

Healthcare



Medical aid insights

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An analysis of key trends in the medical schemes industry from 2000 to 2021

Introduction



The Technical and Actuarial Consulting Solutions team of Alexforbes Health is proud to present this year's Medical Aid Insights.

We are confident that this publication will give you a comprehensive view of the performance of the South African medical schemes' industry, as well as some of the changes and challenges that the industry is facing.

This analysis covers key statistics and trends over the period 2000 to 2021, based on the consolidated financial results for all registered medical schemes as disclosed in the annual report released by the Council for Medical Schemes (CMS). Our focus is on the 10 largest open and the 10 largest restricted medical schemes by principal membership.

The number of beneficiaries covered by medical schemes have remained stagnant in the past decade, and have not surpassed the nine million mark. The only significant increase in the environment was with the introduction of the Government Employees Medical Scheme (GEMS) in 2006. The number of beneficiaries on GEMS increased by 3.6% to exceed 2 million in 2021. The household names in the medical schemes industry mainly experienced a slight increase in membership. The number of beneficiaries saw a year-on-year increase of more than 5% for six schemes, namely, Sizwe Medical Fund (27.1%), which grew as a result of the merger with Hosmed Medical Scheme, Umvuzo Health Medical Scheme (8.8%), Platinum Health (7.7%), TFG Medical Aid Scheme (6.1%), MBMed Medical Aid Fund (5.8%) and the Fishing Industry Medical Scheme (5.5%).



If you would like to discuss any of the issues addressed here in more detail, please speak to your Alexforbes Financial Services consultant or contact one of the specialists listed at the end of this publication.



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1 Key industry updates





Circular 9, 53 and 57 of 2022: Demarcation and low-cost benefit options (LCBO)

- In December 2019, the CMS released a circular communicating that no products based on the Demarcation Exemption Framework will be allowed beyond March 2021. Stakeholders appealed the decision and discussions were held in January and February 2020.
- CMS has confirmed that, following these meetings, advisory committees were established to develop a framework.
- In January 2022, the CMS released a circular communicating that the Demarcation Exemption Framework will be extended to March 2024. The extension is conditional on insurers and their respective financial service providers complying with defined exemption conditions.
- In September 2022, the CMS released Circular 53 requesting public comments on the proposed LCBO Framework Report and the Draft Risk Assessment Report. The deadline for comments was extended to 30 November 2022.



Circular 23 and 27 of 2022: Approved levies for medical schemes 2022/2023

- The CMS has published a Government Gazette 46217 on the imposition of levies for medical schemes for the 2022/2023 financial year. The approved levy to be paid with effect from 1 April 2022 is R42.27 per member per year, which will be adjusted once the new levy for the 2023/2024 financial year has been approved. As per Circular 63 of 2022, the proposed levy for the 2023/2024 financial year is R44.06 per member per year.



Circular 9 of 2023: Adjustment on fees payable to brokers with effect from 1 January 2023

- The maximum amount payable to brokers in terms of Section 65 of the Medical Schemes Act 131 of 1998 is now R111.18 plus value added tax (VAT) or 3% plus VAT of the contributions payable in respect of that member, whichever is the lesser.



Circular 56 of 2022: Extended exemption for late Covid-19 vaccine claims

- CMS has granted the National Department of Health an extended exemption from Regulation 6 of the Medical Schemes Act for late Covid-19 vaccine-related claims.



Circular 58 of 2022: Standard guidelines on the format of business plans submitted to the CMS

The CMS has published updated guidelines for the preparation of submissions to the office. These include:

- Guidelines for the preparation of a business plan pursuant to an application for:
 - the registration of a new medical scheme
 - the registration of a new or restructured benefit option(s)
 - an amalgamation of medical schemes
- Guidelines for the preparation of a Regulation 29 business plan.
- Guidelines to the trustees for the submission of reinsurance contracts with registered insurers.



Health Squared Medical Scheme

- Following the scheme's application for voluntary liquidation, the CMS placed Health Squared under provisional curatorship on 8 September 2022 to examine the actual financial position of the scheme and to oversee the liquidation.
- The CMS held unsuccessful meetings with eight medical schemes in an effort to have Health Squared members accepted without underwriting.
- It was revealed that some of the medical schemes, including Health Squared, were approaching members in efforts to secure Health Squared's good risk, despite agreements to desist from actively seeking to take over the Scheme's membership outside the CMS's intervention.
- CMS has issued a survey to medical scheme members to assess the frequency of their interactions with their brokers.



National Health Insurance Bill

Virtual public hearings on the National Health Insurance Bill were concluded in February 2022. In May 2022, the Portfolio Committee on Health voted to move forward with the National Health Insurance Bill. The Portfolio Committee on Health concluded the 'clause-by-clause' deliberations, and the committee is set to embark on the next phase in early 2023, which includes developing the legislation framework.



IFRS 17 Accounting Disclosures

With effect from 1 January 2023, the IFRS 17 accounting standard will be implemented for all insurance contract providers, which includes medical schemes. This will have several implications for medical schemes' financial results, and schemes would need to make decisions on how financial results are disclosed. The additional requirements include the need to recognise projected losses upfront as an additional liability along with additional risk margins on some of the liabilities disclosed. Should schemes project losses in an upcoming year, this may result in an increase in liabilities for those schemes and, as a result, these schemes' reported accumulated funds and solvency positions are likely to decline.





2 Performance indicators





This section analyses the **key statistics** influencing the performance of medical schemes.



When evaluating the performance of medical schemes, the key factors to consider are:



Size and scale

Larger schemes tend to have a more stable and more predictable claims experience. They should also have greater negotiating power when setting prices.



Membership growth

Increasing membership reduces the volatility of a scheme's claims and improves the profile, as new members tend to claim less than the average member in their first year of membership.



Membership profile

Claims experience will be more favourable for younger populations with lower chronic prevalence.



Financial results

The trend in a scheme's financial results illustrates the adequacy of their pricing.



Solvency levels

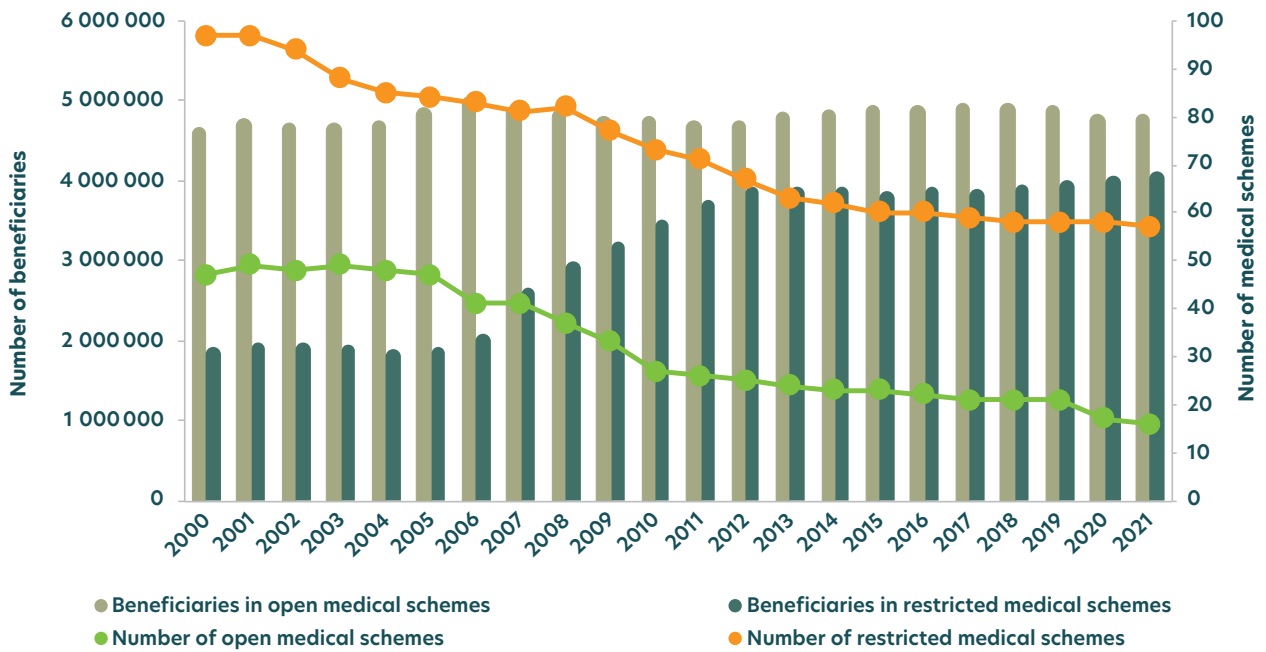
Although the current statutory solvency level of 25% of gross contribution income may be inappropriate, each scheme should have sufficient reserves after considering each of the previous factors.



Size and scale

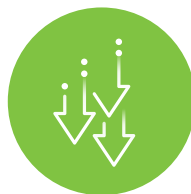


Medical schemes in numbers



At the end of 2021 there were 73 registered medical schemes in South Africa, three fewer than in 2020 as a result of mergers. From the end of 2000 to the end of 2021, the number of medical schemes reduced from 144 to 73, which represents a 49% decrease in the number of registered medical schemes over 22 years, mainly as a result of amalgamations among the smaller, less sustainable schemes.

The number of open medical schemes has decreased by 30 (64%) compared with a decrease of 41 (42%) restricted medical schemes over the 22-year period.



This consolidation appears to be driven in part by the:

- difficulty in maintaining the sustainability of small schemes in the current environment, particularly for restricted medical schemes
- significant amount of management time needed to manage an employer-based restricted scheme



The following events took place over 2021:

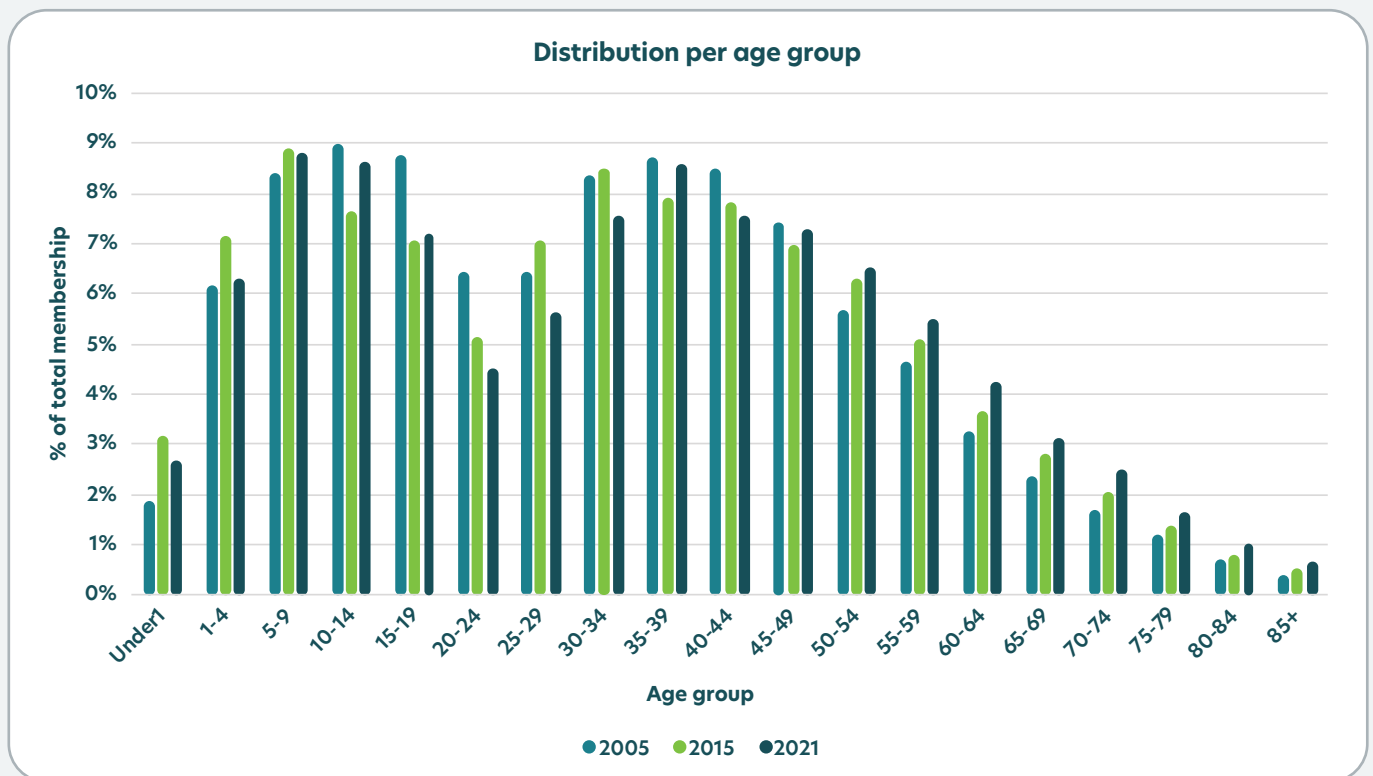
- Quantum Medical Aid Society amalgamated with Discovery Health Medical Scheme with effect from 1 August 2021.
- Sizwe Medical Fund amalgamated with Hosmed Medical Aid Scheme with effect from 1 November 2021. The Registrar approved the name change of the amalgamated scheme to Sizwe Hosmed Medical Scheme.
- Curatorship of KeyHealth Medical Scheme was confirmed on 25 March 2021. The curatorship on KeyHealth Medical Scheme was subsequently lifted with effect from 5 April 2022.



Despite the observed decrease in the number of medical schemes, the industry has grown by 1.5 million principal members (60%) and 2.4 million beneficiaries (36%) since 2000. The 73 medical schemes operating in South Africa at the end of 2021 had a total of 4.06 million principal members and 8.94 million beneficiaries.

The number of principal members covered on medical schemes increased by 0.84% in 2021, while the total number of beneficiaries covered increased by 0.5%, driven mainly by a growth in beneficiaries covered on restricted medical schemes. A total of 57.9% of principal members participated in open medical schemes at the end of 2021, with the balance of 42.1% participating in restricted medical schemes. This is in line with the membership split seen at the end of 2020.

