



Medical Scheme Consolidation

A high-level analysis on consolidation of medical schemes with less than 6000 members

March 29, 2019

Executive Summary

This report seeks to share with the industry additional analysis undertaken by CMS to enhance aspects of Circular 42 of 2018 based on comments received. From the analysis presented, we note that the membership, purely as a number, is an insufficient metric to identify the schemes which could be considered for consolidation. Industry-wide analysis of all medical schemes is recommended, based on a more holistic set of parameters and economic simulations.

Given the varying characteristics of the medical schemes, from their operational to business model, financial and clinical perspective, CMS believes that individual characteristics within each scheme will have to be measured. In addition, certain market mechanisms within a wide range of industries allow small players to operate sustainably, and in fact, enhance competition and innovation. Whilst CMS wait for the final publication of the Health Market Inquiry report, MSAB and NHI Bill, it is recommended that discussions on risk pool consolidation should continue.

CMS intends to continue with industry consultation and research to ensure that stakeholders views are carefully considered as we move closer towards finalisation of the consolidation approach.

CONTENTS

Executive Summary	2
1. Background	4
1.1 Policy goals.....	4
1.2 Circular 42 of 2018.....	4
2. Overview of schemes with less than 6000 members	5
2.1 Membership.....	5
2.1.1 Number of schemes with less than 6000 members.....	5
2.1.2 Three-year membership growth.....	6
2.2 Scheme type.....	7
2.2.1 Restricted schemes with less than 6000 members.....	7
2.3 Risk profile.....	10
2.3.1 Average age.....	10
2.3.2 Trends in average age.....	11
2.3.3 Pensioner ratio.....	12
2.3.4 Trends in pensioner ratio.....	13
2.3.5 Family size.....	13
2.3.6 Trends in family size.....	14
2.4 Solvency.....	14
2.4.1 Trends in solvency.....	15
2.5 Operating results.....	16
2.5.1 Operating results.....	16
2.5.2 Operating results trend.....	17
2.5.3 Net surplus/(deficit).....	17
2.5.4 Trends in net surplus/(deficit).....	18
3. Recommendations	19
4. Conclusion	20

1. Background

1.1 Policy goals

South Africa has embarked on a journey to introduce universal healthcare for the nation. To effectively deliver on this mandate, the private sector healthcare finance environment must be carefully coordinated to ensure that it acts as a complementor and not a direct competitor to the long-term goals of delivering of quality, affordable, accessible and equitable healthcare to the people of South Africa.

1.2 Circular 42 of 2018

On the 19th of October 2018 the Council for Medical Schemes (CMS) published Circular 42 inviting stakeholders within the industry to comment on the proposed framework for medical schemes consolidation. This research was initiated after the publication of the National Health Insurance Policy document in 2017 where paragraph 322 stated the following:

*“Amendments to the Medical Schemes Act will be initiated as part of the broad phased implementation. **Medical schemes will evolve and consolidate during this phase** to provide complementary cover. In the initial stages, all benefit options in the various schemes will be consolidated from the current 323 benefit options in 83 schemes to one option per scheme. **Schemes covering state employees will be consolidated into one scheme, the Government Employee Medical Scheme (GEMS).** The other activities to be undertaken will involve the creation of a uniform information system and standardisation of healthcare services across the medical schemes to be aligned to comprehensive healthcare services for NHI.”*

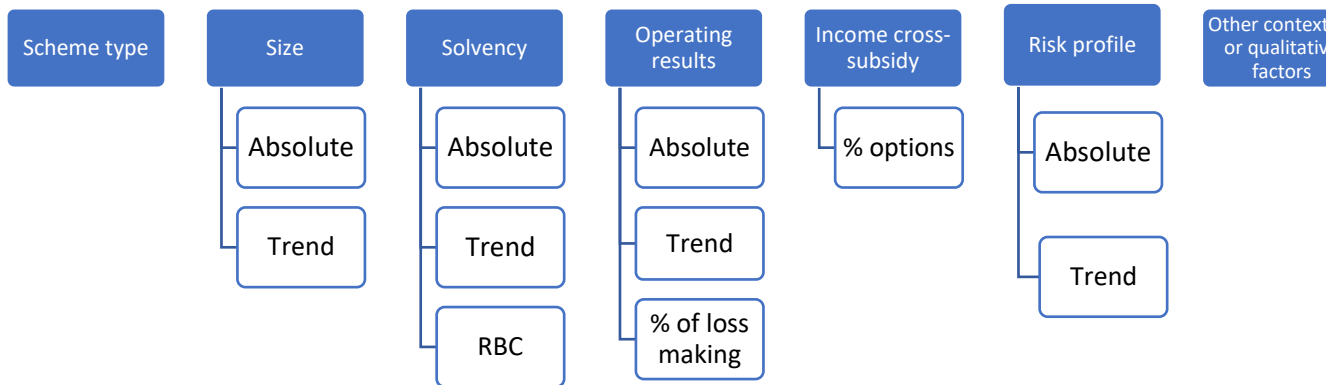
Following the publication of the NHI Policy, there was a Government Gazette on NHI Implementation Structures indicating that medical schemes and benefit options will be consolidated in the period leading to full implementation of the NHI. The medical schemes consolidation framework published by CMS aimed to propose policy responses to fragmented risk pools within the medical schemes environment.

The following were key objectives of Circular 42:

- Reducing the excessive fragmentation of risk pools;
- Address risk rating;
- Strengthening cross-subsidies, and hence social solidarity; and
- Standardise and simplifying benefit options.

Additionally, consolidation of schemes with less than 6000 members was suggested. This consolidation is expected to improve the risk pool fragmentation that currently exists within the market. One of the benefits from consolidation could possibly be increased economies of scale for medical schemes when negotiating with service providers.

Circular 42 suggested that the following factors be reviewed for consolidation.



An important element to note is that the Medical Schemes Act clearly stipulates that the Council for Medical Schemes has a mandate to control and coordinate medical schemes in a manner which is complementary with National Health Policy. This should be coordinated with the efforts of the CMS to protect medical scheme beneficiaries.

2. Overview of schemes with less than 6000 members

Below, is an outline of a high-level analysis of the medical schemes with less than 6000 members. The key driving factors which are available from CMS reports have been considered.

2.1 Membership

2.1.1 Number of schemes with less than 6000 members

In 2017, there were 29 schemes with less than 6,000 members.

