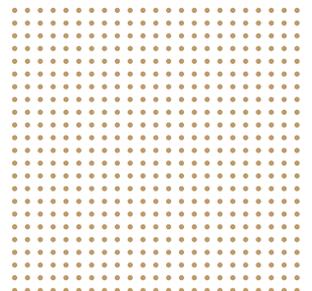




For the benefit of our
members

2016 Integrated Annual Report





2016

Integrated Annual Report

Discovery Health Medical Scheme's Integrated Annual Report is designed to cater for various readers by grouping information in a logical way according to different levels and areas of interest. The chapters in the Report can be read as standalone pieces for this purpose. Below we describe what is in each chapter and its intended audience.

About our Report

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flap

Sets out the assurances provided for this Report and its purpose, scope and boundary, and the Board's statement of responsibility.

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For readers who want a quick view of key performance trends and 2016 highlights. Detailed performance information can be found in the Performance chapter.

About DHMS

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For current and potential members, this chapter provides an overview of the Scheme, who leads and governs it and how it achieves its objectives.

This section also discusses how each of the Scheme's key stakeholders obtain value from the Scheme, within the context of the Scheme's primary responsibility to create value for its members. It may therefore be of interest to healthcare providers and other stakeholders of the Scheme.

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For our regulators and other readers who are interested in the details of the Scheme's governance, this chapter provides an overview from the Chairperson and a description of the legislation governing the Scheme and its governance structures and framework, including the Board of Trustees and Board Committees. It also reviews notable regulatory and industry matters dealt with during 2016.

Performance

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For members and regulators who are interested in more about the performance of the Scheme during 2016, this chapter provides management commentary on the Scheme's strategic, operating and financial performance during 2016. It also includes a review of initiatives undertaken by Discovery Health on behalf of the Scheme and its members.

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A quick reference guide for contact information, feedback, compliments and complaints processes and guidance on where to find additional information.

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OUR PRINCIPAL OFFICER'S REVIEW OF THE YEAR



“In 2016, the Discovery Health Medical Scheme demonstrated its ability to weather difficult conditions and manage unexpected events. As the largest and most innovative open medical scheme in South Africa, I believe the Scheme is best placed to continue providing access to affordable, equitable and quality healthcare that meets the needs of our members now and into the future.”

The economic and industry challenges of 2016, experienced during the last of my eight-year tenure as Principal Officer, tested the agility and resilience of the Scheme's highly innovative Vested outsourcing business model. The Scheme responded effectively and timeously to the confluence of tough local economic conditions and industry-specific adverse events and challenges, which threatened the long-term sustainability of the private healthcare funding industry.

The global context for the Scheme's challenges included extreme economic volatility and significant socio-political shifts felt worldwide. From Brexit in the UK to the US presidential elections, the implications of rising nationalism, protectionism and intolerance promise to be far-reaching.

While at times South Africa feels remote, our relatively small formal economy and developing society are highly sensitive to this global turbulence. Moreover, slow economic growth, the implications of the downgrades in the country's credit rating and policy inconsistency, added to the intractable social problems of inequality and poverty, make for an exceptionally tough domestic economic environment.

Looking back at the year, besides the economic indicators, from the first quarter of 2016, the Scheme experienced significant increases in the utilisation of healthcare services, especially in terms of hospital admission rates and benefits. As medical schemes price their contributions in August of every benefit year for the coming year, based on projected and expected funding requirements, there is limited scope for schemes to respond to such unexpected deviations within a benefit year.

In the context of the Scheme's Vested outsourcing business model, which entails active innovation and collaboration between the Scheme and Discovery Health, its Administrator and Managed Care Provider, this potential threat was effectively mitigated and managed without compromising access to or quality of care. Any possible implications for our members were extensively communicated and individual members were assisted in ensuring optimal cover for their care.

Discovery Health, through their world-class analytics capabilities and big data informatics, performed extensive early root cause analyses and mapped the unprecedented

increase in utilisation of healthcare services to specific drivers. One of the major contributors was a significant increase in hospital admission rates emanating from several new private hospitals, as well as increases in admission rates at certain established hospitals. The effect on the Scheme, and the industry as a whole, was a significant increase in costly hospital claims.

This impact was felt across open and closed medical schemes in the industry, resulting in some media coverage on the financial state and sustainability of the private healthcare funding industry. The Scheme and Discovery Health also interacted with the Council for Medical Schemes (CMS) and the Competition Commission's Healthcare Market Inquiry (HMI) Panel on the matter.

Against this backdrop, management expected an operating loss compared to budget for the 2016 benefit year. However, the thorough measures put in place by Discovery Health, on behalf of the Scheme, to contain costs while ensuring quality of care and managing the utilisation of healthcare services, were highly effective in protecting members' funds and the financial performance of the Scheme.



That we were able to report a positive operating result of R102 million, investment income (net of return on savings trust assets) of R1 201 million, and a net surplus of R1 305 million for the 2016 year demonstrated that the Scheme has the scale, agility and resilience necessary to manage and withstand unpredictable market conditions. This justifies the trust that our 2.7 million beneficiaries place in the Scheme to fund and facilitate their access to affordable, equitable and quality private healthcare.

Ultimately, it is the quality of the Scheme's relationship with all its stakeholders that supports its ability to fulfil its value proposition and promise to members, while remaining sustainable in the long term. This, in turn, underpins effectiveness, efficiency and viability of the private healthcare ecosystem of which the Scheme is a significant part and contributor. As such, the Scheme will remain committed to balancing the needs and expectations of all its stakeholders in line with its primary objective of providing sustained high value to its members.

It has been a real privilege serving the members of the Discovery Health Medical Scheme over the last eight years. I leave the management of the Scheme in the capable hands of Dr Nozipho Sangweni, who has been a member of the Scheme's governing body and a colleague for several years. Dr Sangweni takes the helm as Principal Officer from 1 January 2017. She does so in challenging times for the Scheme and the industry, as the focus on accessibility, affordability, quality and sustainability of private healthcare becomes ever more important in South Africa. I believe the Scheme has the leadership, the partnerships and the track record to ensure continued value for our members, our other stakeholders and society in general.

My sincere gratitude and thanks are due to the Chairman of the Board of Trustees, Mr Michael van der Nest; the Board of Trustees; the Board Committees; the executive management team; and our counterparts at Discovery Health for their support over the years in what has been an incredibly exciting and meaningful journey in my healthcare career.

MILTON STREAK
PRINCIPAL OFFICER

A word from our new Principal Officer



I am honoured and excited to be taking the helm at Discovery Health Medical Scheme and look forward to a new era, where we are able to leverage the solid market position, resilience, agility and adaptive capabilities of DHMS to continue to

withstand economic uncertainty and pressures, for the health and wellness of our members.

The world-class governance structures and practices of the Scheme, combined with the extensive capabilities of Discovery Health, provide me with a solid foundation.

I look forward to working with the industry through the Health Funders Association, the industry representative body of which the Scheme is a member, and to continuing and growing the positive and cooperative working relationships we have with our regulators, most importantly the CMS, to the benefit of the South African healthcare system.

In line with our statements of purpose and vision, and the values that guide our conduct and interactions as a matter of course, we will continue to focus on our most important stakeholders, our members, by understanding their economic and health challenges. We must take a significant step forward to deepen our competitive advantage, through innovation and in the continued pursuit of excellence, in order to generate value for our members and safeguard their continued access to quality, outcomes-based healthcare.

My thanks to Mr Milton Streak for his many years of dedication to the Scheme, and together with my colleagues, we wish him well in his future endeavours.