The graph below shows the change in membership per age group for 2005, 2015 and 2021.



A definite movement in age groups over the last 16 years can be seen, and it is concerning that there has been a decrease in the proportion of young working members seeking medical scheme coverage, with an exception in growth in the age group 35 to 39 years, which is predominately driven by females seeking medical protection during childbearing age. As claims increase by age, and with the possible anti-selection of females during childbearing age, schemes need to take steps to ensure that medical scheme coverage remains affordable and, hence, accessible to younger members.



The graph below shows the percentage change in medical scheme membership over the last 21 years.



There is a significant difference between the trends in the annual growth rate of open and restricted medical schemes. The divergence in the trend began in 2006 with the registration of the first members on GEMS. Subsequently, a significant increase in restricted scheme membership occurred in 2006 and 2007, which can be accredited to GEMS. From 2013, there has been a convergence of the annual growth rate of open and restricted schemes.

In 2021, the principal membership of open medical schemes grew by 1%, while membership of restricted schemes grew by 0.9%, with a net increase of 37 000 members across the industry during the year.

The minimum membership requirement set by the CMS for registering a new medical scheme is 6 000 principal members. At the end of 2021, there were 3 open medical schemes and 26 restricted schemes with fewer than 6 000 principal members.

The open schemes with membership below this threshold are Cape Medical Plan (3 934 principal members), Medimed Medical Scheme (5 883 principal members) and Suremed Health (1 038 principal members).

A large membership base allows for lower claims volatility and helps schemes, or their administrators, negotiate more competitive reimbursement rates and fees with the various healthcare service providers.

This ensures that medical scheme members have lower shortfalls or co-payments when using these designated service providers.

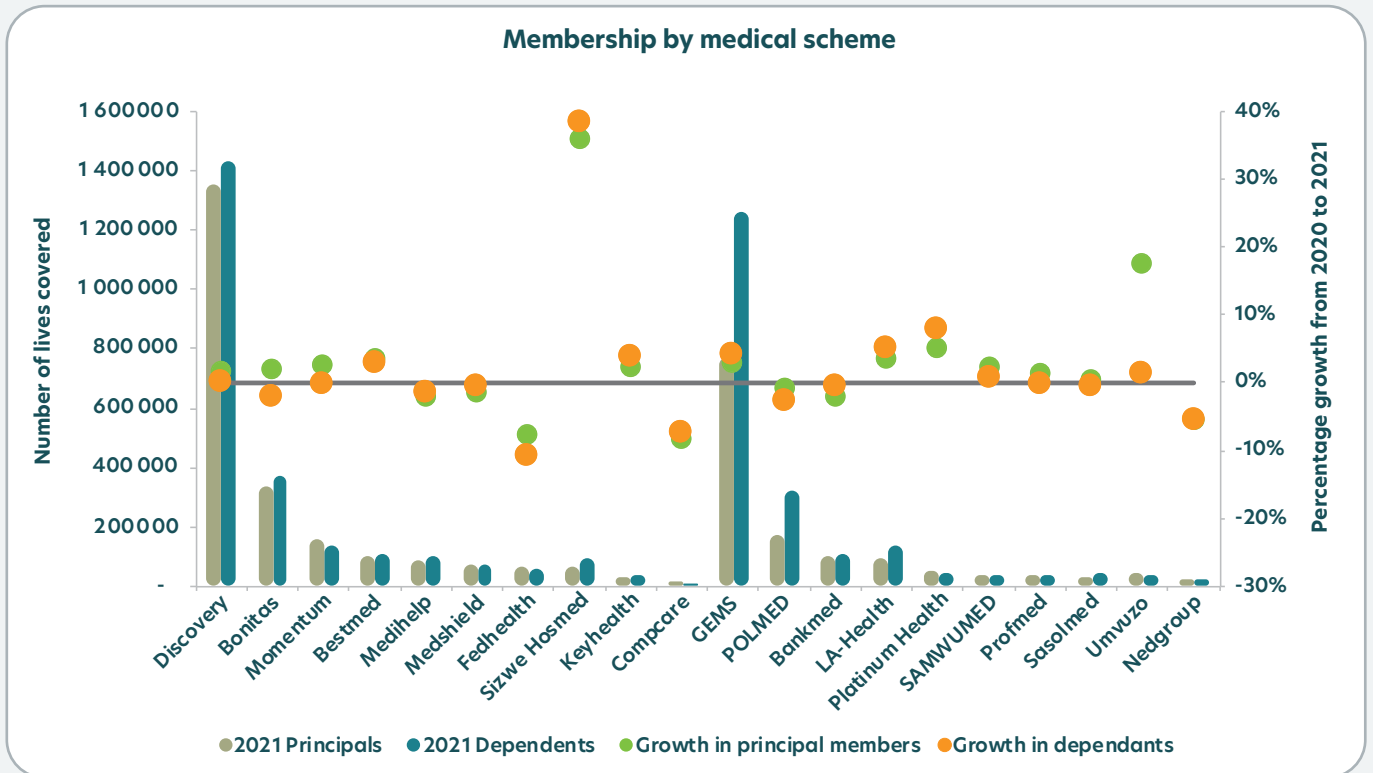
A small membership base generally results in a more variable claims experience, which increases the risk of contributions not being set at an appropriate level to cover all claims and expenses. This variability is compounded by the negative impact of high-cost claims, especially in the current environment where schemes are required to pay in full for the cost of Prescribed Minimum Benefits (PMBs), regardless of the rates charged.





Despite these risks, as well as the amalgamations of many small schemes, a fair number of restricted schemes are still performing well. Of the 26 restricted schemes referred to earlier that have fewer than 6 000 members, 14 achieved a surplus before investment income in 2021, down from 21 in 2020, which indicates the risk profile and claims volatility to which smaller schemes are exposed.

The graph below ranks the top 10 open schemes and top 10 restricted schemes according to the number of principal members at 31 December 2021. This represents 90.3% of all principal members participating on a registered medical scheme, or 97.7% and 80.1% of open and restricted medical scheme membership, respectively.



The top 10 open medical schemes in 2021 include Compcare due to the merger between Sizwe and Hosmed. The top 10 restricted medical schemes by principal membership and ranking have remained unchanged in 2021. However, it is worth noting that Nedgroup amalgamated with Bonitas Medical Fund with effect from January 2022.

Six of the open schemes and seven of the restricted schemes considered here experienced positive growth in 2021, with the rest experiencing a reduction in membership. For open medical schemes, Sizwe experienced the largest increase in principal membership of 35.8%, which resulted from the merger with Hosmed. Compcare experienced the largest decrease in principal membership of 8.1%, while Fedhealth experienced the largest decrease in dependants of 10.9%. For closed medical schemes, Umvuzo experienced the largest increase in principal membership of 17.7%, while Nedgroup experienced the largest decrease in principal membership of 5.5%.



The number of beneficiaries with medical scheme cover increased by 0.5% in 2021. GEMS was the major driver, with an increase of 72 345 beneficiaries over the year.

The number of principal and beneficiary lives covered increased by 0.9% and 0.5%, respectively. This results in the average family size in the industry decreasing from 2.21 to 2.20 from 2020 to 2021. This is consistent with the decline observed each year since 2000, except for 2020. This may be a reversal of the anti-selection observed in 2020 as members were less likely to need medical attention for Covid-19-related conditions as a result of the vaccine rollout and later strains of the virus causing less serious health issues.



Market share



The industry's net increase of 37 000 members over the 2021 financial year was driven by the increase in Discovery Health Medical Scheme and GEMS membership, which grew by 22 499 and 22 578 principal members, respectively.



Discovery's total market share, based on the number of principal members, has increased from 16% in 2001 to 33% at the end of 2021, compared with a decrease in market share for the rest of the open schemes from 54% in 2001 to 25% in 2021.

This decline in open medical scheme membership (excluding Discovery) is due to:

- many members choosing to move from their current medical scheme to join Discovery
- qualifying public sector employees moving from open schemes to GEMS since its inception

In 2021, GEMS' total market share was 19% compared with 2% in 2006 when the first members joined. The rapid growth in membership includes:

- qualifying government employees transferring from other open schemes
- the amalgamation with Medcor in 2010
- the transfer of a group of 16 000 pensioners from Medihelp to GEMS early in 2012

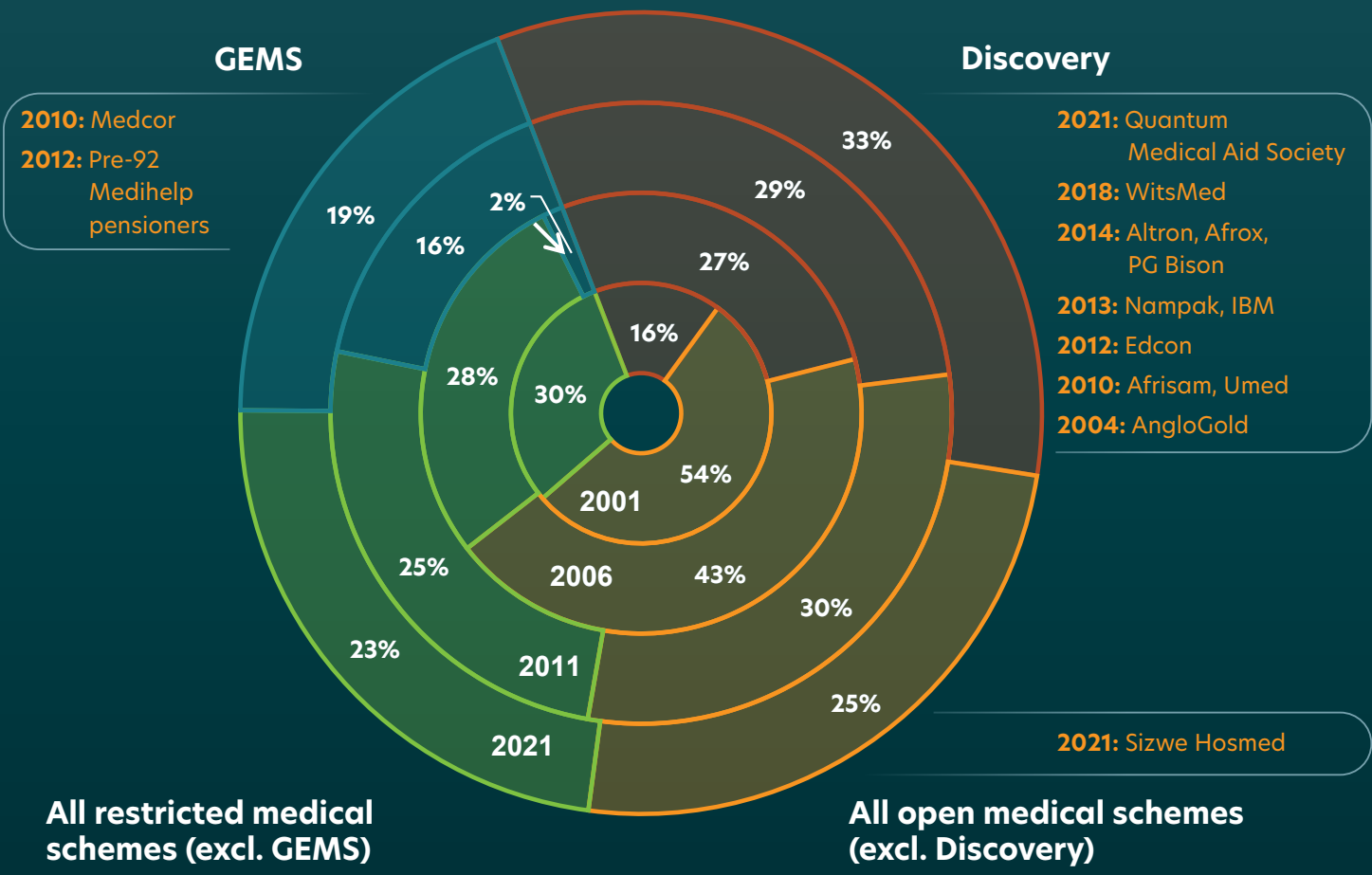
Continued new member growth, stimulated by an attractive employer subsidy, has increased the market share of GEMS in the past. However, the employer subsidy was not increased for several years from 2011, which may have contributed to the slowdown in membership growth.

It is likely that the increases in the public sector subsidy, announced on 1 January 2016, have contributed towards the growth in members covered on GEMS during that year. Since then, public sector subsidy increases have been in line with medical inflation. The total market share of the balance of the restricted schemes has decreased from 30% to 23%, driven by a number of amalgamations of restricted schemes into the open medical scheme environment.





