

## **Request for Proposals (RFP) – Actuarial and Financial Modelling Services for the Bermuda Health Council**

### Overview

The Bermuda Health Council (BHeC) is seeking to commission actuarial and financial modelling services and solution design to support its legislated functions. A contractor is sought to assist with two primary undertakings: (1) the annual actuarial review of the Standard Hospital Benefit and the Mutual Reinsurance Fund that guides the setting of the Standard Premium Rate; and (2) redesign of the way healthcare is financed in Bermuda, in support of the National Health Plan.

All interested companies are invited to submit tenders in response to this RFP. Any individual company may be awarded with either or both contracts. The BHeC will favour proposals for both undertakings as a bundled package. The awarded contractor(s) will be expected to perform actuarial and financial analyses, research, planning and drafting of the actuarial review and/or the financing solution.

### The Actuarial Review

#### *Goal*

The Actuarial Review will update previous annual actuarial reviews and recommend the Standard Premium Rate (SPR) for upcoming years. The SPR is the combined rate of the Standard Hospital Benefits (SHB) package and the Mutual Reinsurance Fund (MRF). The SHB is the minimum package of insurance that employers (including self-employed) are mandated to provide to all employees and their non-working spouses. The MRF serves to mitigate the risks of poor claim experience with the SHB. This review will analyze the statistical and claims information submitted by all health insurers and approved schemes, as it relates to the SHB and MRF. It will also comment on trends and analyze any changes in benefit proposals for the SHB and MRF benefit provisions that are under consideration. The BHeC seeks a three year contract for the annual Actuarial Review.

#### *Deliverables*

1. Complete an actuarial review of the SHB and the MRF, and any benefit proposals including extensive data analysis;
2. Review the claims experience as it relates to the SHB and the MRF, and recommend a premium rate for the fiscal following period 1st April to 31st March;

3. Calculate the loss-ratios;
4. Review the financial statements of the MRF;
5. Prepare a draft actuarial report for the BHeC;
6. Present the results of the actuarial review to the BHeC Board;
7. Make revisions following BHeC directives and finalize the actuarial report for submission to the BHeC;
8. Prepare a draft report for publication by the BHeC;
9. Assist the BHeC with the actuarial review process and the preparation of the data templates; and
10. Attend meetings and conference calls with the BHeC to discuss the actuarial report.

### Health Financing Solution

#### *Goal*

The goal of the Health Financing Solution is to redesign the way healthcare is financed in Bermuda, in support of the National Health Plan. The BHeC is interested in receiving not only recommendations of one or multiple health financing structures/methods, but also analyses on:

- (i) the impact of such health financing structures/methods, as established by financial modelling, for various plausible scenarios (e.g. changes in demography or the economic climate);
- (ii) the strengths and weaknesses of each proposed structure/method;
- (iii) the methods of implementation and monitoring of the proposed structures/methods.

The above comprehensive package of services is the Health Financing Solution that the BHeC is seeking. This is a one-off undertaking with anticipated completion within 2012.

The Solution may propose multiple feasible financing structures/methods. Its broader goal is to ensure efficient, universal and affordable health coverage in Bermuda for a sound basic package of benefits. In particular, any proposed structure/method should meet the following requirements:

- (1) Universal coverage for a basic benefits package that expands the current minimum mandated benefits package to include more than hospitalization. This project does not include the benefits package design; potential proposed basic packages will be provided for costing; development of estimated costs as part of the financial modelling is among the project deliverables.

- (2) Proposals to finance universal coverage must be based on maximum risk pooling mechanisms, and minimize or eliminate the inefficiencies of multiple-payer systems.
- (3) Individual contributions to the financing of the basic benefits package need to be set either according to the ability to pay or at a common community rated level (with subsidies to those unable to pay).

### *Design Objectives*

The design of the health financing structure/method should aim at the following objectives:

- ❖ Efficiency: make optimal use of resources and incur minimum systematic waste;
- ❖ Cost-efficiency: achieve the preferred health outcomes with minimum cost;
- ❖ Sustainability: sustainable in the long run, taking into consideration projected demographic changes for 25 years;
- ❖ Robustness: not sensitive to risks—the system is solvent even when unforeseen (but not unreasonable) changes in economic climate occur;
- ❖ Equitability: positive impact in addressing health inequality and affordability for vulnerable populations and those with low incomes.

The design should also consider the following:

- ❖ Incentives: the design should not induce strong distortions in incentives that might undermine the implementation of the Solution; if such incentives are a possibility, measures to address such distortions need to be discussed;
- ❖ Anti-competition, rent-seeking and corruption: the design should consider potential effects on competition among providers and insurers, and avoid inducing excessive rent-seeking activities and creating loopholes for corruption.
- ❖ Choices: Whenever appropriate, economic agents should be presented with options or choices.