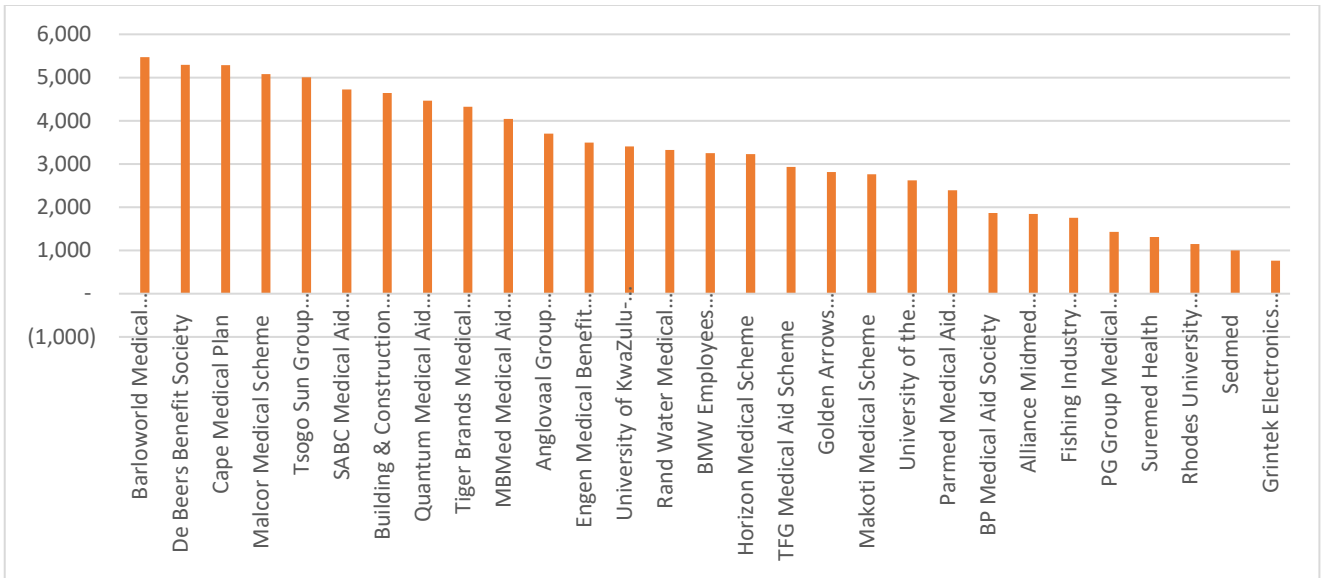


Figure 1: Membership of medical aid schemes with 6000 members or less

From the analysis provided in this report, we can see that the schemes showed in the above graph vary in the characteristics of their membership.

2.1.2 Three-year membership growth

The graph below shows the growth in the number of principal members from 2014 to 2017. Nine of these schemes experienced negative membership growth during this period.

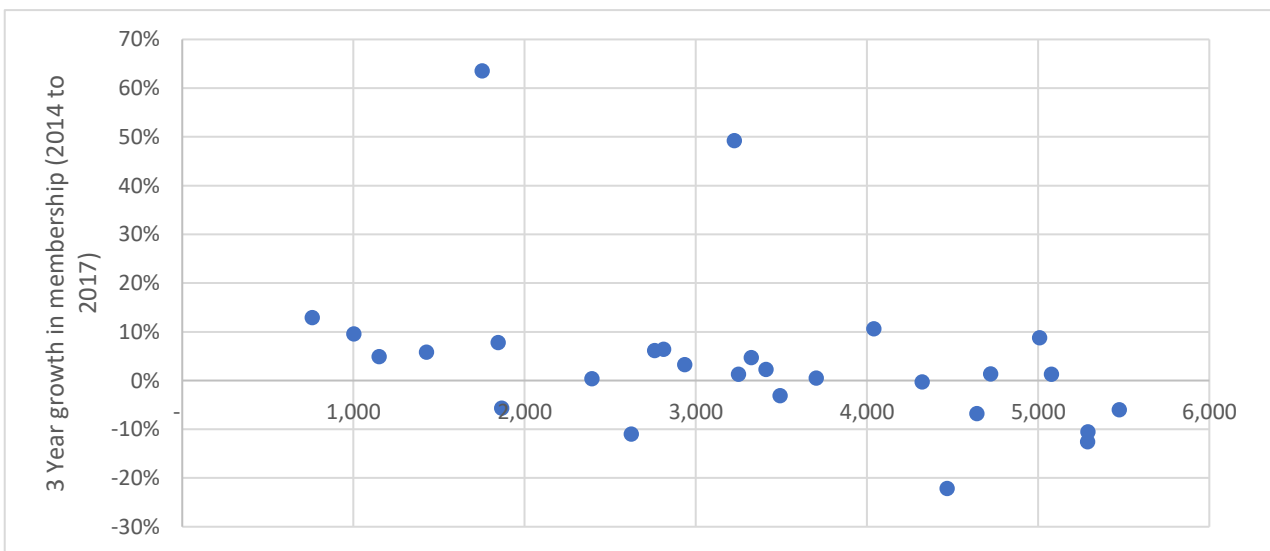


Figure 2: 3 Year growth in membership from 2014 to 2017 for medical schemes with 6000 members or less

Note: Suremed is excluded from above as there is uncertainty in the membership figures between 2014-2015 annual returns.

Key to note from the above is that some schemes are experiencing rapid growth, often an indicator of improving financial sustainability. For example, the schemes with approximately 5000 members could easily move to 6000 mark 2023. However, it would be essential to analyse the characteristics of the new members and the level of underwriting applied by rapidly growing schemes. It is equally essential to ensure that the growth is not being driven by anti-selective behavior, which would have the opposite effect.

2.2 Scheme type

2.2.1 Restricted schemes with less than 6000 members

Of the 29 schemes with less than 6000 members, 26 (90%) are restricted schemes. This is essential to analyse due to the fact that restricted and open schemes experience different financial, demographic and clinical push and pull factors within their membership.

Additionally, the risk of anti-selection within restricted medical schemes is limited if membership is compulsory. The membership tends to be more stable and predictable as well.

Restricted schemes may have greater income cross-subsidies than open schemes. The reason for this is that whilst restricted schemes may have income-rated contribution tables on all options, open schemes typically only use income-rated contribution tables only on their low-cost benefit options.

There is a high level of control by employers on restricted schemes. This is enforced institutionally by the fact that up to half of the trustees may be employer selected. There is a heightened focus on the specific needs of the members within that scheme. This may be an attributing factor to the lower number of benefit options in restricted schemes. Restricted medical schemes typically offer income-rated contribution tables across all options, not just the core options, as is seen with most open schemes. Additionally, the approach to ex-gratia claims is significantly different to that adopted by open schemes, often being perceived to be more accommodating than that of open schemes.