Market share by principal membership





Membership profile



One of the most important contributing factors in a scheme's performance is the risk profile of its members, with some of the key statistics being the:



Average age of beneficiaries

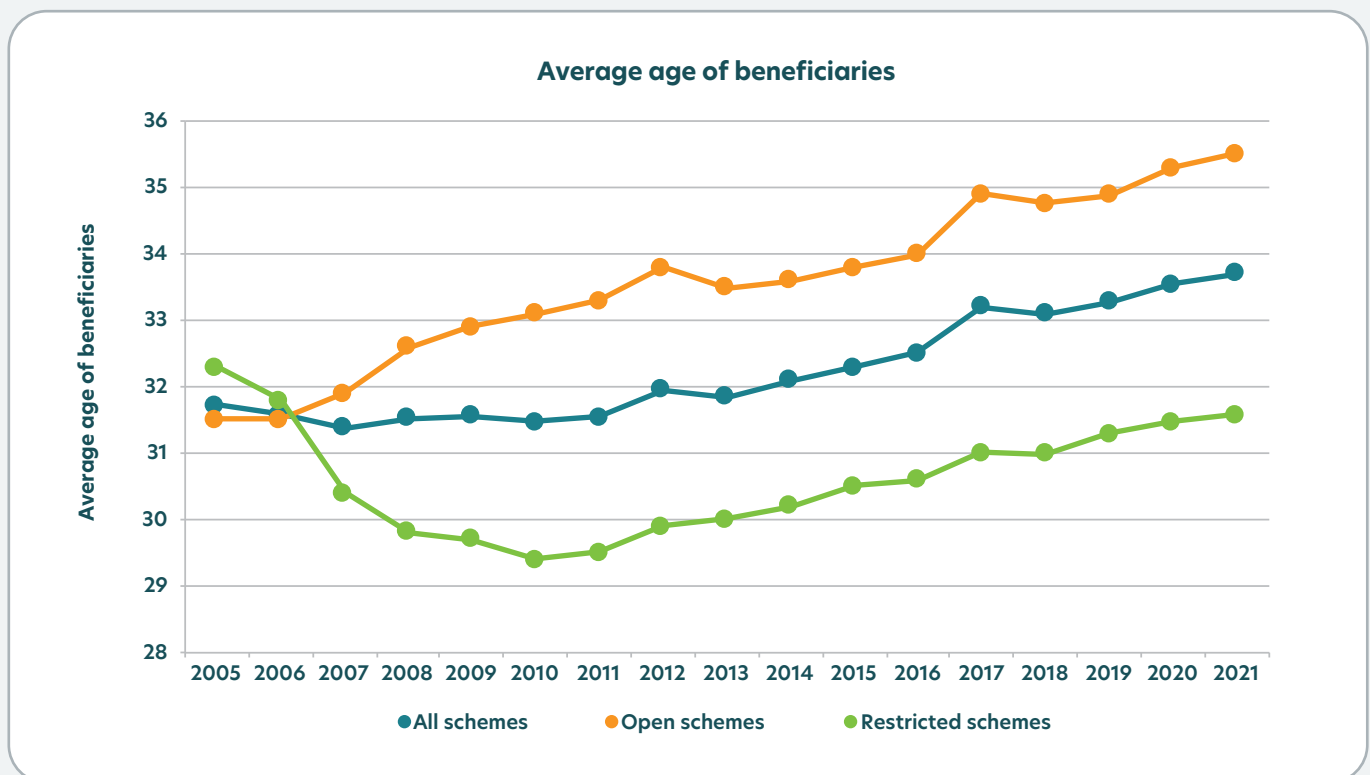


Pensioner ratio (defined as the percentage of beneficiaries over the age of 65 years)



Average family size

Let us consider the trends in each of the above factors.



Note: The average age and pensioner ratios were only recorded in the CMS' Annual Reports from 2005.



As a scheme gets older, we expect the average claims per member to increase, with a benchmark of a 2% increase in average claims per year in average age.



The average age of beneficiaries in the medical schemes industry remained fairly constant from 2005 to 2011.

Thereafter, the average age of beneficiaries has been consistently increasing, with significant increases experienced in 2012 and 2017.

From 2006 to 2010, the average age of beneficiaries in restricted schemes reduced consistently each year. This was due to the rapid growth of GEMS, with significant numbers of younger members joining the scheme in the early years. From 2011, the growth driven by GEMS slowed down, and this has resulted in the average age of restricted scheme beneficiaries increasing from that point.

A typical claims curve is shown on the next page.



Average age of beneficiaries

33,6

All schemes

35,3

Open schemes

31,5

Restricted schemes

2020



2021

33,7

All schemes

35,5

Open schemes

31,6

Restricted schemes



A typical claims curve over a member's lifetime



Young and single

- > Hospital cover
- > Limited or no day-to-day cover



Family with children

- > Hospital cover
- > Day-to-day cover
- > Maternity benefits
- > Limited chronic benefits



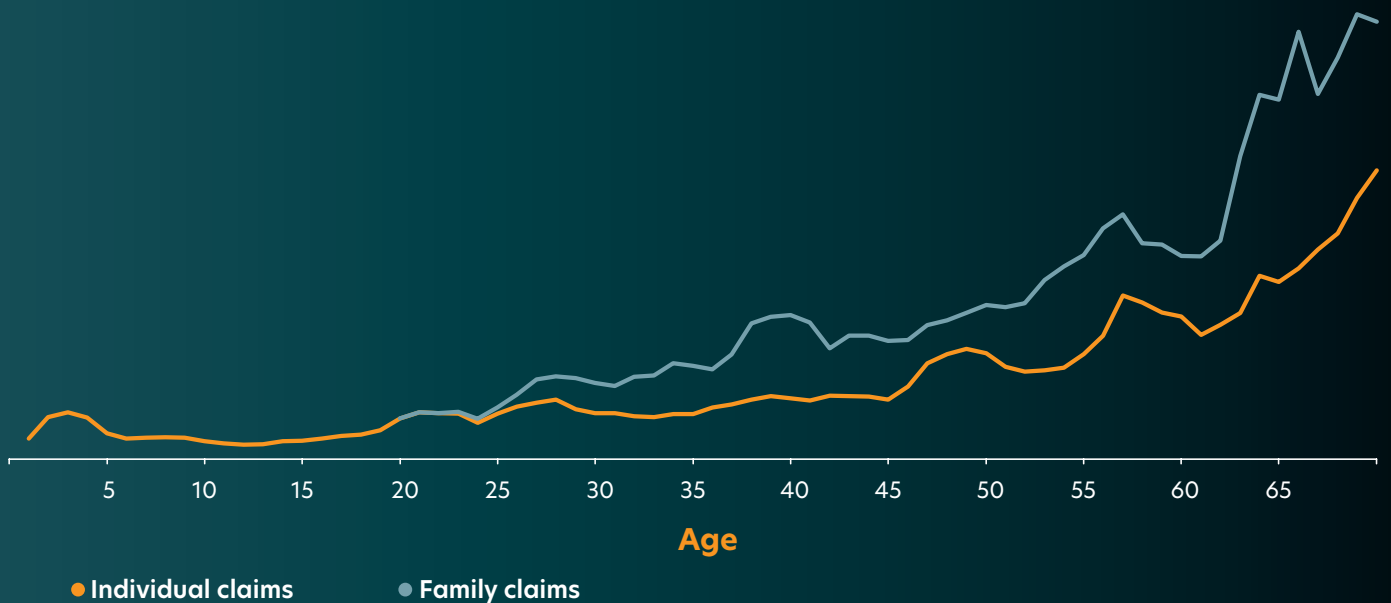
Middle-aged

- > Hospital cover
- > Higher day-to-day cover
- > Chronic benefits planning



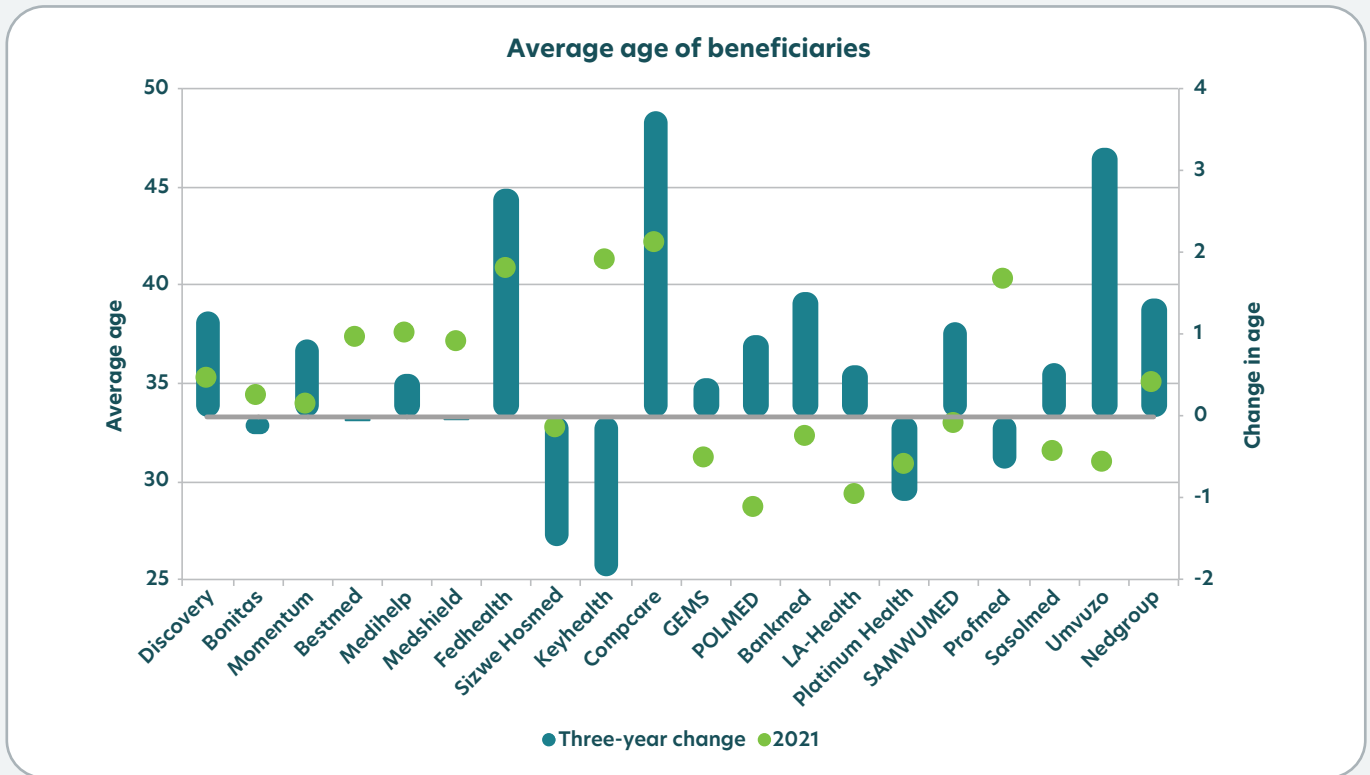
Retired or retiring

- > Hospital cover
- > Comprehensive day-to-day cover
- > Higher chronic benefits
- > Cover for joint replacements and other age-related conditions





The following graph considers the average age of each of the schemes included in this year's analysis. It also includes the change in the average age of each of the schemes from 31 December 2018 to 31 December 2021.



Although the average age of a scheme's membership is important and indicative of the likely claims profile, the change in this figure signals a change in the profile, which would result in the medical scheme needing to take corrective action in the pricing of its benefits, especially if the age were to increase.