DR NOZIPHO SANGWENI
PRINCIPAL OFFICER AS OF 01 JANUARY 2017

I am honoured and excited to be taking the helm at Discovery Health Medical Scheme

Overview

Discovery Health Medical Scheme delivered a positive net healthcare result of R102 million for the year ended 31 December 2016 (2015: R507 million). The year-on-year decrease in the operating result was mainly attributable to medical inflation and increased utilisation of benefits. Despite difficult investment markets, the Scheme generated healthy investment income of R1 257 million (2015: 1 019 million) contributing to the net surplus for the year of R1 305 million (2015: R1 276 million).

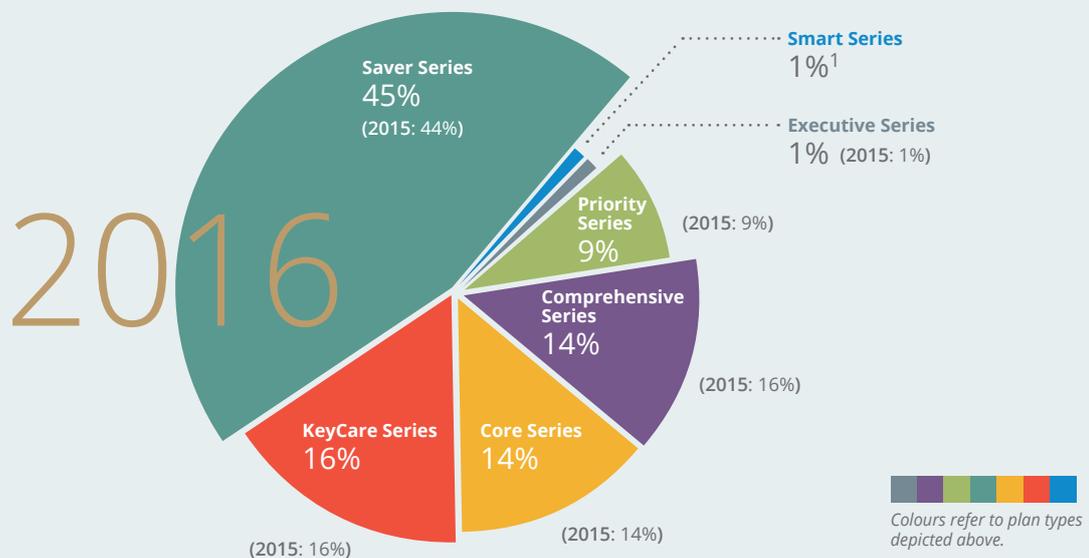
This solid financial performance increased members' funds to R14.2 billion (2015: R12.9 billion) with a solvency level of 26.33% (2015: 25.98%). The Scheme's financial strength and ability to pay claims was once again confirmed with a credit rating of AA+, the highest possible rating in the industry, from independent credit rating agency, Global Credit Rating Co (GCR).

16 Benefit options
(2015: 15)

6 Network efficiency discount options*
(2015: 6)



Distribution of scheme beneficiaries on various plans



¹ Launched in 2016.



Gross contribution income

Maintaining the balance between competitive contributions, providing affordable quality healthcare to our members and meeting regulatory reserve requirements remains a challenge.

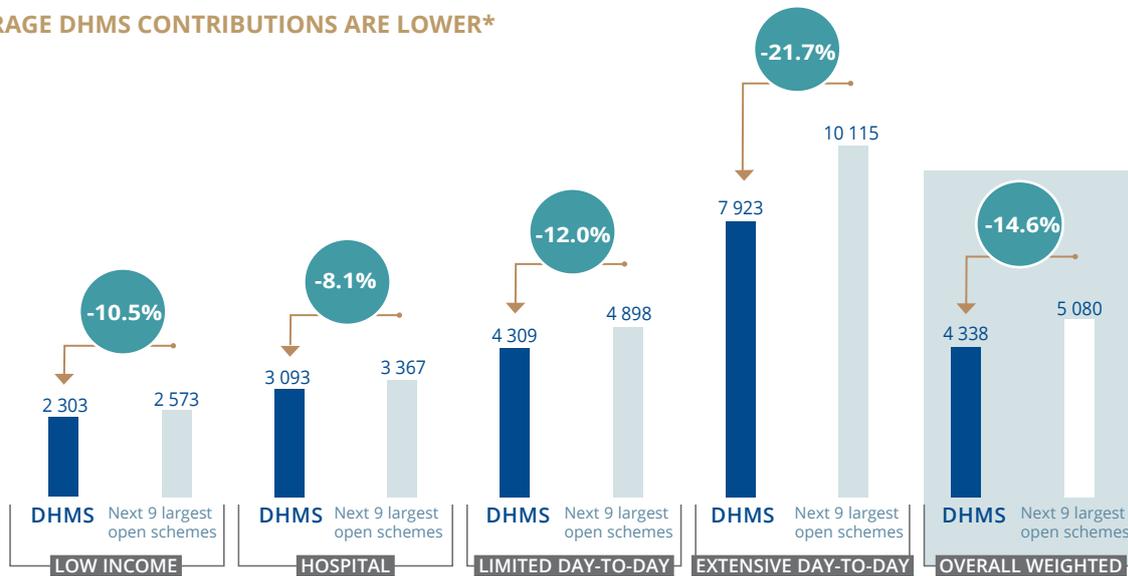
However, the Scheme remained competitive with average contributions in 2016 being 14.6% lower* (based on the rate for a principal member plus one adult beneficiary and one child beneficiary) than the next nine open schemes by size, largely due to its ability to contain the impact of medical inflation. The Scheme's competitiveness was reflected in average net membership and beneficiary growth of 2.45% and 1.71% respectively.

That 87% of contributions received are used for members' direct benefit by funding claims and reserves (to meet regulatory

solvency requirements) demonstrates the Scheme's commitment to its members and its high levels of efficiency. The remainder is utilised to fund activities for the support and benefit of members such as innovation, administration, managed care, financial advisers and the daily operations of the Scheme.

Gross contribution income rose 8.63% to R54.1 billion (2015: R49.8 billion), driven by the 8.6% headline increase in 2016 contributions and net growth in average Scheme membership of 2.45%. The most significant net membership growth was recorded in the mid to low tier options, where the Saver series and newly launched Smart plan recorded net membership growth of 27 321 and 11 807 respectively. The Comprehensive series experienced the largest decline in principal membership of 12 439.

AVERAGE DHMS CONTRIBUTIONS ARE LOWER*



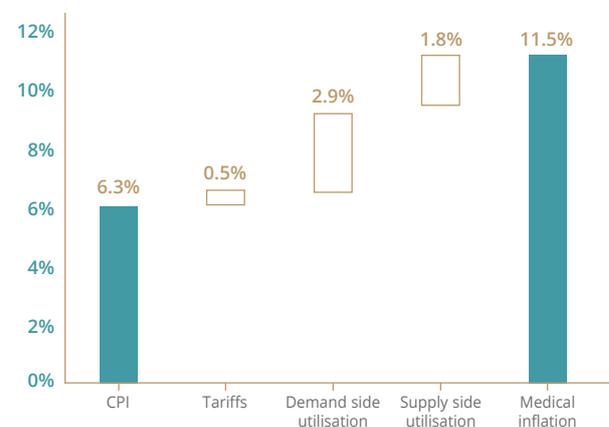
* To ascertain the contribution differential between DHMS and competitors, we calculate an average contribution within each plan category for a family unit comprising one principal member, one adult and one child dependant (a family of three). These average contributions are then weighted (for DHMS and the next nine largest open schemes) according to the distribution of members across DHMS plans. This ensures that plans with similar benefits are being compared on a like-for-like basis, thereby providing a reasonable estimate of the discount that a typical member of another scheme would earn by moving to DHMS.

Net claims incurred

Net claims incurred increased 10.4% to R36.6 billion (2015: R33.2 billion).