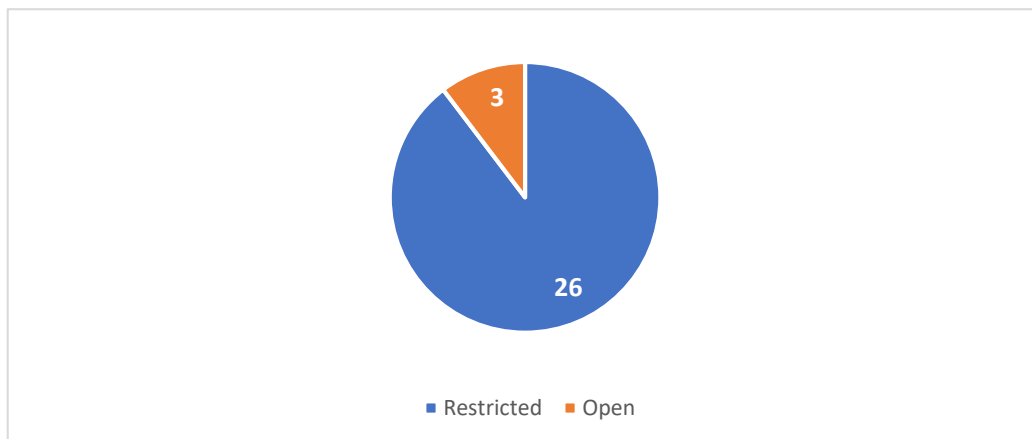


Figure 3: % split of restricted and open medical schemes in South Africa with 6000 members or less

2.2.2 Non-healthcare expenditure

Restricted schemes typically have lower levels of non-healthcare expenditure as there is usually no need to pay broker commission and marketing costs. However, some restricted schemes which are in direct competition with open schemes, for example Profmed, may find themselves incurring marketing and possibly broker omission costs as well. Additionally, they usually have a far more simplified contribution collection which is often linked directly to payroll. This assists to keep restricted schemes simpler and less costly to run, *ceteris paribus*.

We can also see from the graph below that restricted schemes do indeed have a significantly lower gross non-healthcare expenditure compared to open schemes, supporting the conjecture above.

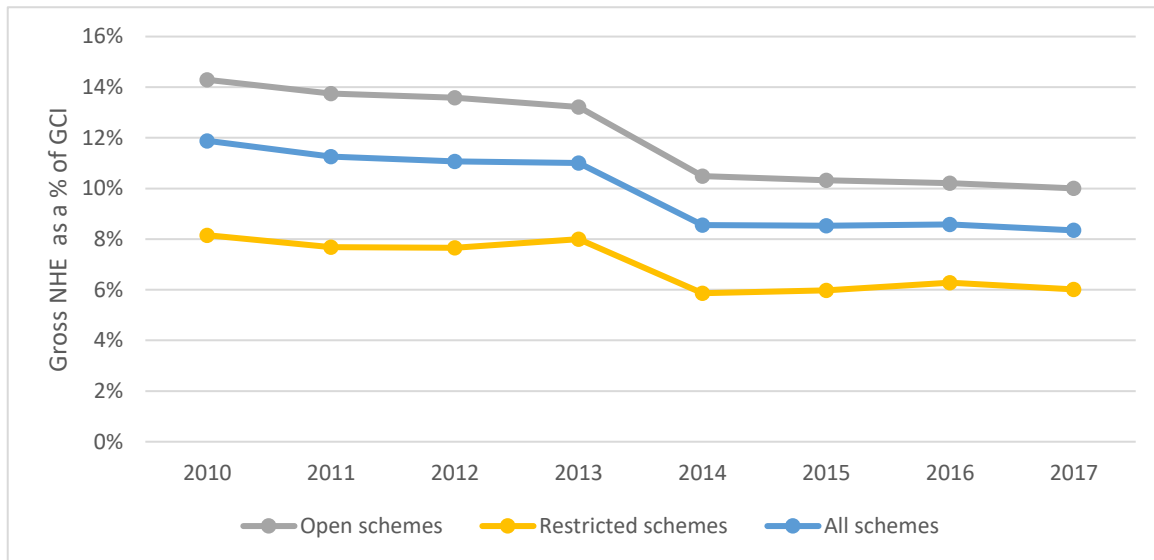


Figure 4: Gross NHE as a % of GCI for all medical schemes

Additionally, on average, restricted medical schemes have an older population and a higher pension ratio. Older individuals are expected to claim more than younger individuals and schemes with higher pensioner ratios are expected to experience higher claims. However, we will see from the analysis of the schemes below that the schemes under consideration have mixed experiences of these factors.