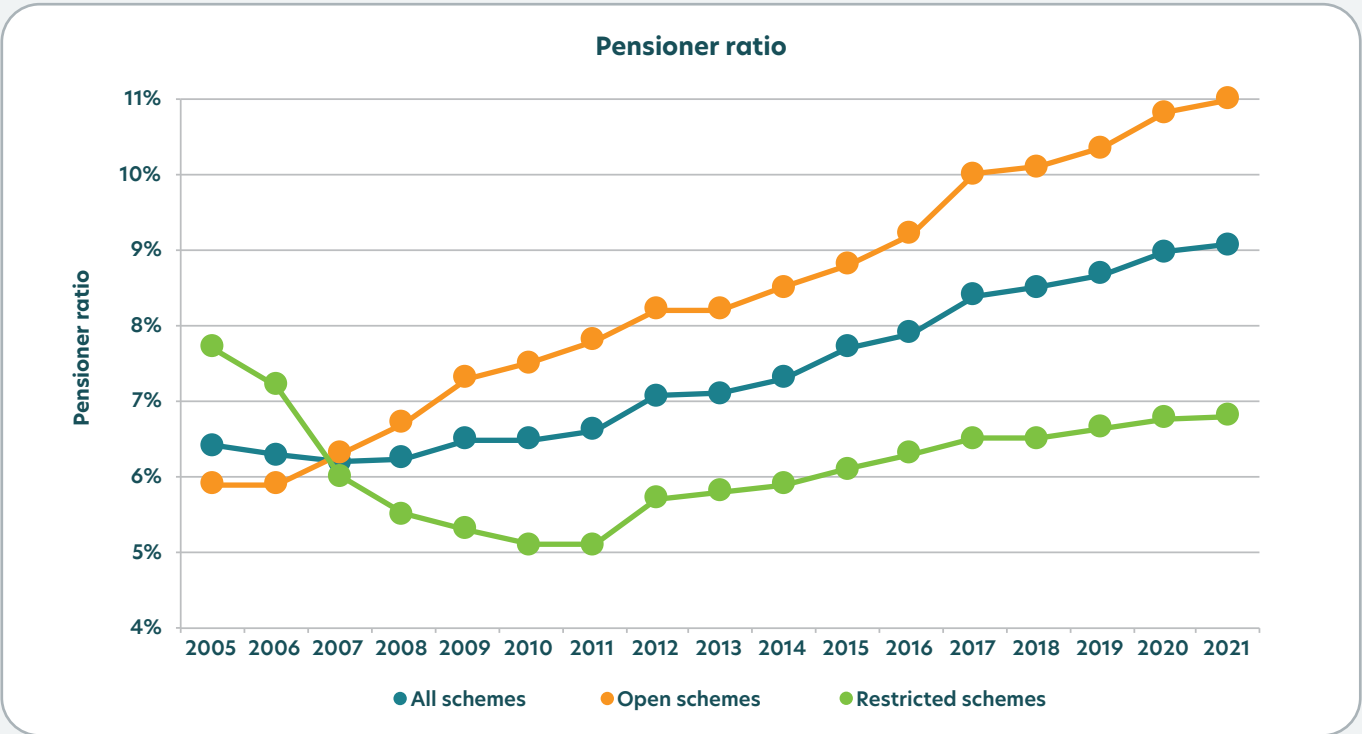
Of the 20 schemes

included in this year's Insights

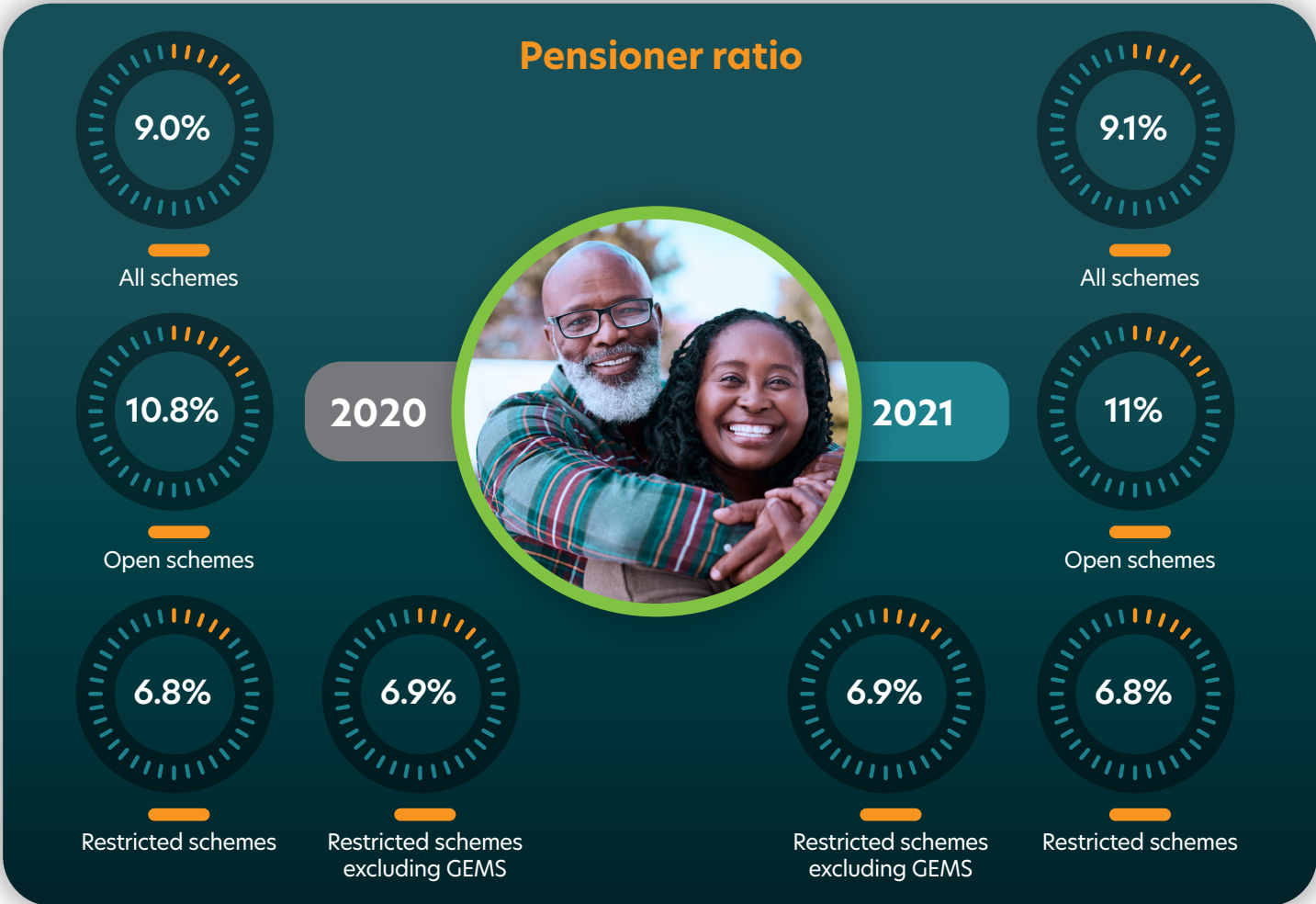
Compcore	Compcore and Profmed have the highest average age of beneficiaries in the open and restricted medical scheme industries, respectively.
Profmed	
KeyHealth	KeyHealth has experienced the largest decrease in average age (2 years).
Polmed	As in previous years, Polmed has the lowest average age out of all the schemes considered.

Over the last 3 years, Compcore has aged the most (3.7 years)



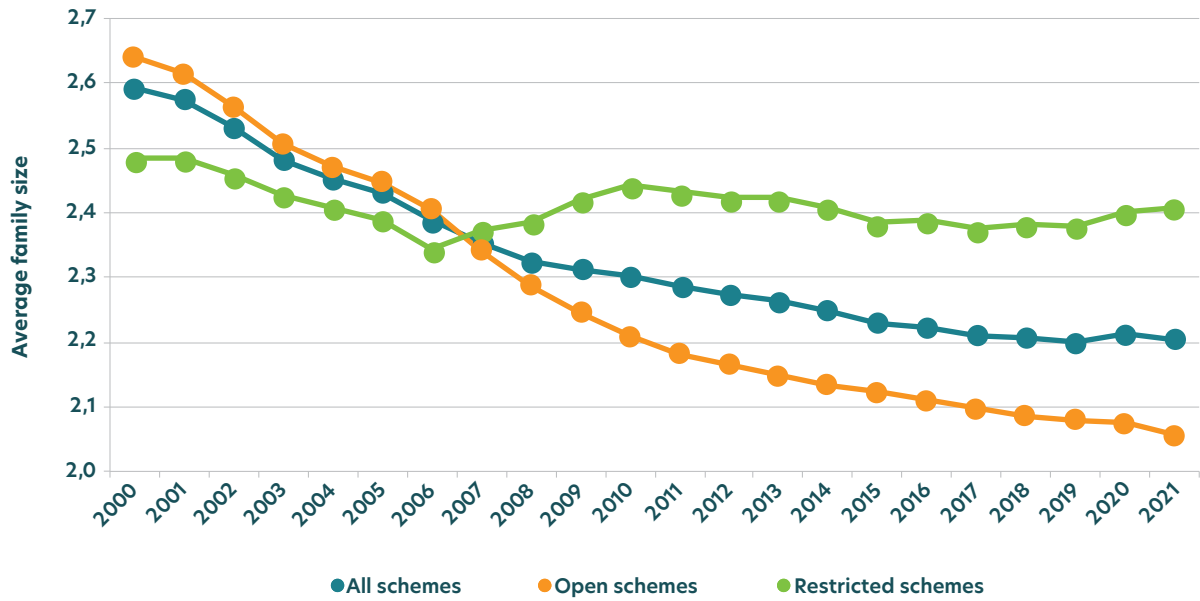


The average pensioner ratio across the industry increased from 9.0% to 9.1% in 2021. Open schemes were the main driver of this, with their pensioner ratio increasing from 10.8% to 11.0% over the year. This trend is in line with the ageing of the medical scheme population.





Average family size



In 2020, the industry's average family size increased for the first time since 2000. In 2021, the industry's average family size decreased from 2.21 to 2.20. Open schemes experienced a decrease, while restricted schemes experienced an increase in average family size.

Family size

2.21

All schemes

2.20

All schemes

2.07

Open schemes

2020

2021

2.06

Open schemes

2.40

Restricted schemes

2.41

Restricted schemes





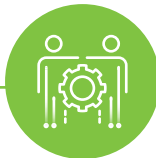
The average family size for the medical schemes industry has declined over the last 21 years, except for 2020. This indicates that, historically, fewer dependants per principal member are being registered on medical schemes over time.



This may be because some members can no longer afford to provide medical cover for their entire family, which may become more of an issue once children no longer qualify for medical scheme contribution subsidies.

Those beneficiaries who have been removed from cover may be added back as dependants when they need medical cover, for example during pregnancy, and medical schemes may use waiting periods to try to control this anti-selective behaviour.

In addition, as members' dependent children become self-supporting adults, they no longer qualify for membership as dependants on their parents' medical scheme and, in turn, become principal members themselves.



This has a direct impact on the average family size in two ways:

- dependants who are removed from a medical scheme reduce the average family size
- people joining a medical scheme as single members will also reduce the average family size





Contributions



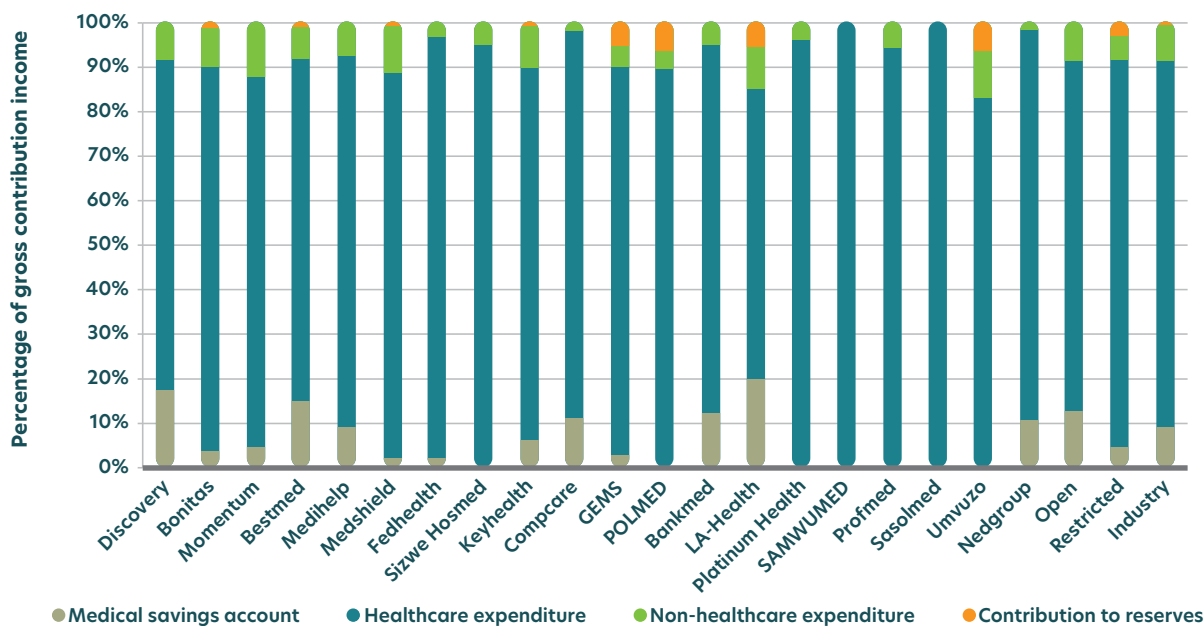
Medical schemes are priced based on the concept of risk pooling, where the risk contribution charged to members depends on a combination of these factors:

- **Claims:** the expected medical expenses of the entire membership group
- **Non-healthcare expenses:** the expected costs associated with any administration of claims and day-to-day operations
- **Investment income:** the interest or returns expected from the scheme's assets

In simple terms, the financial operations of a medical scheme can be described by four main factors, shown in this equation:

$$\text{contributions} + \text{investment income} \geq \text{claims} + \text{expenses}$$

Allocation of contribution income in 2021



Where the **scheme's** claims and expenses **exceed** the contributions, investment income is required to **subsidise** this shortfall. Any remaining **investment** income is then added to the reserves of the scheme and is used to **maintain** its solvency levels.

➤ However, where investment income is not sufficient to cover this shortfall, the scheme is forced to use its existing reserves, which results in decreasing solvency levels. A scheme may decide to use investment income to cover claims or expenses for a number of reasons, including increasing claims costs, an adverse claims experience and cross-subsidisation between benefit options.

Some schemes may intentionally set contributions to use part of the investment income to subsidise claims and expenses, particularly schemes that have significant reserves in excess of the statutory requirements. However, this would not be sustainable in the long term as, over time, the scheme would become under-priced and ultimately need to adjust its pricing with larger contribution increases in the future. In addition, this would result in a deterioration in the scheme's solvency over time.

Since medical schemes are not profit entities, any surpluses which arise are added to the reserves of the scheme to protect the scheme from claims volatility. As a result of the way that solvency is defined for medical schemes, when contributions are increased, reserves need to increase by the same proportion to maintain a solvency level.

➤ Contribution increases need to align with the increases in the underlying costs that the scheme needs to cover. If claims on a medical scheme are at a specific level, then the contributions will be set to cover those claims in the next financial year.

A lower contribution increase should only be considered where there is a significant change to the claims base and when it is expected that, in future years, the claims would be fewer (for example restructuring of an option, change in hospital base tariffs). If a lower contribution increase is granted in a year where the base claims have not changed permanently, then there is a good chance that the increase will need to be put through in the future. This is a unique situation for medical schemes. It means that in a year where claims are low due to external factors (for example, a lockdown) but are expected to return to normal levels in the future, a lower contribution increase could result in higher increases in future, unless there is a permanent shift in the claims behaviour.





A trend that has recently been observed is where schemes have put through lower contribution increases, or increases in later parts of the year, in an effort to give back some reserves that a scheme may recently have built up.



Contribution holidays have also been implemented for this purpose. Members' affordability constraints, particularly in the restricted medical scheme industry, can play a significant role in the level of contribution increases put through.

The graph on page 22 considers the top 10 open schemes and top 10 restricted schemes, together with the totals for open and restricted schemes and the industry as a whole. Where the contribution to reserves sits below the 0% line, schemes have used part or all of their investment income to fund claims and expenses. In some cases, where investment income has not been sufficient, schemes have had to use their existing reserves, placing pressure on solvency levels.

In 2021, 12 of the 20 schemes considered did not have sufficient contribution income to cover both their claims and non-healthcare expenses in full and therefore, used investment income and, in some cases, their reserves to subsidise the cost incurred. Three open schemes, Fedhealth, Sizwe Hosmed and Compicare, and one restricted scheme, Sasolmed, did not have sufficient contribution income to add to their reserves during the year.

Each component of the medical scheme pricing equation is considered in more detail in the sections that follow, but first: we will look at some inflationary trends that we have seen in the industry over the past 22 years.





