

Executive Summary of NHI Policy Brief 3

The Impact of Chronic Disease on a Future NHI

This policy brief looks at the impact of 25 chronic diseases on a future National Health Insurance (NHI) scheme. The 25 chronic diseases are those making up the Chronic Disease List (CDL) that must be covered by medical schemes as part of the Prescribed Minimum Benefits (PMB) package. The important topic of HIV is the subject of a separate policy brief.

Excellent data on the prevalence by age and gender of these diseases is available from work on the Risk Equalisation Fund (REF). A study in 2005 used data from about 63% of beneficiaries in medical schemes and provides detailed insight into the numbers diagnosed with each disease and those receiving treatment for the disease.

It was found that each CDL disease exhibits a unique shape by age and gender, as illustrated in Figure 1 overleaf using Diabetes Mellitus Type 2. ICD-10 codes^a have been used to identify those diagnosed with the disease. The “treated patient” definition is used in the REF submissions to determine who counts towards financial transfers under risk equalisation. The definition typically requires that the person has an ICD-10 diagnosis and that there be proof of treatment being paid from the medical scheme risk pool in two of the most recent three months.

These shapes, derived from medical scheme data, can be used with other populations (like the public sector by age and gender) to estimate the possible prevalence in the new population. The difficult technical issue in projecting future levels of chronic disease in South Africa is to what extent the excellent shapes by disease found in the medical schemes data can be applied to the public sector or to groups joining under a phased introduction of NHI. The poor data in the public sector at present makes adjusting and calibrating the curves difficult.

Using a simplifying assumption that the medical scheme prevalence is appropriate for the public sector, the effect that the aging of the population might have on the burden of chronic disease can be estimated. The aging, combined with population growth since 1985, is significant: the total number with CDL chronic diseases might be:

- 1985: 2.28 million
- 1994: 2.99 million (131% of 1985 figure)
- 2009: 4.12 million (138% of 1994 figure)
- 2025: 5.13 million (172% of 1994 figure).

The implications of more people with chronic disease are an increase in visits to clinics and GPs, an increase in the use of chronic medicine, an increase in the use of specialists and an increase in hospital events. A future NHI system would be facing a growing burden of chronic disease, simply due to the growth in the population and the aging of that population. Note that this analysis does not yet include the substantial additional burden from HIV.

It should be noted that it is not only the numbers with chronic disease that are important, but the complexity and severity of disease that can be expected. There is a very distinct pattern by age and gender of the chronic conditions and their combinations (multiple CDL diseases). The rate of chronic disease rises with age, but the number of people with chronic disease is highest in the age bracket 50-64 years since there are few members at the older ages in medical schemes.

Understanding the burden of disease is fundamental to the planning and decision-making processes in health departments. South Africa will face a growing burden of chronic disease. Disease management, high-cost patient programmes and wellness programmes are areas where the private sector can add significant value to a future National Health Insurance system, no matter the details of the funding design.

^a ICD-10 means the International Classification of Diseases, version 10. This alpha-numeric diagnosis coding standard is owned and maintained by the World Health Organization and is a standard diagnostic classification system used internationally. See <http://www.who.int/classifications/icd/en/>.

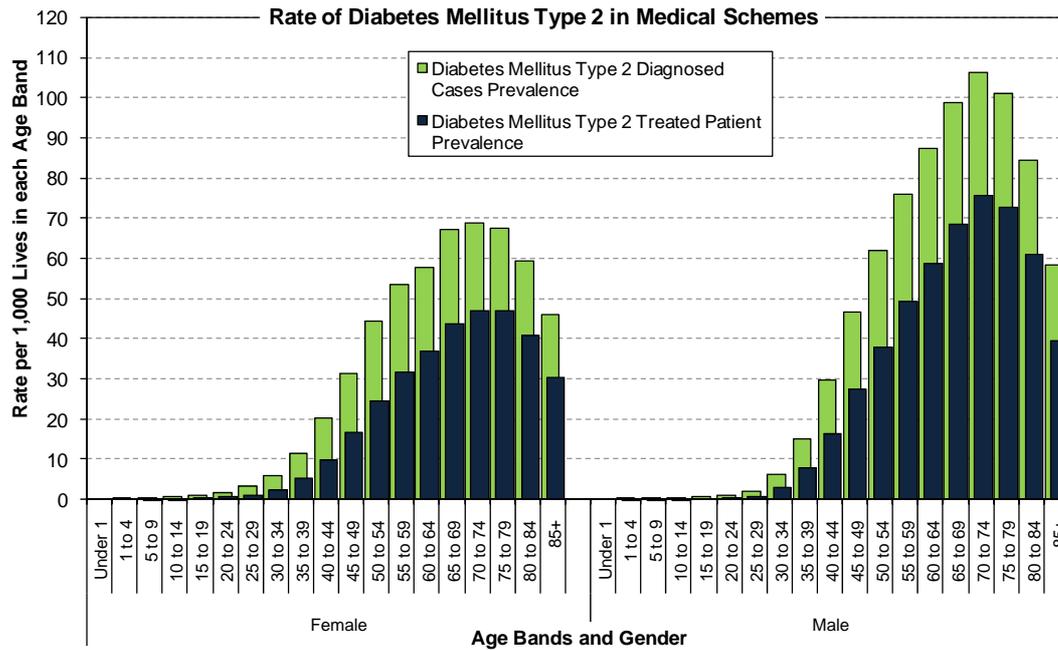


Figure 1: Rate of Diabetes Mellitus Type 2 in Medical Schemes

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Further resources on the IMSA NHI web-site:

http://www.innovativemedicines.co.za/national_health_insurance_library.html

- The full policy brief and slides and tables used.
- Spreadsheets and graphs of DL disease prevalence by age and gender, for “diagnosed cases” and “treated patients”.
- A glossary of healthcare terms.

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