2019

WELCOME TO THE DISCOVERY HEALTH MEDICAL SCHEME ANNUAL GENERAL MEETING

20 June 2019

Agenda

1. Welcome and quorum
2. Minutes of the 2018 Annual General Meeting - for approval
3. Tabling of the 2018 Integrated Report, including the Scheme's Annual Financial Statements for the financial year ended 31 December 2018
    - Presentation by the Chief Medical Officer and the Chief Financial Officer of Discovery Health Medical Scheme
    - Presentation by the CEO of Discovery Health (Pty) Limited, the Administrator of Discovery Health Medical Scheme
4. Governance
    - Discovery Health Medical Scheme Trustee Remuneration Policy and approval of the 2019 Trustee Remuneration
    - Appointment of Auditors
5. Motions
6. General
7. Voting and closure of the AGM
    - Election of Trustees
    - 2019 Trustee Remuneration
    - Non-binding Advisory vote on the Trustee Remuneration Policy
    - Motions
8. Member Engagement
    - The Board of Trustees invites members to engage with the Scheme representatives and the Board of Trustees on specific Scheme matters of their choice immediately after the closure of the AGM.

2019

PRESENTATION BY THE CHIEF MEDICAL OFFICER AND CHIEF FINANCIAL OFFICER OF DISCOVERY HEALTH MEDICAL SCHEME

20 June 2019

We provide sustainable access to the best healthcare, connecting our members and their families to an ecosystem that gives them the highest quality of care for the lowest possible cost, at every stage of their lives.

THIS IS HOW WE DEFINE VALUE

In 2018 87.9% of contributions are used to fund members' healthcare claims

DHMS expense breakdown (2018)

Gross Contributions	Claims	Administration fees	Managed care fees	Financial adviser and Scheme expenses	Shortfall funded from investment income
100.0%	87.9%	7.5%	2.6%	2.5%	-0.5%

Screening and Prevention
Chronic Illness Benefit
Hospital Benefit
Above Threshold Benefit
Day-to-day Extender Benefit
Medical Savings Account
Maternity Benefit

Source: DHMS internal data; 2018

Contributions are used to fund R56 billion of healthcare claims

Hospitals – R29.5bn

52%	Of total claims paid
673 492	Hospital admissions

Oncology – R3.6 bn

6%	Of total claims paid
37 264	Members currently claiming for oncology treatment

Chronic– R3.3 bn

6%	Of total claims paid
705 434	Members with chronic conditions

R56.4 bn

DHMS claims expenditure in 2018 (risk + MSA)

Maternity – R1.5 bn

3%	Of total claims paid
38 221	Number of deliveries

Screening & Prevention

375 914	Members performed health checks

Day-to-day – R18.4 bn

6.4 mil	GP visits

Notes: Total claims include risk and MSA claims
Source: DHMS internal data; 2018

Caring for members with complex and emergency healthcare needs

10 highest individual member claims paid in 2018 = **R 48 million**

Claim	Description
R 5.6m	Age 68: *Infections*
R 5.5m	Age 48: *Long term use of a ventilator (cardiovascular related)*
R 4.9m	Age 78: *Long term use of a ventilator (gastrointestinal related)*
R 4.9m	Age 61: *Infections*
R 4.8m	Age 58: *Infections*
R 4.7m	Age 54: *Respiratory related*
R 4.5m	Age 0: *Neonate*
R 4.4m	Age 82: *Major heart procedure*
R 4.4m	Age 69: *Long term use of a ventilator (respiratory related)*
R 4.2m	Age 81: *Long term use of a ventilator (cardiovascular related)*

210 years

worth of contributions to fund the claim

3 522

individuals claimed over R500 000

890

individuals claimed over R1 million

Notes: Assumes a total contribution of R2,203 per average member per month
Does not include any maternity claims
Source: DHMS data

Hospital admissions contributing most to total claims costs

R29.5bn

Paid for hospital admissions

673 492

hospital admissions

R43 860

Average cost per admission

R1.1bn

Paid for 500 sickest families

Some hospital admissions are less frequent, but very costly, while others may cost relatively less, but can occur much more frequently

Size of the bubble represents total cost to the Scheme

AVERAGE COST PER ADMISSION (LOW – HIGH)

NUMBER OF ADMISSIONS (0 – 5 000 – 10 000 – 15 000 – 20 000 – 25 000 – 30 000)

- Long term use of a ventilator — *R1 145 158*
- Heart bypass surgery and heart catheterisation — *R497 049*
- Heart bypass surgery — *R425 318*
- Surgical procedures to fuse the spine — *R201 146*
- Major joint replacements: lower limbs — *R142 334*
- Surgical procedures of the shoulder or elbow — *R70 001*
- Surgical procedures on the uterus, ovaries or fallopian tubes — *R42 720*
- Depression — *R38 425*
- Infections of the digestive system — *R16 579*
- Pneumonia or whooping cough — *R32 802*
- Caesarean birth — *R42 931*
- Surgical procedures on the lens of the eye — *R27 057*

Source: DHMS internal data; All figures for the period Oct 2017 to Sept 2018

Increasing prevalence and incidence of cancer

R3.6bn

Paid for oncology treatment

56%

Increase in prevalence since 2011

Leukaemia

Top cancer type for children

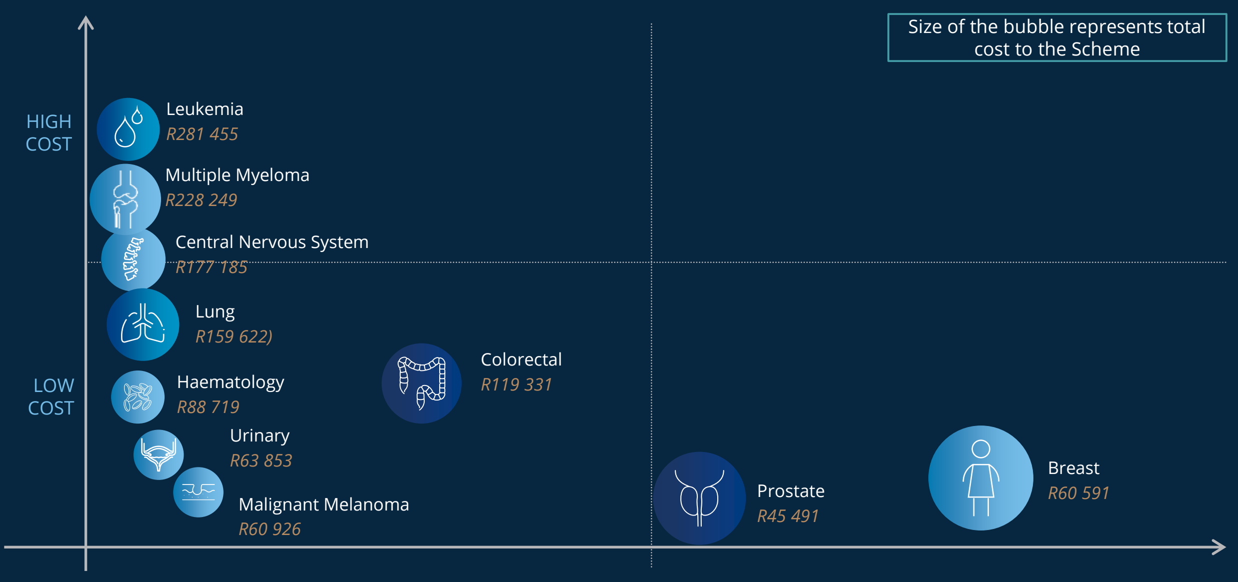
Prostate cancer

Top cancer type for adult males

Breast cancer

Top cancer type for adult females

Top 10 most costly cancers to the Scheme in terms of average cost and prevalence of the cancer



Source: DHMS internal data; All figures for the period Jan 2017 – Dec 2017

Increasing prevalence and cost of chronic disease

R3.3bn

Paid for chronic claims

53%

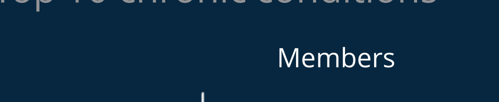
Increase in prevalence since 2009

22%

Members have at least 2 chronic conditions

14%

Members have at least 3 chronic conditions

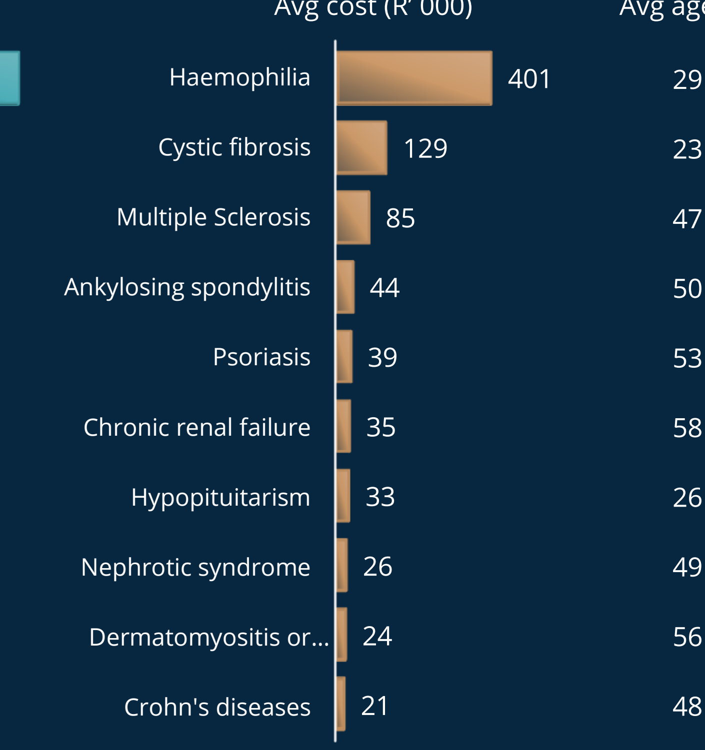


Top 10 chronic conditions

Condition	Members
Essential hypertension	376,341
Hypercholesterlaemia	230,004
Asthma	140,196
Diabetes mellitus type 2	111,030
Hypothyroidism	65,298
Ischaemic heart disease	63,589
HIV Infection	52,545
Bipolar mood disorder	40,199
Menopuase	39,190
Depression	34,191

Source: DHMS data; All figures for the period Oct 2017 – Sept 2018

Top 10 most costly chronic conditions



Condition	Avg cost (R' 000)	Avg age
Haemophilia	401	29
Cystic fibrosis	129	23
Multiple Sclerosis	85	47
Ankylosing spondylitis	44	50
Psoriasis	39	53
Chronic renal failure	35	58
Hypopituitarism	33	26
Nephrotic syndrome	26	49
Dermatomyositis or…	24	56
Crohn's diseases	21	48

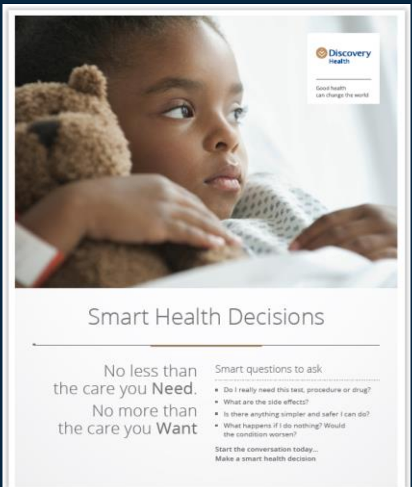
Source: DHMS data; All figures for the period Jan 2017 – Dec 2017

We provide sustainable access to the best healthcare, connecting our members and their families to an ecosystem that gives them the ***highest quality of care*** *for the lowest possible cost, at every stage of their lives.*

THIS IS HOW WE DEFINE VALUE

Safely guiding our members through their healthcare journey

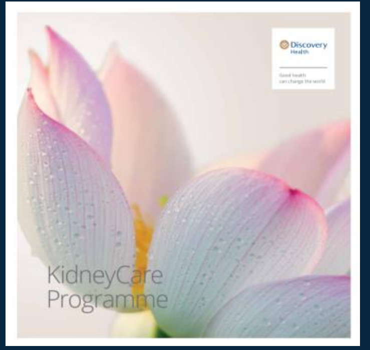
Member campaigns



Disease Management Programmes

DiabetesCare

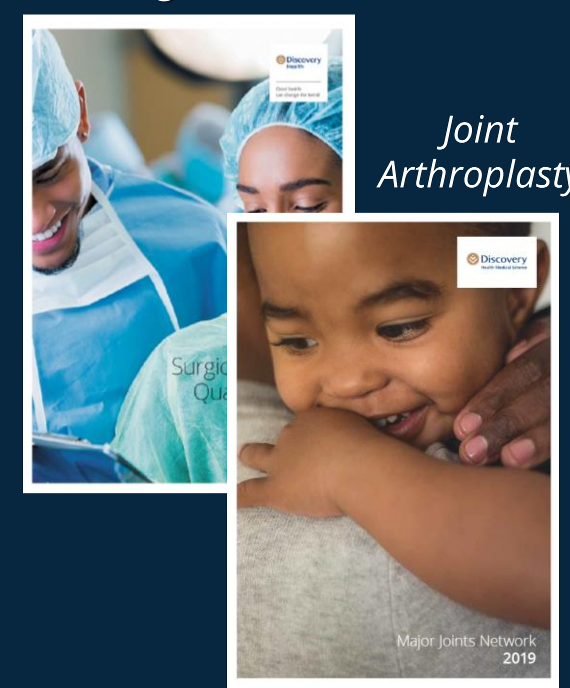
KidneyCare



Value Based Contracts

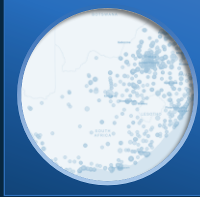
Surgicom

Joint Arthroplasty

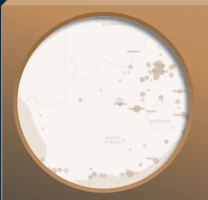


Driving quality through provider networks and payment models

GP Networks



Specialist Networks



Hospital Networks

GP Network

- 6 351 practices
- 85% within DPA

Specialist Networks

- 6 927 practices
- 91% within DPA

Delta

- 44 facilities
- 20% lower contributions

Smart

- 43 facilities
- 23% lower contributions

Day Surgery

- 90 day clinic facilities
- 243 acute hospitals

Higher levels of cover compared to other open schemes

In-hospital claims pay-out ratio: DHMS vs all other open schemes (2017)

