescent
PARKES ACT 2600

Dear Sir/Madam

Re: Medicines Australia submission on *Australia's Demographic Challenges*

Medicines Australia would like to comment on some of the issues contained within Treasury's recent publication *Australia's Demographic Challenges*. In particular, we would like to highlight the important role that medicines and the Pharmaceutical Benefits Scheme play in maintaining a healthy, productive workforce.

In particular, we believe that two issues related to medicines and PBS spending deserve greater consideration in the debate over Australia's ageing population:

1. the effect of PBS spending on labour productivity and workforce participation, and
2. the effect of PBS spending on expenditure in other areas of the health system and capturing the value of such savings to the community.

About Medicines Australia

Medicines Australia is the national association representing the prescription medicines industry in Australia. MA's member companies represent over 90 per cent of the prescription market, and are engaged in the research, development, manufacture, marketing and export of prescription medicines.

Medicines Australia is committed to enhancing the health of Australians by providing medicines of the highest quality, safety and efficacy, and developing new and improved medicines, to which patients should have timely and universal access.

We congratulate the Government on its interest in long-term intergenerational issues. The latest paper, *Australia's Demographic Challenges*, makes a timely further contribution to the debate initiated by the *Intergenerational Report* released in 2002. Medicines Australia welcomes Treasury's participation in examining population issues and welcomes the chance to be part of the debate about how such issues will affect the future of Australia.

Medicines and Australia's ageing population

Medicines funded under the PBS play a vital role in prolonging the active, working lives of Australians. This is a particularly important point as our population ages. The *Intergenerational Report* suggests that over the next 40 years the ratio of dependants to workers will rise and population factors will detract from GDP per capita. It is estimated that in 2042 in a population of around about 25 million people, the number of people that are aged 54 or less will be approximately the same. It's the people over 55 that will be increasing as a proportion of the population, making up nearly all of the population increase between now and 2042.

The Federal Treasurer has made the very critical point that work force participation among older Australians will have a much more immediate and direct impact on GDP per capita than rising fertility rates. To gain a cultural shift to increased participation and the consequent increased productivity among older Australians, we will need to maintain and enhance the health of our ageing Australian population. Access to innovative medicines will play the major role and the relationship between the pharmaceutical industry, pharmacists and doctors will remain critical.

Proposed changes to the superannuation and retirement rules announced by the Federal Treasurer in launching *Australia's Demographic Challenges* will encourage people to stay in the work place longer – if they remain healthy. The projections in the *Intergenerational Report* released suggest that the PBS is going to be the fastest growing area of health spending over the next forty years. In fact the pressure on the PBS, particularly as a result of the demand for innovative medicines by an ageing baby boomer population, is with us now.

This pressure will only intensify in the future as more innovative medicines become available and our population ages. These medicines can and will treat life-shortening illnesses such as cancers, leukaemia, heart disease, diabetes and mental illness to name a few examples. They have the capacity to offer significant savings to other parts of the Health budget, including number of days in hospital, costs of alternative, more invasive therapies, and the extent to which medical practitioners need to become involved.

The effect of the PBS on productivity and participation

Australia's Demographic Challenges correctly points out that improvements in workforce participation are affected, at least in part, by the health of the workforce. The report states "Poor health often leads to early retirement, spells out of work, and lost productivity through sickness or injury" (*Australia's Demographic Challenges*, p. 6).

However, while it is recognised that medications can improve Australians' health and workforce participation, there is not sufficient recognition in either report of the value that medicines can bring to improving the health of Australians. The reports make little mention of the fact that increased PBS spending, while obviously needing to be funded, can positively contribute to health, labour productivity and economic growth.

As well as treating symptoms and extending life, innovative medicines improve peoples' activities and functions in daily life, including their physical, social, emotional and cognitive well being. These all contribute to a person's ability to participate in the community and the economy.

It could well be that increased PBS spending may improve economic growth and should be seen as an investment, not just a cost, for the community. As a case in point, several of the examples of key health conditions affecting Australians highlighted in *Australia's Demographic Challenges*, such as circulatory diseases and depression, are now directly treatable by innovative new medicines available on the PBS.

As the Institute of Actuaries argued in a recent paper for the Committee for Economic Development of Australia, *Official Forecasts of the Fiscal Impact of an Ageing Population: a Critique*, the modelling for the *Intergenerational Report* omits several 'feedback loops', where variables in the model may interact with each other.

One such feedback loop that deserves further consideration in the modelling is the impact of higher PBS spending on participation and productivity. For example, as well as the main forecasts in the *Intergenerational Report*, there are alternative modelling scenarios contained in that report based on different assumptions about labour productivity and workforce participation of older workers.

Changing these assumptions gives significantly different economic and fiscal outcomes to those suggested in the main modelling in the *Intergenerational Report*. Higher labour productivity or greater participation in the workforce by older Australians leads to higher economic growth and helps reduce the budget deficit in the longer term.

However, it is likely that one factor that causes an increase in workforce productivity and participation may actually be an improvement in Australians' health, attributable in part to access to innovative medicines via the PBS. This improvement in health then has all the flow-on benefits of greater GDP growth, lower budget deficits and so on. In this case, an improvement in productivity and participation is not due to an 'exogenous' influence external to the model, but actually due to an 'endogenous' factor contained elsewhere in the model, namely PBS spending.