Escalating healthcare costs remain of concern to medical schemes with healthcare inflation consistently well above CPI. The main drivers of healthcare inflation are tariff increases and higher utilisation of healthcare services due to demand side and supply side effects. Supply side utilisation is driven by an increase in available services, such as new hospitals, and technological developments in healthcare; and demand side utilisation pertains to the deterioration in the demographic profile of beneficiaries, specifically a higher ratio of older and ailing members who need more, higher priced healthcare services. A summary of the composition of medical inflation (annualised over the period 2008 to 2016) is illustrated in the diagram alongside.

Average annualised inflation rate (2008 – 2016)



Despite these cost pressures, the Scheme was able to contain the gross claims ratio to 87% (2015: 86%) due to robust risk management interventions implemented by the Administrator.

Discovery Health Medical Scheme performance *continued*

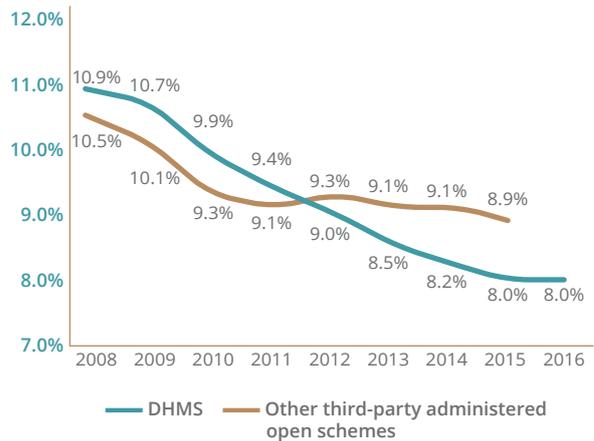
Gross administration expenditure

Gross administration expenditure consists of administration fees paid to the Administrator and other operational Scheme expenditure.

The most significant component of gross administration expenditure is administration fees paid to the Scheme's Administrator, Discovery Health. The gross increase in administration fees of 7.1% to R4.2 billion (2015: R3.9 billion) was attributable to the administration fee per member rate increase and net growth in average Scheme membership of 2.45%. The administration fee per average member per month (pampm) increased by only 4.5% from R258.73 to R270.49, as significant scale-related administration fee discounts continued to contain increases to below CPI.

The graph alongside depicts the continued decrease in gross administration expenses as a percentage of gross contribution income, compared to the average third-party administered open scheme competitor.

Gross administration expenditure as % of gross contribution income



A Scheme analysis of the CMS Annual Report 2015–2016 shows that at R125.23 for 2015, DHMS continued to rank below the average gross administration expenditure per average beneficiary per month (pabpm) for open schemes, which was R127.54 (or R130.27 excluding the Scheme). This ranks the Scheme 9th lowest out of 23 open schemes.

Accredited managed care services costs

The increase in accredited managed care services costs of 7.8% to R1.4 billion (2015: R1.3 billion) was attributable to both the accredited managed care costs per member per month rate increase, and growth in average Scheme membership of 2.45%.

Managed care costs pampm increased, at a rate below CPI, by 5.2% from R87.19 to R91.72. However, managed care costs as a percentage of gross contribution income continued to decline with the 2016 ratio at 2.60% (2015: 2.62%).

The Scheme analysis of the CMS Annual Report 2015–2016 shows that DHMS had a managed care cost pabpm of R40.86 compared to the average of R37.53 among open schemes (average of R33.52 when the Scheme is excluded). Although the pabpm managed care costs may appear more expensive relative to other open schemes, it does not consider the breadth of managed care services offered, or the claims cost savings generated by the managed care services. In 2015, claims cost savings of R136.29 pabpm were realised through claims review processes, implemented protocols, price negotiations and drug utilisation reviews. This equates to a saving of R3.33 for every Rand paid in managed care costs – an exceptional return on investment of 233%.

Investment results

The Scheme's investment portfolio is suitably diversified and managed with the aim of optimising returns within its approved risk appetite. Asset allocation is managed and monitored from an asset/liability perspective, ensuring sufficient liquid funds are available to meet claims and other liabilities as they fall due. Given the short-term nature of Scheme liabilities, a significant portion of Scheme assets are invested in money market and cash investments, with smaller allocations to bonds (local and foreign) and equities.

The volatility in the 2016 year, precipitated by shock results in both the Brexit referendum and the US election, challenged the local equity market with the FTSE/JSE All Share Index returning a mere 2.6% for the year (2015: 5.1%). The Rand bucked its historic trend, appreciating 11.5% against the US Dollar (2015: 35% depreciation against the US Dollar). The bond market (ALBI JSE All Bond Composite Index) redeemed itself with a 15.5% return in 2016 from a dismal showing in 2015 (negative 3.9% return). Cash (STeFI Index) returned around 7.4% for 2016.

Despite the difficult market conditions, the Scheme managed an overall investment return of 8.79% for 2016 (2015: 6.01%).



Member disputes and appeals

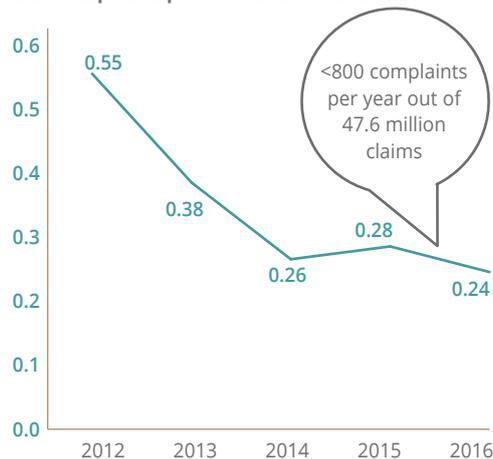
Given the Scheme's approximately 55% market share (covering more than 2.7 million beneficiaries), the reduction in complaints received is a source of great pride for the Scheme. We believe our strong focus on our members as the Scheme's primary stakeholders supported this achievement.

In 2016, the CMS received an average of 0.24 complaints per 1000 lives covered by the Scheme, an improvement from the 0.28 complaints per 1000 lives recorded during 2015, shown in the graph alongside. In an effort to deal with member disputes in a prompt and equitable manner, the Scheme expanded its Disputes Committee to comprise four practicing attorneys and three medical doctors. This additional capacity allowed it to convene more than once a week, which it had previously been limited to. During the year, 773 (2015: 738) complaints were lodged with the CMS in terms of Section 47 of the Medical Schemes Act (the Act).



See more about how to lodge complaints or disputes on [page 155](#).

CMS complaints per 1 000 DHMS beneficiaries



Solvency

The Medical Scheme Act (the Act) requires the Scheme to maintain accumulated funds of 25% of gross annual contributions for the accounting period, in terms of Regulation 29 (2) of the Act.

At 31 December 2016, the Scheme's solvency level of 26.33% (2015: 25.98%) of gross annual contributions was R719 million (2015: R488 million) more than the statutory solvency requirement.

Calculation of regulatory capital requirement

	31 December 2016 R'000	31 December 2015 R'000
Total members' funds	14 234 461	12 929 011
Less cumulative net gain on re-measurement of investments	-	-
Total net assets (Regulation 29)	14 234 461	12 929 011
Gross annual contributions	54 056 212	49 759 756
Solvency ratio	26.33%	25.98%
Average accumulated funds per member at year end	R10 971	R10 360

Prudent financial management

The table alongside shows the high level of contribution management achieved during the year.

	31 December 2016 R'000	31 December 2015 R'000
Gross annual contributions	54 056 212	49 759 756
Total outstanding contributions, excluding December	24 258	16 378
% outstanding	0.04%	0.03%

Due application of the Scheme Rules

The Board of Trustees keeps a constant check on appropriate and consistent application of the Scheme Rules in relation to beneficiary entitlement and healthcare provider reimbursements. This check is an integral component of the Board's fiduciary responsibility.

