

Health System Quarterly

"Achieving a quality, equitable and sustainable health system"



2016 National Health Accounts

The 2016 National Health Accounts Report (NHA) provides a detailed summary of Bermuda's health system finance and expenditure for 1st April 2014 to 31st March 2015 (FYE 2015). This report has been produced annually since 2009 and is an essential tool for monitoring health system trends and guiding health policy.

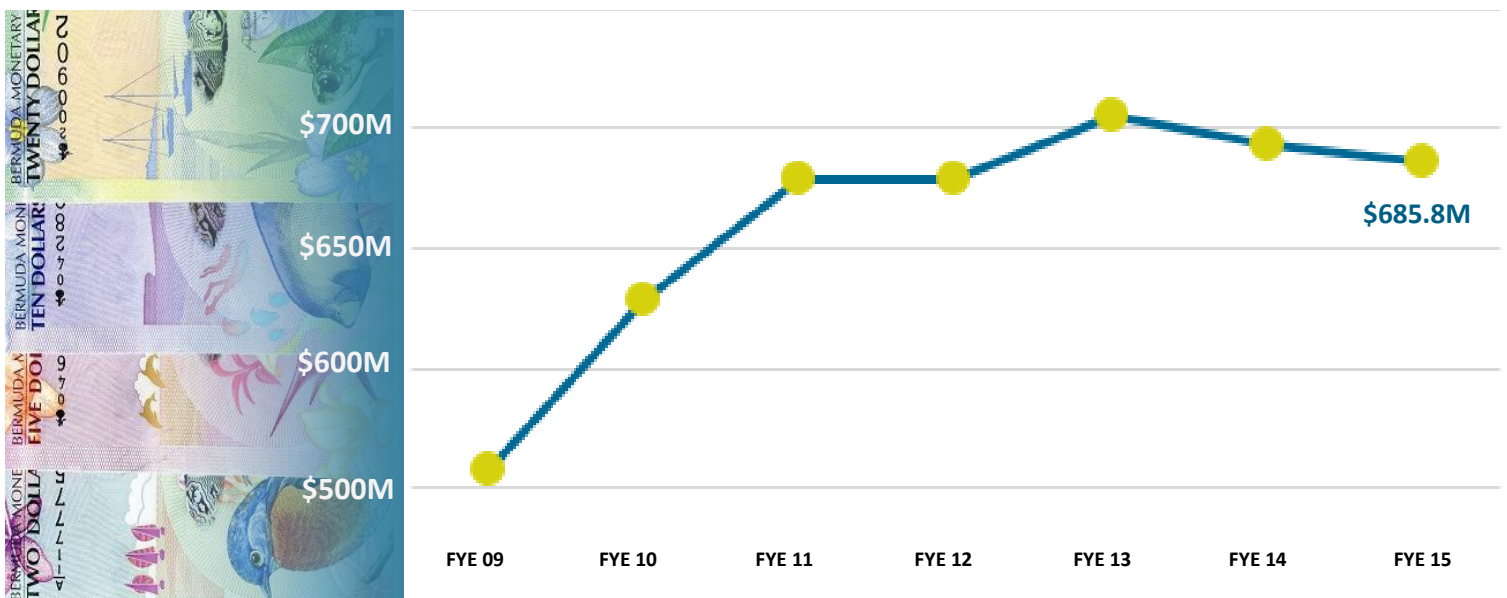
In FYE 2015 decreases were seen in total health expenditure, per capita health expenditure and health expenditure share of GDP, which reflects some improvement in the health system and the economy overall.

NHA also looks at local health costs in a global context, and provides comparison of Bermuda with other jurisdictions based on health expenditure and health outcomes.

Tiara Carlington, *Policy Analyst, Data and Research* stated: "While there are benefits to the decreases in expenditure, health policy should improve its focus on reducing the burden of chronic disease as this continues to be a key driver of health costs."

- Total health expenditure decreased by 1.1%.
- Patient subsidies and BHB grants are 44% (\$301M) of total expenditure.
- Per capita health expenditure is \$11,102.
- Percentage share of GDP decreased by 1.1%.
- Administrative costs for health insurance decreased by \$1.9M.

Total Health Expenditure





Self-Managing Your Diabetes

Dr. Annabel Fountain
Director of Endocrinology, Bermuda Hospitals Board

Bermuda has the **highest rate of lower limb amputations** in the developed world. Additionally, Bermuda also has 10 times the rates of blindness and end-stage kidney disease compared with the US and Europe. This is discouraging, because diabetes complications are preventable.

In Bermuda, diabetes is affecting younger, working people.

Type 2 diabetes used to be a disease of old age, but now it affects younger, working people. In the new acute care wing of the hospital, Health Information Management Services (HIMS) of Bermuda Hospitals Board (BHB) found that 25-39% of beds are occupied by people with diabetes. Further more, HIMS also found that the number with diabetes in the hospital aged 41-64 years old is equal to those with diabetes over 65 years old, and, people with diabetes stay in hospital an average of 40 days when those without diabetes stay 16.5 days and they're twice as likely to get MRSA and other infections*.

The **Bermuda Diabetes Guidelines 2009** recommended that someone diagnosed with diabetes should immediately be referred for education and treatment, have an annual review of control and complications, and, have involvement with a multidisciplinary team of doctor, educators, nurses and dietitians. In 2015 the American Diabetes Association, The

American Association of Diabetes Educators and the Academy of Nutrition and Dietetics released **guidance** for health professionals on diabetes self-management education (DSME) and

support, which endorsed these recommendations.