This is a feedback loop that should ideally be included in modelling the impact of the projected growth in PBS spending on productivity, GDP and the budget deficit. The fact that higher PBS spending could lead to greater economic growth deserves more detailed consideration in future analysis of the impact of an ageing population.

<u>Studies on the value of medicines for productivity and growth</u>

In his paper *The Economic Value of Innovation: Measuring the Linkages of Pharmaceutical Research, Use of Innovative Drugs and Productivity Gains*, Australian researcher Dr Paul Gross of the Institute of Health Economics and Technology Assessment, confirmed that higher levels of national health expenditures are associated with better health outcomes. Moreover, better health outcomes obtained with modern innovative medicines lead to higher gross domestic product (GDP) by increasing both workforce participation and productivity.

A 2002 Access Economics report on schizophrenia, *Schizophrenia Costs: an Analysis of the Burden of Schizophrenia and Related Suicide in Australia,* found that improved outcomes, dependant in part on access to newer antipsychotic medications, could reduce a projected $1 billion health burden associated with the illness. In 2001 the lost earnings from people unable to work due to schizophrenia was $488 million.

A more recent Access Economics report, *The Dementia Epidemic: Economic Impact and Positive Solutions for Australia*, notes that in Australia there were over 162,000 people with dementia in 2002. The prevalence of dementia is growing rapidly and will reach the 500,000 mark around 2040. Dementia cost over 117,000 years of healthy life in 2002 and will become the largest cause of disability burden in Australia by 2016. By mid-century, according to Access Economics, dementia costs may exceed 3% of GDP – unless we can find effective treatments.

In a 2002 National Bureau of Economic Research paper, *The Effect of Changes in Drug Utilization on Labor Supply and Per Capita Output*, Frank Lichtenberg confirmed that pharmaceutical technical progress has increased per capita output via its effect on employment rate and hours worked per employed person. Each successive vintage of innovative medicines has produced a progressive increase in per capita output. The research concluded that the use of new medicines reduces the rate of human capital depreciation.

A study in the United States by MEDTAP International, *The Value of Investment in Health Care*, released earlier this year showed that spending on medicines has substantial health gains. For example, it showed that every dollar spent on medicines that lower a diabetic's cholesterol produces $3 in health gains, each additional dollar spent on hormonal treatments for breast cancer results in at least $27 of health gains, each dollar invested in beta-blockers to treat heart attacks produces $38 in health gains, and every dollar spent on therapies to prevent strokes in high-risk patients has delivered health gains valued at $2 to $6.

The World Health Organisation has established that access to new knowledge-medicines and vaccines was substantially more important in achieving the dramatic decline in mortality rates throughout the twentieth century than income growth, improved educational levels and improvements in nutrition and sanitation.

Further academic studies have shown that the use of prescription medicines reduces absenteeism of chronically ill workers and increases their productivity by a value far greater than the cost of the medications. Other studies have shown that poor health has a substantial impact on a person's earnings, workforce participation and productivity.

The effect of the PBS on other areas of health expenditure

A second effect of PBS spending is its impact on overall health spending. A cursory analysis would suggest that increased spending on medicines through the PBS would lead to an overall increase in health spending, as is outlined in the *Intergenerational Report*. However, the relationship is not be as simple as that.

There is evidence to suggest that increased spending on medicines can and does lead to greater offsetting savings in other parts of the health system. Treating conditions like high cholesterol, mental illness and cancer with medicines now can reduce the need for more expensive options such as hospitalisation and surgery. The result is savings in other parts of the health system.

International research suggests that a general increase in spending on medicines is more than offset by greater savings in other parts of the health system. A 1996 study by Lichtenberg in the *American Economic Review* found that for every $1 increase in spending on medicines there was a $3.65 saving in hospital care expenditure. Moreover, Lichtenberg found that a 10 per cent increase in expenditure on medicines was associated with a 6.6 per cent reduction in hospital expenditures.

Assessing the impact of increased spending on medicines on health outcomes, productivity, workforce participation, health spending and economic growth is difficult. However, the studies outlined above suggest that there are overall economic benefits from greater spending on medicines.

Medicines Australia is working with the National Centre for Social and Economic Modelling (NATSEM) at the University of Canberra to develop the MediSim model to forecast the impact of changes in PBS policies on households and the overall level of spending on the PBS. In addition, a health outcomes component is being developed which will track the impact of changes in PBS policy and spending on health outcomes in the community. Medicines Australia would be interested in working with the Treasury in considering and furthering this work.

Conclusion

In conclusion, Medicines Australia believes that the benefits increased expenditure on medicines have on the economy deserve further attention. Greater consideration and analysis should be directed at the effect of greater PBS spending on workforce participation – especially among older Australians, labour productivity, overall health spending, the fiscal position, significant savings to the community and economic growth.

We would welcome the opportunity to explore these issues further with you. Should you wish to discuss these issues, please do not hesitate to contact myself or Dr Brendan Shaw, Senior Manager – Policy and Research here at Medicines Australia.

Yours faithfully

Kieran Schneemann