Ensuring statutory and regulatory compliance

The Trustees are committed to ensuring statutory and regulatory compliance, viewing this as one of their most important responsibilities. The Scheme's external auditors and Audit and Risk Committees, as well as the internal auditors and Compliance function, have an ongoing role in monitoring compliance to ensure the Scheme meets all applicable regulatory requirements.



Matters of non-compliance for the year ended 31 December 2016

The CMS issued Circular 11 of 2006 (the Circular) deals with issues to be addressed in the audited financial statements of medical schemes. The Circular requires that all instances of non-compliance be disclosed in the audited financial statements, irrespective of whether the auditor considers them to be material or not.

During the year, the Scheme did not comply with the following Sections and Regulations of the Act.

► STATUTORY SCHEME SOLVENCY

Under the Act, medical schemes are required to hold a minimum of 25% of gross annual contribution income as a reserve or accumulated funds (also known as the solvency ratio). The solvency ratio is a measure of a scheme's ability to absorb unexpected changes in claims experience, demographics (e.g. average age, chronic profile, etc.) and legislative environments, and therefore reflects a scheme's financial strength.

During 2016, the Scheme's solvency level dropped below 25% during January and November. In January, the drop was attributable to the impact of annual contribution increases (schemes are required to hold reserves equal to annualised inflation-adjusted contributions from the first day of the financial year). In November, the drop was due to a negative claims experience in line with historic trends.

At 31 December 2016, the Scheme's accumulated funds expressed as a percentage of gross annual contributions was 26.33% (2015: 25.98%), exceeding the statutory solvency requirement of 25%.

► SUSTAINABILITY OF BENEFIT PLANS

In terms of Section 33 (2) of the Act, each benefit plan is required to be self-supporting in terms of membership and financial performance, and be financially sound.

For the year ended 31 December 2016 the following plans did not comply with Section 33 (2):

Benefit plan	Net healthcare result (R'000)	Net surplus/ (deficit) (R'000)
Executive	(350 528)	(341 248)
Classic Comprehensive	(872 500)	(741 888)
Classic Comprehensive Zero MSA	(2 040)	(1 072)
Coastal Saver	(184 640)	(31 011)
Coastal Core	(32 915)	67 366
KeyCare Plus	(579 629)	(314 518)

The performance of all benefit options is monitored on an ongoing basis with a view to improving financial outcomes, and different strategies to address the deficit in these plans are continually evaluated.

When structuring benefit options, the financial sustainability of all the options is considered. The different financial positions reflect the different disease burdens in each option, among many other factors. The Scheme's strategy on the sustainability of plans balances short- and long-term financial considerations, fairness to both healthy and sick members, and continued affordability of cover for members with different levels of income and healthcare needs. While the Scheme is committed to complying wherever possible with the applicable legislation, it also focuses intensively on the overall stability and financial position of the Scheme as a whole and not only on individual benefit plans.

In addition, DHMS continually provides the Registrar with updates on both the Scheme and individual benefit option performance through the monthly management accounts and quarterly monitoring meetings.

► INVESTMENT IN EMPLOYER GROUPS AND MEDICAL SCHEME ADMINISTRATORS

Section 35 (8) (a) and (c) of the Act states that a medical scheme shall not invest any of its assets in the business of an employer who participates in the Scheme, or any administrator or any arrangement associated with the Scheme. The Scheme has investments in certain employer groups and companies associated with medical scheme administration within its diversified investment portfolio. This situation occurs across the industry. The CMS granted DHMS an exemption from these sections of the Act up to 21 April 2018.

The Scheme has no investments in Discovery Holdings Limited, the holding company of Discovery Health (Pty) Ltd.

► INVESTMENTS IN OTHER ASSETS IN TERRITORIES OUTSIDE SOUTH AFRICA

The Scheme's offshore bond managers utilise derivative instruments to aid with efficient portfolio construction and management, and to reduce the overall risk within our portfolios. The derivatives used are highly liquid and are either exchange traded or governed by International Swaps and Derivatives Association agreements. The derivative instruments are not used for speculation and there is no gearing or leverage applied. Investments in derivatives in territories outside the Republic of South Africa are, however, prohibited in terms of Category 7 (b) of Annexure B to the Regulations of the Act.

The Scheme was granted an exemption to invest in offshore derivatives, subject to certain conditions, up to 31 December 2018.

During August and September, a breach of the Scheme's foreign derivative exemption (Category 7 (b) of Annexure B) occurred when the Investec Target Return Bond Fund (collective investment scheme) derivative exposure was greater than 2.5% due to large foreign exchange fluctuations that occurred because of Brexit. The breach was rectified on 21 September 2016. This was duly reported to the CMS on 26 October 2016. It should be noted that despite the recorded breach at the individual fund level, the fair value of the Scheme's total offshore derivative exposures was only 0.19% of the aggregate fair value of Scheme liabilities and minimum accumulated funds at 31 August 2016.

► CONTRIBUTIONS RECEIVED AFTER DUE DATE

Section 26 (7) of the Act states that all subscriptions or contributions shall be paid directly to a medical scheme not later than three days after payment becomes due. There are instances where the Scheme received contributions after the three days; however, there are no contracts in place agreeing to this practice. It is important to note that the Scheme has no control over the timely payment of contributions. The legal obligation resides with the members/employers to pay contributions within the prescribed period.

The Scheme applies robust credit control processes to deal with the collection of outstanding contributions, including the suspension of membership for non-payment.

► BROKER FEES PAID

In terms of Regulation 28 (5) of the Act, broker fees shall be paid monthly on receipt by a medical scheme of the relevant monthly contribution in accordance with the maximum amount payable per Regulation 28 (2), limited to one broker as required by Regulation 28 (8).

In some instances, brokers were compensated prior to receipt of the relevant monthly contribution, the amount paid was more than the prescribed amount and more than one broker per member was paid. In the instances where brokers were paid above the prescribed amount or more than one broker was paid, the value is negligible and represents less than 0.02% of the total broker fees paid for the year. The exceptions relate to transactions that do not occur frequently and the Administrator has developed exception reporting to identify and correct these transactions, and has a well-established claw-back system to rectify commission overpayments.

► CLAIMS PAID IN EXCESS OF 30 DAYS AFTER RECEIPT

Section 59 (2) of the Act requires a medical scheme to pay a member or a supplier of a service any benefit owing to them within 30 days after the day on which the claim in respect of the benefit is received by the medical scheme.

During the process of transitioning to a new claims administration platform, quality assurance processes were significantly extended to ensure valid, accurate and complete processing of claims on the new claims administration platform. This process resulted in a delay in the processing of claims payments. A total number of 34 claims were identified that were paid later than 30 days after the claims notification date. The value of exceptions should be considered in the context of net claims incurred of R36.6 billion during 2016. Exceptions identified pertained to a specific event i.e. the transition to the new claims administration platform and thus no further action is required. The claims administration platform is set up to ensure payments occur within regulatory requirements.

Reserve accounts

Movements in reserve accounts are set out in the Statement of Changes in Funds and Reserves on **page 92**.

Outstanding claims

Movements in the outstanding claims provision are set out in Note 6 to the Annual Financial Statements on **page 104**.

Personal Medical Savings Accounts

The Personal Medical Savings Account (PMSA) enables members to manage day-to-day healthcare expenses. Members pay an agreed sum of 0%, 15% or 25% of the gross contributions, depending on their plan choice, into this savings account. The Scheme advances the full annual amount to members for immediate use, although members only contribute monthly. The PMSA provides a variety of benefits to members for medical expenses outside hospital, such as day-to-day medicines, visits to GPs and specialists, dental care and optometry.

The balance remaining in the PMSA at the end of each calendar year is carried over to the following year for the benefit of the member.