### *Impact Projection/Financial Modelling*

Considerations of the impact of the recommended financing structures/methods need to address a range of plausible scenarios exogenous to the model (e.g. economic or demographic changes). For each scenario, the considerations may include but are not limited to:

1. How much would the structure/method cost the public sector and the private sector, including individuals, families, Government (as subsidy payer, insurer and as employer), large and small employers, local and international employers, employees, and the not-formally-employed? For example, proposed Solutions must include redesign of existing Government health-related grants, subsidies and entitlements, and detail the intended impact on Government financing, including Government as an employer, and on its five insurance products (for details see *Background Materials* section).
2. Of the total cost of the structure/method, what would be the administrative portion? And what would be indirect costs?
3. How might these costs develop in the future?
4. How would these costs change with modifications to the benefit package, price-setting arrangements or eligibility criteria for coverage under the system?
5. How might the type and number of providers be affected?
6. How might the cost of particular services be affected?
7. How might the nature and extent of financial risks borne by the public and private sectors be affected?
8. What is the extent to which the structure/method might increase appropriate or inappropriate use of medical resources?
9. What would be the redistributive impact on the poor?

### *Design Options*

The Bermuda Health Council is open to consider a range of structures/methods that satisfy the design objectives. However, while many design options are proposed in the literature, their feasibility in a Bermuda context differ and they need not all be discussed. The Bermuda Health Council intends to engage the contractor's expertise to propose and compare a small subset of the most promising candidates of the structure/method designs to identify the optimal one for Bermuda to achieve the objectives of the National Health Plan goals 1, 2, 3 and 9. The project is NOT to be a comprehensive review of all design options.

The following are examples of options to be considered; this is not to be regarded an exhaustive list:

- ❖ Financial contributions based on ability to pay: How could such contributions be collected within Bermuda's context?

- ❖ Government subsidies: How would the Government's health subsidies have to change to ensure they are sustainable?
- ❖ Which cost-saving options are most likely to make an impact with minimal public opposition? Cost-saving ideas abound, though their effectiveness may not be clear. A small subset of such ideas which may be considered includes, but is not limited to: use of disease management programmes, use of pay-for-performance programmes, decreasing the intensity of resource use for end-of-life care, increasing the use of preventive care etc.
- ❖ Regulation of provider fees: should the government regulate the full fee? If not, can provider fees be contained?
- ❖ Co-payments: should there be copayments to discourage excessive utilization? If so, how to price them?
- ❖ Financial incentives for health behaviours: can costing and contribution levels be set to reward good health outcomes? (e.g. require lower contributions from individuals who are proven (medically certified) non-smokers with good outcomes in blood pressure, blood cholesterol, and waist circumference).

### *Deliverables*

1. At least two (2) health financing structures/methods that follow the funding flows in the healthcare system: where do the funds within the healthcare system come from and how to ensure the collection of such funds; where do the funds get expended on and how to make sure they flow in the right direction;
2. An estimate of the cost of the basic benefits package—the possible package designs are to be supplied by the Bermuda Health Council;
3. The projection of the impact of the proposed health financing structure/method in various scenarios and a financial modelling tool that generates predictions for alternative scenario parameters the BHeC may need to explore;
4. Comparison of the proposed financing structures/methods;
5. Notes on the degree to which the proposed financing structures/methods meet the objectives laid out above;
6. Notes on the limitations and caveats of the proposed financing structures/methods;
7. Assessment of the implementability of the model in Bermuda's context;

8. The performance criteria to monitor the implementation progress and the impact of the models.

#### *Delivery Format*

1. Three draft reports for the BHeC, allowing for three rounds of revisions of full drafts (i.e. not partial drafts), before finalizing;
2. At least three presentations to relevant officials;
3. The financial modelling tool;
4. Finalised full report for submission to the BHeC;
5. A draft summary report for publication by the BHeC.

#### Background Materials

Bermuda currently does not have universal health coverage. However, the Health Insurance Act 1970 requires that all employees and their non-employed spouses be insured for the Standard Hospital Benefit (SHB) package; every insured person has to be covered for SHB at the minimum; for uninsured youth, elders and indigent persons, Government subsidies cover the total or the majority cost of services defined in the SHB.