	DHMS	All other open schemes
Hospital	98%	93%
Healthcare Professionals	92%	88%
Overall	96%	91%

	Hospital	Healthcare Professionals	Overall
Amount claimed	R36.5 bn	R20.0 bn	R56.5 bn

The difference in claims payout ratio equates to R1,910 per admission (assuming an average hospital bill of R40,125) or R2.5 bn over all in-hospital claims for open medical schemes

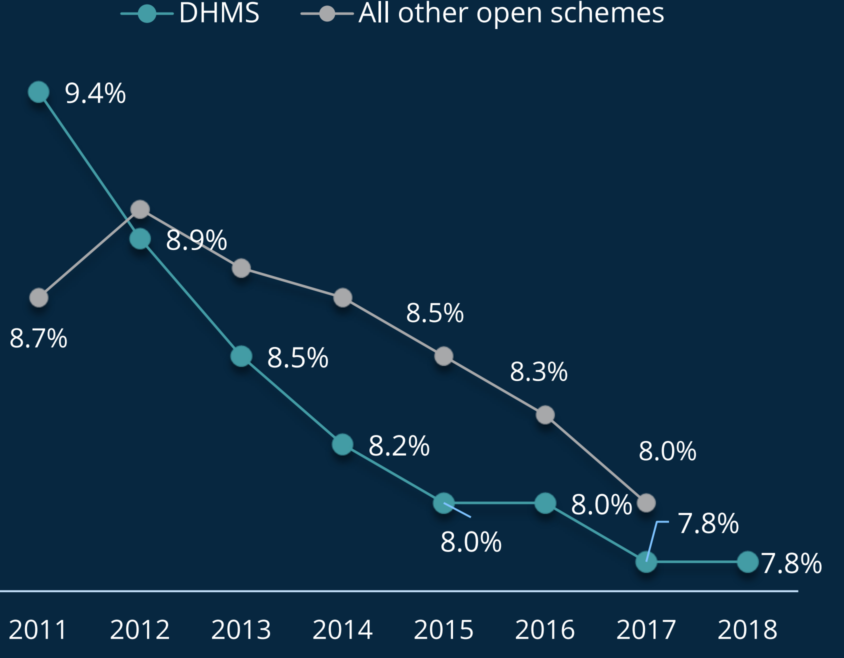
Sources: Council for Medical Schemes Annual Annexures 2017-2018

We provide sustainable access to the best healthcare, connecting our members and their families to an ecosystem that gives them the highest quality of care for the ***lowest possible cost,*** *at every stage of their lives.*

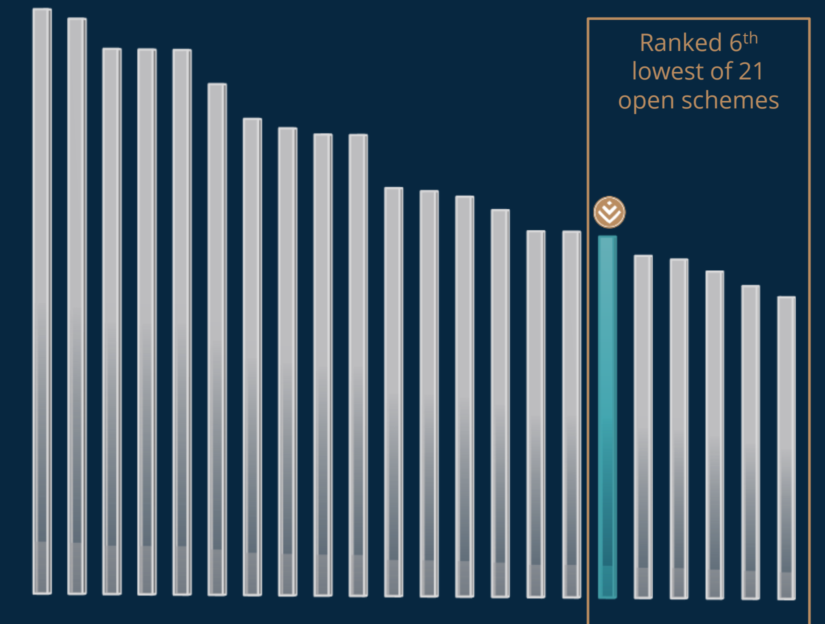
THIS IS HOW WE DEFINE VALUE

Members benefit through continuously reducing administration expenditure that is among the lowest in the industry

Administration expenditure as % of gross contribution income (2011 – 2018)



Administration expenditure as % of gross contribution income (2017)



Notes: The latest CMS report is for 2017
The admin expenditure as % of GCI figure is a weighted average for all other open schemes
The figure of 7.8% differs from the previous figure of 7.6% because it includes other operating expenses and net impairment losses
Source: CMS Annual Report 2017-18

We protect our members' funds from inappropriate use

DHMS forensic savings and recoveries of R469 million in 2018; and cumulative halo effect of R4.5 billion

DHMS fraud savings and recoveries
(R million)

2015	2016	2017	2018
323	333	472	469

IOL Shop @ Loot Drive360 IOL Property Talent360

PERSONAL FINANCE MY MONEY DEBT FINANCIAL PLANNING RETIREMENT INVEST

Anti-fraud efforts pay off for Discovery Health

INSURANCE / 18 MARCH 2019, 3:00PM / SUPPLIED

Sunday Times Times LIVE

NEWS POLITICS SPORT TSHISALIVE LIFESTYLE BUSINESS MOTORI

SOUTH AFRICA

Discovery uncovers more than R500m in fraud

Discovery uncovers more than R500m in fra
goes undiscovered

19 January 2018 - 14:03
BY KATHARINE CHILD

TRENDING BUSINESS MONEY & MARKETS TECH

BUSINESS INSIDER | MONEY AND MARKETS

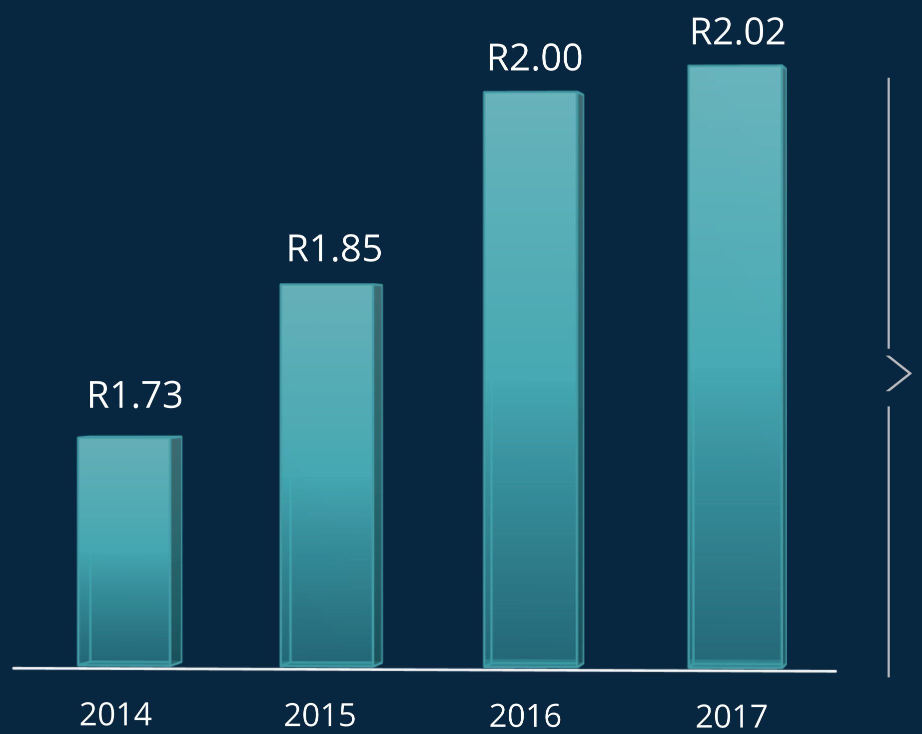
Some of the biggest scams that hit Discovery last year – including a nurse who earned R500,000 a month

Business Insider SA
Mar 12, 2019, 08:15 AM

Members benefit through a **1.0% lower contribution increase** every year

Our members receive increasing value from Discovery Health

Value generated for DHMS members



For every R1 spent on managed care and administration fees, members of DHMS derived **R2.02 in value**

Deloitte.

Reviewed by Deloitte

Source: DHMS data

Members experienced a weighted average risk contribution increase of 9.6% for 2019

DHMS estimated weighted average risk contribution increase vs competitors (2019)

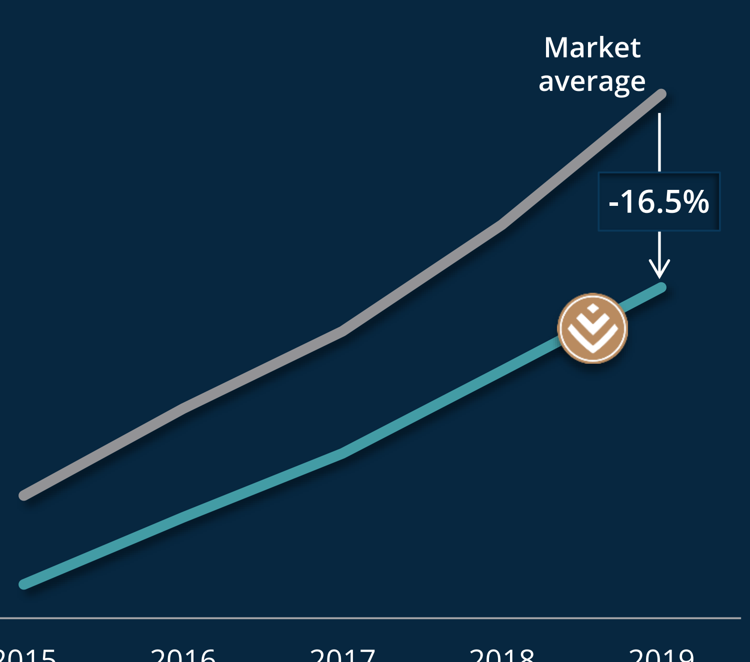
Top 8 scheme average: 9.6%

	Scheme A	Scheme B	Scheme C	DHMS	Scheme D	Scheme E	Scheme F	Scheme G
Estimated weighted average risk contribution increase	6.1%	8.9%	9.1%	9.4%	9.8%	9.9%	10.7%	13.2%
Announced headline increase	6.1%	8.9%	8.5%	**9.4%**	8.9%	9.9%	10.7%	12.5%

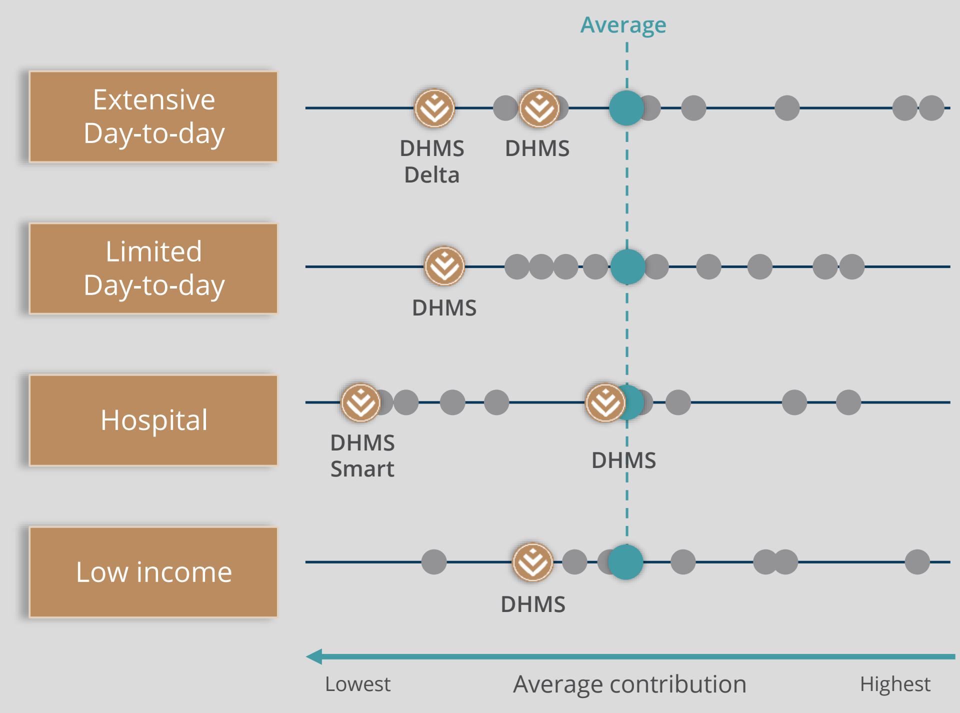
Notes:[1]MSA allocations on FlexiFED options reduced to R300 per annum for a principal member (lower on network options); [2]MSA allocations on Beat 2 to Beat 4 and Pace 1 to Pace 3 reduced by one percentage point (e.g. from 17% to 16%); 3MSA allocations on Premium Plus adjusted from 25% to 20%, and on MediSaver adjusted from 20% to 15%;