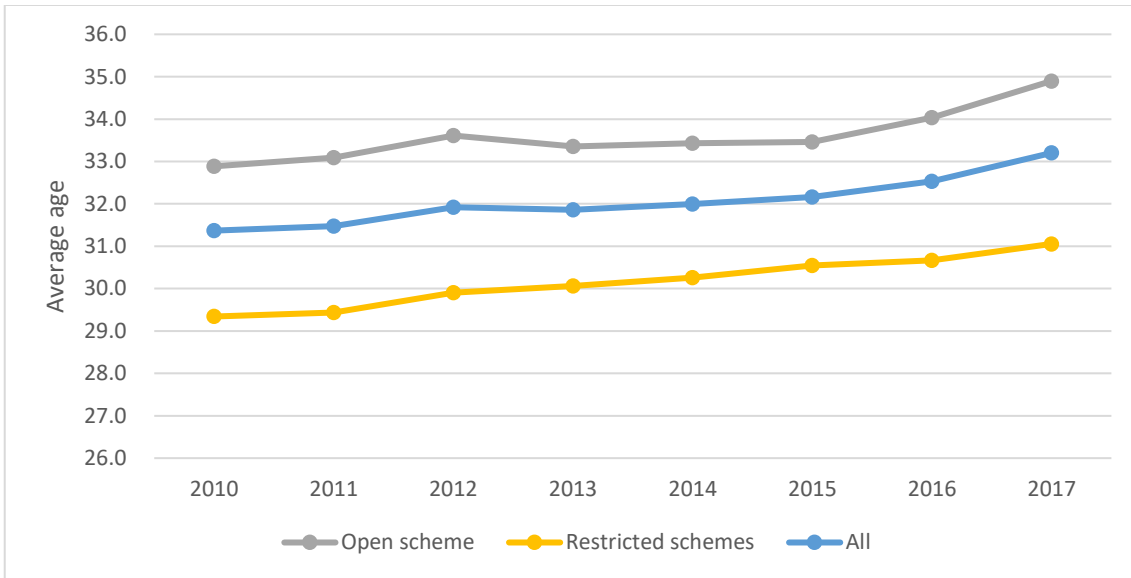


Figure 5: Average age of all medical schemes

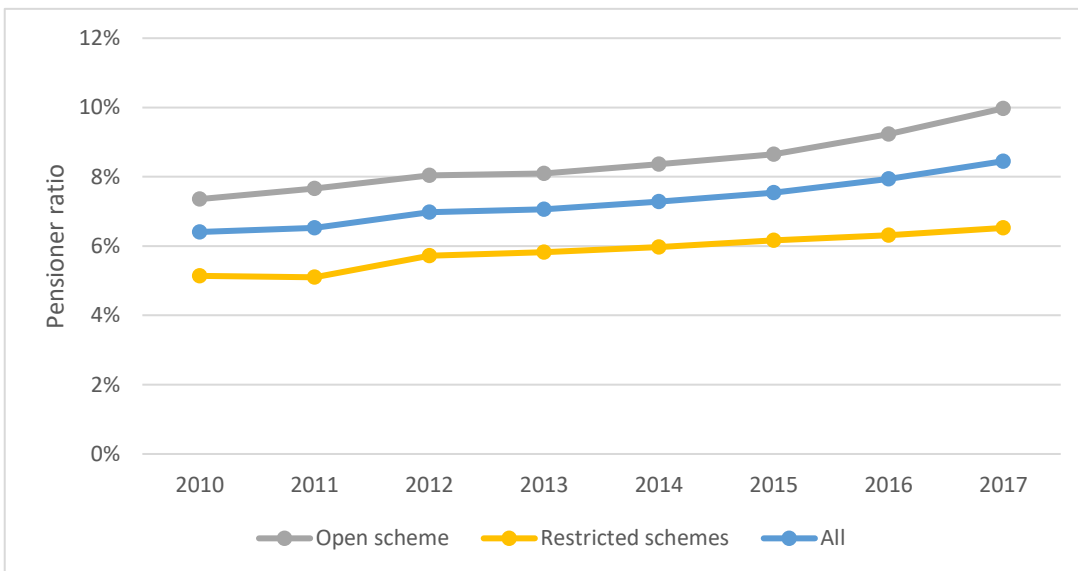


Figure 6: Pensioner ratios of all medical schemes

2.3 Risk profile

The average age of a scheme is essential to consider as generally younger population often result in lower claims as the younger individuals are assumed to be healthier.

2.3.1 Average age

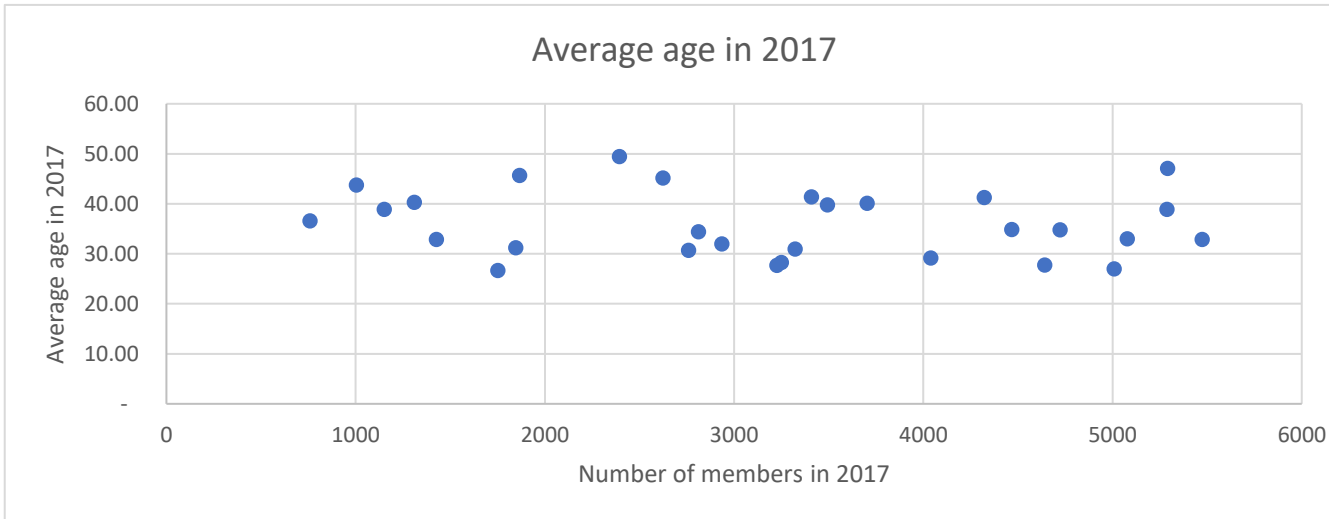


Figure 7: Average age of medical schemes with less than 6000 members

From the graph above, it appears that there is no direct correlation between scheme size and the pensioner ratio. Even when considering all schemes with members below 100 000 (as shown in graph below), we do not see a clear direct relationship between scheme size and average age. As a result, it is not prudent to assume that restricted schemes are likely to have an ageing and more “expensive” membership base.

In fact, from the two graphs, we can see that there are several very small schemes (under 4000 members) which have relatively young population (with an average under 30 years of age).

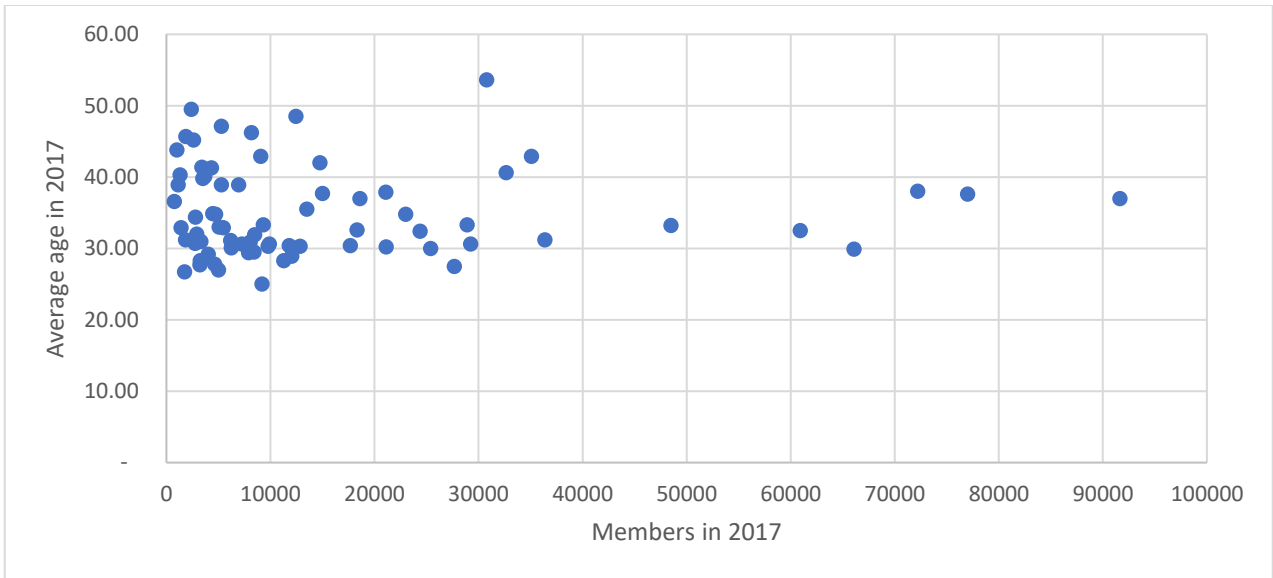


Figure 8: Average age of medical schemes with less than 100 000 members

2.3.2 Trends in average age

However, when we consider the overall behavior of the schemes with less than 6000 members, the individual characteristics of the schemes are masked. There is the impression of an ageing population within the combined scheme membership.