The SHB package consists of inpatient and outpatient benefits at the local hospitals and if necessary, at overseas hospitals. The range of benefits in the SHB is defined in the Standard Hospital Benefit Regulations 1971. The premium for SHB, the Standard Premium Rate, is determined annually, under the guidance of the BHeC's Actuarial Review, for which the claims experience of all insured participants is reviewed. The Actuarial Review also makes recommendations on the rate of the Mutual Reinsurance Fund premium. The Mutual Reinsurance Fund serves to mitigate the risk of poor claims experience with the SHB.

The Bermuda Government offers five insurance plans: the Health Insurance Plan (HIP), FutureCare, the Government Employees Health Insurance (GEHI), the Veterans Fund, and the Mutual Reinsurance Fund (MRF). HIP is a basic package that includes the SHB and supplemental benefits; it is the lowest cost standalone insurance package available on the market. FutureCare is a package catering specifically to persons aged 65 years or over with a wider range of benefits than HIP. GEHI covers all government employees, pensioner and their dependents; it is equivalent in benefits to commercial major medical policies. Large employers can also apply to offer their own self-funded insurance schemes, known as "approved schemes".

Private health insurance companies and private healthcare providers also play an active role. The majority of the insured population in Bermuda (75% in 2010) is covered by private health insurance. For the majority of the population, primary care is delivered by private physicians, while the local hospitals provide almost all secondary care in Bermuda.

For more information on Bermuda's current health system, please refer to the Actuarial Reviews, National Health Accounts, Health System Profile and Health in Review reports. For more information on the health reform, please refer to National Health Plan 2011. The following webpage provides links to the materials mentioned above:

[http://www.bhec.bm/resources/reports\\_pub.html](http://www.bhec.bm/resources/reports_pub.html)

### Timelines

#### **Contract:**

Intent to respond notice: 21<sup>st</sup> December 2011  
RFP submission deadline: 27<sup>st</sup> January 2012  
Contract award: 29<sup>th</sup> February 2012

#### **Annual actuarial review timelines:**

Data collection begins in July of each year  
Final report due November of each year

#### **Health Financing Solution**

Detailed timeline is to be agreed. Final report delivery is to be by September 2012, inclusive of no less than three complete draft report revisions, three presentations to relevant officials, a financial modelling tool, and a summary report.

### Statement of Proposal

Please provide us with the curriculum vitae of your project lead, and a brief statement of proposal, of no more than twenty pages, addressing the following points:

1. Indicate which one or both of the two projects you are interested in pursuing.
2. Include an outline of evidence of your ability to produce report(s) of the scope and nature described above. Please include separately, a relevant sample of your work and provide one example of any relevant published literature you have authored or co-authored.
3. Evidence of thorough, up-to-date knowledge and understanding of current health system structure, financing and expenditure, and of the cost drivers in current health system arrangements in Bermuda.

4. Evidence of thorough, up-to-date knowledge and understanding of global best practices in health system structure and financing.
5. A brief description of how you will achieve the aims of the project(s) and meet the deadlines.
6. A preliminary list of health financing options you would consider.
7. A statement as to why the project(s) is of interest to you, indicating in your statement whether or not it falls within your core area of expertise.
8. State the total cost of the project(s) to the Bermuda Health Council, with any relevant details, and indication of how you would expect to be paid if you are successful in winning this contract.
9. Responsibilities of the Bermuda Health Council - Involvement required of the BHeC in terms of staff, office space, computer hardware, networking or other supplies.
10. Declare any potential conflict of interest.
11. Any other relevant information.

Please be succinct in your proposal. Short-listed vendors will have the opportunity to elaborate further during the interview process.

Please submit your proposal as one (1) pdf file via e-mail to:

Michelle Ye, PhD  
Programme Manager Health Economics  
Bermuda Health Council  
Hamilton, Bermuda  
[mmye@bhec.bm](mailto:mmye@bhec.bm)

### Questions

Please feel free to address any questions about the RFP to Michelle Ye.

### Intent to Respond

Please let the BHeC know by 21<sup>st</sup> December 2011 if you intend to respond to this RFP.

### Amendments

At any time prior to the close of the RFP, the BHeC may alter, amend, delete or add to, in whole or in part, any terms or provisions of this RFP. The BHeC will immediately notify all vendors of any such modification or amendment, revision or addenda via e-mail.

### Evaluation Process

The proposals submitted to the BHeC will be evaluated and the contract will be awarded. The only information that will be released is the name of the successful contractor. It is anticipated that the BHeC will select the successful contractor by 20<sup>th</sup> February 2011.

### Report Delivery

The report is considered delivered when the Chief Executive Officer of the BHeC has signed-off on the report.

### Project Authorities

Project Sponsor: Jennifer Attride-Stirling (CEO)

Project Manager: Michelle Ye (Programme Manager Health Economics)