The Scheme's liability to members in respect of the PMSA is reflected as a current liability in the Annual Financial Statements (Note 8) and is repayable in terms of Regulation 10 of the Act. These funds are invested separately from the Scheme's assets and are managed by two independent asset managers, Taquanta and Aluwani. The average interest earned on these funds was 7.64% in 2016 (2015: 6.91%).

Going concern

The Trustees are satisfied that the Scheme has adequate resources to continue its operations in the foreseeable future. Accordingly, the Scheme's Annual Financial Statements have been prepared on the going concern basis.

Auditor independence

PricewaterhouseCoopers Inc have audited the Scheme's Annual Financial Statements. The Trustees believe the external auditors have observed the highest level of business and professional ethics, and have acted independently. The Audit Committee is satisfied that the auditor was independent of the Scheme.



Operational statistics per benefit plan for the year ended 31 December 2016

2016

	Executive	Classic Comp	Classic Core	Classic Saver	Classic Priority	Essential Comp	Essential Core	Essential Saver	Essential Priority	Coastal Saver	Coastal Core	KeyCare Plus	KeyCare Core	KeyCare Access	Classic Comp Zero MSA	Smart	Total
Number of members at the end of the accounting period	10 929	153 385	52 156	269 779	96 275	18 377	38 189	107 335	7 510	187 250	87 187	236 417	14 926	5 115	829	11 807	1 297 466
Number of beneficiaries at the end of the accounting period	24 142	349 237	111 913	590 831	220 180	36 131	79 461	223 979	15 848	424 238	193 129	412 459	23 505	7 280	1 827	21 031	2 735 191
Average number of members for the accounting period	11 159	157 002	51 848	267 495	97 459	18 763	36 070	102 528	7 595	185 776	86 006	227 986	14 055	4 928	831	9 090	1 278 589
Average number of beneficiaries for the accounting period	24 760	358 278	111 469	585 472	222 823	37 058	75 442	214 655	16 023	421 822	190 699	398 756	22 064	7 002	1 828	16 659	2 704 810
Average risk contributions per member per month (R')	6 538	5 203	2 986	2 840	3 593	4 504	2 342	2 345	3 260	2 416	2 339	1 538	1 310	965	5 120	2 081	2 843
Average risk contributions per beneficiary per month (R')	2 947	2 280	1 389	1 297	1 572	2 280	1 120	1 120	1 545	1 064	1 055	879	834	679	2 328	1 136	1 344
Average net claims incurred per member per month (R')	8 648	5 154	2 154	2 114	2 894	3 703	1 526	1 468	2 259	2 015	1 902	1 449	754	388	4 804	1 033	2 386
Average net claims incurred per beneficiary per month (R')	3 897	2 258	1 002	966	1 266	1 875	730	701	1 071	887	858	829	480	273	2 184	564	1 128
Average administration costs per member per month (R')	298	298	298	298	298	298	298	298	298	298	298	160	86	103	298	300	270
Average administration costs per beneficiary per month (R')	134	131	139	136	130	151	143	142	141	131	135	91	55	73	136	164	128
Average managed care: Management services per member per month (R')	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92
Average managed care: Management services per beneficiary per month (R')	41	40	43	42	40	46	44	44	43	40	41	52	58	65	42	50	43
Average family size at 31 December	2.21	2.28	2.15	2.19	2.29	1.97	2.08	2.09	2.11	2.27	2.22	1.74	1.57	1.42	2.20	1.78	2.11
Loss ratio (%)	134%	101%	75%	78%	83%	85%	69%	66%	72%	87%	85%	99%	65%	55%	96%	55%	87%
Total non-healthcare expenses as a percentage of risk contributions (%)	6%	8%	13%	14%	11%	9%	16%	16%	12%	16%	16%	14%	11%	15%	8%	18%	13%
Average non-healthcare expenses per member per month (R')	399	401	382	394	401	405	375	384	396	392	377	220	140	149	397	372	358
Average non-healthcare expenses per beneficiary per month (R')	180	176	178	180	175	205	179	183	188	173	170	126	89	105	180	203	169
Average age of beneficiaries (years)	42	39	38	31	36	44	34	29	35	33	36	28	34	30	38	29	34.17
Pensioner ratio (beneficiaries over 65 years)	19%	14%	13%	6%	10%	24%	8%	4%	10%	6%	10%	5%	9%	5%	11%	3%	9%
Average relevant health care expenses per member per month (R')	8 758	5 264	2 246	2 205	2 986	3 814	1 618	1 559	2 351	2 107	1 993	1 529	845	529	4 928	1 135	2 479
Average relevant health care expenses per beneficiary per month (R')	3 947	2 307	1 045	1 008	1 306	1 931	774	745	1 114	928	899	874	538	372	2 240	620	1 172
Net surplus/(deficit) per benefit plan (R'000)	(341 248)	(741 888)	282 896	991 747	321 876	79 776	192 694	579 193	53 128	(31 011)	67 366	(314 518)	70 967	22 707	(1 072)	72 837	1 305 450

2015

	Executive	Classic Comp	Classic Core	Classic Saver	Classic Priority	Essential Comp	Essential Core	Essential Saver	Essential Priority	Coastal Saver	Coastal Core	KeyCare Plus	KeyCare Core	KeyCare Access	Classic Comp Zero MSA	Smart**	Total
Number of members at the end of the accounting period	11 262	163 889	54 057	258 175	100 080	20 388	35 434	97 816	8 344	181 052	87 022	229 510	14 854	5 241	753		1 267 877
Number of beneficiaries at the end of the accounting period	25 149	376 774	115 775	565 252	230 166	40 810	74 106	205 605	17 651	412 879	191 498	403 636	23 320	7 531	1 700		2 691 852
Average number of members for the accounting period	11 468	167 127	53 274	255 914	101 008	20 783	33 075	93 255	8 444	179 275	85 046	219 615	14 083	4 913	751		1 248 031
Average number of beneficiaries for the accounting period	25 698	385 422	114 418	559 621	231 898	41 770	69 820	197 093	17 798	409 467	187 726	387 746	22 132	7 152	1 685		2 659 446
Average risk contributions per member per month (R')	6 037	4 800	2 759	2 633	3 308	4 182	2 192	2 203	2 990	2 224	2 136	1 443	1 219	872	4 805		2 675
Average risk contributions per beneficiary per month (R')	2 694	2 081	1 285	1 204	1 441	2 081	1 039	1 042	1 419	974	968	818	776	599	2 141		1 255
Average net claims incurred per member per month (R')*	7 927	4 660	1 915	1 902	2 617	3 353	1 457	1 355	1 843	1 820	1 679	1 360	541	425	4 406		2 214
Average net claims incurred per beneficiary per month (R')*	3 538	2 021	892	870	1 140	1 668	690	641	874	797	760	771	344	292	1 963		1 039
Average administration costs per member per month (R')	285	285	285	285	285	285	285	285	285	285	285	153	82	98	285		259
Average administration costs per beneficiary per month (R')	127	124	133	130	124	142	135	135	135	125	129	87	52	68	127		121
Average managed care: Management services per member per month (R')	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87		87
Average managed care: Management services per beneficiary per month (R')	39	38	41	40	38	43	41	41	41	38	40	49	55	60	39		41
Average family size at 31 December	2.23	2.30	2.14	2.19	2.30	2.00	2.09	2.10	2.12	2.28	2.20	1.76	1.57	1.44	2.26		2.12
Loss ratio (%)	133%	99%	73%	76%	82%	83%	70%	65%	65%	86%	83%	99%	52%	64%	95%		86%
Total non-healthcare expenses as a percentage of risk contributions (%)	6%	8%	13%	14%	11%	9%	16%	16%	12%	17%	17%	14%	11%	16%	8%		13%
Average non-healthcare expenses per member per month (R')	377	378	362	371	377	378	356	362	372	368	357	208	131	139	374		338
Average non-healthcare expenses per beneficiary per month (R')	168	164	168	170	164	188	169	171	177	161	162	118	83	95	167		158
Average age of beneficiaries (years)	42.49	39.74	38.54	32.19	35.94	44.59	35.93	30.71	35.20	32.98	36.78	28.68	34.17	30.43	38.15		33.86
Pensioner ratio (beneficiaries over 65 years)	19%	15%	14%	6%	10%	24%	10%	5%	10%	6%	11%	5%	10%	5%	12%		9%
Average relevant health care expenses per member per month (R')	8 043	4 774	2 002	1 989	2 704	3 464	1 544	1 442	1 930	1 907	1 766	1 436	628	560	4 543		2 304
Average relevant health care expenses per beneficiary per month (R')	3 590	2 070	932	910	1 178	1 724	731	682	916	835	800	813	400	385	2 024		1 081
Net surplus/(deficit) per benefit plan (R'000)	(320 737)	(601 499)	285 423	993 912	336 804	97 722	136 190	504 202	74 927	(84)	65 198	(394 861)	86 251	13 236	(544)		1 276 140

