



## Managing Health Care in an Ageing World

People are living longer, and with birth rates falling in most regions, the inevitable consequence is an ageing population. About 700 million people - more than 10 per cent of the world's population—are 60 or older, and by 2050, that number is expected to rise to almost 2 billion—more than one fifth of the total. Advances in medical technology, greater awareness of health issues, improved nutritional standards, and the commitment of more resources to health care have all helped to dramatically increase the chances of surviving infancy and living longer.

This demographic shift is accompanied by a changing health profile, with chronic diseases, which tend to afflict older persons the most, increasing relative to those infectious and communicable diseases which hit younger people more. This demographic and epidemiological transition is most advanced in the developed countries, but is already under way in many developing countries.

An ageing population will pose big challenges to existing health-care systems. Changes will be required in the type of health-care services delivered, in the coverage of health insurance schemes, as well as the direction of medical research. But will it overload health-care systems and push up costs to unmanageable levels?

The *World Economic and Social Survey 2007: Development in an Ageing World* (<http://www.un.org/esa/policy/wess>) addresses this question. It concludes that ageing will contribute to rising health-care costs over the coming decades, but is not the most important factor behind the projected increases. It also suggests that any increases in health costs due to ageing should be manageable, particularly if Governments put greater emphasis on preventive measures which could limit the incidence of chronic diseases.

### Ageing is only one factor determining health care costs

Health costs are difficult to predict over long periods of time given that many factors other than demographic changes have a direct bearing on their evolution growth, including, *inter alia*, more demanding patients, the introduction of new medical technologies, increases in pharmaceutical prices and rising costs of health care personnel. These factors have led to higher health costs of treatment, irrespective of population ageing.

A very high proportion of health expenditures is concentrated at the end of our lives, as, thanks to medical advances, the onset of many chronic diseases or disabilities has been postponed to the very last stage of a person's life. Older people, at least in the more advanced countries, are enjoying longer periods of life with good health. This trend may be replicated in poorer countries as their incomes rise. In this sense, ageing need not be the main factor in driving up rising health costs, provided there is this "compression of morbidity".

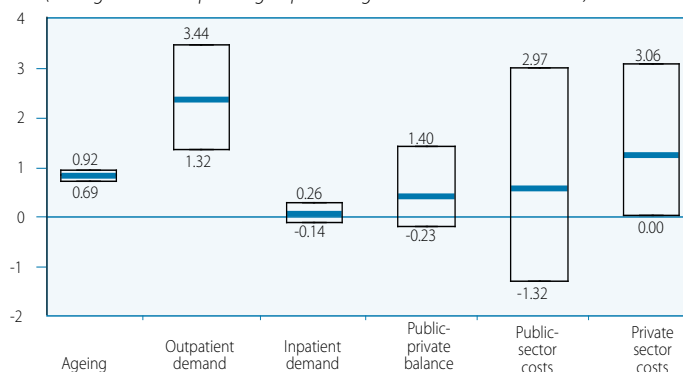
### Health cost projections for Sri Lanka and Australia

Given the lack of sufficiently detailed and comparable data at the global level, the *Survey* presents health cost projections for two countries at very different stages of development—Sri Lanka and Australia. Although the two studies adopted different approaches, both suggest that ageing is not the main driver of rising health costs no more than a few percentage points of GDP.

The Sri Lankan study used an *actuarial* framework, with which future expenditure requirements are calculated based on existing age and gender profiles of expenditure. The study offered three scenarios for health expenditure until the year 2101, involving differences in the public-private mix of provision and in control of price increases in the health sector.

In all the scenarios, ageing added less than 1 per cent of GDP to total national health expenditure by the year

**Figure 1: Sri Lanka, Range in impacts of key cost drivers on national health care costs, 2101**  
(Change in health spending as percentage of GDP from level in 2005)



Source: Rannan-Eliya, Ravi P. (2007). Population ageing and health expenditure: Sri Lanka 2001-2101. Background paper prepared for *World Economic and Social Survey 2007*, February. (<http://www.un.org/esa/policy/wess/wess2007files/backgroundpapers/srilanka.pdf>)