Contributions are competitively priced across all segments, usually with superior benefits

DHMS relative contribution differential



Comparative affordability by plan segment



Sources: Published contributions for 2018
P + A + C = Principal member + Adult dependant + Child dependant
Sizwe Medical Scheme excluded from analysis

Discovery
Health Medical Scheme
We provide sustainable access to the best healthcare, connecting our members and their families to an ecosystem that gives them the highest quality of care for the lowest possible cost, at every stage of their lives.
THIS IS HOW WE DEFINE VALUE

2018 DHMS financial highlights: members' funds are secure

Measure	2017 (R million)	2018 (R million)	% change pampm[1]
Gross Contribution Income	59,711	64,649	8.4%
Less savings contribution income	(11,009)	(11,820)	3.6%
Net contribution income	48,702	52,829	9.5%
Relevant healthcare expenditure[2]	(41,748)	(46,719)	7.7%
Gross healthcare result (contributions – claims)	6,954	6,110	
Broker service fees	(1,214)	(1,314)	8.1%
Expenses for administration	(4,512)	(4,876)	6.6%
Other operating expenses	(261)	(273)	8.2%
Net healthcare result (contributions – claims – expenses)	968	(352)	
Net investment and other income[3]	1,482	1,168	20.9%
Net surplus for the year (including investment income)	2,450	816	

[1] Per average member per month
[2] Includes accredited managed healthcare fees
[3] Net investment income and other income (net gains on financial assets at fair value through profit or loss, and sundry income) less other expenses (expenses for asset management services rendered and interest paid)

Adjusting for the VAT increase in 2018, the Scheme's net healthcare result in 2018 would be break-even

VAT increased to 15%, effective 1 April 2018

Budget 2018

South Africans to pay higher VAT for first time in two decades

2018-02-21 14:11 - Jan Cronje

SHARE:

Cape Town - South Africans will be paying a higher rate of VAT for the first time since 1993 from April 1.

Finance Minister Malusi Gigaba announced on Wednesday that the VAT rate will be increase by one percentage point from 14% to 15%, and is expected to raise an additional R22.9bn.

Some basic food stuffs, as well as paraffin, will remain zero rated.

The increase is part of tax policy proposals included in Gigaba's maiden budget to raise R36bn in additional tax revenue for the 2018/2019 financial year.

Budget

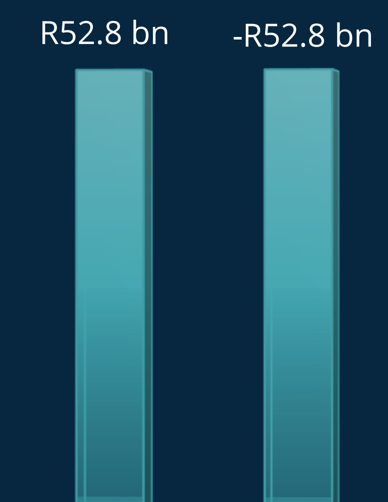
VAT increased to 15%

Proposal will likely be met by significant resistance from unions.

Ingé Lamprecht / 21 February 2018 14:09 3 comments

Vulnerable households will be compensated for the VAT increase through an above average increase in social grants. Picture: Shutterstock

Estimated impact of VAT increase on DHMS net healthcare result

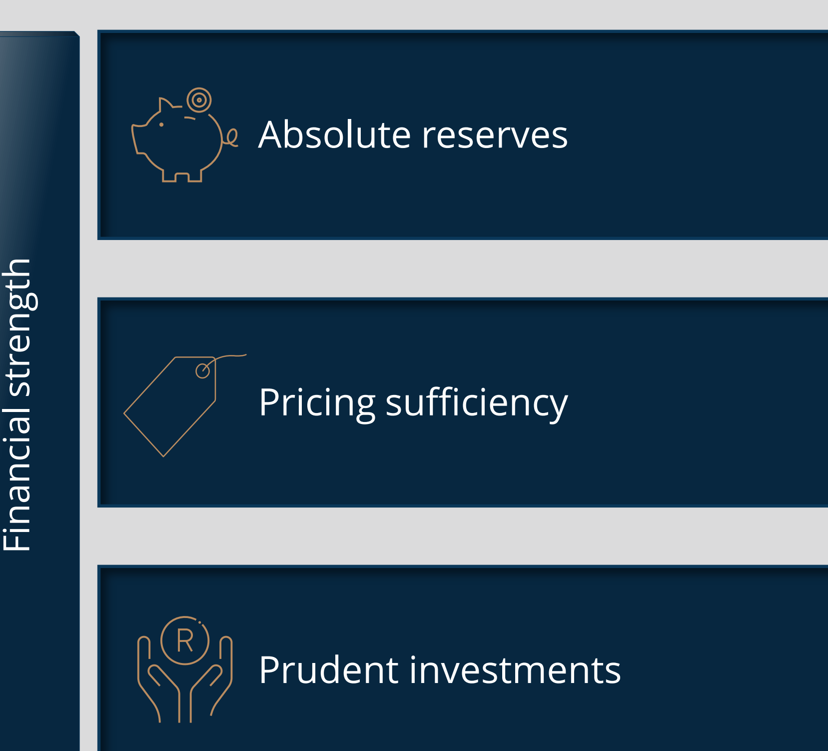


How do we know we are delivering value for our members ?

We measure key metrics for a sustainable medical scheme:

Growth and sustainability

- Membership size
- Membership growth
- Plan movements
- Contribution increases



How do we know we are delivering value for our members ?

We measure key metrics for a sustainable medical scheme:

Growth and sustainability

Metric	Description
Membership size	Greater risk pooling means **more predictable claims experience** and accuracy in pricing, leading to stable performance.
Membership growth	Continuous growth of young and healthy **beneficiaries improves risk pooling** and reflects attractiveness and competitiveness of the Scheme through cross-subsidisation principles.
Plan movements	Indicates **satisfaction**, stability in benefit design and appropriate pricing.
Contribution increases	Reflects **effective risk management** and **value proposition** to members.

DHMS continues to grow and attract new members

DHMS beneficiaries covered

Dec 2017
2.78m beneficiaries

Dec 2018
2.82m beneficiaries

3,000,000
2,800,000
2,600,000
2,400,000
2,200,000
2,000,000
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000

2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

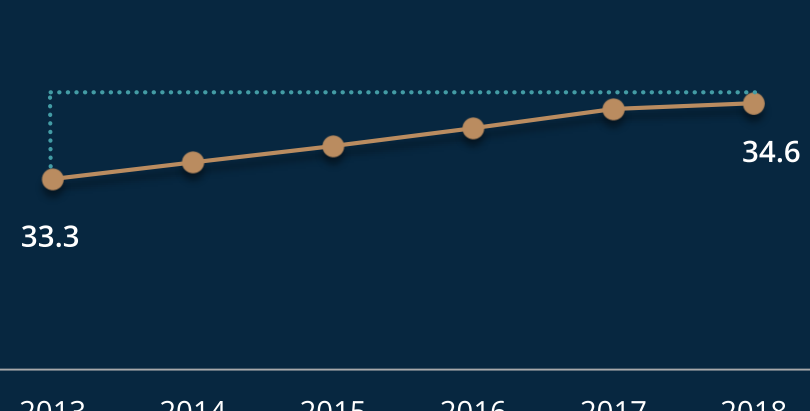
2.1%
Net growth in principal members from 2017 to 2018

> 41 000
Beneficiaries added in 2018

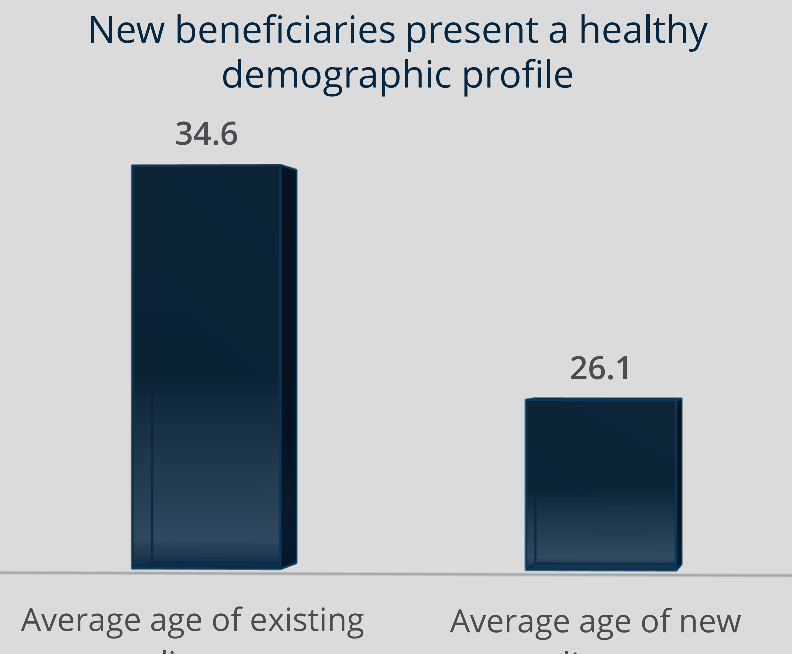
Source: DHMS Integrated Report

New members are younger which positively impacts the Scheme's risk profile

1.3 years aging over a 5-year period



Average claims of a medical scheme increase by 2.5% for every year that the average age of a medical scheme increases



Source: DHMS data

Consistent pattern of stable plan distribution

Stability in plan movements over time | 94% of members do not change plans

Year	Downgrade	Upgrade	No change
2015	2.3%	3.0%	94.7%
2016	3.2%	2.9%	93.9 %
2017	2.5%	3.2%	94.2%
2018	2.9%	2.9%	94.2%

Source: DHMS internal data

How do we know we are delivering value for our members ?

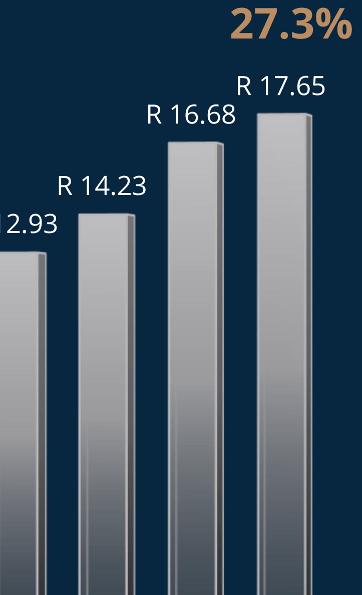
We measure key metrics of a sustainable medical scheme

Financial strength

Absolute reserves	Demonstrates ability to **meet large, unexpected claims variation.**
Pricing sufficiency	Surplus year-on-year reflects **contribution levels** that are in line with expected membership and claims.
Prudent investments	Ensuring that **investment returns** are maximised within an acceptable and conservative level of risk

DHMS has significant reserves to fund members' claims

Reserves[1] (R billions) and solvency level



Investment returns

5.85% p.a.

ROI

Highest possible rating in the industry

Industry ceiling

DHMS reserves higher than combined reserves for

all other

open schemes combined

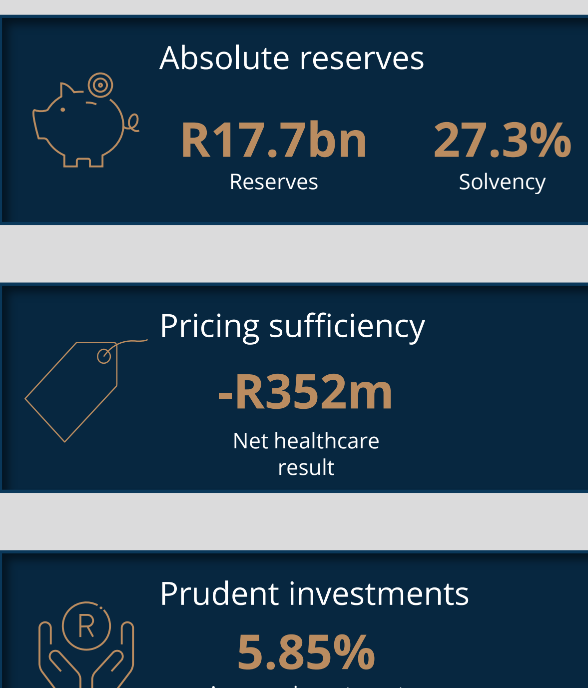
Notes: [1]Reserves refer to accumulated funds (per Regulation 29); On average, reserves of R5,899 per beneficiary
DHMS reserves being higher than all other open schemes is a 2017 calculation
Source: Published results 2018

How do we know we are delivering value for our members ?