* See note 13 to the Annual Financial Statements for explanatory note on change of disclosure.
** The Smart Plan was introduced in 2016.

DISCOVERY HEALTH'S INITIATIVES FOR THE SCHEME

Discovery Health's vision of an integrated, value-driven healthcare system, centred on the needs of members, has led to the development of its business model that integrates wellness, quality of care and technology into a cohesive and sustainable healthcare system.

Discovery Health's business model



Discovery Health's vision for the Scheme is that current and potential members see the Scheme as providing far more than commoditised medical scheme benefits, and as delivering an integrated healthcare system that ensures that Scheme members obtain the best quality of care available in South Africa, as well as outstanding value.

Discovery Health provides services that go well beyond traditional administration and managed care services, including ongoing product innovation, best-in-class service excellence, effective claims risk management, fraud management as well as coordination and management of the quality of clinical services accessed by the Scheme's members. Discovery Health employs more than 4 000 people and deploys world-class actuarial, analytic, clinical and research and development capabilities at every point in the medical scheme product cycle.



A DAY IN THE LIFE OF THE SCHEME

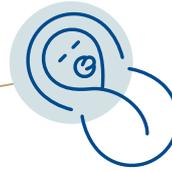
Every day* on average in 2016, Discovery Health facilitated the following for the Scheme's members:



Paid out in claims:
R142 million



Calls handled:
36 600



Babies born:
117



New lives:
1 350



Claims processed:
250 900



Hospital admissions authorised:
2 900

* 258 working days in a year.

Improving wellness

At the heart of Discovery Health's drive to make people healthier is Vitality, the world's leading science-based wellness programme. Through Vitality, the Scheme's members can benefit from innovative solutions that address their health risks and make them healthier. Increased engagement in the programme over time leads to substantially improved health outcomes. Externally verified research clearly indicates that patients with chronic conditions who are highly engaged in the Vitality programme have between 10% and 30% lower healthcare costs, fewer admissions to hospital and shorter stays in hospital. Vitality members who exercise twice a week are 13% less likely to be admitted to hospital than those who rarely exercise. The greatest benefit is evident in the impact on mortality. Members on the two highest Vitality statuses have a life expectancy (at age 65) that is eight years longer than members who are not on Vitality or who are on the lowest status.

VITALITY STATISTICS FOR DHMS MEMBERS IN 2016

Vitality Health Checks
255 000

Gym visits
26 million

HealthyFood Baskets bought
20 million

Flights booked
1.25 million

Movies watched
2.8 million

Discovery Miles earned
1.7 billion

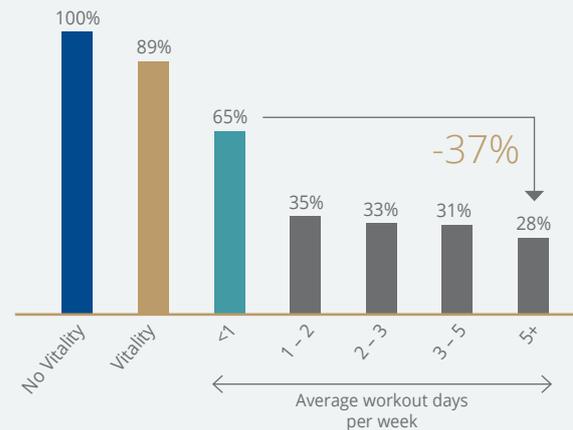
In 2016, over 53% of the Scheme's members were on Vitality and 43% were actively engaged, a steady increase from the previous year due to the introduction of Vitality Active Rewards. This enables members to set weekly exercise goals to access more immediate rewards and feedback. Vitality also collaborated with Apple to launch Vitality Active Rewards with Apple Watch, which combined the functionality and appeal of the Apple Watch with frequent incentives to encourage healthy behaviour. The more than 290 000 members who signed up for Vitality Active Rewards have demonstrated an increase of 25% in their physical activity, and those who use the Apple Watch have shown an 81% increase.

Supporting these ongoing healthy behaviours has enabled the Scheme to benefit from savings of R1 billion in 2015¹, through Vitality.

¹ 2016 figures not available at time of printing.

VITALITY ACTIVE REWARDS USING WEARABLES AND ANALYTICS TO DRIVE BEHAVIOUR CHANGE

Physical activity reduces mortality risk



Unprecedented engagement

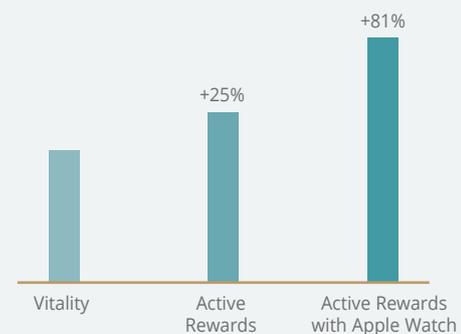
More than
25%
increase in physical activity



More than
290 000
active members

More than
3 500 000
weekly rewards

Incentive-driven behaviour change





Ensuring higher quality healthcare

Discovery Health actively works to improve the quality of healthcare available to the Scheme's members. It enables a cohesive healthcare system in which healthcare professionals work in integrated teams better able to share patient information, and are paid using innovative alternatives to current fee-for-service models, such as value-based reimbursement models.

Discovery Health has developed best-in-class disease management and care coordination programmes to improve member's access to and quality of care. These include chronic disease programmes for diabetes, renal failure, HIV, mental health, and care coordination programmes aimed at complex patients with multiple conditions, such as the ElderCare programme. Some examples of these programmes are:

- The **Coordinated Care Programme**, which provides high-quality coordinated care to the Scheme's sickest members. The programme has been extended to more than 6 300 patients across five regions, 16 facilities and five home-based care companies. The programme has shown improved quality (67% increase in mobility and cognitive functions), a 34% reduction in cost per event and more than 33% less hospital admissions. From 2017, the programme will be extended to KeyCare members with complex medical conditions.
- The **KidneyCare Programme** in 2008, which has shown improved clinical outcomes for members and lower overall healthcare costs.

 Read more about this programme and other initiatives for the Scheme's members on [pages 30 – 33](#).

- The Scheme launched targeted benefits for at risk members including an individualised approach to screening, a comprehensive **DiabetesCare Programme** and an external medical items extender benefit.
- As part of the focus on improving the quality of healthcare delivered to members, **Centres of Excellence for major joint replacements and in-hospital psychiatry** have been introduced. Our data along with international data shows that clinical outcomes (mortality and readmission rates) are significantly improved where there is a higher volume of cases, due to the skills and experience that the practising healthcare teams develop.
- Discovery Health's **HealthID** application (app) for health professionals is South Africa's first and most comprehensive electronic health record (EHR), which provides doctors and other health professionals with a complete view of their patient's health history and test results. This improves patient care and reduces the likelihood of serious medical errors, as well as reducing duplicate or unnecessary pathology tests. The app also reduces the administrative burden for doctors and simplifies their engagement in managed care initiatives by, for instance, making it quick and easy to fill in chronic illness benefit applications, and providing them with the relevant scheme formulary list. Discovery Health is consistently enhancing the functionality of HealthID to ensure increasing relevance to health professionals treating the Scheme's members. The app is now in regular use by more than 2 780 doctors and has more than 1 200 000 member consents.