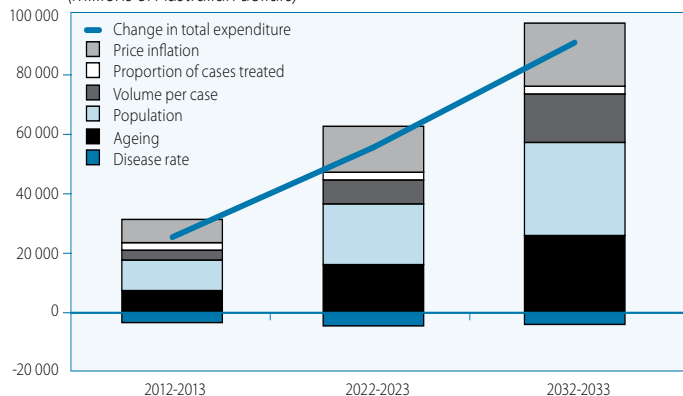
Note: Three values of each bar represent the maximum, median and minimum, respectively.

2101. Other cost drivers, such as greater outpatient demand and public sector costs, will have greater impacts on health cost trends, although their scale is difficult to predict with any great accuracy. Indeed, in the optimistic scenario linked to a more efficient public health sector, the resulting cost savings would far outweigh any rise from the effects of ageing (see figure 1).

The Australian study adopted the *epidemiological* approach, which takes into account the country's evolving disease profile. As a share of GDP, health costs would increase from 9.4 to 10.8 per cent between 2002 and 2032. Ageing is expected to contribute \$29 billion or 30 per cent of the total increase in health expenditure in Australia, much of which (\$17.7 billion) would be on account of increased demand for residential long-term care. Overall population growth would contribute as much as ageing. The remainder of the projected increase in health care costs would come on account of excess health price inflation, and changes in the extent and pattern of service delivery (see figure 2).

**Figure 2: Australia: Decomposition of projected change in health expenditure for all projected disease patterns, 2012-2033**

(Millions of Australian dollars)



Source: Vos, Theo et al (2007). Projection of health care expenditure by disease: a case study from Australia. Background paper prepared for *World Economic and Social Survey 2007*, January. (<http://www.un.org/esa/policy/wess/wess2007files/backgroundpapers/australia.pdf>)

## Providing health care for older populations

The provision of health care to older persons varies across countries. Differences reflect not only the extent of human and financial resources available, but also societal views concerning the roles and responsibilities of the family and state in caring for older persons.

For developed countries, persistent concerns about a general rise in health costs are coupled with the desire to improve the quality of health and long-term care services for older citizens. One trend in richer countries is to provide more care to people in their own home and community, or in a home-like environment. Such a change can involve additional financial support as well as human resources, and countries are already experimenting with innovative policy measures

and programmes designed to support family caregivers in the most effective manner.

The resource challenge is more pronounced for developing countries where a broad range of other unmet basic health needs remain a high priority for policy makers. Increasing health expenditure per capita and ensuring that more resources are channeled through an efficient public sector will be pressing challenges for the foreseeable future. At the same time, these countries must prepare for the expected shift away from traditional forms of care for older persons as the pace of development accelerates.

## Financing health care provision in developing countries

Expanded health-care systems will need to be staffed with an adequate number of quality health care personnel, and provide improved access to health care facilities. Additional sources of finance as well as the more efficient delivery of services will be key to ensuring older persons are not left behind as development proceeds.

If countries are successful in containing the prevalence of chronic diseases associated with population ageing, the related increase of future health care costs can be contained. This means that policymakers in developed and developing countries alike will need to dedicate more resources to preventive measures, such as those aimed at reducing smoking and excessive alcohol consumption and encouraging exercise and rehabilitative regimens for chronic illness.

The need for developing countries to pool the financial risks associated with poor health or morbidity by adopting better-organized schemes, including public insurance schemes, cannot be emphasized enough. At the present time, private payments account for a major share of total health expenditure in developing countries. Because the scope for private insurance schemes is still limited in many developing countries, Governments should initiate risk-pooling mechanisms and ensure that social and private health insurance schemes combine to provide universal coverage for all, including older persons who have never been insured previously. ■

*Prepared by:*

Rob Vos, Richard Kozul-Wright, Ana Cortez, Simon Cunningham and Hiroshi Kawamura, DPAD

For further information please contact:

Rob Vos, *Director*, Development Policy and Analysis Division  
Department of Economic and Social Affairs, Rm. DC2-2170  
United Nations, New York, NY 10017, U.S.A.

Tel: +1 212 963-4838 • Fax: +1 212 963-1061

e-mail: [vos@un.org](mailto:vos@un.org) • website: <http://www.un.org/esa/policy>