



October

2018

21st South African Financial Services Conference

BRETT TROMP | CFO | DISCOVERY HEALTH



1

Efficacy of the Shared value model achieving the results that drive a social purpose

2

Discovery Health and growth

3

Big data accelerating the competitive landscape

4

Vitality continues to catalyze the growth

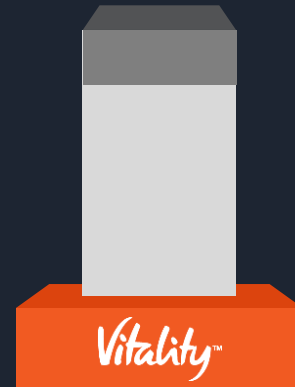
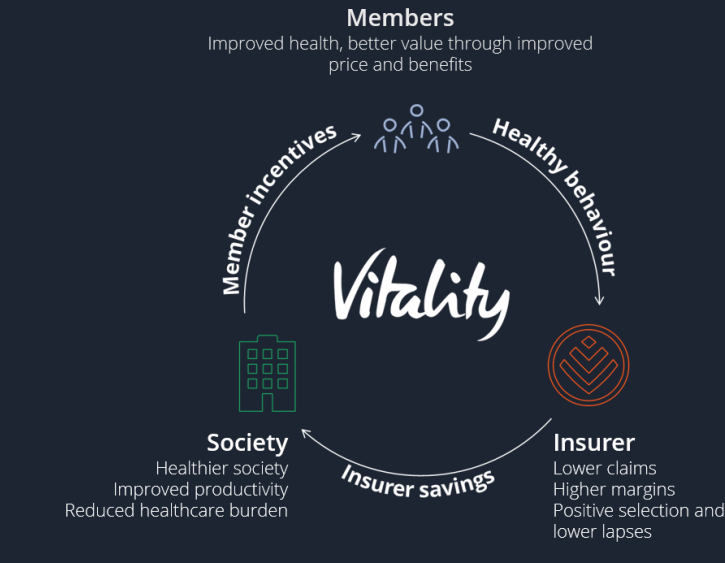


WHY

Make people healthier and enhance and protect their lives



HOW



WHAT

Life insurance

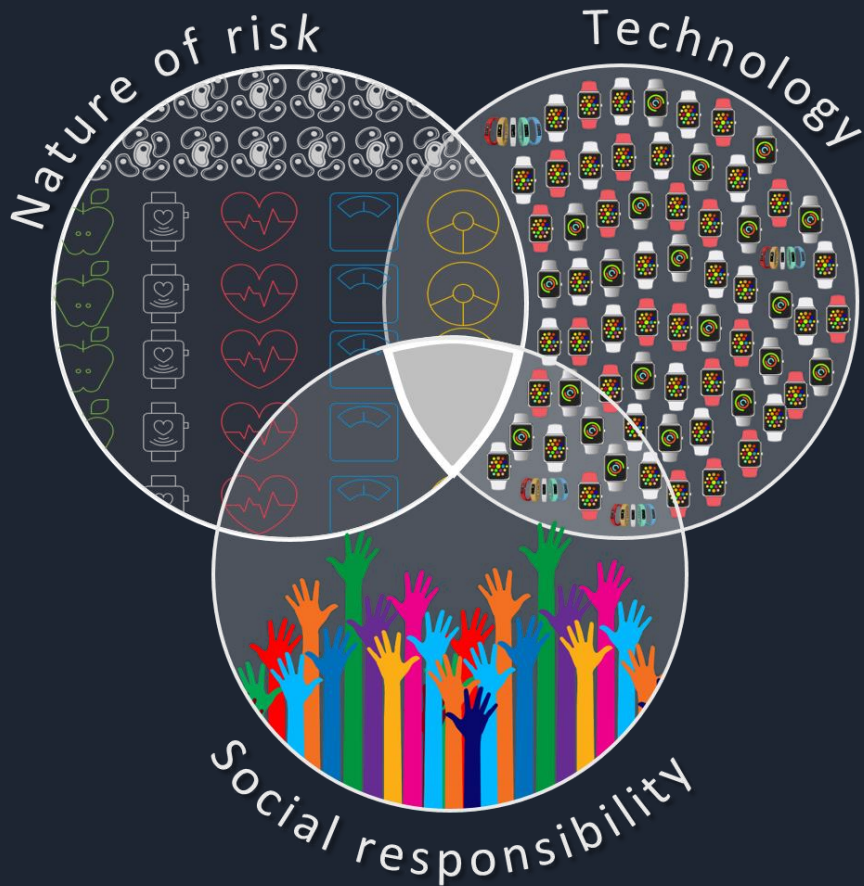
Health insurance

Short-term insurance

Long-term savings

Banking

Trends underpinning the Shared-Value model remain relevant



Societies require companies to fulfil a socially progressive core purpose



Consumers live in a technology-dominated world and seek solutions instead of services



The nature of risk is behavioural and solutions are becoming increasingly personalised