TARGETED ENHANCEMENTS FOR IMPROVED QUALITY OF CARE

Centres of Excellence



Major joint replacements

National network of hospitals and specialists

Contracted on quality measures

Co-payment on voluntary out-of-network admissions



In-hospital psychiatry

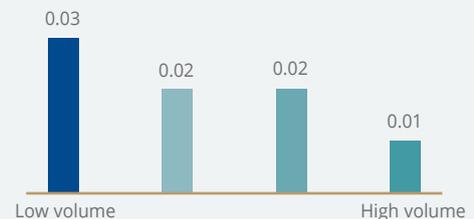
National network of accredited facilities

Specialised facilities for patients with mental health conditions

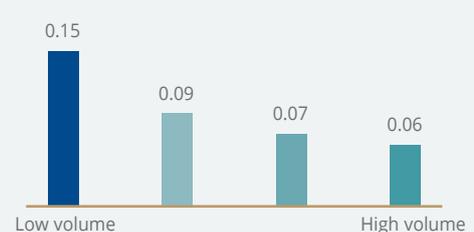
Co-payment on voluntary out-of-network admissions

Outcomes in Centres of Excellence

Risk adjusted mortality rate



Risk adjusted readmission rate



Lowering the cost of healthcare

Discovery Health actively manages the cost of healthcare through an integrated operating model and various health innovations and assets. Some of the strategies Discovery Health employs on behalf of the Scheme include a move away from fee-for-service reimbursement to value-based contracting with providers. This type of contracting includes measures of quality of care and clinical outcomes. Discovery Health has already developed and implemented several value-based contracts with doctors, and is engaging with the industry on identifying other means to reduce healthcare costs. Discovery Health continues to grow and maintain provider networks that are efficient, drive adoption of cost-effective generic medicines, and incorporate technology into the healthcare system – measures that together help to counteract medical inflation without compromising access to and quality of healthcare.

The turnaround in the Scheme's loss ratio is evidence of Discovery Health's capabilities and value added to members. In May 2016, the Scheme was projecting an operating loss of R600 million for the full year. However, Discovery Health's risk management and utilisation interventions supported a turnaround of R700 million, which allowed the Scheme to end the year with a R102 million operating surplus, and net surplus after investment income of R1 305 million.

The turnaround was effected mainly by a reduction in inappropriate admissions to hospital, as well as through the impact of the Scheme's risk sharing contracts with hospital groups. This reversal in the utilisation trend will underpin the Scheme's ability to continue offering lower contribution increases than its competitors in the future, as well as the Scheme's longer-term sustainability.

Discovery Health's managed care processes and intervention resulted in savings of R4.54 billion for the Scheme in 2015. Achieved through tariff and alternative reimbursement mechanism (ARM) savings, medicine savings, benefit design and funding policy, forensics and billing rules and surgical devices management, these savings amounted to a 12% reduction in risk claims, equivalent to a return of 3.5 times on the Scheme's investment in managed care fees; i.e. for every R1 the Scheme paid in managed healthcare fees, it received R3.50 in return¹.

By addressing the increasing costs of healthcare holistically and adopting an approach that combines Vitality engagement with an integrated healthcare system offering, the Scheme can offer substantially lower healthcare premium contributions than the rest of the market. In 2016, the Scheme's premiums were 14.6%² lower than the average for the next nine largest open medical schemes, on a plan-for-plan basis.

¹ 2016 figures not available at time of printing.

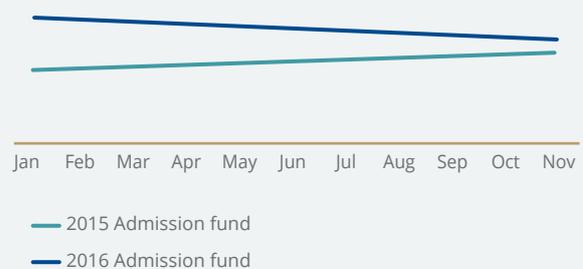
² Based on the rate for a principal member plus one adult beneficiary and one child beneficiary.

DRAMATIC TURNAROUND IN DISCOVERY HEALTH MEDICAL SCHEME LOSS RATIO DUE TO EFFECTIVE INTERVENTIONS

R700 million turnaround in projected DHMS claims – equivalent to 2% of total premiums