We measure key metrics for a sustainable medical scheme:

Value for money

For every R1 spent on managed care and administration fees, members of DHMS derived **R2.02 in value**



We protect our members' funds through strong, independent governance structures

CMS
Council
for Medical Schemes

ACCOUNTABLE TO

DHMS
MEMBERS

SERVICES

BELONG TO

ELECT

BOARD OF TRUSTEES

BOARD COMMITTEES

GOVERNS

REGULATES

Discovery
Health Medical Scheme

APPOINTS/
OUTSOURCES
TO

MANDATES

REPORTS TO

ACCREDITS

Discovery
Health
Administrator and
Managed Care Provider

OVERSEES

PRINCIPAL OFFICER

Scheme Office

PRESENTATION BY THE CEO OF DISCOVERY HEALTH (PTY) LTD LIMITED, THE ADMINISTRATOR OF DISCOVERY HEALTH MEDICAL SCHEME

20 June 2019

Agenda

01

Review of 2018 performance

02

Key trends impacting DH and DHMS in 2019 and beyond

03

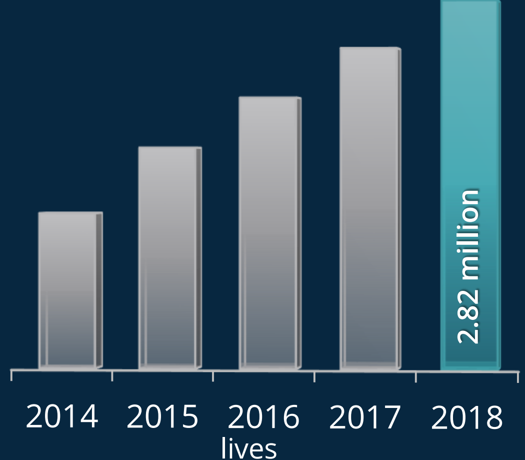
2019 Strategic objectives

Discovery Health Medical Scheme | Sustained strong performance in 2018 despite challenging environment

Membership growth

>41 000
Net new lives

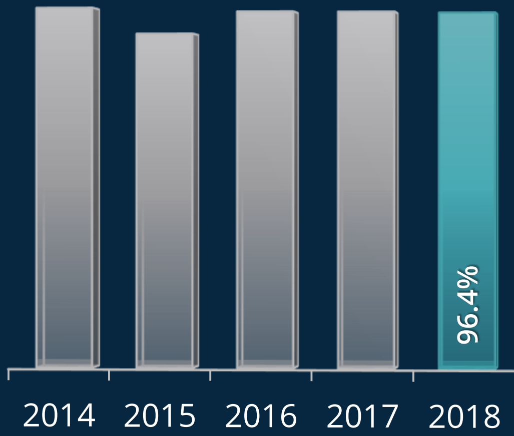
56.6%
Market share



DHMS has **+30%** more lives than the rest of the open medical scheme market combined

Sustained high cover ratios

96.4%
In-hospital claims payout ratio



Financial strength

-R352m
Net healthcare result
(-R2m adjusting for VAT impact)

R17.6bn
Reserves

DHMS reserves are **+10%** greater than combined reserves of the rest of the open medical scheme market

DHMS performed strongly relative to key competitors in 2018

DHMS net healthcare result vs competitors (2018)

Rand per average beneficiary

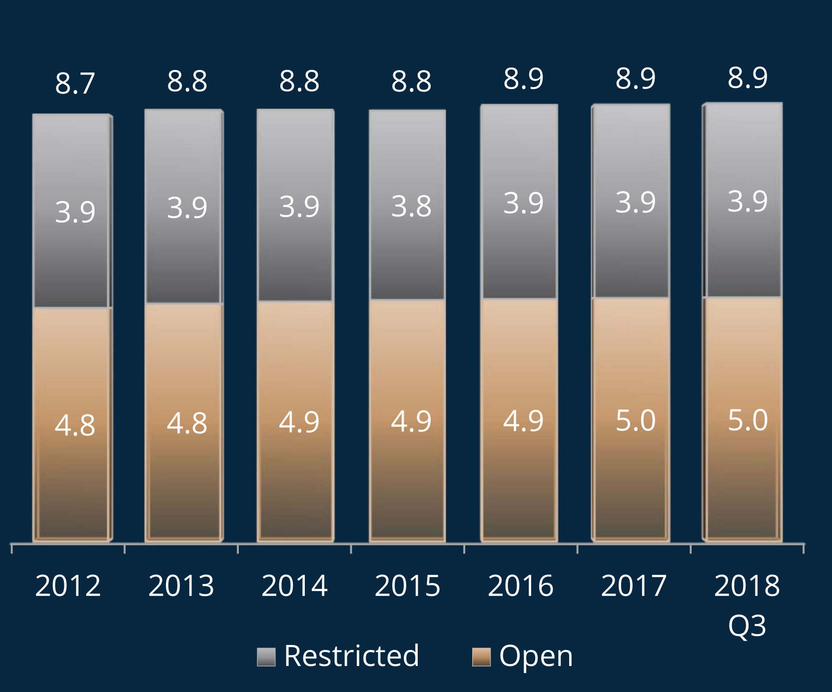
Scheme	Rand per average beneficiary
Scheme A	444
Discovery Health Medical Scheme	-126
Scheme B	-309
Scheme C	-491
Scheme D	-637
Scheme E	-1201

Sources: Scheme financials 2018

DHMS continues to grow, while membership growth across the industry is under pressure

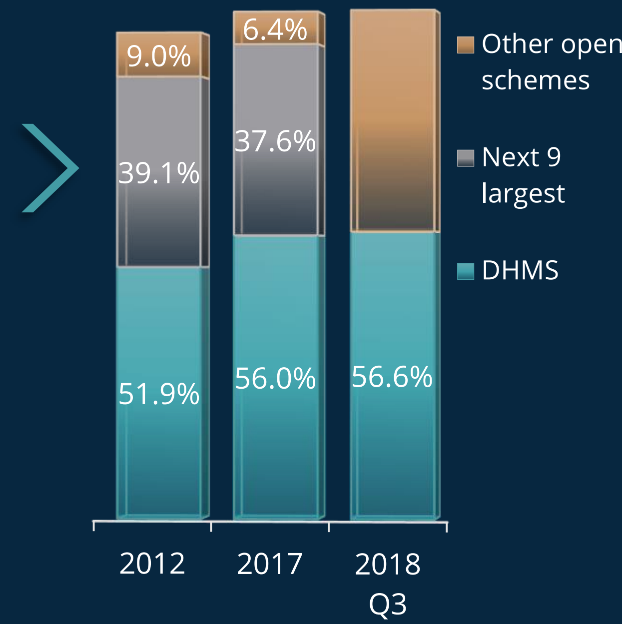
Open medical scheme membership has remained largely static since 2015

Number of beneficiaries (million) (2012 - 2018 Q3)



DHMS has achieved strong growth over this period, in contrast to competitors

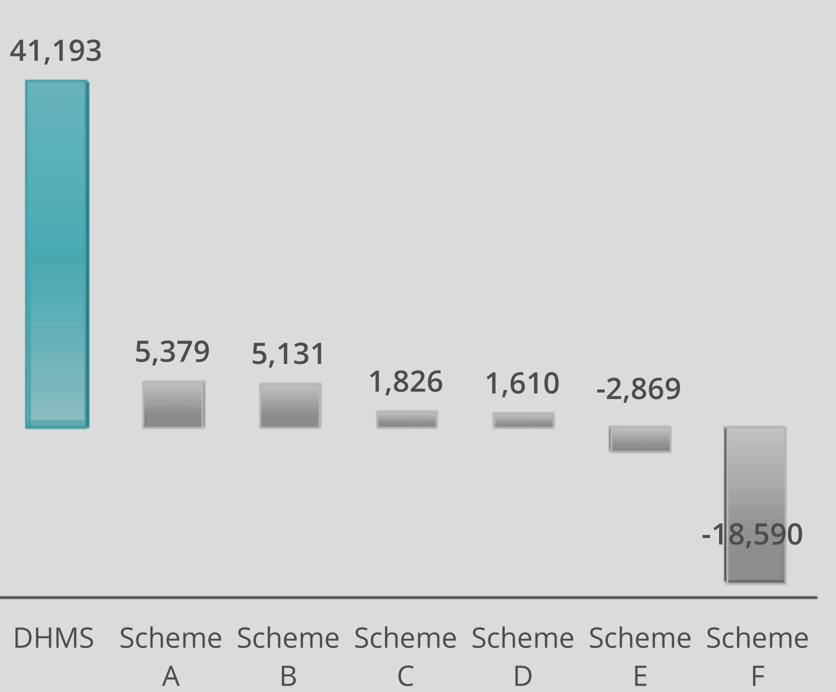
Market share (2012, 2017, 2018 Q3)



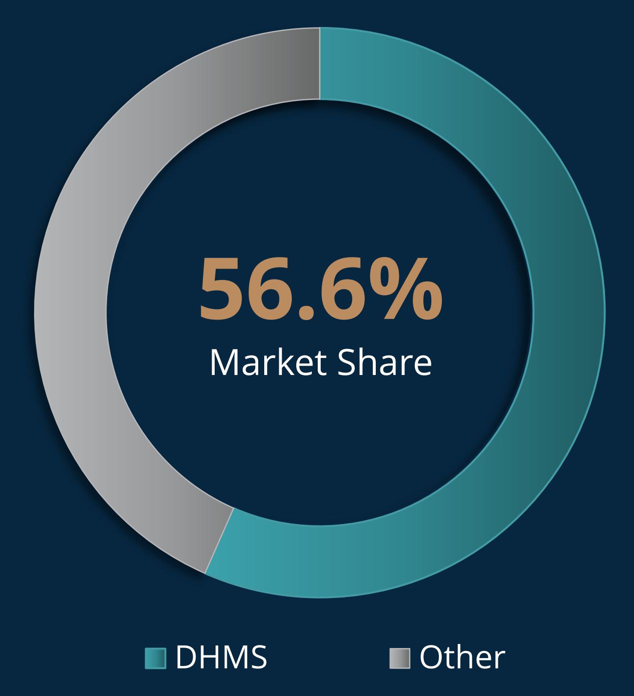
Change	
'12-'17	'17-'18 Q3
-108,462	-23,906
+308,923	+36,310
+200,461	**+12,404**

Sources: Council for Medical Schemes Annual 2012 – 2018; 'Quarterly Reports for the period ending 30 September 2018', CMS

Members are choosing DHMS as their preferred healthcare partner



Open schemes market share (2018 Q3)



Notes: Comparison amongst the seven schemes by size
Source: Published results 2018; CMS Annual Report 2017-18

Four major macro trends shaping the future of healthcare in SA and global markets

01

Regulatory Trends

- National Health Insurance and Medical Schemes Amendment Bills
- Health Market Inquiry

02

Economic Trends

- Low GDP growth
- Increasing unemployment
- Increasing cost of living
- Slowing growth in scheme membership and downgrade trends

03

Demand Side Trends

- Increasing disease burden
- Ageing
- Anti-selection
- Digitisation

04

Supply Side Trends

- Increasing bed supply
- High cost new medical technologies
- Fragmented delivery system
- Over-servicing

The regulatory environment is increasingly complex

Council of Medical Schemes

Managing a complex and evolving policy environment

Health Market Inquiry

Comprehensive and insightful

Will recommendations be implemented?

National Health Insurance Bill

Phased roll-out

Complex politics

Financial constraints

Micro regulation ⟷ Macro regulation

Consumers are facing affordability pressure with medical scheme contributions representing an increasing share of wallet

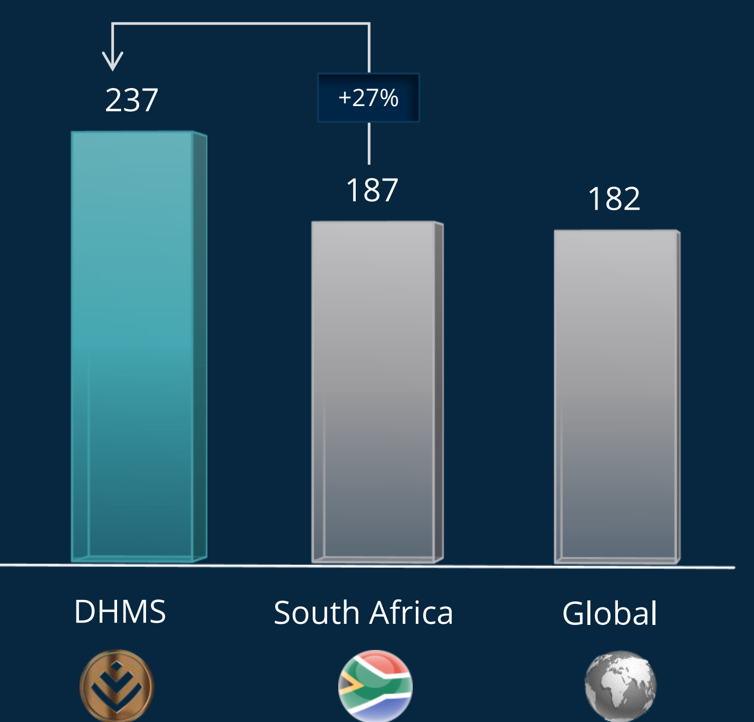
	2012		2017
Median household income for **top decile** of South African population:	R647,223	›	R753,346