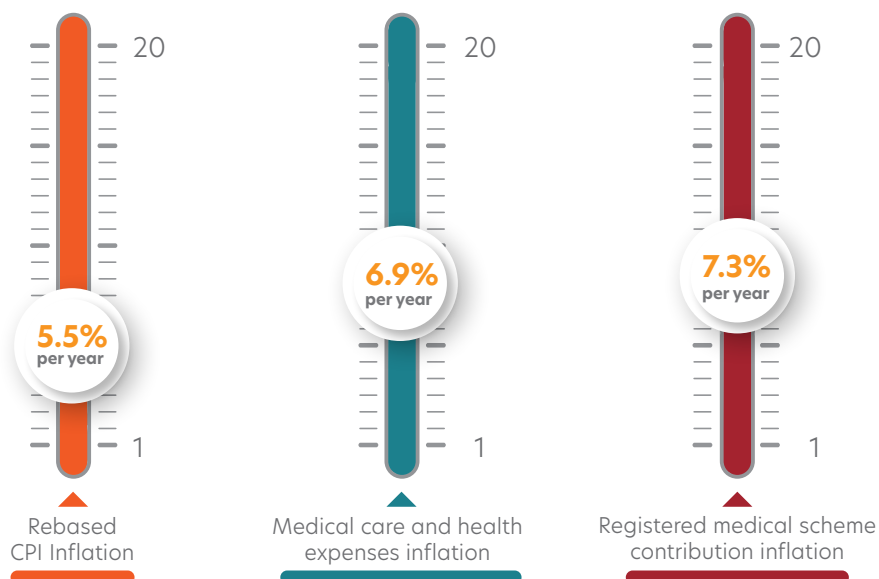
Inflationary trends



The illustration below compares medical scheme contribution inflation, along with medical care and healthcare expense inflation trends, to consumer price index (CPI) inflation in the past decade, where:

- CPI inflation** is the weighted average price inflation in different sectors and indicates the general level of price increases published by Statistics South Africa. Viewed in isolation, it does not necessarily give a true reflection of cost pressures in a particular sector. Individual sectors may experience cost increases that differ from CPI inflation, as is the case in the healthcare sector.
- Medical care and health expense inflation** is measured by Statistics South Africa and is based on that component of CPI which relates to doctors' fees, nurses' fees, hospital fees, nursing home fees, medical and pharmaceutical products and therapeutic appliances.
- Medical scheme contribution inflation** is calculated for all medical schemes that submit annual financial returns to the Registrar of Medical Schemes. Percentage increases are based on the average contribution per principal member per month and allow for normal medical scheme contribution increases, as well as buy-ups and buy-downs to other benefit options. Changes in contributions as a result of family size or family composition are also taken into account.

Average inflation over 22 years



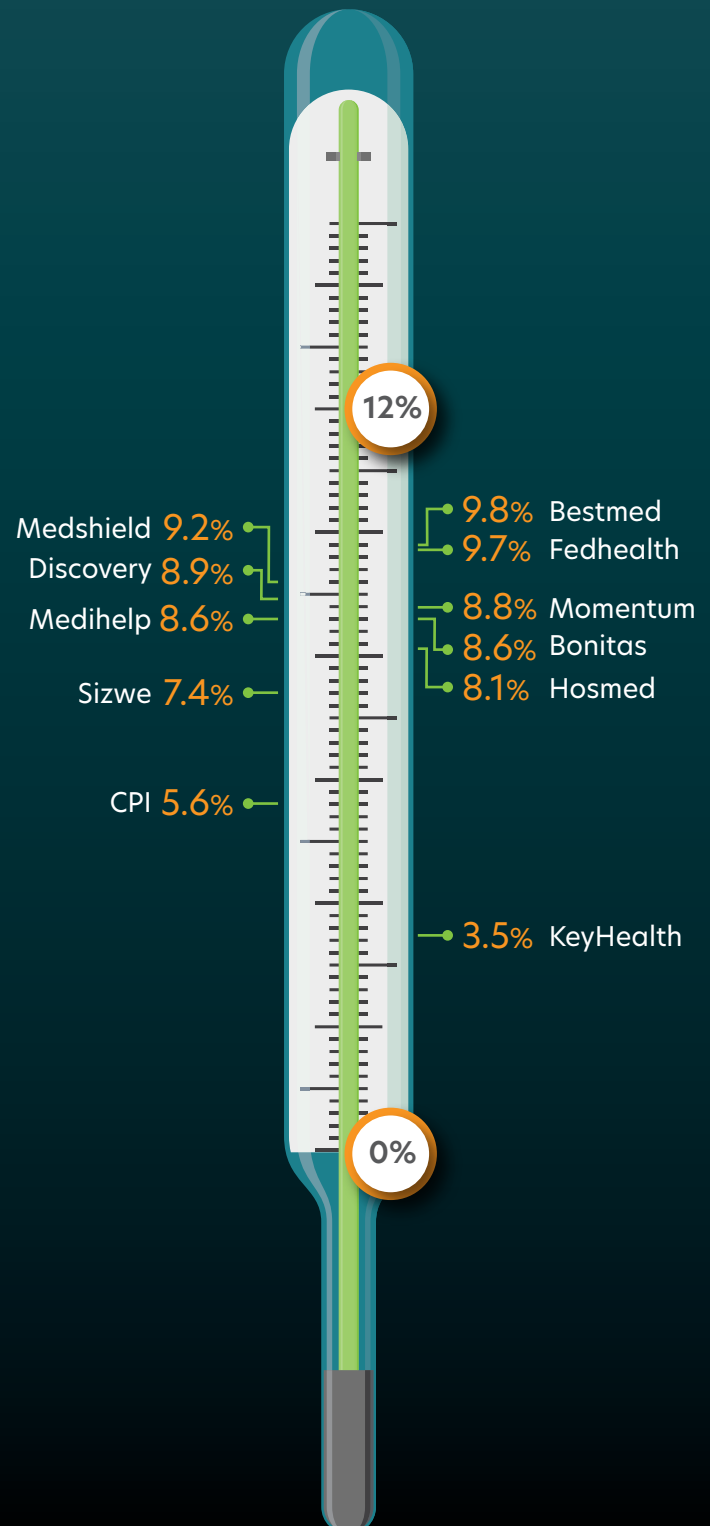


The general observation in the industry is that medical inflation (medical care and health expenses inflation) will be 2% to 3% higher than CPI inflation over the long term. However, increases in a particular year may be significantly higher because of an adverse claims experience. The deviation from CPI is due to:

- high increases in healthcare service provider fees
- a rising burden of disease
- increasing hospital admission rates
- higher use of benefits
- new medical technologies
- the requirement to maintain reserves of at least 25% of gross contribution income
- certain benefit enhancements
- fraud, waste and abuse

Over the last 22 years, CPI inflation has averaged 5.5%, while medical care and health expenses inflation has averaged 6.9% per year, resulting in a gap of 1.4% per year. Over the same period, average medical scheme contribution inflation was 7.3% per year, resulting in actual increases in medical scheme contributions per principal member exceeding CPI inflation by at least 1.8% per year.

Average annualised contribution increases from 2007 to 2023





The gap between medical scheme contribution inflation and CPI inflation has reduced in recent years, most likely as a result of efforts by medical schemes in managing the costs charged by providers.

While this would have a direct impact on medical scheme contribution increases, the further reduction in the gap between average medical scheme contribution inflation and CPI inflation indicates the extent of member buy-downs to lower cost benefit options, new entrants joining low-income options, and changes to family size, possibly when dependants are removed due to affordability constraints.

The chart summarises the average headline contribution increases announced by medical schemes since 2007 and compares them to average CPI. Note that we have taken an arithmetic average for illustrative purposes and have only included the medical schemes where this information is available. Also note that these increases are based on the headline increases announced by individual schemes and the method of calculation may vary. It does, however, provide some useful information regarding real contribution increases faced by members.

The average contribution increases for the top 10 open medical schemes, excluding Compicare, since 2007 have far exceeded average CPI. The margin between the level of CPI and the industry's contribution rate was highest from 2008 to 2011.

Since 2012, the contribution increases have tended to be closer to CPI. Increases announced for 2020 were higher than prior years in part due to the higher claims ratio experience in 2019.

The 2023 contribution increases for the 10 open schemes considered ranged from 5.9% to 8.9%. Discovery Health, Bonitas and Momentum Medical Scheme all implemented a contribution freeze for three months and, thereafter, Bonitas and Momentum will increase by 5.9% and 8.5%, respectively. Discovery Health implemented a weighted-average contribution increase on 1 April 2023 of 8.2%, with increases ranging from 7.9% on its lower options to 9.9% on its more comprehensive options.

Medihelp implemented a weighted contribution increase of 7.5%, with a decrease of 13.6% on the MedMove! option and increases ranging from 7.4% to 8.6%.



Healthcare expenditure



- One of the main components influencing the performance of a medical scheme is its healthcare expenditure or claims experience. In this section, the claims ratio as well as the actual level of claims that are paid by medical schemes are considered.

Healthcare expenditure includes all payments made for claims incurred by members. The risk claims ratio is defined as the ratio of risk claims to risk contributions (the proportion of contributions that are used to fund claims, excluding any allowance for medical savings accounts).

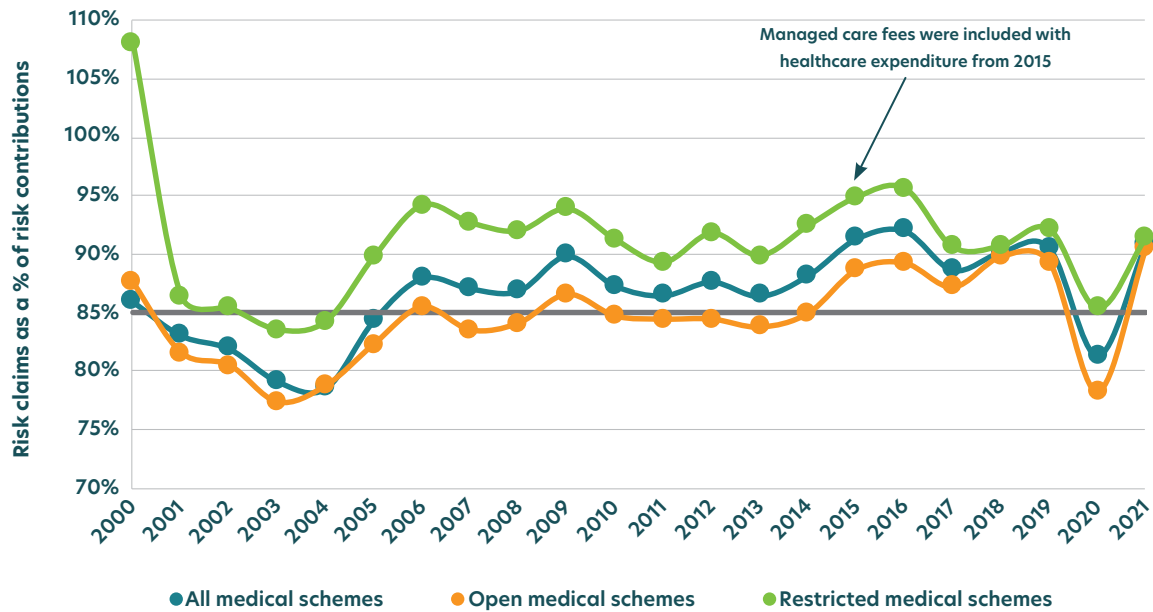
The risk claims ratio for all medical schemes increased from 81.4% in 2020 to 90.9% in 2021. For the 2021 benefit year, open medical schemes had an overall risk claims ratio of 90.5% compared with 91.4% experienced by restricted medical schemes.



Many restricted schemes do not incur certain non-healthcare expenditure items such as distribution costs, marketing expenses and broker fees. As a result, they can often afford to use a higher percentage of risk contributions towards risk claims than open medical schemes. This trend is illustrated in the graph below for most of the period until 2018 where the claims ratios were very similar. In 2020, the claims ratio was the lowest it has been over the past 16 years, this is largely attributed to the impact of the Covid-19 pandemic.



Trend in claims ratios



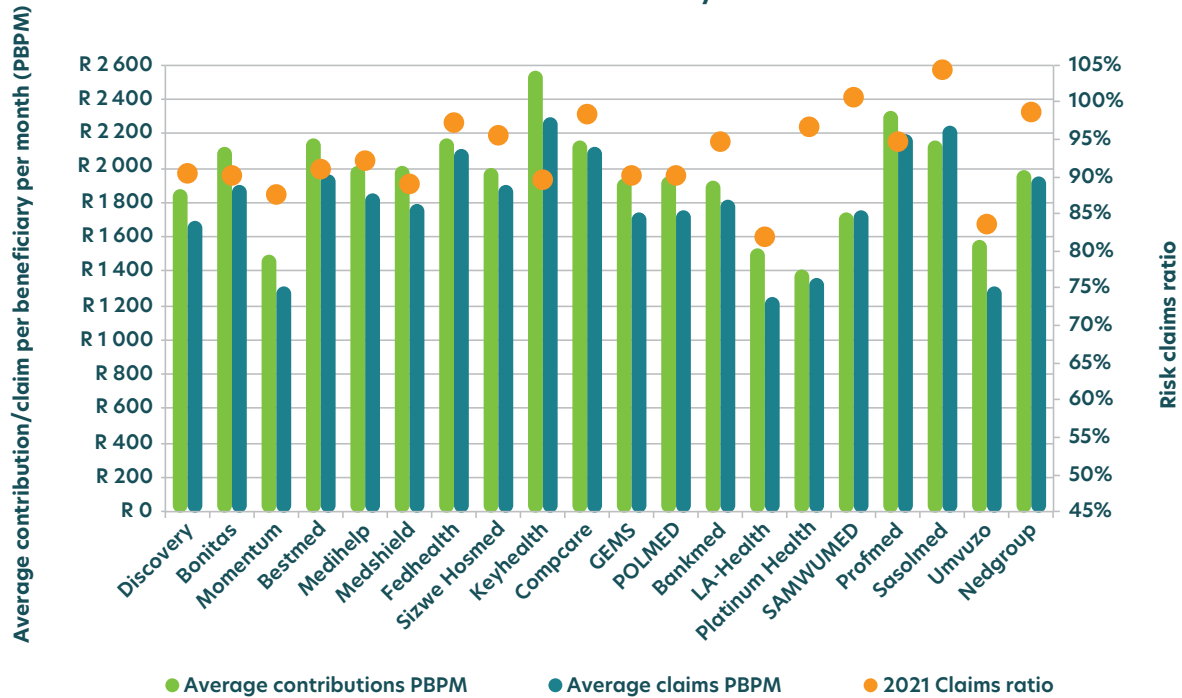
This graph also shows a cyclical trend. This is most likely caused by the lag effect of annual pricing exercises by medical schemes. Where a scheme has experienced adverse claims during the year, it would usually only correct that experience through higher contributions or benefit reductions (and therefore lower relative claims) in the next financial year, and this corrective action often takes place over more than one year.

The noticeable increase in the claims ratio from 2014 to 2015 was in part due to the inclusion of managed care fees in healthcare expenditure from 2015.





Claims and contributions by scheme



Note: PBPM refers to per beneficiary per month.



