

FBC INSURANCE MEDICAL AID ACTUARIAL ASSESSMENT REPORT

Prepared exclusively for Management

Contents

1. Introduction	3
2. Purpose of the exercise.....	3
3. Data, Reliance, Limitations	4
Data and Sources of Information	4
Reliance	4
Limitations	4
4. Product	5
5. Pricing	6
Pricing Philosophy	6
Assumptions	6
Premiums	8
6. Performance Projections	9
7. Conclusion.....	9
Appendix 1: Plan Specifications.....	11

1. Introduction

- 1.1. This report outlines an actuarial assessment for the medical aid packages to be sold by FBC Insurance which has been undertaken by the Analytics and Actuarial Services department.
- 1.2. The assesment has been conducted through the use of sound actuarial principles and professional guidelines and regulatory requirements.
- 1.3. FBC Insurance provides short term, life and health insurance products under a composite license.
- 1.4. Whilst FBC Insurance has distributed Liberty Health products in the past, the proposed new medical aid packages will be sold separately without direct involvement of Liberty Health.

2. Purpose of the exercise

- 2.1. The exercise was carried out with the following objectives
 - Assess proposed premiums in terms of adequacy and sustainability of meeting claims experience.
 - Comment on the risk profile of the products and the company
 - Carry out projections of the future performance of the packages
 - Give an overall opinion on the overall profitability of the packages

3. Data, Reliance, Limitations

Data and Sources of Information

- 3.1. In conducting this exercise, reliance was placed on information provided by FBC Insurance management and our own internal sources.
- 3.2. The responsibility for maintaining and providing accurate information in respect of the FBC Insurance business lies with Management.
- 3.3. Though there has been a running Liberty Health product, it was noted that the product targeted the upper end of the customer spectrum whilst the proposed new offering is going to target the lower end. It was assumed that experience of the two ends is significantly different. Hence no use was made of Liberty Health data. Neither are assumptions and calculations based on previous experience for Liberty Health.
- 3.4. Once the new product has been launched it is proposed that experience be consistently monitored so that pricing and benefits can be assisted accordingly.
- 3.5. This report and the estimates of value and opinions contained herein are subject to (but not exclusively to) the following reliance and limitations.

Reliance

- 3.6. In developing this report we have relied extensively on a substantial body of information supplied by the Management.
- 3.7. Reliance is placed on, but not limited to, the accuracy and validity of the following:
 - Business plan as availed by Management
 - Communications by management including sales targets and

Limitations

- 3.8. The accuracy of any values quoted in this report and the conclusions reached must be limited to the realisation of the assumptions used, and the accuracy of the data and information (listed above) to which these assumptions were applied.
- 3.9. It must be emphasised that the current economic environment has significant impact upon realisation of key assumptions. Inflation, interest rates, expenses per policy are generally a function of the economy.

4. Product

- 4.1. The medical aid product to be sold by FBC Insurance will mainly cover the risks: morbidity only. There is a funeral cash rider which will cover death risk. The product is comprehensive and doesn't have aspects of being a budget plan.
- 4.2. There are three plans in the form of Lite Plan, Standard Plan and Superior Plan. Details of the plan have been attached as Appendix 1.
- 4.3. The product will be sold to mainly low income households that have socio-economic activities to sustain their lives. These include rural farming communities with sustainable operations like irrigations, small scale mining communities, civil servants, small enterprises etc. For middle and high income, the aim is to motivate them to put as many extended family members from low income backgrounds.
- 4.4. Specific distribution channels will depend on the most effective channel depending on the target market. For example, development organisations working with rural farmers would be very effective when targeting rural irrigation schemes. In some instances, churches or cooperatives may be the selected channel. The distribution channels should be generally be cost effective in order to support the microinsurance nature of the product.
- 4.5. The product is a microinsurance version targeting the following aspects: Simplicity, Flexibility, Affordability, Accessibility, Valuable, Efficiency and Understood. I

5. Pricing

Pricing Philosophy

- 5.1. Generally, to price a product in an actuarially sound manner it is necessary to have reliable data and statistics that can be used to predict the likely future experience of the product. As in most developing countries, data and statistics may not be readily available for the Zimbabwean market. As such, in some instances we have used judgement to come up with assumptions.
- 5.2. The general trend in the market is to have rates that are not age specific. Neither are the rates specific to gender. Premiums may be split between adult and child rates. It is also common to have group and individual rates.
- 5.3. With respect to this product rates are split into adult rates and child rates. Granular pricing will be incorporated once there is credible claims experience to use for pricing.
- 5.4. The premiums were derived from risk premium basis and then loaded for expenses, profit margins and business acquisition costs to come up with a recommended gross premium rated for FBC Insurance.
- 5.5. Consideration was also done for the rates that competition offer so that the rates are marketable and competitive.

Assumptions

- 5.6. A number of assumptions were used in calculating the premiums payable, the following assumptions were used.