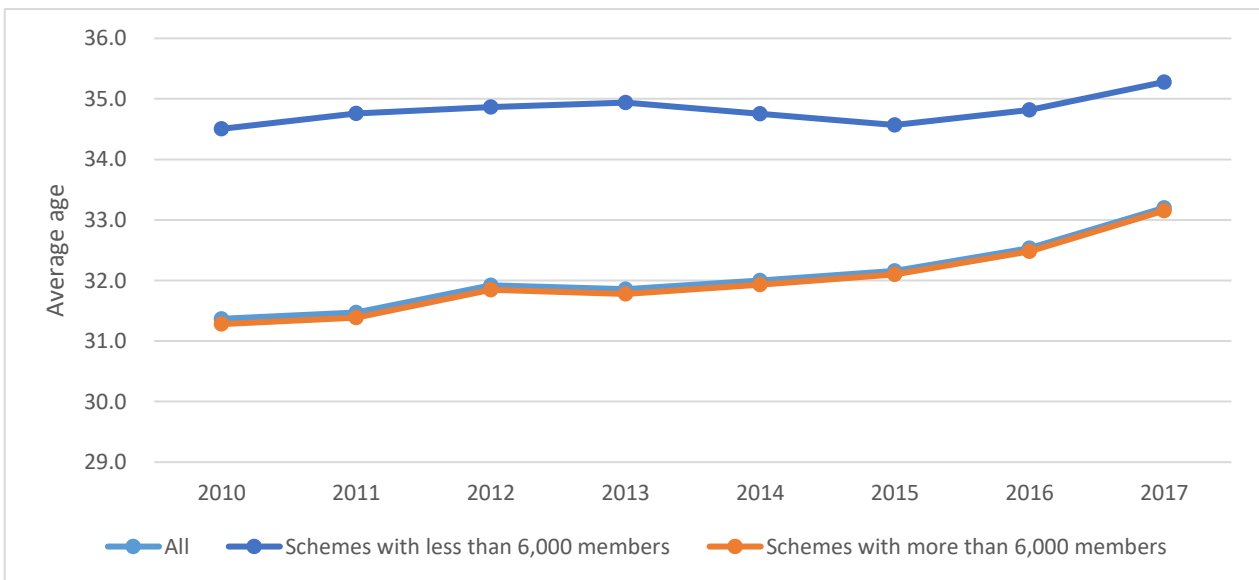


Figure 9: Combined average age of medical schemes with less than 6 000 members

Therefore, from the comparison of the above Figures, analyzing potential future performance of schemes with less than 6000 members by observing their combined age only could result in the erroneous conclusion.

2.3.3 Pensioner ratio

The pensioner ratio is usually a measure used to identify whether a scheme has an elderly population. Individuals who are past retirement typically have costlier healthcare needs. It is also significant for the calculation of the post-retirement medical assistance and other healthcare subsidies which are set aside for pensioners. Additionally, its progression, gives us insight of the direction of claim severity, because of the high cost claims associated with the last days of life.

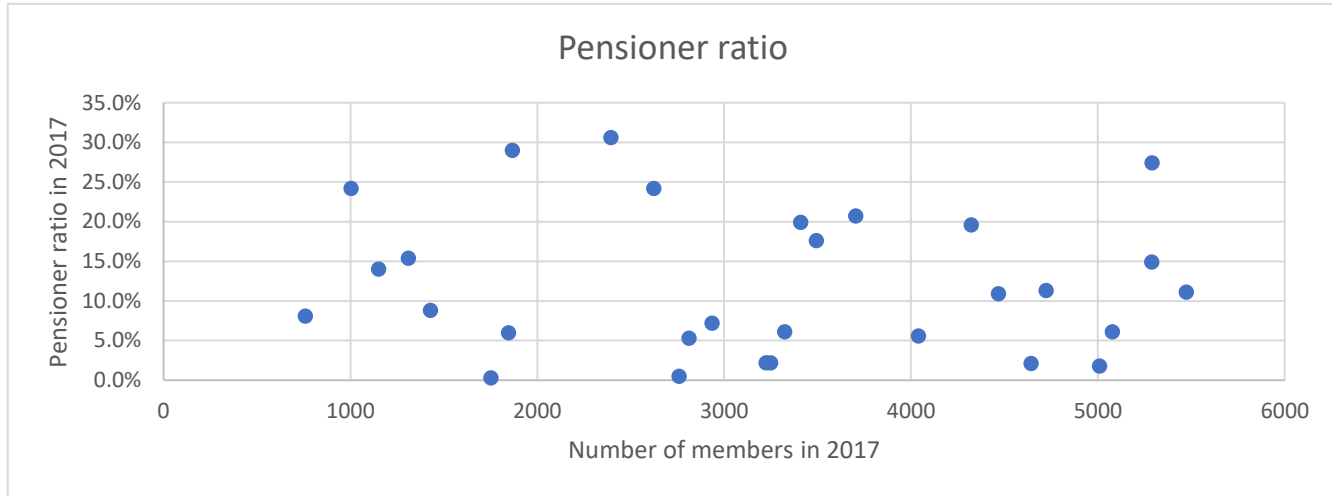


Figure 10: Pensioner ratio of medical schemes with less than 6 000 members

Once again, from the graph above, it appears that there is no clear direct relationship between scheme size and the pensioner ratio. Even when considering all schemes with members below 100 000 (as shown in graph below), we do not see a clear direct relationship between scheme size and pensioner ratio.

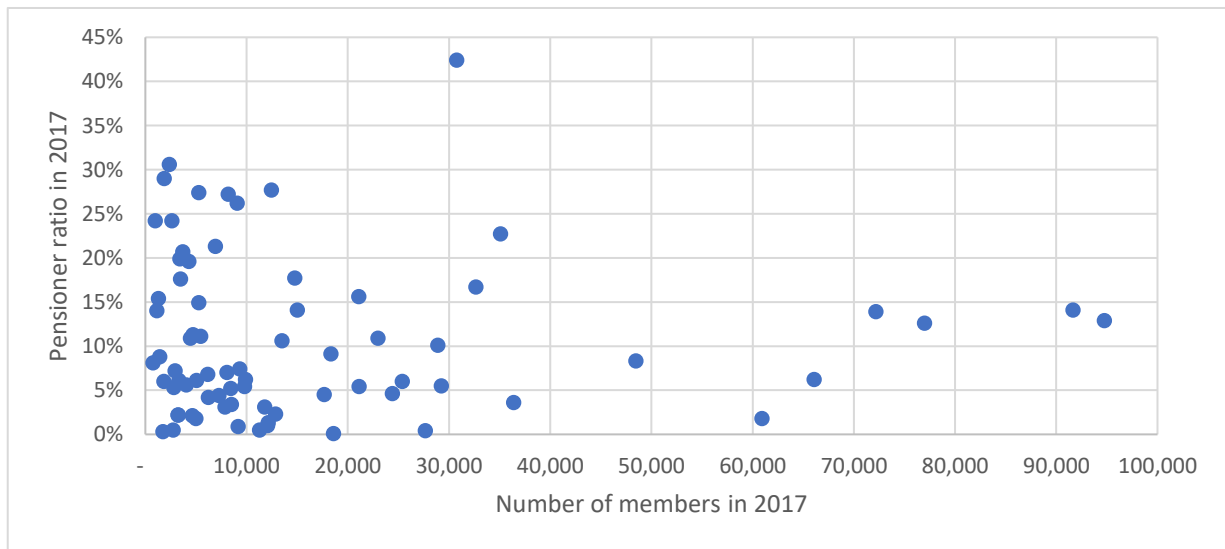


Figure 11: Pensioner ratio of medical schemes with less than 100 000 members

When we compare these figures, we can in fact see that there are small schemes (under 4000 members) which have pension ratios under 5%, yet there are larger schemes which have significantly higher pension ratios (and average ages) above 20%. One could argue that these large schemes are better able to cover the claims of older members who have higher cost healthcare need, as a result of the economies of scale and risk-pooling benefits of a larger membership. However, in the absence of an analysis of claiming behavior of these pensioners, this argument is still conjecture. Additionally, this needs to be analysed in light of approaches to reserving and investments.