Medical schemes usually finalise their benefit and contribution reviews in September each year, without the full membership and claims experience of that year. Where experience has been worse than expected in the first part of the year and is therefore included in the data used for the purposes of pricing, allowances can be made for this experience in the next financial year.

However, where the adverse experience occurs in the second half of the year, it cannot be allowed for in the pricing of benefits in the next year, and so this adverse experience must be made up in the following year. In addition, the adverse experience in the second half of the year has a direct impact on the reserves and solvency levels of the scheme going into the next year.

In general, medical schemes with a risk claims ratio of above 85% face the challenge of achieving an operating surplus (contributions less claims and expenses) while:

- containing non-healthcare expenses below the CMS' generally accepted guideline of 10% of contributions
- building and maintaining reserves at a sustainable level

Although 85% is the benchmark for the claims ratio, the ideal ratio for a particular scheme will depend on its current circumstances, such as the:

- current adequacy of contributions
- level of non-healthcare expenses
- need for reserve building
- scheme's long-term strategy

The graph above specifies the average claims paid per beneficiary per month (PBPM) as well as the risk claims ratio in 2021 for the 20 schemes included in Insights this year. These claims ratios all include any managed care fees incurred by the schemes.

While the claims ratios show the adequacy of contribution levels, the actual average claims paid per beneficiary indicate the level of benefits provided by a scheme. The graph above shows that KeyHealth paid the highest amount in claims per beneficiary in 2021 and had the highest contribution income per beneficiary during the year. Sasolmed experienced the highest claims ratio of these schemes, with a claims ratio of 104.2% for 2021. LA Health had a claims ratio of 81.7% for 2021, the lowest claims ratio of the 20 schemes considered.



> **The actual healthcare costs funded by medical schemes are driven largely by service usage by medical scheme members, as well as the actual cost of claims. The use of services is influenced by:**

- demographic factors (age profile and pensioner ratio)
- the incidence and distribution of disease (often called 'disease burden')
- advances in diagnostic technology and biological drugs

The increase in the actual cost of claims can be managed by the negotiating power of a particular medical scheme or its administrator.

> **The level of the average claims and contributions per beneficiary for a particular scheme depends on the:**

- richness of benefits offered
- split of members between high-cover and low-cover options
- the demographic profile of the scheme in terms of average age and chronic prevalence

The relationship between contributions and claims for a particular medical scheme depends on the pricing philosophy followed by that scheme.

A scheme with a significant level of reserves might intentionally price for an operating deficit to use some of those reserves, while a scheme which does not meet the statutory solvency requirements may have higher contributions than their demographic and claims profile would require to build reserves.



Non-healthcare expenditure

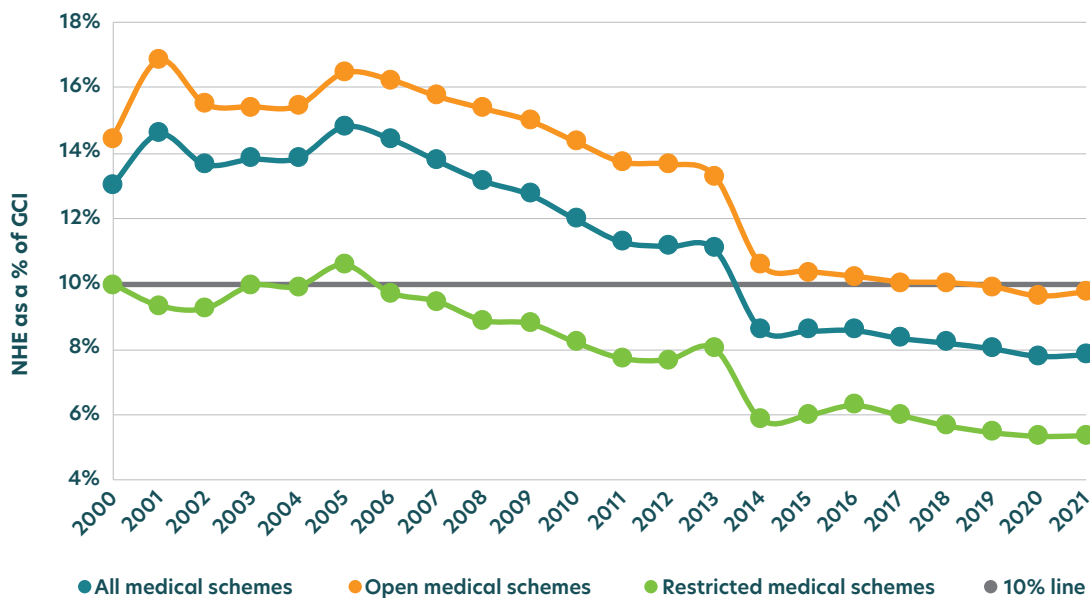


Non-healthcare expenditure (NHE) includes administration fees, broker commission, distribution costs, bad debt and reinsurance costs.

Up to 2014, managed care fees were reported as part of NHE. However, managed care fees have been recognised as part of healthcare expenditure since 2015, which means that the proportion of gross contribution income spent on NHE has reduced significantly from 2014 to 2015.

Total NHE, as a proportion of gross contribution income (GCI), increased marginally in 2021 for the medical schemes industry. Restricted medical schemes increased the proportion of GCI spent on NHE marginally from 5.36% to 5.37%, while open medical schemes increased this proportion from 9.61% to 9.73%.

Trend in non-healthcare expenditure



The higher level of NHE within open schemes is driven to a large extent by Momentum, Sizwe Hosmed and Fedhealth, whose NHE was 14.0%, 12.1% and 11.9% respectively, of GCI in 2021.

Restricted schemes are expected to have lower non-healthcare costs, primarily because they have lower or no distribution expenses or broker fees, and certain operating expenses may be subsidised by their participating employers. However, some restricted schemes, for example Profmed and LA Health, compete with the open market to a certain extent and, as a result, will budget for marketing expenses and broker fees.

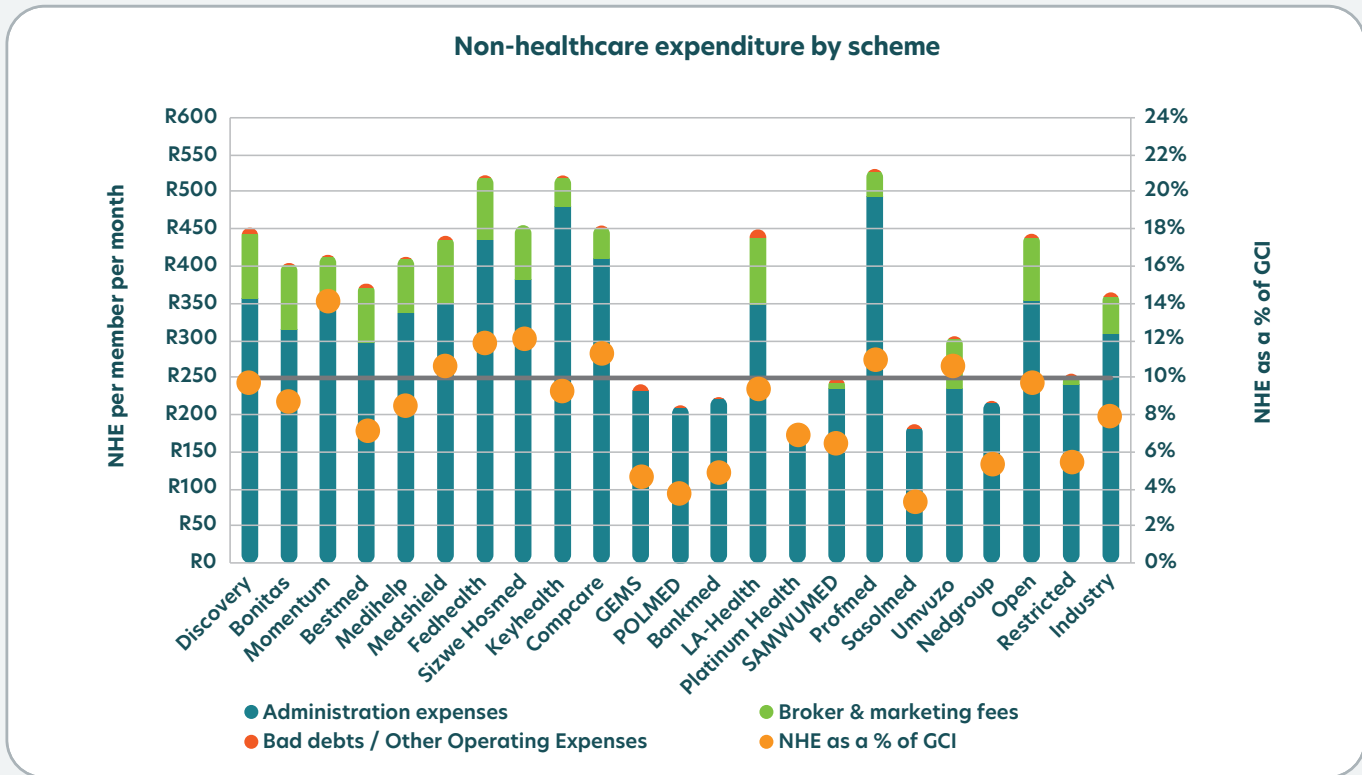
As we assume that NHE increases with CPI, while contributions increase with medical inflation, which is usually 2 to 3% more than CPI on average each year, we would expect that the proportion paid to NHE would decrease over time, irrespective of whether additional cost control measures are introduced.



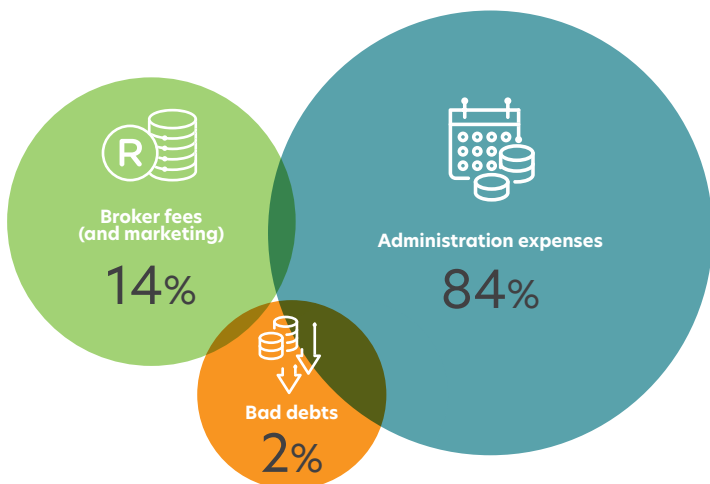
In addition, broker fees paid each year do not increase at the same rate as contributions. This is due to the commission cap in place, which does not increase at CPI and contributes to the decreased NHE percentage. As a result, a more suitable measure of NHE is the absolute cost per member per month.

The graph below illustrates the components of NHE for the top 10 open and top 10 restricted schemes for 2021, as well as for open and restricted schemes, and the medical schemes industry as a whole.

The marked difference between non-healthcare expenses of open and restricted medical schemes is evident from the graph above.



Breakdown of non-healthcare expenditure



Even after excluding broker fees, the pure administration costs of open and restricted medical schemes are significantly different. This may be due to the sponsoring employers of the restricted schemes taking on some of the expenses incurred in the running of the medical scheme through the corporate entity, and so reducing the costs borne by the medical scheme itself.

There is no fixed definition for the expenses that can be included as administration fees, and this contributes to varied levels of administration fees charged across the market. Some administrators may include services other than pure administration, for example actuarial services, which will affect the overall profile of administration expenses.

The illustration above shows the breakdown of NHE expenditure into its different components across the industry in 2021.

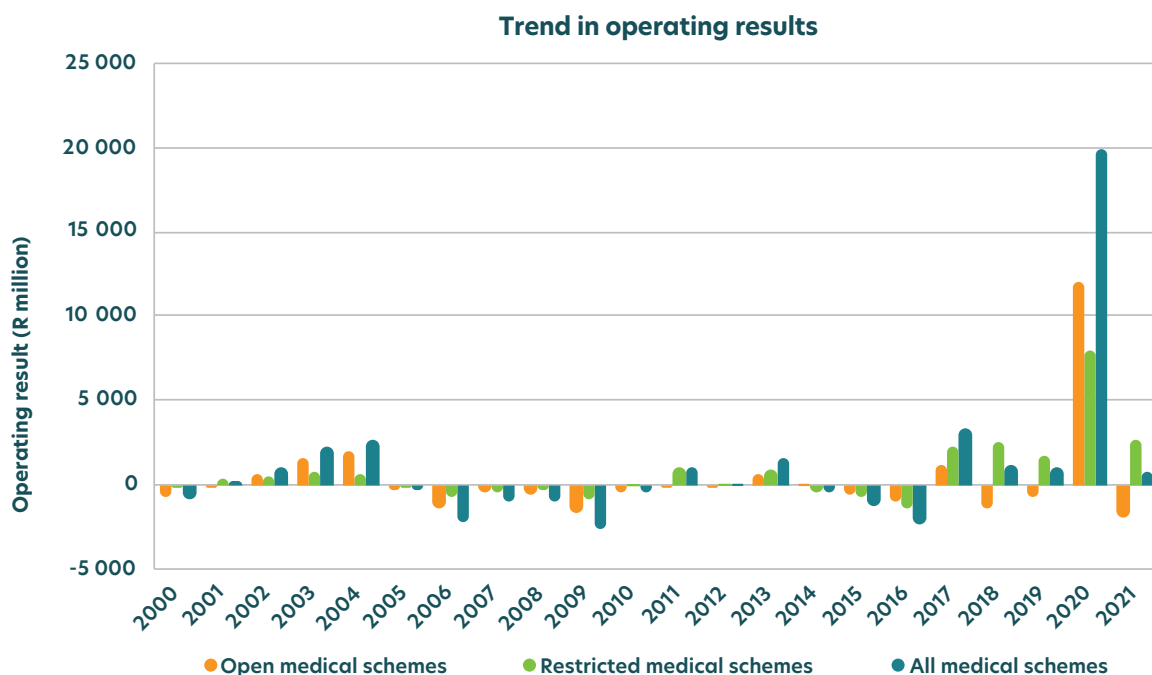


Financial performance

One of the key factors that are used to measure the performance of a medical scheme is the scheme's operating result. A scheme's operating result is an indication of its financial soundness after claims and NHE are deducted from the contribution income.