In most chronic diseases (heart, stroke, cancer, lung disease), you can visit your doctor every 3-4 months to check your blood pressure and blood tests. As long as you take your medications, you may not need more treatment between visits. An individual with diabetes must make management decisions every 2 to 5 hours related to what and when they eat, whether they exercise etc. This means that most of

**Data supplied by BHB.*

An individual with diabetes must make management decisions every 2—5hrs. Diabetes self-management education helps people with diabetes to navigate these decisions and activities.

diabetes management is not in the clinic, but by the individual at home, and at work.

DSME helps people with diabetes to navigate these decisions and activities. DSME teaches about glucose, medications, diabetes complications, and coping skills, behaviours and abilities necessary for diabetes self-care. It reduces hospital admissions and reduces development/progression of diabetes-related complications and improves quality of life.

The FDA will approve a **drug that reduces HbA1c** (average blood sugar over 3 months) by 0.4%. DSME reduces HbA1c an average of 0.57% and the longer an individual spends with diabetes educators, the **more impact** the education has. Reducing HbA1c by 1%, **lowers the risk** of a heart attack by 20%. **Group classes** can reduce HbA1c by 2%. DSME is therefore **more effective** and certainly less expensive than many drugs used to treat diabetes.

To ensure that everyone with diabetes in Bermuda has the best

chance of good outcomes, they need quality education. Diabetes educators should be certified or part of an accredited programme. If your diabetes is still difficult to manage, you should see a physician who specializes in diabetes, such as an Endocrinologist.

When people with diabetes understand their condition, and are empowered to control their sugar, they can expect long and healthy lives despite their diagnosis.

Dr. Annabel Fountain is a Bermudian physician trained in the UK. She is Board certified with the Royal College of Physicians (London) in Internal Medicine, Diabetes and Endocrinology and is currently the Director of Endocrinology at Bermuda Hospitals Board.





Managing Premiums in Competitive Health Insurance Markets

Wynand P.M.M. van de Ven

Professor of Health Insurance (Emeritus), Erasmus University, Rotterdam

A competitive insurance market tends toward *equivalence* between the premium and the expected costs for each contract. That is, insurers must charge a sufficient premium for each contract to cover the expected costs. They cannot compensate predictable losses on the contracts with the high risks by making predictable profits on the low risks, because competition minimizes predictable profits. Since the individual variation in predictable health care expenses is tremendous, the premiums for high-risks can be more than 1,000 times the premiums for low-risks. This would make health insurance unaffordable for many high-risk individuals.

How can we make health insurance affordable for the high risks on a competitive health insurance market?

The answer is, cross subsidies from low-risk to high-risk individuals. To do so, many countries (e.g. Colombia, Germany, the Netherlands, The United States, and Switzerland) have implemented a **risk-equalisation system**. This means that insurers receive a high risk-adjusted payment from a solidarity fund (or equalization fund) for the high-risk insured; and the low risks have to pay a solidarity contribution to the solidarity fund. The subsidy fund can also be filled with income-related contributions. The risk-adjusted equalization payments can depend on age, gender, health status, and other risk factors that insurers (could) use for risk rating. Although risk equalization has been applied for more than 25 years, it is still imperfect, leaving many groups of high-risks undercompensated.

To the extent that high-risks are insufficiently subsidized by the equalization payments, the regulator can provide insurers with an ex-post-cost-based compensation out of the subsidy fund, e.g. 80% of all expenses above a certain threshold. This will reduce the high-risks' premium, but will also reduce the insurers' incentive for efficiency. This confronts the regulator with a tradeoff between affordability and efficiency.

An alternative strategy to make health insurance affordable for the high-risks is to regulate the premiums. Premium-rate restrictions can take several forms: community rating, a ban on certain rating factors (for example health status, genetic information, duration of coverage, or claim experience) or a

minimum and maximum premium. Community rating usually has the form of a requirement that insurers must charge the same premium (in case of risk-equalization: the same out-of-pocket-premium) for the same product to each enrollee, independent of the enrollee's risk. The goal of such regulation is to create implicit cross-subsidies from the low-risks to the high-risks who are in the same pool. However, pooling of people with different risks creates predictable profits and losses for certain subgroups, and thereby provides insurers with incentives for risk selection, which can have the following unfavorable effects:

- Insurers have a disincentive to respond to the preferences of high-risk consumers. Therefore, insurers may structure their coverage such that the insurance is unattractive for the high risks,
- Efficient insurers, who do not engage in risk selection, may lose market share to inefficient risk-selecting insurers, resulting in a welfare loss to society.
- In case of large predictable profits resulting from selection, selection will be more profitable than improving efficiency in health care production.
- To the extent that some insurers are successful in attracting the low-risk persons, these selection activities result in risk segmentation, whereby the high risks pay a higher premium than the low risks.

The regulator is confronted with a tradeoff between affordability and the negative effects of risk selection.

To make health insurance affordable for the high risks on a competitive health insurance market policymakers have to choose the most appropriate strategy, or, blend of strategies, given the weights that society attaches to affordability, efficiency and the negative effects of selection, notably low quality care for the chronically ill.

Professor Wynand van de Ven is Professor of Health Insurance at Erasmus University Rotterdam; he has worked as a Consultant for the World Bank and World Health Organization and studied healthcare systems in Chile, Ireland, Israel, New Zealand, Poland, Russia, South Africa and Sweden.