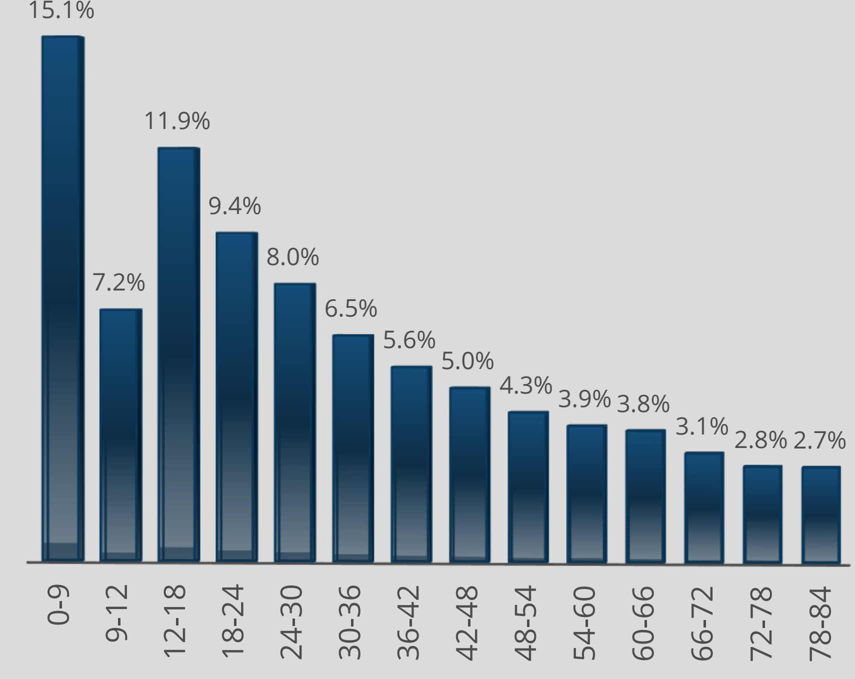
Contribution (P + A + C) as a proportion of household income (2012 vs 2017)

	2012	2017
Hospital | Network plan	3.6%	5.1%
Limited day-to-day | Network plan	5.1%	6.9%
Hospital | Non-network plan	5.0%	6.7%
Limited day-to-day | Non-network plan	6.7%	9.0%
Extensive day-to-day | Network plan	9.9%	13.9%
Extensive day-to-day | Non-network plan	11.0%	15.4%

Notes: Household income data by decile was used from 2010 and 2014 to linearly interpolate 2012 figures and extrapolate 2017 figures. Income appears to be gross and no allowance is made for tax or medical aid tax credits
Source: 'Income and Expenditure of Households 2010/2011' ,STATS SA, 2012; 'Living Conditions of Households in South Africa 2014/15', STATS SA, 2015

Clear evidence of substantial adverse selection

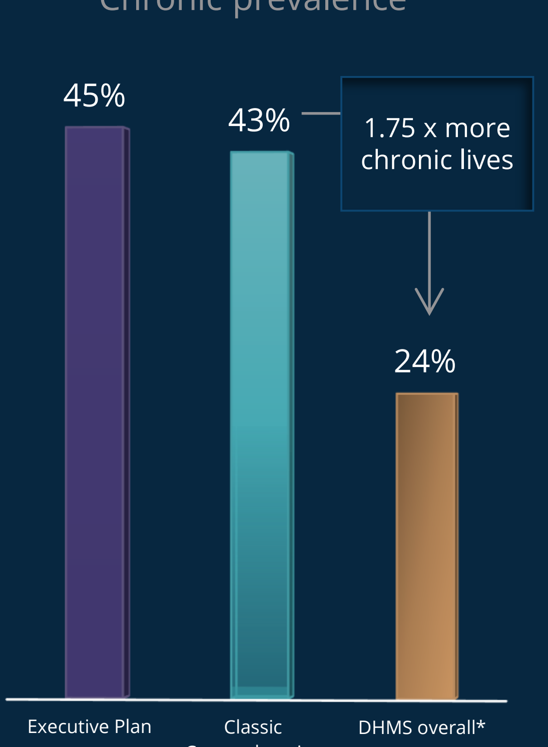


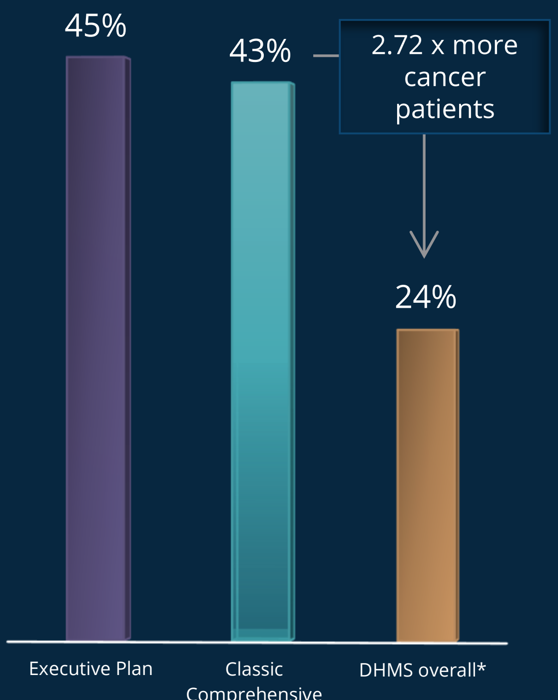


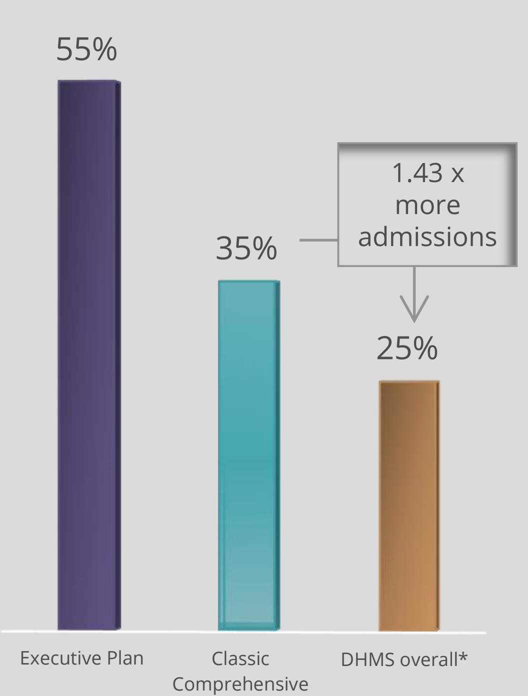
Source: World Health Organisation's research titled 'GLOBOCAN 2012: Estimated Cancer Incidence, Mortality and Prevalence Worldwide in 2012'; Months 84+ represent 57.4% of new cancer diagnoses

Notes: All births on KeyCare Plus between 2016 and 2018; Months 84+ represent 10.6% of births

Executive and Comprehensive plan options display a particularly selective membership profile



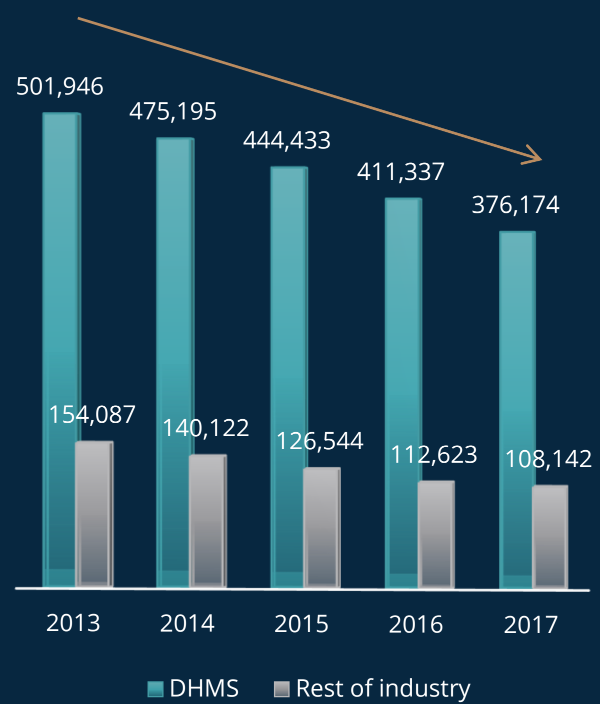




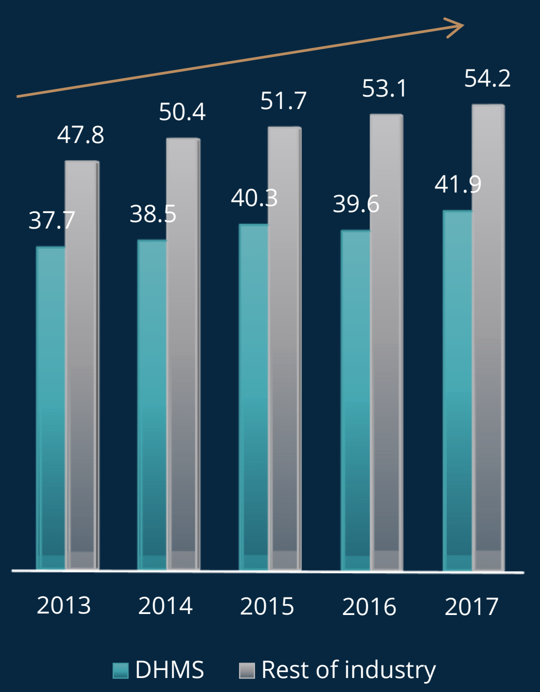
Source: DHMS data
*Excluding Executive, Comprehensive & KeyCare options

The performance of the top end plans is consistent across the industry and not unique to DHMS

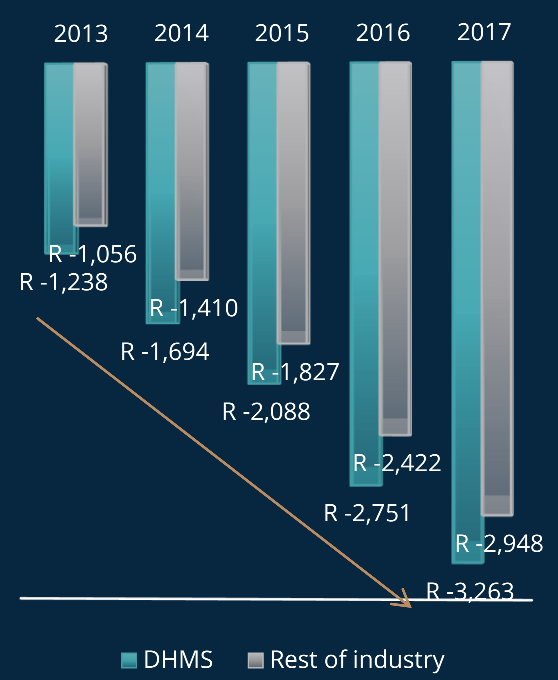
Declining membership growth



Increasing average age



Consistently negative net healthcare result

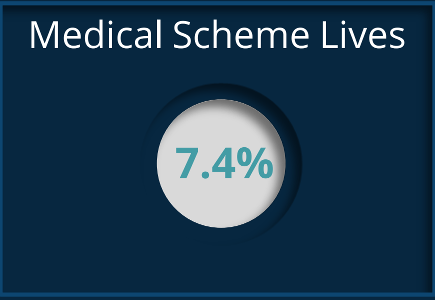


Source: CMS data; DHMS and Scheme financials 2013 - 2017

Supply induced demand and new technologies continue to drive high medical inflation

Increasing bed supply

Growth between 2010 and 2016

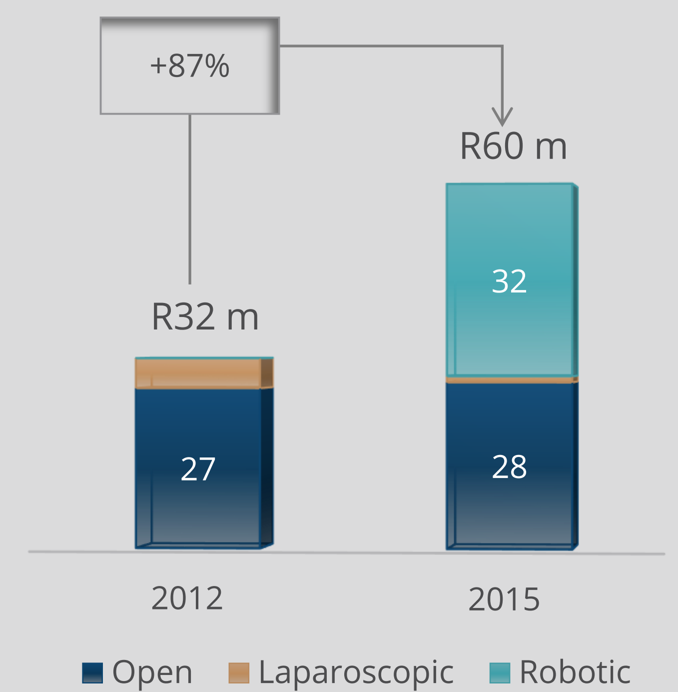


R855m

Total spend since inception of new hospitals (January 2016 – March 2018)

New technology

Shift to robotic prostatectomy procedures has led to an 87% cost increase over 4 years



Source: Internal DH Analysis

Discovery Health's strategy for DHMS

01 | Lowering healthcare costs

02 | Superior quality of care for scheme members

03 | Using digital technology to transform healthcare and member servicing

04 | Making members healthier

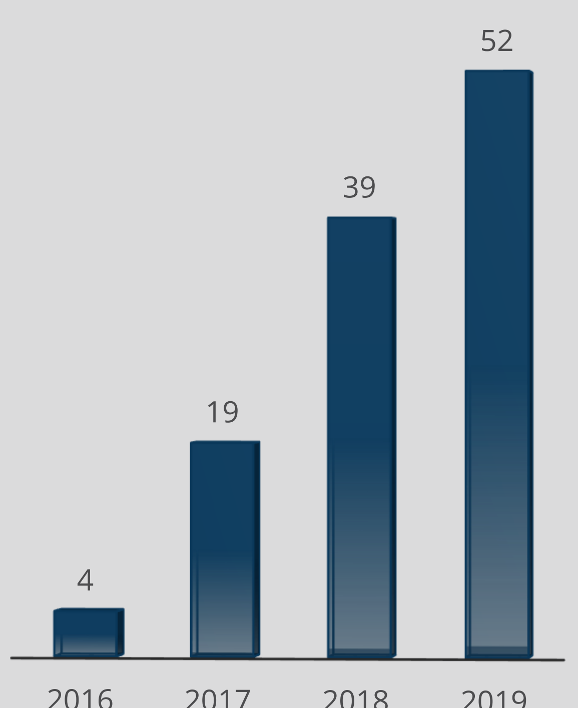
Discovery Health's social mandate | curbing medical inflation