2.3.4 Trends in pensioner ratio



Figure 12: Combined pensioner ratio of medical schemes with less than 6000 members

Once again, a combined view of the schemes with less than 6000 members shows that schemes with less than 6000 members typically results in a higher pension ratio, which is associated with higher claims frequency and severity. However, the experience of these schemes within this categorization is varied.

The argument is made once again that the membership size cut-off of 6000 members does not provide the objectivity required of a metric meant to determine whether a scheme should be amalgamated with other schemes.

2.3.5 Family size

In 2017, the average family size for all registered schemes was 2.2. The graph below shows a range in family size from 1.7 to 2.7.

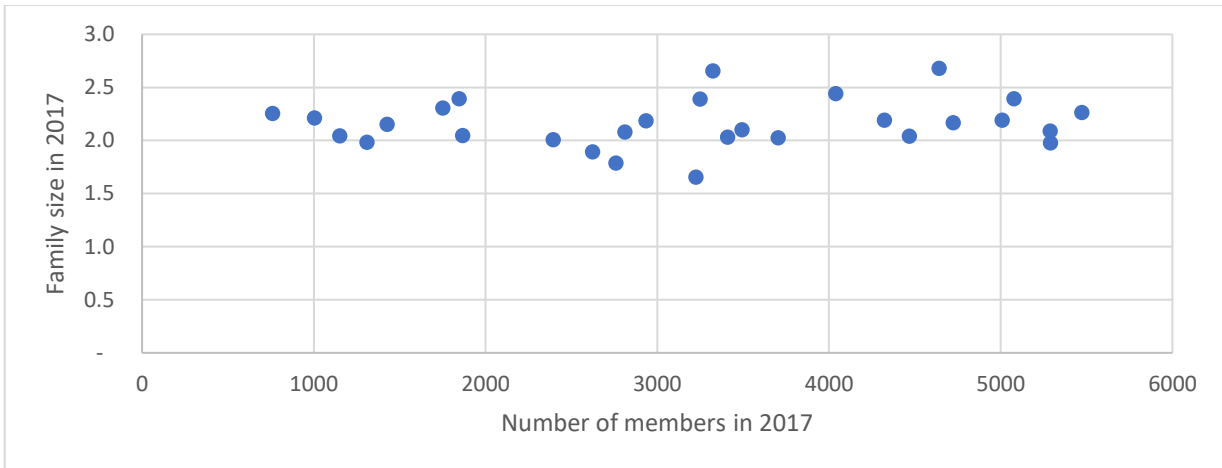


Figure 13: Average family size of medical schemes with less than 6000 members

2.3.6 Trends in family size



Figure 14: Combined average family size of medical schemes with less than 6000 members

The combined view of average family size of schemes with less than 6000 members shows a combined higher average family size, which is decreasing over the years, in line with the whole industry and the national population. However, once again, it masks the individual characteristic of the schemes which are likely to be affected.

2.4 Solvency

Solvency as a key measure for sustainability currently being used in the South African medical scheme environment is essential in determining the schemes which will be considered for consolidation.

From the graph below, it appears that there is no directly observable relationship between scheme size and solvency. Furthermore, all the schemes under consideration have a solvency ratio above the statutory minimum requirement of 25%.

More importantly, the use of 25% as a strict solvency cut-off is insufficient to assess the financial sustainability of a scheme, several clinical and financial factors need to be considered to assess sustainability. The risk-based framework which is currently under consideration by CMS would provide a better basis upon which to assess the financial health of these schemes. This should be considered in the consolidation framework design.

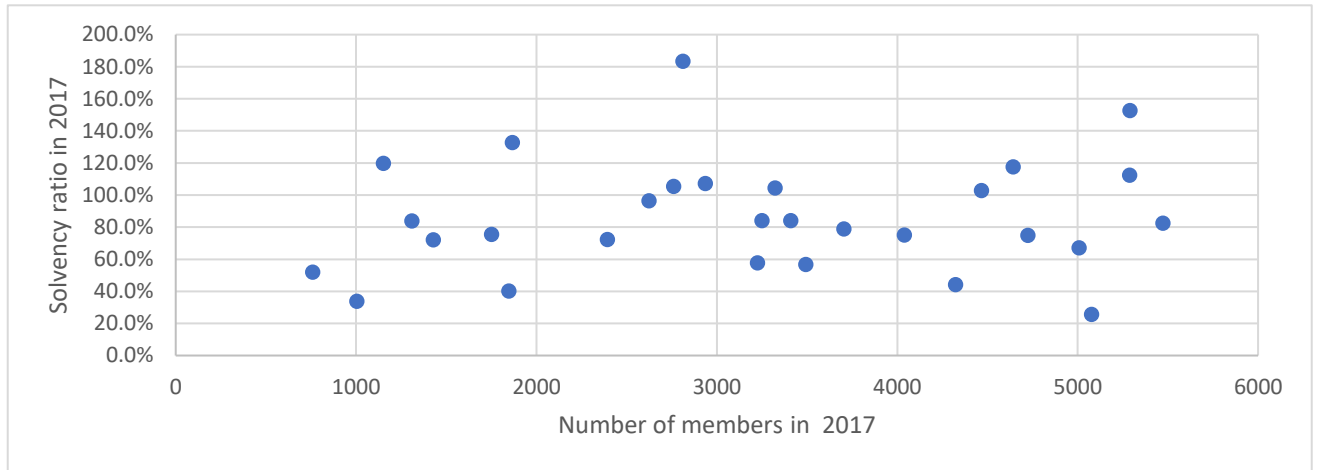


Figure 15: Solvency ratio for medical schemes with less than 6000 members

2.4.1 Trends in solvency

Although from the graph below we can see that schemes with less than 6000 members have a significantly higher solvency than larger schemes, this cannot be viewed in isolation of the key risk factors which these schemes face and which are likely to impact financial and clinical performance on the future.



Figure 16: Combined average solvency of medical schemes with less than 6000 members

2.5 Operating results

Operating results show the financial results of a scheme after deducting healthcare and non-healthcare expenditure from the contribution income, but before allowing for any investment income. Ideally, schemes should be priced such that the scheme achieves break-even point before allowing for investment income.

2.5.1 Operating results

The economies of scale associated with larger schemes are not immediately obvious from viewing the graph below. This calls to question the ability of market forces to operate efficiently below a certain scheme size. It would be useful to compare the net healthcare results of the combined schemes with that of a similar size, after accounting for overlapping administrative and operating costs, such as marketing costs, salaries and actuarial services.