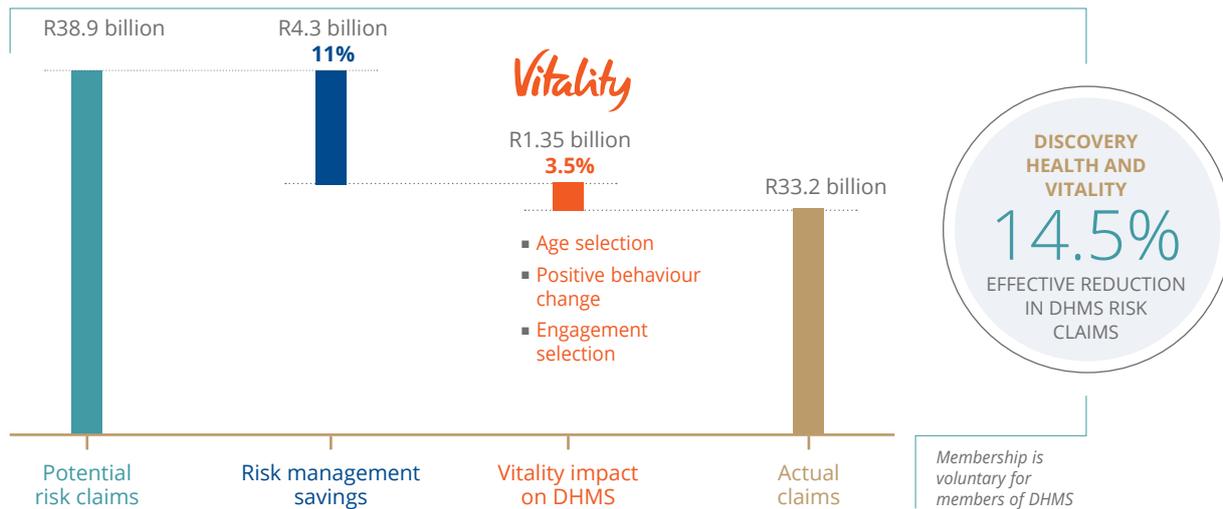
DHMS Medical admission trend





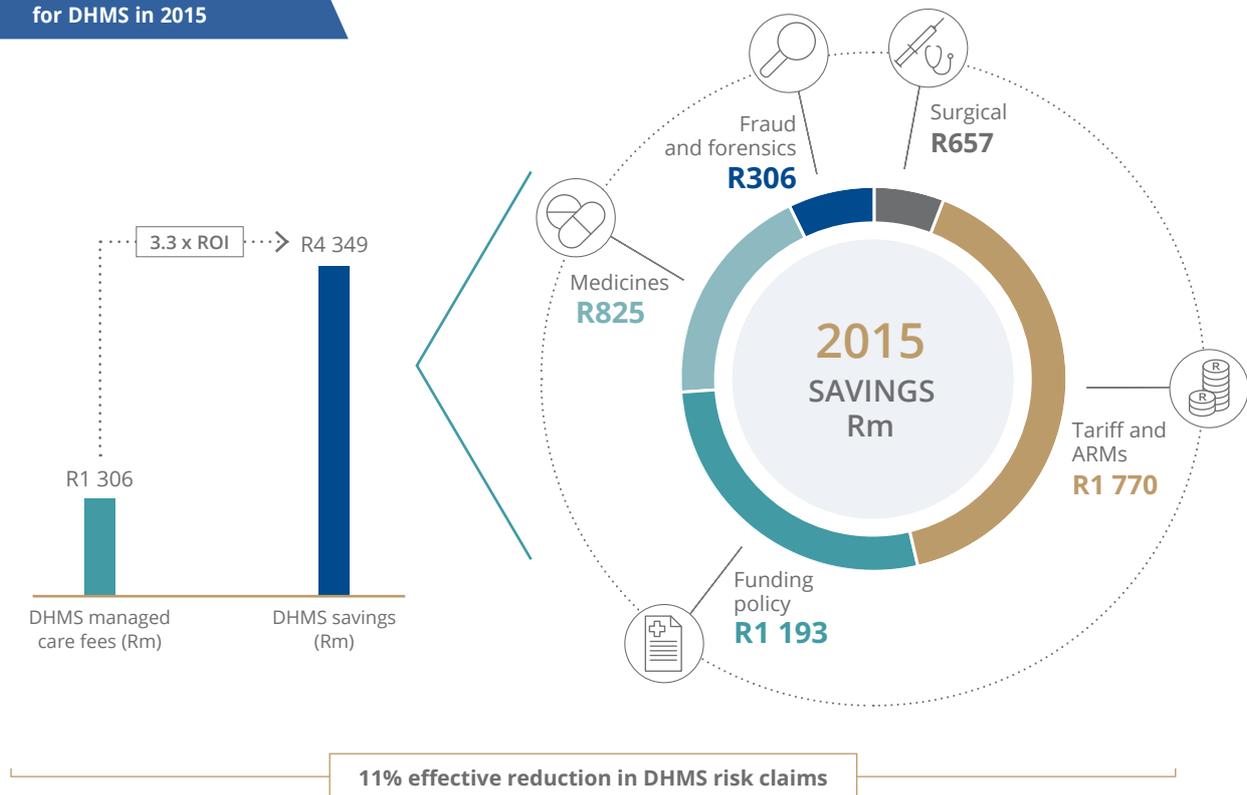
DISCOVERY HEALTH AND VITALITY GENERATES SUBSTANTIAL SAVINGS FOR DHMS

Discovery Health and Vitality had a R5.7 billion positive impact on DHMS risk claims in 2015



DISCOVERY HEALTH'S MANAGED CARE INTERVENTIONS

Achieved R4.3 billion savings for DHMS in 2015



Enabling personalised healthcare and service benefits through technology

Mobile and digital technologies such as wearable technologies and big data are driving significant change in global healthcare systems. They empower members and their doctors to manage their health and health plans more proactively, and improve coordination, quality of care and overall experience. Staying abreast of these emerging technologies and applying data analytics to gain deep insights is critical for new and unique product designs.

Discovery Health invests substantially in new technology and innovation to improve its value proposition and that of its client schemes to attract more members, an investment that amounted to more than R800 million in 2016. This included:

Smart Advisor App

– an iPad app to make it easier for financial advisers to engage with members and sign on new clients.

Direct to Consumer Channel (D2C)

– an online application channel for new members.

The Discovery Member App

has been extremely successful channel to engage with our members. There are currently more than 236 000 users, with more than 2.6 million logins a month.

The Smart Plan – integrates digital platforms, network providers and medical services in a seamless member journey. The plan offers the best value for money in the South African open medical scheme market, due to its use of digital technology and smart networks to significantly reduce healthcare costs. Its premium contributions are 23% lower than the average contributions of comparable health plans from other medical schemes. By incorporating technology, the Scheme can attract a tech-savvy, younger generation of members who are empowered to manage their own health plans and spending. Launched in January 2016, the plan now has approximately 36 000 members. It has been particularly helpful in supporting the Scheme's efforts to attract new members with a younger demographic profile. The launch of The Essential Smart Plan for 2017 extended The Smart Plan range.



Unlimited hospital cover @ 100%

Admissions outside the Smart Hospital Network are subject to a fixed deduction of R8 200.



Full cover for chronic medicine

Through MedXpress, MedXpress partner pharmacies, Clicks or Dis-Chem.



Screening and prevention benefits

Extensive screening and prevention benefits when done at any of our wellness providers.



Unlimited GP consultations

R100 per consultation



Dental check-up

One dental check-up a year, with a R150 payment.



Eye test

One eye test a year in the Smart Optometry Network, with a R100 payment.



Discovery Health is investing over R800 million per annum in technology and digital innovation



Discovery Member App

236 000+ users

59% year-on-year user growth

2.6 million+ monthly logins



First EHR in SA

2 780+ doctors

1.2 million+ member consents



AI Virtual Agent

1st in SA healthcare Science Hub

94% of queries answered with 93% accuracy

5 – 10% reduction in general calls and emails once fully operational



Big Data and Data Science Hub

2 Peta Bytes of data

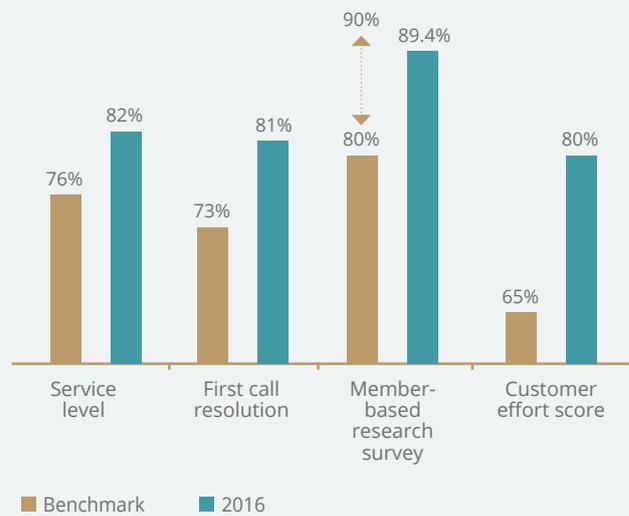
Predictive analytics for health risk, mortality risk, fraud risk, lifestyle choices, etc.

Maintaining world-class service levels

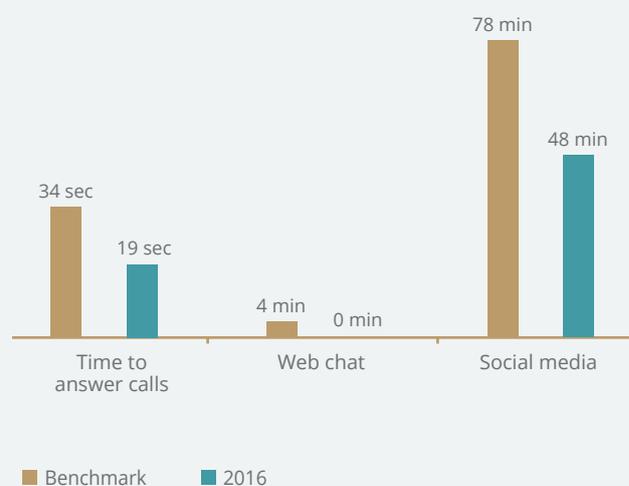
In 2016, Discovery Health enhanced its model to ensure the continued delivery of quality healthcare in an environment of high medical inflation. Its service metrics improved and are considered above international benchmarks.

SERVICE QUALITY EXCEEDS BEST INTERNATIONAL BENCHMARKS

Leading service metrics



Quickest response time



Independent benchmarking: McKinsey Service Comparison; 2016 Dimension Data's Global Contact Centre Benchmarking.