- The split of adults to children has been assumed to be 60%:40%
- Membership growth rates were assumed to be as below:

Membership Monthly Growth Assumptions			
Year	1	2	3
Membership Growth Rate	20%	10%	7.5%

- Growth rate is expected to gradually reduce from year to year. As the membership pool it becomes more difficult to achieve the same growth in membership.
- The cheaper and simpler plans are expected to attract more membership volumes and the calculations try to represent this expectation.
- The following claim ratios were assumed to be achieved on average each year:

Claims Ratio Assumptions			
Year	1	2	3
Lite Plan	75%	70%	65%
Standard Plan	80%	75%	70%
Private Plan	82.5%	77.5%	72.5%

- Cheaper plans are expected to have lower claims ratio because of two reasons. It is expected that due to a high membership will have better pooling of risks resulting in a more stable claims experience. Due to the likely shortfalls, it is also expected that utilisation will be lower for cheaper plans as the members will be deterred from using health services due to the shortfalls.
- As membership increases for all the schemes, it is expected that claims experience will gradually reduce due to better pooling of risks.
- The following assumptions have been made for expense and business acquisition ratios:

Expense and Business Acquisition Ratios Assumptions			
Year	1	2	3
Expense Ratio	17.5%	15.0%	15.0%
Business Acquisition Ratio	5.0%	5.0%	5.0%

- It has been assumed that FBC Insurance will endeavour to get more direct business so as to reduce business acquisition costs.
- Expenses are expected to be on a higher side during the first year due to low volumes having less ability to absorb fixed overheads like salaries.
- Business provided their targeted membership statistics for the years till 2023 as below:

Business Provided Membership Targets	
Year	Membership
2020	10 000
2021	60 000
2022	100 000
2023	140 000
2024	200 000

- For year one to year three, membership projections were carried out in a different manner but largely around the same membership at the end of three years.
- Due to the volatility of the economy, the projection period was reduced from five to three years.
- Whilst it is clear that service providers will continue increasing their costs in line with inflation, the projections without explicit loadings of inflation. This is because, no credible projections of inflation over a three year period were considered plausible.
- As such, it was assumed that the product will be repriced at least every quarter in line with the changes in costs as driven by inflation.

Premiums

5.7. The recommended premiums are given in the table below

Recommended Premiums			
Plan	Lite Plan	Standard Plan	Private Plan
Adult Contributions	\$130	\$290	\$790
Child Contributions	\$75	\$170	\$500

- 5.8. The above recommended premiums are in line with rates being applied in the market by competition.
- 5.9. The premiums whilst they seem expensive are just a response to the significant increases in tariffs that have been approved by industry.
- 5.10. We are therefore confident that the recommended rates can be competitive in the market.

6. Performance Projections

- 6.1 The projections in terms of performance of the product are given below:

Overall Results				
Year	One	Two	Three	Total
Membership	12,382	38,863	92,566	92,566
Premiums	17,240,001	76,139,033	201,205,229	294,584,263
Claims	13,836,148	57,299,385	141,359,361	212,494,895
Expenses and Acquisitions	3,879,000	15,227,807	40,241,046	59,347,853
Net Cashflow/ Profit	(475,148)	3,611,841	19,604,822	22,741,516
Claims Ratio	80%	75%	70%	72%
Expense and Business Acquisition Ratio	23%	20%	20%	20%
Combined Ratio	103%	95%	90%	92%
Profit Margin	-3%	5%	10%	8%

- 6.2 During the first year, the product won't be profitable as both claims and expenses will start on the higher side.
- 6.3 It must be mentioned that there is need for strict adherence to the claims ratio and expense ratio for the product to be sustainable.
- 6.4 Repricing of the product will be consistently carried out in line with trends in the market.

7. Conclusion

- 9.1. A recommendation on the pricing of the medical aid product that is about to be launched has been made.

9.2. The recommended premiums are in line with competition and are expected to be marketable.

9.3. The product is expected not to be profitable in the first year but be profitable there after.

Appendix 1: Plan Specifications

	Lite Plan	Standard Plan	Private Plan
Annual Limit per person	\$30,000	\$60,000	\$150 000
	Mission Hospitals	Mission Hospitals	Foreign treatment India, (if not available locally)
	Council clinics	Private Hospitals Group C	Private Hospitals
	General hospitals	Specialists access at these institutions	Specialists access
	GPs	GPs	GPs
	Specialists access at these institutions only	Ahfoz tariffs	FBC Tariffs
	Ahfoz Tariff		
Hospitalisation Limit	\$13,500	\$27,000	\$68,000
In-patient Maternity	From overall limit	From overall limit	From overall limit
Acute Medication	\$3,000	\$4,500	\$8,000
Chronic medication	From overall limit	From overall limit	From overall limit
Basic Dental Cover	\$3,000	\$5,000	\$7,000
Specialised Dental	\$5,000	\$8,000	\$10,000
Optical (10 months waiting period thereafter per every two years)	\$2,500	\$4,500	\$6,000
Pyschiatric	\$2,000	\$3,500	\$5,000
Rehabilitative Services (Physiotherapy)	\$3,000	\$5,000	\$7,000
Prosthetics Appliances Treatment (Internal 18 months, External 6 months waiting period)	\$5,000	\$8,000	\$10,000

Out-patient Maternity	\$2,000	\$4,000	\$6,000
Ambulance Services (According to tariff)	In full	In full	In full
Adult Contributions'	\$130	\$290	\$790
Child Contributions	\$75	\$170	\$500
Funeral Cover	FREE	FREE	FREE
Funeral Benefit - Cash	1000	3000	5000