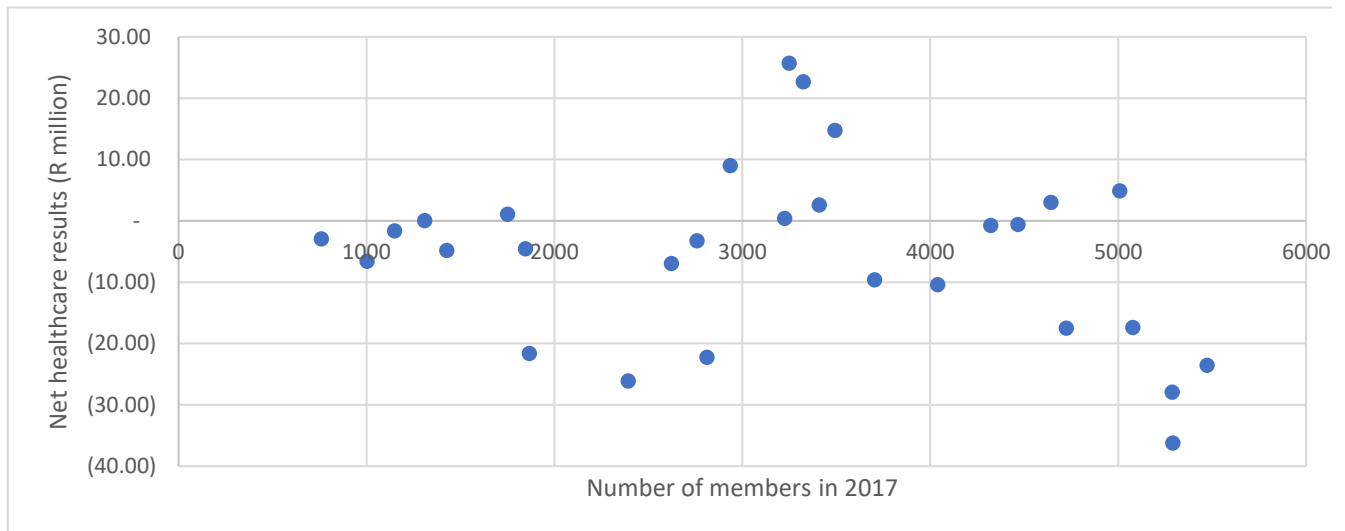


Figure 17: Net healthcare results for medical schemes with less than 6000 members

The above indicates that there is varied pricing adequacy across schemes. This is however not unique to schemes with less than 6000 members. Additionally, the pricing differences could also allow for expected longer-term claiming patterns, and not simply the one-year pricing cycles we are currently witness (e.g. schemes with a high pensioner ratio and an increasing average age are likely to reserve and price differently from their peers).

2.5.2 Operating results trend



Figure 18: Operating results for medical schemes

The graph above shows the trend in operating results from 2010 to 2017. Operating results for schemes with more than 6000 members are consistently above operating results for schemes with less than 6000 members from 2010 to 2013. From 2014 to 2016, we observe a deteriorating trend of operating results for the industry. For this period, operating results for schemes with members above 6000 are less than for schemes with members less than 6000. In 2017, the operating results for schemes with more than 6000 members increased to levels above that of schemes with less than 6000 members.

On average, the data shows that schemes with fewer members experience more volatility in operating results than larger schemes.

2.5.3 Net surplus/(deficit)

Whereas 19 schemes showed a negative operating result in 2017, only 3 medical schemes had a net deficit in 2017. Several schemes have accumulated large reserve (to accommodate the pensioners in the long-term) and can thus rely on investment income to achieve positive net results.

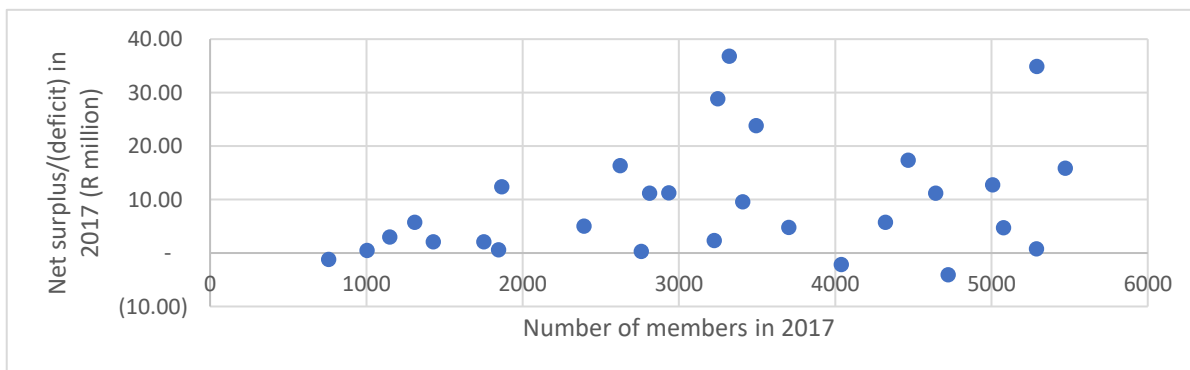


Figure 19: Net surplus or deficits for medical schemes with less than 6000 members

The graph below shows net surplus/(deficit) in 2017 for schemes that have negative net operating results in 2017. This is particularly as a result of the aggressive reserving approach taken by these schemes in order to adequately safeguard their means of covering their expected claims, based on their membership profiles.

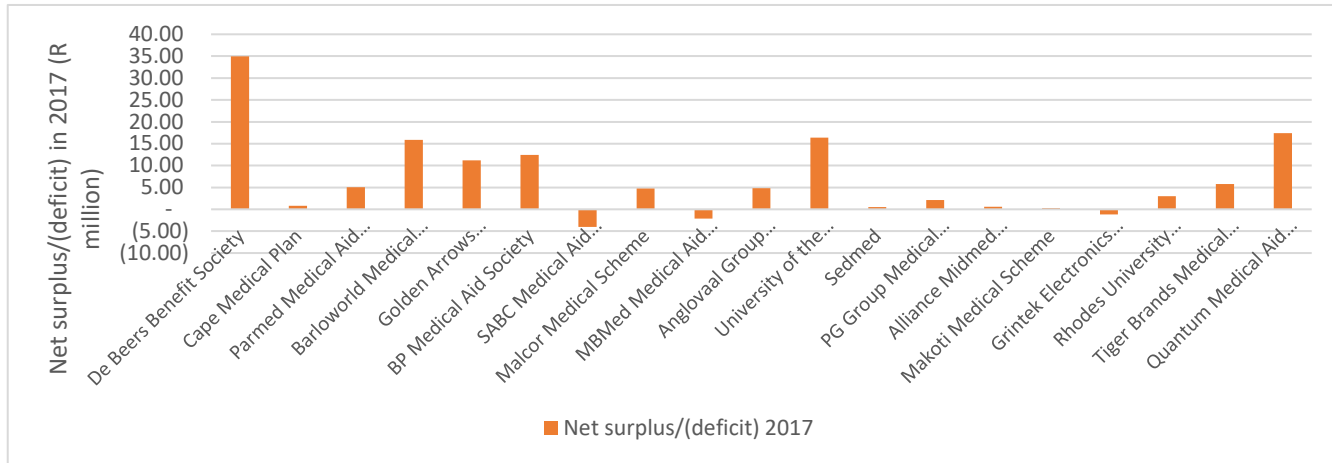


Figure 20: Net surplus or deficits for medical schemes with less than 6000 members

2.5.4 Trends in net surplus/(deficit)

While schemes with less than 6000 members have on average lower net results, we see less volatile experience than for larger schemes.