Discovery Health average annualised inflation rates (2008 – 2018)

April 2018: VAT increase from **14%** to **15%** for the first time in a democratic South Africa

Hospital benefit managers having a significant impact on admission rate

Number of DHMS on-site case managers (2016 - 2019)



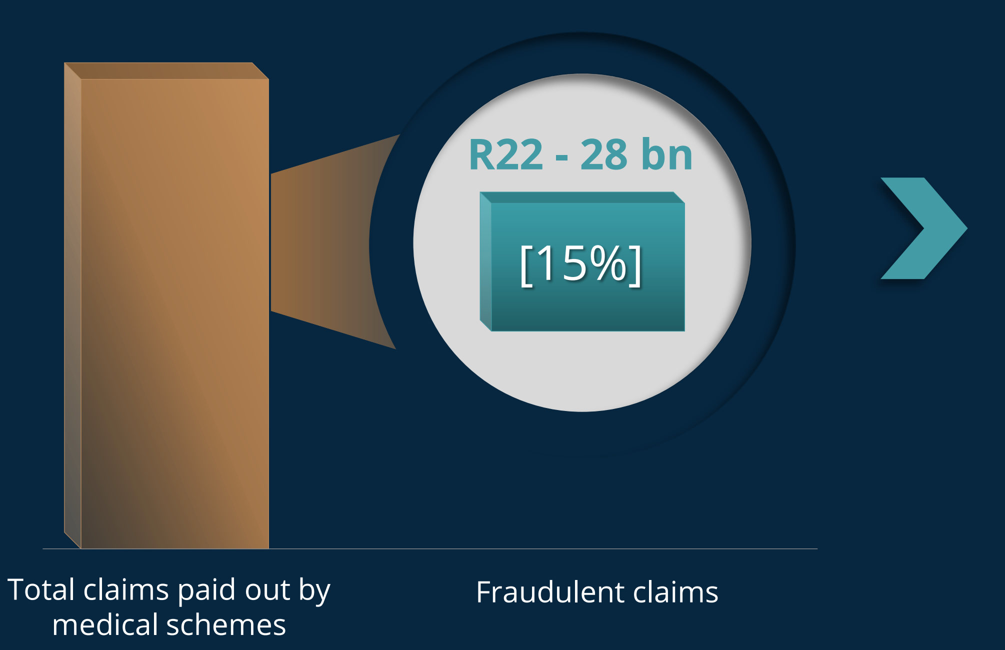
Year-on-year change in admission rate (2015 – 2018)

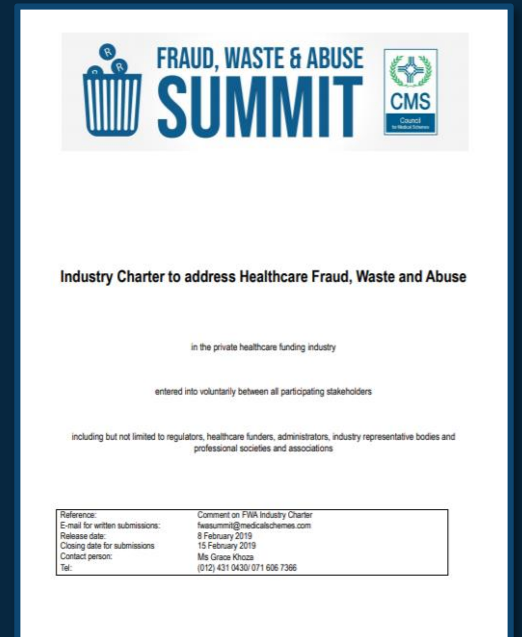
2015	2016	2017	YTD Jan 18	YTD Feb 18	YTD Mar 18	YTD Apr 18	YTD May 18	YTD Jun 18	YTD Jul 18	YTD Aug 18	YTD Sep 18	YTD Oct 18	YTD Nov 18	YTD Dec 18
1.69%	3.21%	-0.33%	0.58%	1.66%	1.54%	2.63%	2.51%	2.42%	1.48%	0.98%	0.90%	0.70%	0.49%	0.39%

Source: Internal DH Analysis

Fraud, waste and abuse has been recognized as an industry imperative by the Council for Medical Schemes

In 2017, 15% of all claims paid by medical schemes were rejected due to Fraud, Waste and Abuse





Industry Charter to address Healthcare Fraud, Waste and Abuse

in the private healthcare funding industry

entered into voluntarily between all participating stakeholders

including but not limited to regulators, healthcare funders, administrators, industry representative bodies and professional societies and associations

Reference:	Comment on FWA Industry Charter
E-mail for written submissions:	fwasummit@medicalschemes.com
Release date:	8 February 2019
Closing date for submissions	15 February 2019
Contact person:	Ms Grace Khoza
Tel:	(012) 431 0430/ 071 606 7366

Sophisticated processes for fraud detection and recovery

Claims received from
35 000
Healthcare professionals

90%

31 500
healthcare professionals claim's processed automatically and paid in good faith to healthcare professionals within 4-5 days

10%

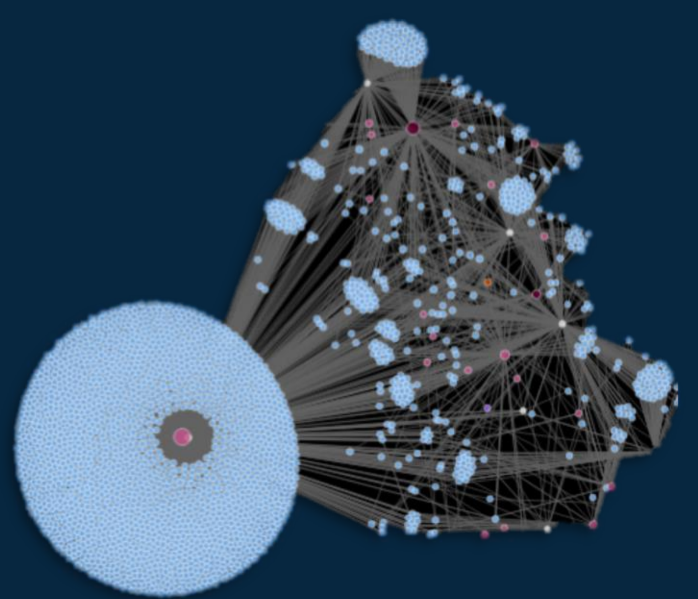
3 500
healthcare professionals claim's identified as potentially fraudulent through:

53%
Tip-offs

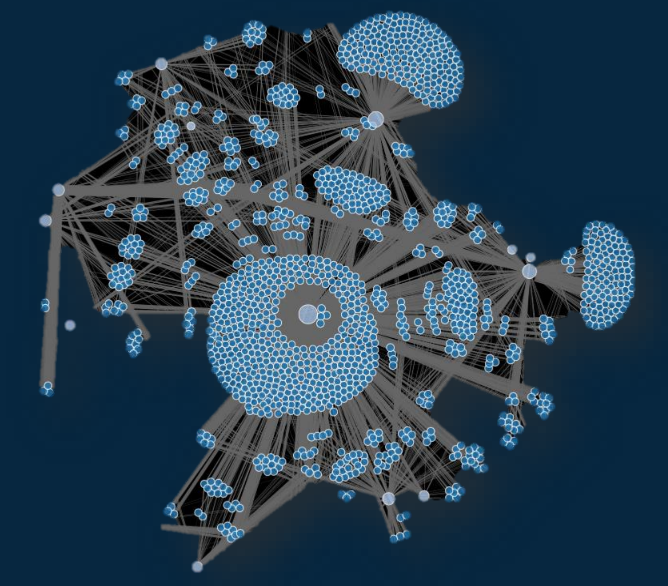
47%
Data analytics models and tools

Identifying fraud using network analytics models

Flower shaped clusters identify large volumes of patients being shared by more than one doctor



Eye-ball shaped clusters identify large volumes of patients being referred or admitted to one particular doctor

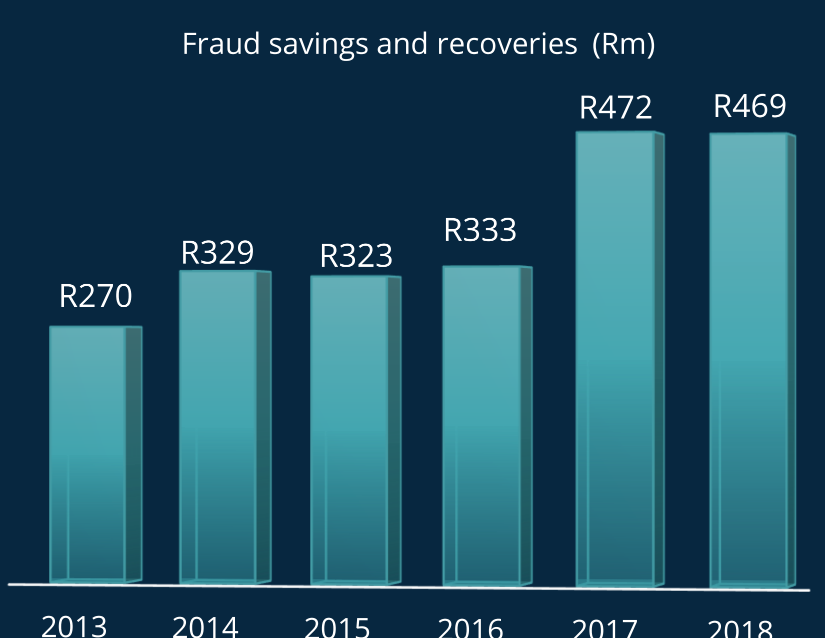


The majority of fraud, waste and abuse investigations are initiated as a result of tip-offs from members or other physicians

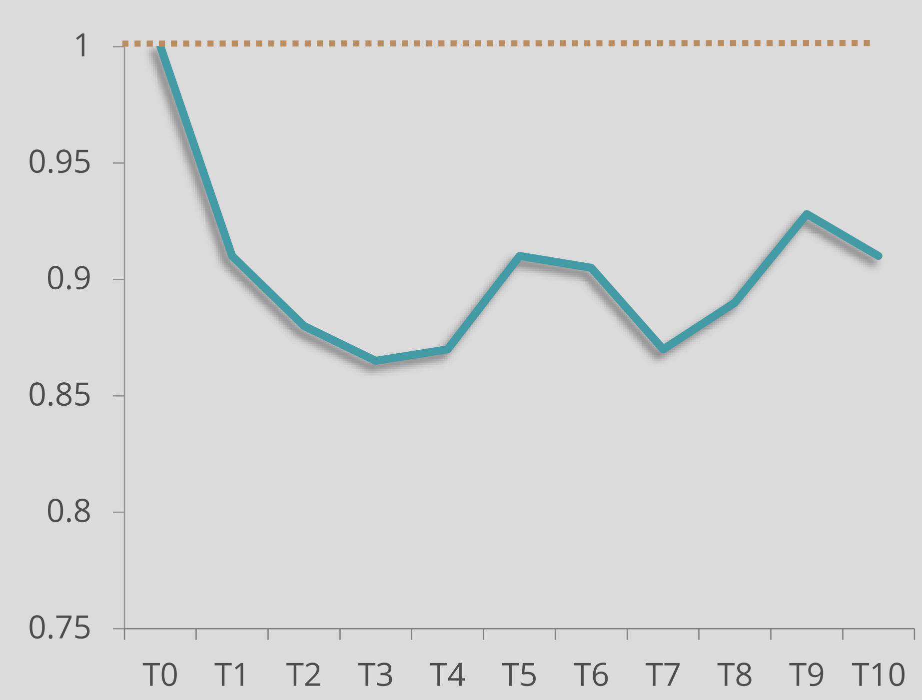
	01 | Cardiologist's fraudulent claims	02 | Irregular Radiologist Billing
Case Details	• A tip-off was received on a cardiologist for: - Claiming that patients were in ICU when they were in fact in High Care; - Submitting claims with false condition codes to artificially extend the length of stay - Manipulating dates of outpatient consults to increase the amount billed per consultation	• Tip-offs indicated irregular billing behaviour by a radiologist • The radiologist worked from several hospitals and the practice was unable to produce invoices to validate certain costly consumables
Response	• Data analysis confirmed that the cardiologist was a significant outlier for claims compared to peers - Cost per claimant 43% above national average - Count of angiograms 2X that of peers	• Fraud analytics indicated that the radiologist had a claims profile with several red flags
Outcome	• This cardiologist acknowledged these fraudulent activities and agreed to refund Discovery Health's client schemes an amount of R9 million	• The practice billed for consumables already paid • Certain consumables used may have originated from public facilities but were charged for • Billing for theatre assistance was claimed but not proved • The practice agreed to repay an amount of R6 million and the matter was escalated to the HPCSA

Discovery Health's internal fraud measures have saved the Scheme over R1bn per annum