It shows the surplus or deficit before investment income. Drivers of strong financial performance by medical schemes include:

- appropriate benefit pricing
- adequate risk management and claims control
- favourable age and risk profile of the membership base
- low NHE



The industry ended 2014 with an operating deficit of R0.47 billion, which grew to R1.22 billion at the end of 2015 and further deteriorated in 2016 as the industry ended the year with an operating deficit of R2.39 billion.

The trend of deteriorating financial results that we observed in the industry between 2014 and 2016 improved in 2017. It continued to improve into 2018 and 2019, with the industry generating an operating surplus of R1.22 billion and R1.03 billion respectively.



In 2020, the operating surplus was far higher than anything experienced over the time period considered. This is largely driven by the favourable claims experience, which stems from Covid-19.

> In 2021, restricted schemes incurred an operating surplus of R2.72 billion, driven by the large operating surplus of R2.45 billion generated by GEMS.

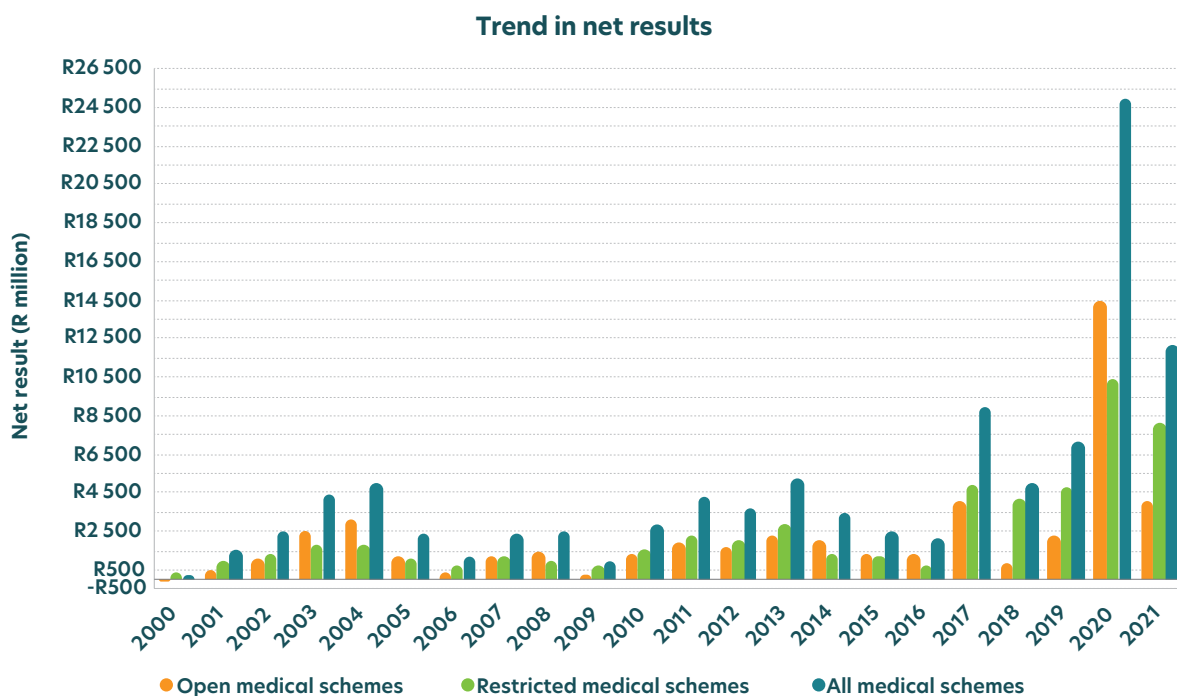
An operating surplus of R0.27 billion arises, considering the restricted schemes, excluding GEMS. Only four of the top 10 restricted schemes made an operational surplus in 2021. Open schemes incurred an operating deficit of R1.89 billion, driven by the large operating deficit of R1.17 billion generated

by Discovery. Similarly, only four of the top 10 open schemes experienced operational surpluses in 2021.

The longer-term trend in operating results since 2000 has been driven in large part by the current regulations. Medical schemes were priced to target significant surpluses in the years prior to 2004 in order to meet the regulatory solvency requirements by 2004.

During the years following 2004, many schemes had met the solvency requirements and so no longer had to price for larger surpluses. However, they faced significant increases in claims in the following years from a change in service provider charges with the requirement to pay PMBs at cost.

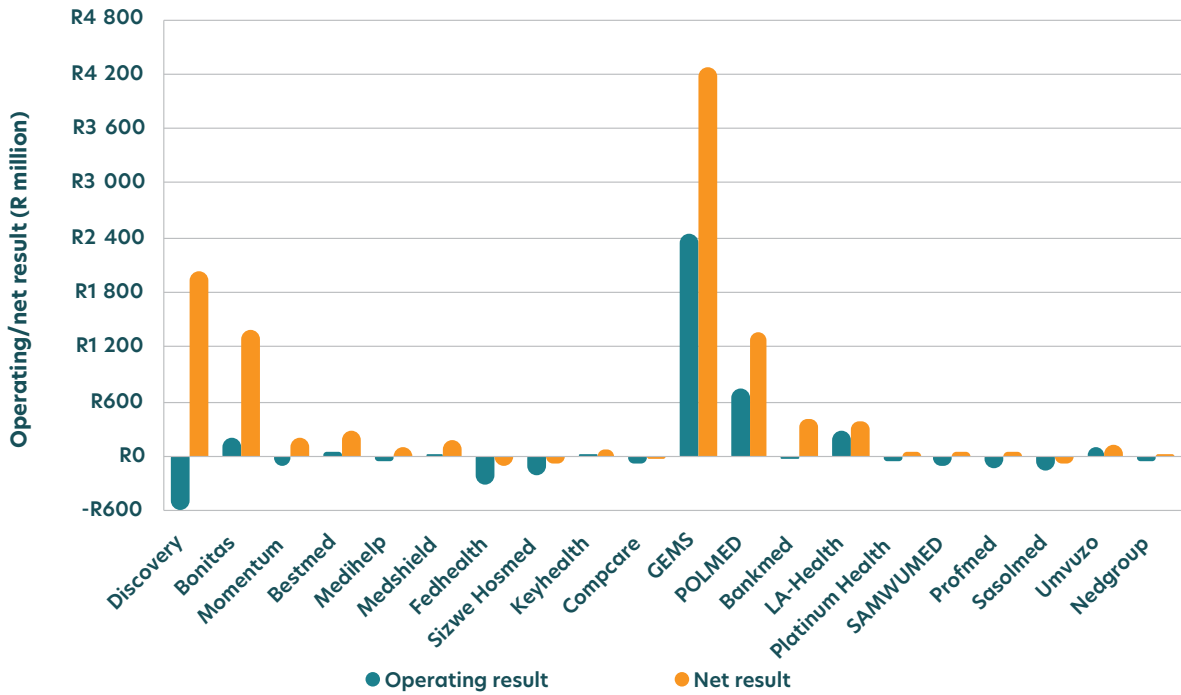
Schemes that incur operating deficits have to rely on investment income to achieve a net breakeven result. In 2021, with the addition of investment and other income, the industry achieved a net result of R12.18 billion compared with the overall net surplus of R24.84 billion achieved in 2020. Open schemes achieved an overall net result of R4.06 billion (2020: R14.45 billion) while restricted schemes achieved an overall net surplus of R8.12 billion (2020: R10.39 billion).



In 2021, 11 of 17 open schemes and 53 of 57 restricted schemes achieved a net surplus, compared with a net surplus for all open and restricted schemes in 2020.



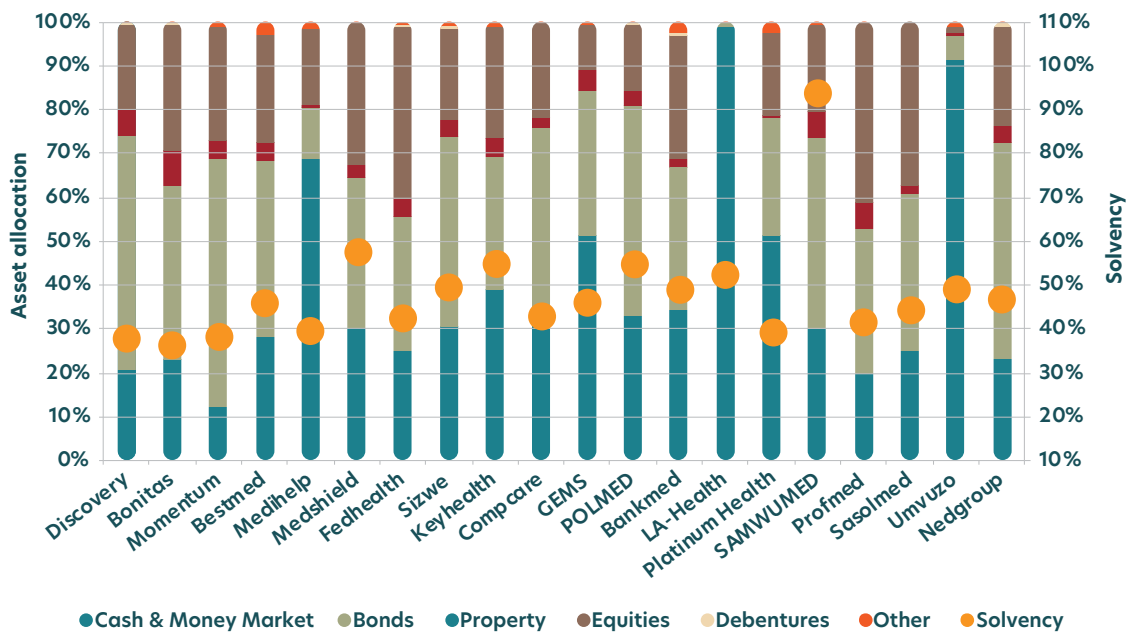
Schemes' financial performance for 2021



The graph above shows the financial performance of the top 10 open schemes and top 10 restricted schemes in 2021.

Of the 20 schemes considered in this year's Medical aid Insights, four open schemes and four restricted schemes attained an operating surplus in 2021. The schemes that attained an operating deficit had to rely on investment income to subsidise claims and NHE.

Asset allocation as at 31 December 2021





Investments



Where medical schemes do not achieve operating surpluses, they rely on the investment returns earned over the year to fund part of their claims and NHE. In 2021, 41 of 75 medical schemes failed to achieve an operating surplus and therefore had to draw on their investment returns, placing additional pressure on solvency levels.

This strategy is not sustainable unless investment returns keep pace with, and preferably exceed, claims inflation. At present, however, most medical schemes follow highly conservative investment strategies as shown in the graph on the previous page. The graph shows the asset allocation for the 20 schemes under consideration in this publication.

In 2021, open schemes held 22.3% of assets in equities, with 46.3% in bonds and 25.2% in cash. In contrast, restricted schemes held 17.5% of assets in equities, 32.3% in bonds and 45.9% in cash or cash equivalents. The balance is mainly held in property, with some exposure to debentures and insurance policies.

Asset class limits are placed on medical schemes in Annexure B of the Regulations to the Medical Schemes Act, but most schemes are operating well inside the limits for riskier asset classes. The limit on equities is 40%, while the limit on property is 10%.

This implies that schemes could have up to 50% of their investments in these higher-risk asset classes, whose returns are expected to exceed CPI inflation. There are no limits on exposure in conservative asset classes such as cash, money market instruments and bonds. The only restrictions on these asset classes are on the exposure to specific issuers, to ensure diversification.





Medical schemes' preference for cash appears to be driven by a preference for liquid assets, given that medical scheme liabilities are short term, as well as concerns about risks related directly to the investments (the possibility of making negative returns or losing scheme assets).

However, for the long-term sustainability of the scheme, average returns below medical inflation may pose a greater risk, especially for schemes that rely on investment returns, when they fail to achieve an operating surplus.

In particular, the claims expenditure tends to grow faster than CPI. To maintain solvency year on year, the accumulated funds need to increase in line with the increase in contributions. If investment returns cannot keep pace with the increase in claims inflation, and accumulated funds increase at a rate less than contributions, then solvency levels will decrease. This results in a need to either increase contributions further (which would exacerbate this issue) or reduce benefits.

As a result, for schemes failing to meet the solvency requirement, low investment returns from conservative asset allocations may in fact be increasing risk for the scheme. For schemes meeting the solvency threshold, this can be eroded over time if returns are below claims inflation, and they may be missing an opportunity to maintain affordable contribution increases in the future.

Where a scheme already has sufficient reserves, there is a strong argument to invest at least some of the reserves in more risky asset classes allowed by Annexure B of the regulations. Conversely, schemes that are not adequately funded can increase their expected returns by investing in riskier assets, which could in the medium to longer term increase the reserves held and thereby the solvency ratio. This also depends on the absolute value of the asset base.