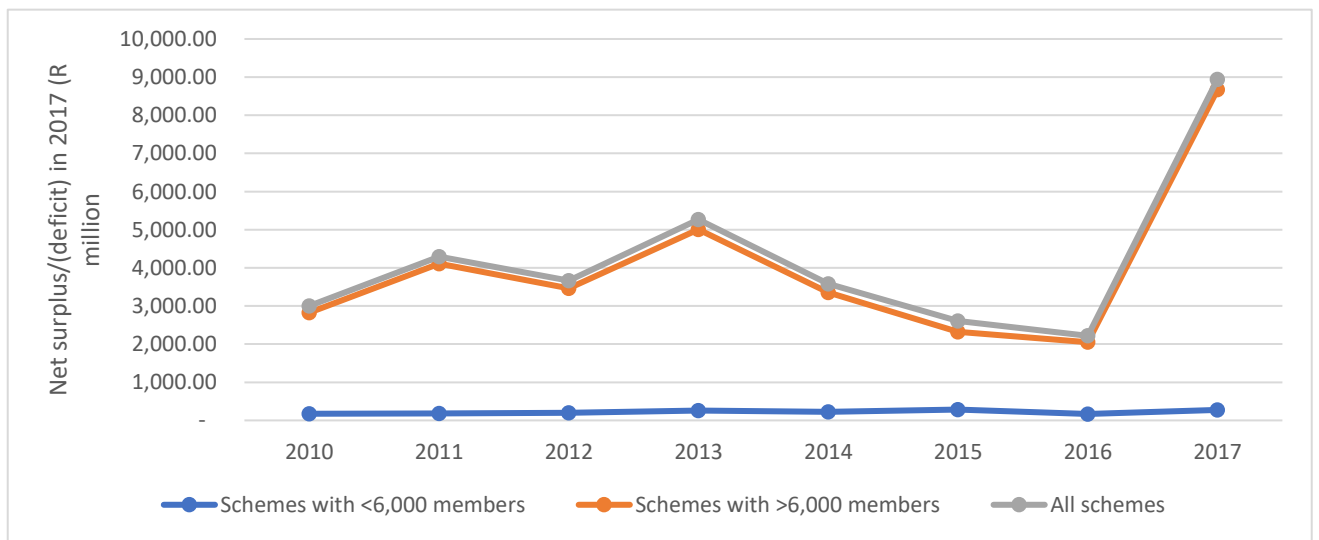


Figure 21: Net surplus or deficits for medical schemes

The above results call into question the basis upon which we identify a scheme as vulnerable. Additionally, it shows that there is a strong interaction effect between the demographic, clinical and financial metrics we currently use to assess schemes.

3 Recommendations

From the presented high-level analysis, the size of the scheme alone is not the most objective and justifiable measure upon which to decide which schemes should be prioritised for consolidation. Additional data regarding claims experience and a review of unique characteristics of members is required to inform the basis upon which consolidation will be suggested to the industry.

In the coming financial year, CMS will be collecting the following primary data (but not limited to):

- Chronicity
- Demographic factors of beneficiaries added each month
- Average claim sizes by the factors included in this report
- Information on eligibility criteria and subsidy policies

In addition, a multi-linear (and possibly polynomial) regression analysis is suggested against this more granular data to identify the interaction of these factors and determine how their combined effect contributes to financial sustainability, not just at a scheme level, but also for the overall industry.

The cross-subsidisation impact of the membership will be analysed pre and post consolidation to identify the best risk pooling combinations.

Additionally, the Council of Medical Schemes is in a unique position to identify the combinations of amalgamations that would result in the most optimal pairings of schemes, considering financial, demographic and clinical considerations. This would require a study which includes simulations of claims over a long term.

Paramount to ensuring that the schemes adopt this approach is considering the strategic and operational impact that is associated with mergers and acquisitions. This will be allowed for in the simulation.

Given the above, a more dynamic framework is proposed, which allows for the unique characteristics of schemes. A consideration in developing output structures is to combine several schemes, based on alternative criteria, and not necessarily one criteria. The interaction effect of the variables will be allowed for in the analysis and the simulation. The above should be clearly articulated in the delivery of the framework to ensure the stakeholders understand the critical success factors.

CMS will also be publishing a Circular which will provide detail on the creation of an umbrella fund, in parallel to and like the Government Employee Scheme since a significant number of stakeholders through their submissions requested more detail on that policy option.

The consolidation of any schemes is likely to impact administrators in the healthcare environment. The impact on their overall sustainability and competitiveness will also be considered. There are 4 self-administered schemes with less than 6000 members. The rest of the schemes are mainly concentrated within four other administrators, namely, Discovery Health, MMI

Health, Medscheme and Universal Healthcare Administrators. All administrators will be engaged between 2019 and 2020 to ensure stability within their market space.

As seen from the above analysis, there are several small schemes which have a high percentage of pensioners and due to the high expected claims from these members, these schemes have built reserves over the years to be able to provide the required cover. The protection of cover for pensioners will be carefully considered in our analysis. It is recommended that the industry should also develop more innovative means to finance healthcare for the elderly, particularly given the slight increase in life expectancy. This is also in light of the challenges faced by developed economies in caring for the elderly as well as the high costs associated with the last year of life.

The impact of any consolidation arrangement will also be discussed with employers to ensure that there is no reduction in the subsidy to members. This is particularly important in the case of pensioners who receive Post-Retirement Medical Aid Liability (PRMA) assistance from their employers.

4 Conclusion

There is significant evidence in the insurance industry to support the concept of consolidation, as it supports risk pooling and economies of scale. However, there are many elements that contribute to the overall long-term sustainability of a medical scheme, and the overall healthcare funding environment. These factors often have a strong interaction effect.

From this report, we have seen that there are unique characteristics within the schemes with less than 6000 members. The data shows that some of these schemes are in fact in a good financial, clinical and demographic position to support sustainability, with others being in a worse off position. However, we see from the comparison to larger schemes that the conditions around smaller schemes are not unique to them. The vulnerability of a scheme is a complex function which takes into consideration several factors. The views from classical economics regarding economies of scale need not be taken at face value. Once the Health Market Inquiry has published its final report, upon engaging with the final recommendations, CMS will explore methodological instrument that it can use to collect and report data with respect to economies of scale and scope as well as diseconomies of scale. CMS agrees that these need to be understood technically from the data, and not only from a theoretical perspective.