Significant fraud savings and recoveries



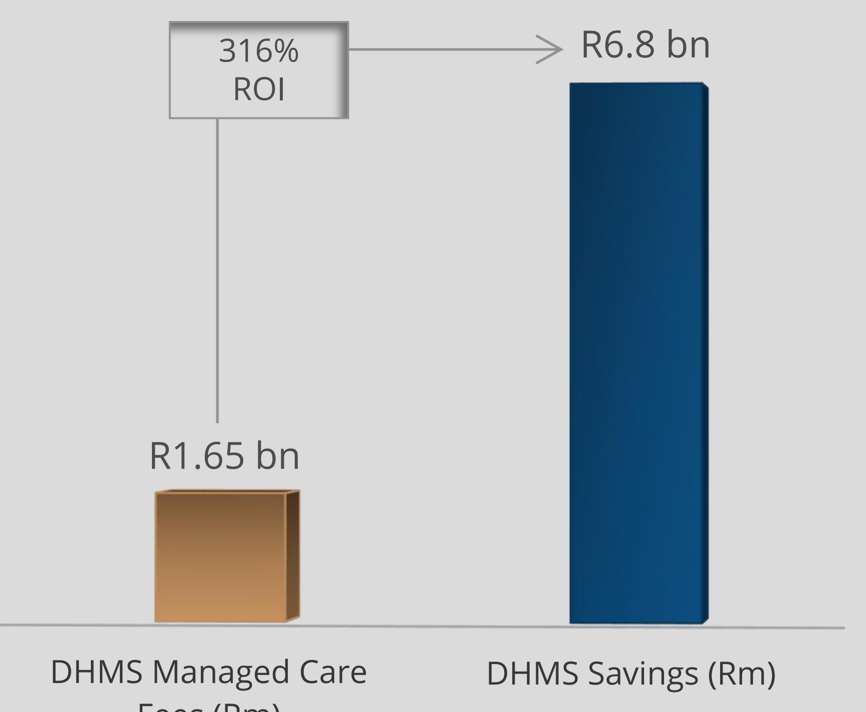
Cumulative Halo effect of R4.5 billion (2012-2018)

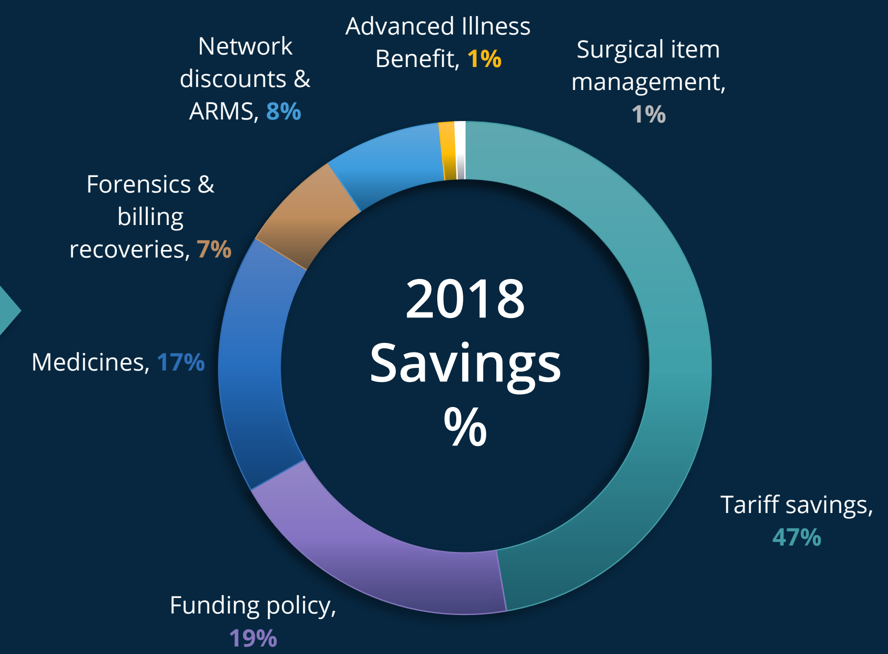


Members benefit through a **1.0% lower contribution increase** every year

Managed care interventions and provider contracting strategies generated a 316% ROI for DHMS

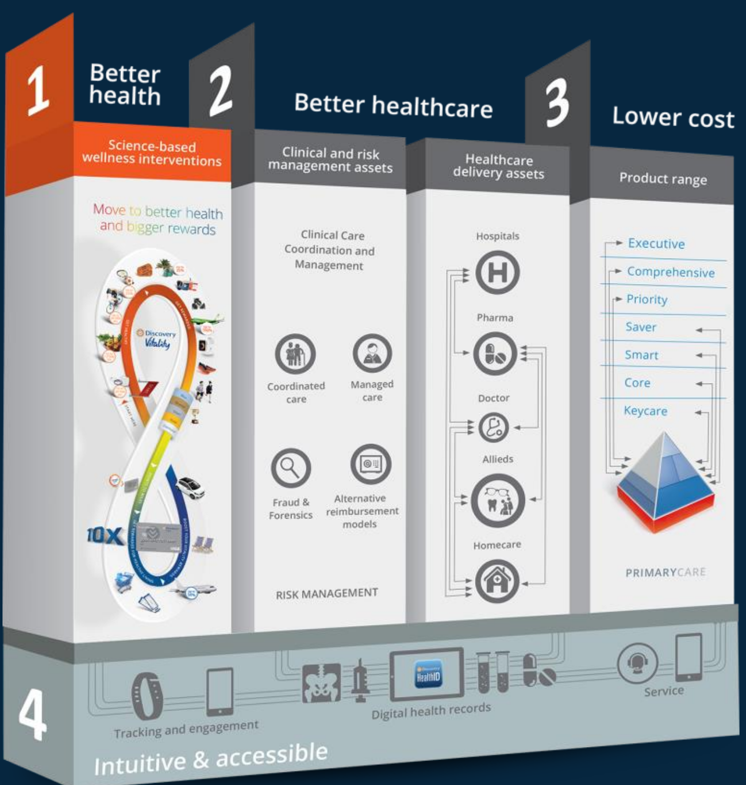
Discovery Health managed care interventions in 2018





Note: Figures unaudited
Source: DHMS internal analysis

Discovery Health's strategy for DHMS



01 | Lowering healthcare costs

02 | Superior quality of care for scheme members

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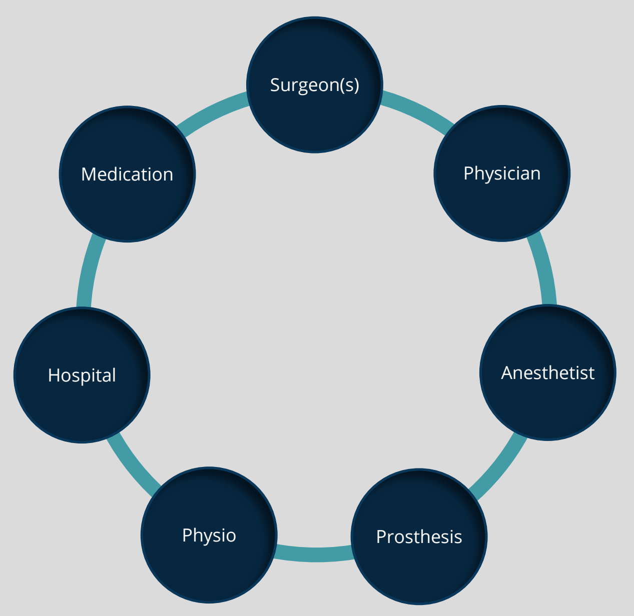
High-quality, cost effective arthroplasty network with defined pathways

AIM: To provide access to a network of high quality hip and knee arthroplasty centres of excellence



- Full cover network with global fees: 1 Jul 2018
- 94 Centres of Excellence; 334 surgeons
- 90% coverage
- Co-payment out of network

- Pre & post surgery education
- Clinical outcome measures
- Single global fee for all services
- Peer review & mentoring
- Full cover in network
- Incentivise highest quality of care
- Reimbursement alignment to share savings

Discovery Health's strategy for DHMS

01 | Lowering healthcare costs

03 | **Using digital technology and data science to transform healthcare and member servicing**

04 | Making members healthier

Agent affinity matching to improve service experience and sentiment

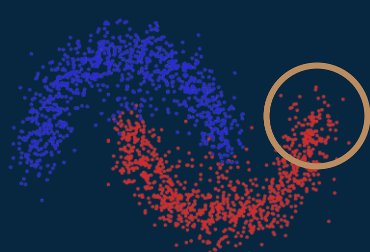
Data sources / factors

- Age
- Gender
- Health plan

Most significant factors

- Chronic status
- Vitality status
- Vitality benefit usage
- Socio economic status
- Digital index
- Agent tenure

Clusters based on which members have best experience with each group of agents



70%

of calls routed to matched agents

Member satisfaction score

8.92

Compared to **8.81** for non-affinity routed members

First call resolution

80.2%

Compared to **78.7%** for non-affinity routed members

Sentiment analysis using natural language processing

- Algorithm derives client sentiment from emails and agent notes
- Emails scored and auto-routed in real time
- Dedicated team of agents
- Contact typically made within 2 hours
- Members given interim feedback

Business Impact

Analysed interactions increased from **4.5% to 43%** (10-fold increase)

Average customer service rating increased to **9/10** post intervention

Machine Learning model to predict new diabetes cases and progression

2015

2016

No evidence of diabetes

Predictive target

Members unregistered for management but for whom diabetes DEG has been opened or diabetes drug claims are being paid

Diabetics registered on management program

2,8m

Non_diab_2015

Non_diab_2016

~0.37% incidence rate
= 24k members

DEG_or_drug_diab_2015

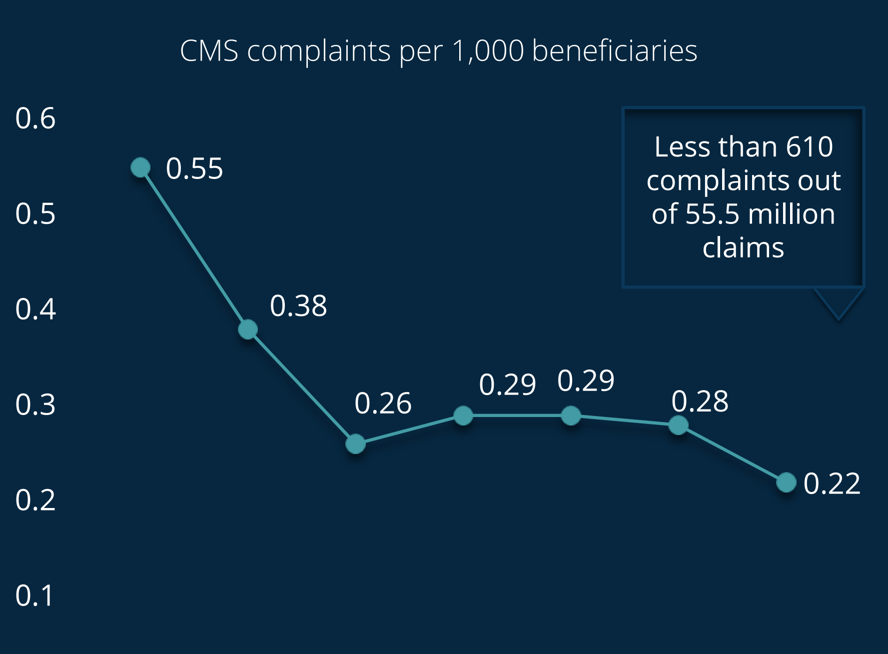
DEG_or_drug_diab_2016

Reg_diab_2015

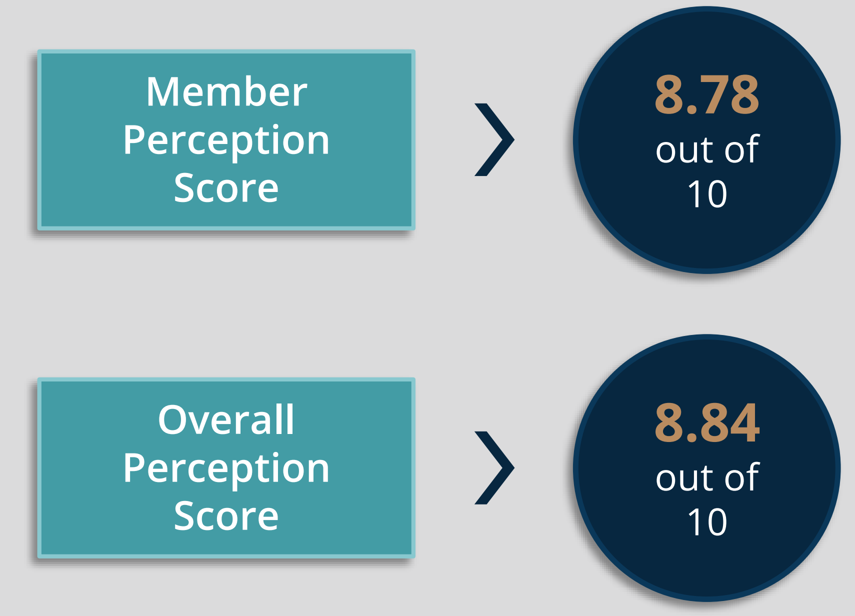
Reg_diab_2016

89k

Our efforts are realised through lower levels
of complaints improving member satisfaction



Consistently high member satisfaction



Notes: 609 CMS complaints were recorded in 2018
Overall Perception Score considers members, brokers and providers
Source: DHMS Integrated Report