Solvency levels



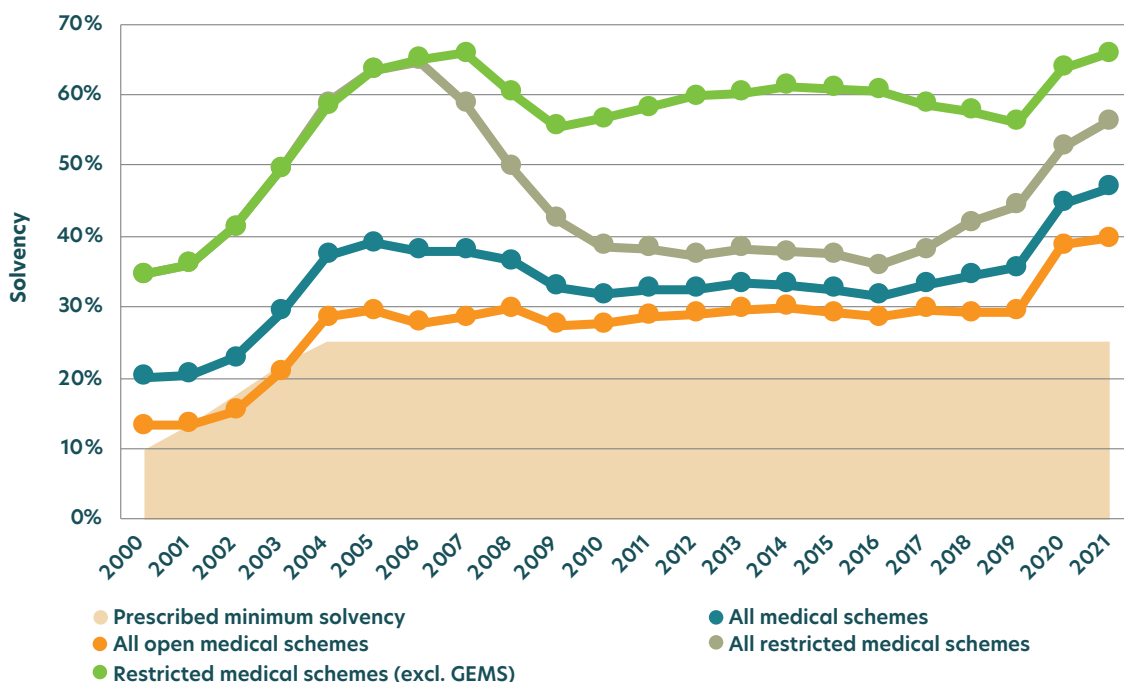
The solvency ratio is the level of reserves (accumulated funds) that a medical scheme needs to hold as a percentage of gross annualised contributions. Regulation 29 promulgated in terms of the Medical Schemes Act prescribes that medical schemes maintain a minimum solvency ratio of 25%.

The graph below shows the solvency levels of open and restricted schemes against the statutory level over the past 22 years. The increase in industry solvency levels from 2000 to 2004 is primarily attributable to the calculated efforts of medical schemes in trying to build reserves to the prescribed minimum solvency level that was required by 31 December 2004.

On average, restricted schemes have maintained higher solvency levels compared with open schemes. From 2006, the solvency level for all restricted schemes declined because of rapid membership growth in GEMS. The average solvency of open schemes remained relatively stable between 2006 and 2019.

In 2020, the average solvency for all schemes increased significantly as a result of the large surpluses due to Covid-19. In 2021, the average solvency for all schemes increased to 46.7% from 44.6% in 2020. The solvency level for open schemes increased from 38.7% in 2020 to 39.6% in 2021. The overall solvency level for restricted schemes increased from 52.5% in 2020 to 56.2% in 2021.

Trend in solvency levels



In 2019, the significant reduction in the restricted schemes solvency (excluding GEMS) was a result of 7 of the remaining 9 restricted schemes experiencing a drop in solvency.



Medical schemes that do not meet the statutory minimum solvency level of 25% need to submit a business plan to the CMS outlining their plans to achieve this level. This may include benefit reductions or additional contribution increases. In 2021, all of the top 10 open and restricted schemes achieved the statutory minimum solvency level of 25%.

The graph below illustrates the solvency levels for the 20 schemes considered at the end of 2021.

The suitability of the current solvency framework, requiring schemes to allocate a minimum of 25% of gross contributions to reserves, has long been debated. Reasons that support the need to review the current framework include:

- **Appropriateness of a 'one-size-fits-all' approach**

Medical scheme claims experience is likely to be more stable for larger schemes, so the solvency requirements should be less onerous, while solvency requirements for smaller schemes should be higher

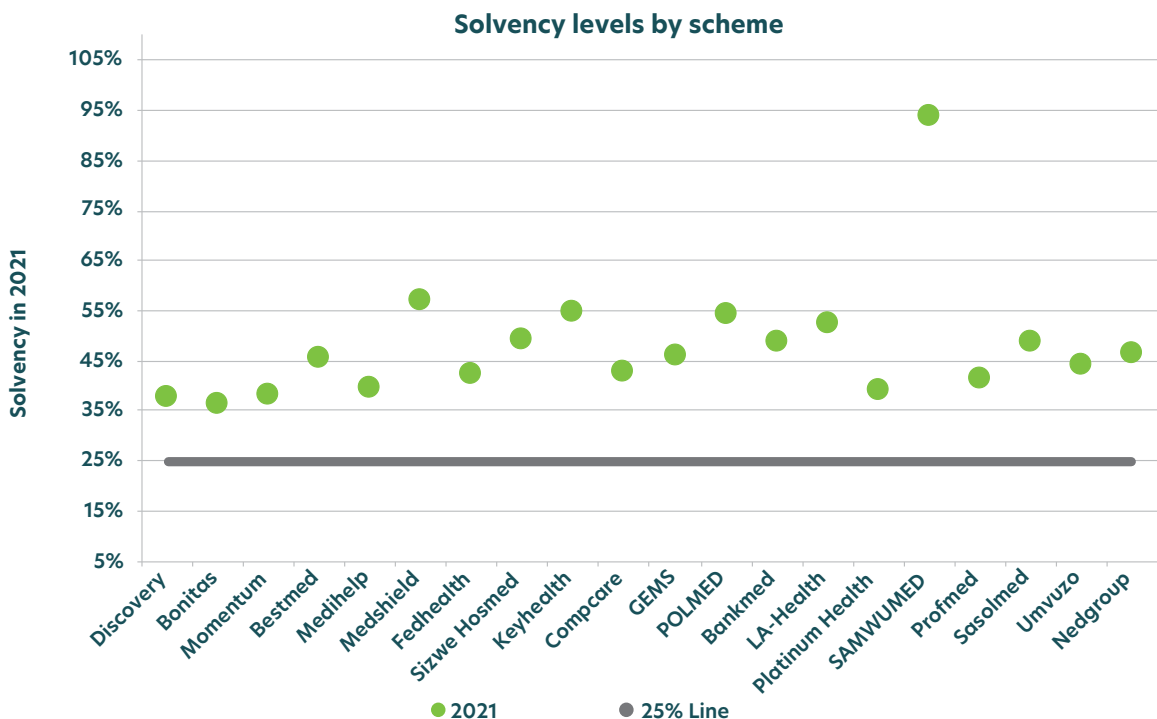
- **Nature of the solvency calculation formula**

On the one hand, schemes showing membership growth are penalised from a solvency perspective. On the other hand, the solvency calculation formula rewards schemes losing members. Therefore, schemes that are growing are less competitive because of the need to build and maintain solvency levels.

The CMS released Circular 68 on 25 November 2015, which discusses a review of the current solvency framework and outlines a proposed alternative risk-based solvency framework. In 2016, the industry was invited to comment on:

- the proposed move to a risk-based solvency framework
- their proposed calculation
- how the transition from the existing solvency calculation should be managed

Workshops were held with various stakeholders. In 2019, the CMS published an update on the review of the solvency framework. The review included comments from industry stakeholders on the merits and drawbacks of the proposed framework.





Alexforbes Health 3 Medical Schemes Sustainability Index





With the continued consolidation of medical schemes in the industry as well as rising claims costs, the sustainability of medical schemes and the assessment thereof has become increasingly important for all industry stakeholders.

Throughout this publication, we have analysed key statistics of medical schemes, but it is difficult to assess how these work together to affect the sustainability of a medical scheme.

The Alexforbes Health Medical Schemes Sustainability Index attempts to do this by combining certain key factors and considering their impact on a medical scheme in future years.



The index has been calculated from a base year of 2006 and considers the following factors:

- The **size** of the scheme relative to the average scheme size in the industry. A larger membership base would reduce volatility in the claims experience and benefit from economies of scale.
- **Membership growth** over time indicates that benefits are attractive. In addition, an increase in size serves to reduce the volatility of the scheme's claims experience.
- The change in the **average age** of beneficiaries over time. An increasing average age indicates a worsening profile and higher expected claims. This would require a medical scheme to adjust its base pricing for benefits through either contribution increases or benefit reductions.
- The **operating result** of the scheme relative to the industry each year, as this would indicate the medical scheme's performance relative to its peers.
- The change in the **operating result per beneficiary** each year. The operating result should give an indication of the suitability of current contribution levels and whether higher or lower contribution increases can be expected in the next year.
- The change in the **accumulated funds** per beneficiary held at the end of each year. Accumulated funds act as a buffer against an adverse claims experience, and an increase in the accumulated funds per beneficiary would improve this buffer.
- The scheme's **actual solvency** relative to the statutory requirement. Although the suitability of the current statutory requirement is debated, schemes whose solvency is below 25% are required to have business plans in place with the CMS and their contribution increases would include an element of additional reserve building in future. Higher-than-average contribution increases would serve to reduce the scheme's marketability. If the 25% solvency requirement is replaced with a risk-based capital requirement, this component of the index would be replaced with actual solvency relative to the risk-based requirement.
- The **trend in the scheme's solvency**. Increasing solvency levels over time would also support the sustainability of a medical scheme.

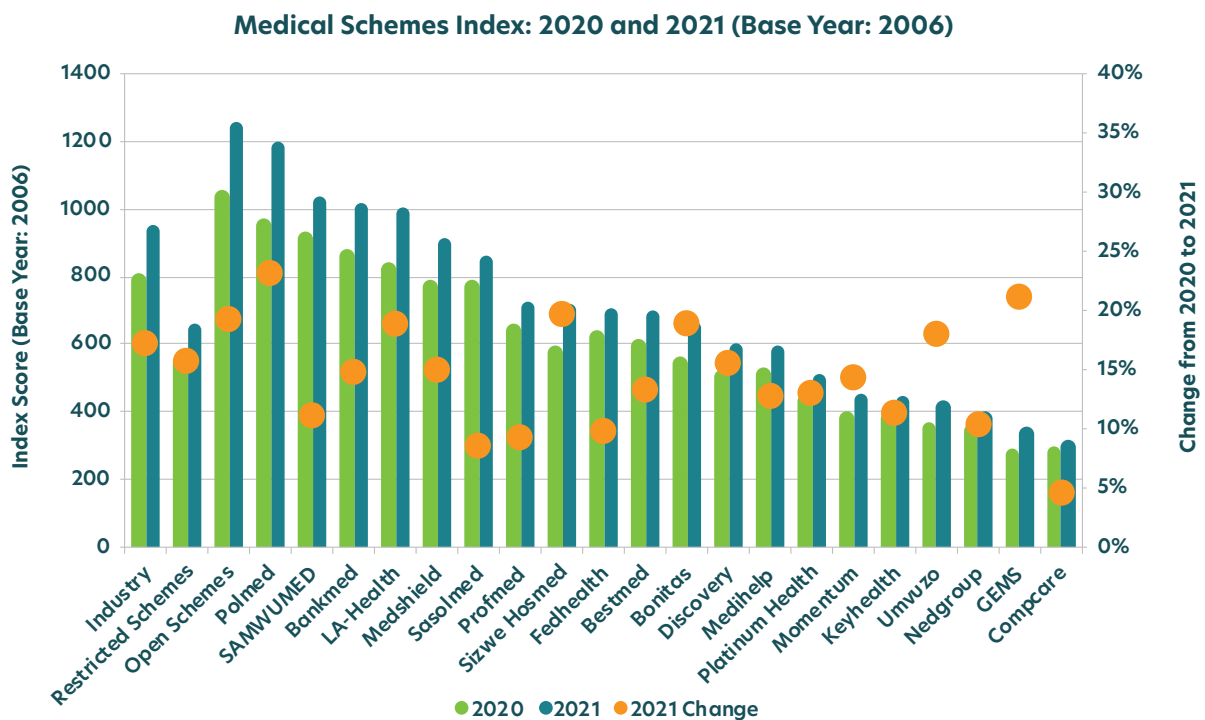


Using a base year of 2006, these factors are considered for each of the years from 2007 to 2021, with the final index score reflecting the cumulative impact over this period.

The medical schemes are ranked from highest to lowest to show their relative sustainability. The index aims to provide a comparative assessment between schemes. For this reason, the relative positioning is more important than the absolute score. Note that small differences in the scores (between 10 to 20 points) are not significant.

The graph on the next page shows the 2020 and 2021 index scores for each of the top 10 open and top 10 restricted medical schemes, using a base year of 2006.

The biggest increases in the index for 2021 were observed for Polmed, who improved their 2021 score by 23.2%, closely followed by GEMS with an increase of 21.3%. The open schemes trailed by a small margin, with Sizwe Hosmed improving their score by 19.8% followed by Bonitas with 18.9%.



Polmed's solvency increased by 14.1% since 2020, while GEMS' increased by 13.0%. Both schemes experienced a lower than anticipated increase in beneficiary age.

Polmed, on the other hand, experienced a reduction in membership, while GEMS experienced an increase in membership since 2020.

Polmed and Samwumed are the top performing schemes over the 15-year period. Polmed was the top performer in the index for two consecutive years.



4 Conclusion





We can make the following key observations from the analysis:

- The **number of medical schemes** decreased by two from 75 to 73 from 2020 to 2021.
- The **number of principal members** increased marginally by 0.9% from 2020 to 2021, compared with decreases of 1.0% from 2019 to 2020. Principal members at the end of 2021 totalled 4 059 597 (2020: 4 022 597).
- The **average age of beneficiaries** increased to 33.7 years at the end of 2021 (2020: 33.6 years), with the pensioner ratio increasing to 9.1% (2020: 9.0%).
- The **average family size** has decreased by a insignificant margin, from 2.21 in 2019 to 2.20 in 2020.
- The **risk claims ratio** for all schemes increased from 81.4% in 2020 to 90.9% in 2021. This is a direct consequence of the reduced Covid-19 measures imposed on elective procedures and access to health providers.
- **Total NHE** as a percentage of GCI increased marginally from 7.8% in 2020 to 7.9% in 2021.
- A **total of 34 of the 73 schemes** (47%) achieved an operating surplus in 2021.
- In 2021, most **scheme assets** were held as cash, either in bank accounts or through money market instruments.
- The **average solvency** of all schemes increased from 44.6% at 31 December 2020 to 46.7% at 31 December 2021.



Overall, the profile of the industry remained **fairly stable** and the financial position is **sound** despite another year of operating losses for many schemes.



Alexforbes Health



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Sources: CMS Annual Reports (2000 to 2020)
Audited annual financial statements of medical schemes



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