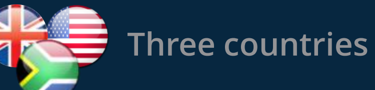
Discovery Health's strategy for DHMS

01 | Lowering healthcare costs

03 |

04 | Making members healthier

The largest behaviour change study on physical activity based on verified data



422 643 people,
91 000 Apple Watch users

Before and after taking up Apple Watch

Granular data

Demographic data,
Biometric information,
Physical activity

Proven behavior change

+34%
Increase in physical activity

+4.8 DAYS
Per month

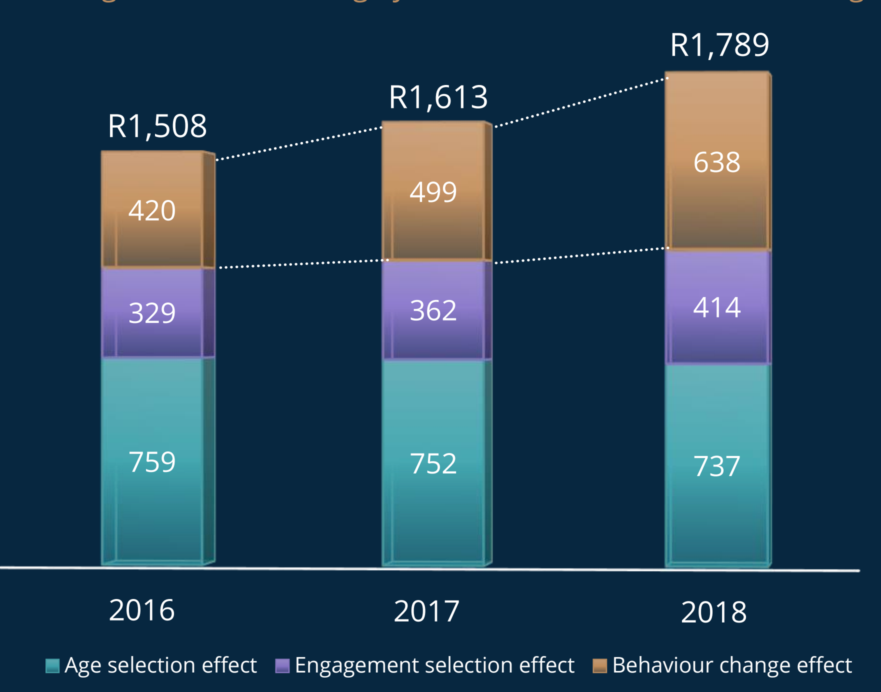
+109-206%
Increase in physical activity
For at risk populations
(BMI > 30)

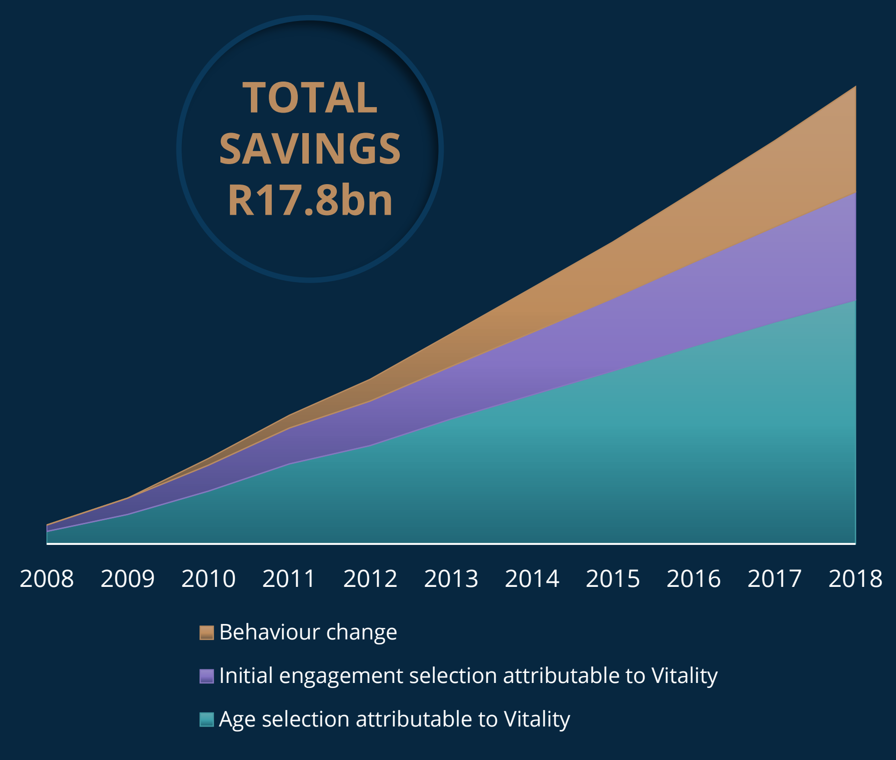
+49%
Increase in INTENSIVE Physical activity
(Advanced workouts)

All data was collected on a fully anonymized basis in line with GVN and Apple's commitment to privacy. At risk population range a function of country considered

In 2018, Vitality generating R1.8bn savings for DHMS

Savings increase can largely be attributed to behaviour change





Note: Figures adjusted for 2018
Note: Figures unaudited
Source: DHMS internal analysis

Impact of Discovery Health and Vitality on DHMS risk claims in 2018

Impact of Discovery Health and Vitality on DHMS risk claims in 2018

R45.1bn

R6.8bn
11.9%

R1.8bn
3.4%

- Age selection
- Positive behavior change
- Engagement selection

R36.4bn

Potential risk claims

Risk management savings

Vitality impact on DHMS

Actual risk claims

Note: Figures unaudited
Source: DHMS internal analysis

2019

2019 ANNUAL GENERAL MEETING REMUNERATION PRESENTATION

20 June 2019

Agenda

1. Remuneration Governance

2. Trustee Remuneration Policy
   - Remuneration Methodology
   - Remuneration of the Board of Trustees

3. Proposed 2019 Trustee Remuneration
   - Trustees
   - Chairpersons

Remuneration governance

- The Board of Trustees is responsible for the development and implementation of a Remuneration Policy for Scheme employees as well as Trustees and Board Committee members.
- The Board of Trustees has delegated the responsibility of Scheme remuneration oversight to the Remuneration Committee (REMCO).
- REMCO constitution – Four Trustees, one of whom is the Chair, and one Independent member.
- REMCO makes use of independent expert consultants and market benchmarking to assist the Committee in terms of best remuneration practices.

Remuneration governance

Adoption and Approval of Remuneration

- Trustees remuneration – presented at this AGM for majority vote by members, after the approval thereof by the Board of Trustees, on recommendation of the REMCO.

Approval of Trustee Remuneration Policy

- The Remuneration Policy for Trustee and Board Committee member remuneration for each prospective financial year is reviewed and recommended by the REMCO Committee to the Board for approval and thereafter tabled at the AGM for a non-binding advisory vote by members.

Trustee Remuneration Disclosure

- AGM – members
- Regulator - Council for Medical Schemes
- Integrated Annual Report

Remuneration methodology

- The objective of the remuneration policy for the Board and Board Committees is to provide a legal and policy framework against which all remuneration decisions are made, validated, implemented, approved and reported by the Scheme.
- The DHMS REMCO engaged PwC's Remuneration Practice in 2014 to assist in developing a new remuneration methodology and benchmark applicable to Trustees, taking into account that DHMS is a non-profit organisation and the guidelines of Circular 41 of 2014 issued by the CMS. This methodology was submitted to the CMS on 24 November 2014.
- In terms of this methodology:
  - Trustee remuneration is based on a professional fee and an hourly rate. The fees take into account the fact that the Scheme is a non-profit entity.
  - For 2019 this hourly rate is R3 551.61 (excl. VAT) which is reflected in the next slide and which members are required to vote on via ballot:
  - i.e. R5 073.73 (professional fee) less 30% = R3 551.61 (hourly rate).
- The total remuneration paid to Trustees is determined by the following elements and illustrative examples will be provided:
  - Number of meetings planned per year
  - Preparation time for each meeting
  - Duration of meetings
  - Estimated time required between meetings
  - The number of actual meetings attended

Remuneration methodology

- The total annual fees payable to Trustees and Board Committee members is split into:
  - "Annual Base Fee" (70%)
  - "Fee per Meeting" (30%)
  - Additional amount for unplanned meetings

- The Annual Base Fees and Fees per Meeting payable to Board Committee members differ from those payable to Trustees insofar as the duration and frequency of their meetings differ from Board of Trustee Meetings.

- For 2019, the policy has been updated to clarify the manner in which Trustees and Independent Board Committee members are remunerated for the various forums and meetings that they participate in.

- Trustee and/or Board Committee member fees are exclusive of VAT. Where Trustees and/or Board Committee members are registered for VAT, a Tax invoice is issued to the Scheme.

Remuneration methodology

- Attendance at a Board or Board Committee meeting as an observer
  - No remuneration is payable

- Attendance at an Annual General Meeting ("AGM") or a Special General Meeting ("SGM")
  - Trustees
  - AGM will receive remuneration at the hourly rate for preparation time, as agreed to by the Chair, and the duration of their attendance SGM - will receive remuneration at the hourly rate for preparation time, as agreed to by the Chair, and the duration of their attendance
  - Independent Board Committee Members
  - AGM or SGM - will receive remuneration at the hourly rate for the duration of their attendance

- Attendance at Board strategy sessions; other Board Committee strategy sessions; and workshops
  - Board Strategy session - Trustees and Independent Board Committee members will receive remuneration at the hourly rate for preparation time, as agreed to by the Chair of the Board, and the duration of their attendance.
  - For Board Committee Strategy session - will receive remuneration at the hourly rate for preparation time, as agreed to by the relevant Chair, and the duration of their attendance.
  - For Workshops - Trustees and Independent Board Committee members will receive remuneration at the hourly rate for preparation time, as agreed to by the relevant Chair, and the duration of their attendance.

- Attendance at a Board or Board Committee meeting at the request of a Chairperson
  - Independent Board Committee member invited to attend a Board meeting or Trustee invited to attend a Board Committee meeting - will receive remuneration at the hourly rate for preparation time, as agreed to by the relevant Chair, and the duration of their attendance

Remuneration methodology

- Attendance of an Independent Board Committee Chairperson at a Board meeting
  - Such an Independent Board Committee Chairperson will receive remuneration at the hourly rate for preparation time, as agreed to by the Chair of the Board, and the duration of their attendance
- Attendance of a Trustee and/or Independent Board Committee member at an Ad Hoc meeting
  - Trustees and Independent Board Committee members will receive remuneration at the hourly rate for preparation time, as agreed to by the Chair of the Board, and the duration of their attendance.
- Trustee training
  - Trustees are NOT paid for attending training or conferences over and above the training fees, travel costs, accommodation and subsistence costs
- Consulting fees
  - Trustees are NOT paid any consulting fees
- Incentive programmes
  - Trustees do not participate in any incentive programmes
- Reimbursement of expenses
  - Trustees are reimbursed all reasonable expenses incurred by them in the performance of their duties as a Trustee

Proposed 2019 trustee remuneration | Chair of board of trustees

The table below provides an overview of the Proposed Board Chairman's remuneration for 2019 and uses the methodology as discussed in the Remuneration Policy.

Proposed fee build up for the Remuneration of the Chairman of the Board of Trustees	
Additional time requirements and preparation for Board of Trustee Meetings	20
Attendance at Board of Trustee Meetings	8
Total number of hours per Board of Trustee Meeting	**28**
Number of meetings per year (average)	7
Total number of hours per year for the Board of Trustees meetings (average)	**196**
Proposed **2019** professional hourly rate	R3 551.61
Total fee for attendance at Board of Trustee meetings (x7)	**R696 115.56**

The total fee will vary depending on the actual number of Board meetings attended per year.
The additional time requirements are for matters that require deliberation at the Board of Trustee Meetings, matters that arose from previous meetings that require attention and resolution, and Scheme strategic matters which require the Chair's involvement.

Proposed 2019 trustee remuneration | Trustees

The table below provides an overview of the Proposed Board Chairman's remuneration for 2019 and uses the methodology as discussed in the Remuneration Policy.

Proposed fee build up for the Remuneration of Trustees	
Preparation for Board of Trustee Meetings	8
Attendance at Board of Trustee Meetings	8
Total number of hours per Board of Trustee Meeting	**16**
Number of meetings per year (average)	7
Total number of hours per year for the Board of Trustees meetings (average)	**112**
Proposed **2019** professional hourly rate	R3 551.61
Total fee for attendance at Board of Trustee meeting (x7)	**R397 780.32**

The total fee will vary depending on the actual number of Board meetings attended per year.
Trustees also serve on Board Committees together with Independent Committee members, for which they receive remuneration as per the Remuneration Policy.

Proposed 2019 trustee remuneration | Chair of a board committee

The table below provides an overview of the Proposed Board Chairman's remuneration for 2019 and uses the methodology as discussed in the Remuneration Policy.

Proposed fee build up for the Chair of a Board Committee**	
Preparation for Board Committee Meetings	11
Attendance at Board Committee Meetings	4.75
Total number of hours per Board Committee Meeting	**15.75**
Number of meetings per year (average)	4
Total number of hours per year for the Board Committee meetings (average)	**63**
Proposed **2019** professional hourly rate	R3 551.61
Total fee for attendance at Board Committee Meetings (x4)	**R223 751.43**

***The Audit Committee is used as an example.*
The total fee will vary depending on the actual number of Board meetings attended per year.
The additional time requirements are for matters that require deliberation at the Board of Trustee Meetings, matters that arose from previous meetings that require attention and resolution, and Scheme strategic matters which require the Chair's involvement.

Discovery

2019

The Discovery Health Medical Scheme Annual General Meeting

THANK YOU