The nature of risk is behavioural



Life insurance

Health insurance

Motor insurance

Long-term savings

Banking

4 **4** **70**

Lifestyle behaviours
Chronic conditions
Deaths worldwide

World Health Organisation and
Global Burden of Disease

Make people healthier
and live longer

4 **4** **70**

Lifestyle behaviours
Chronic conditions
Deaths worldwide

World Health Organisation and
Global Burden of Disease

Make people healthier
and live longer

5 **3** **60**

Driving behaviours
Driving conditions
Fatal accidents

Road Traffic Management Corporation and
U.S. Department of Transportation

Make people better
drivers and have fewer
road accidents

3 **3** **90**

Controllable behaviours
Conditions
Inadequate retirement funding

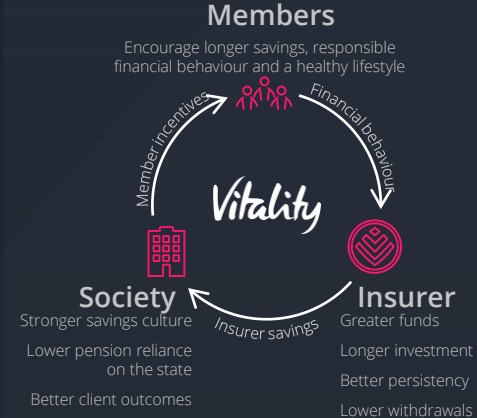
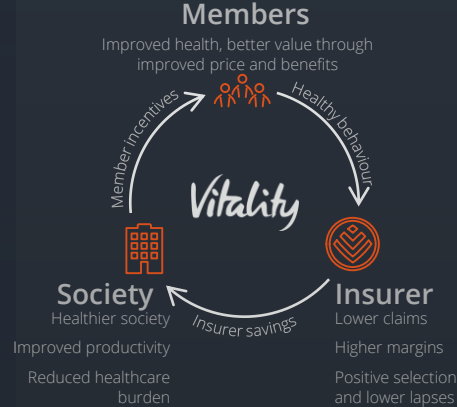
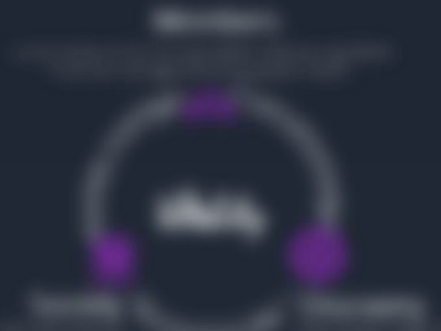
Make people better
prepared for retirement

4 **80**

Controllable behaviours
Credit defaults and retirement shortfalls

Journal of Economics and Finance
and other sources

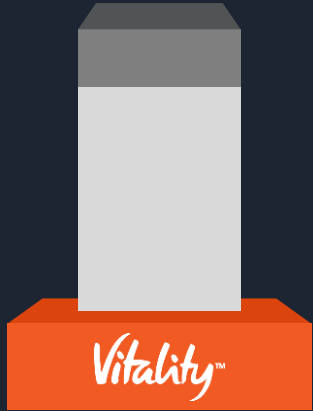
Make people manage their
money better



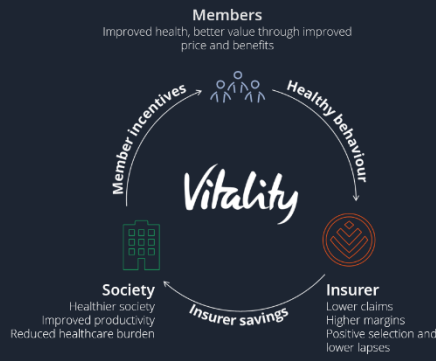
Dynamics of the model manifest across all industries



Sales x **Selection** x **Behaviour** x **Lapses** → **Shared value**



Industry	Sales	Selection	Behaviour	Lapses	Shared value
Life insurance 	20%-30% ↑ increase in market share	20%+ better claims experience compared to non-Vitality	>50% lower mortality on highly engaged	15%+ lower lapse rates Stayers have 50% mortality of leavers	>2x Higher VNB
Health insurance 	44% ↑ increase in market share ¹	Initial engagers have: 28% lower hospital costs 10% lower chronic conditions	Members who run at least 2 times per week save 15% on healthcare costs	>3.6x lower lapse rates	4% Lower loss ratio
Motor insurance 	6x ↑ increase in market share ²	10% better driving score compared to population	15% improvement in driving behaviour	60% lower lapse rates Stayers have 24.7% lower absolute loss ratios than leavers	17% Lower loss ratio
Long-term savings 	70%-200% ↑ increase in market share ³	85%+ invested into preferred funds	60% lower income drawdowns	3x more ad hoc additions 25%-50% lower withdrawals	>1.5x Higher VNB



¹ from 2007 to 2016

² from 2013 to 2018

³ RA and linked annuities, from 2015 to 2018

Mathematics of Vitality Shared-Value Insurance



$$\frac{\text{Value Member}}{\text{Member}} = \frac{\text{Incentive Member}}{\text{Member}} \times \frac{\Delta \text{ Behaviour}}{\Delta \text{ Incentive}} \times \frac{\text{Bent (qx)}}{\Delta \text{ Behaviour}} \times \frac{\text{Value}}{\text{Bent (qx)}}$$

Shared value

Vitality chassis

Programmes

Make people healthier

Product



Vitality Age



Vitality Points



Vitality Status



Rewards



Screening



Active Rewards



Nutrition



Weight Loss



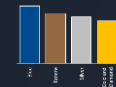
Mental Wellbeing



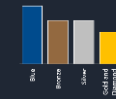
Healthy Aging



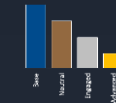
Morbidity & mortality



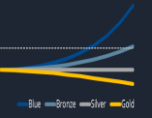
Accidents



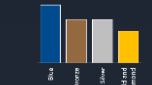
Defaults



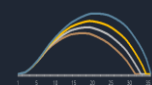
Dynamic pricing



Wedge funding



Enhanced yield



Vitality Fund



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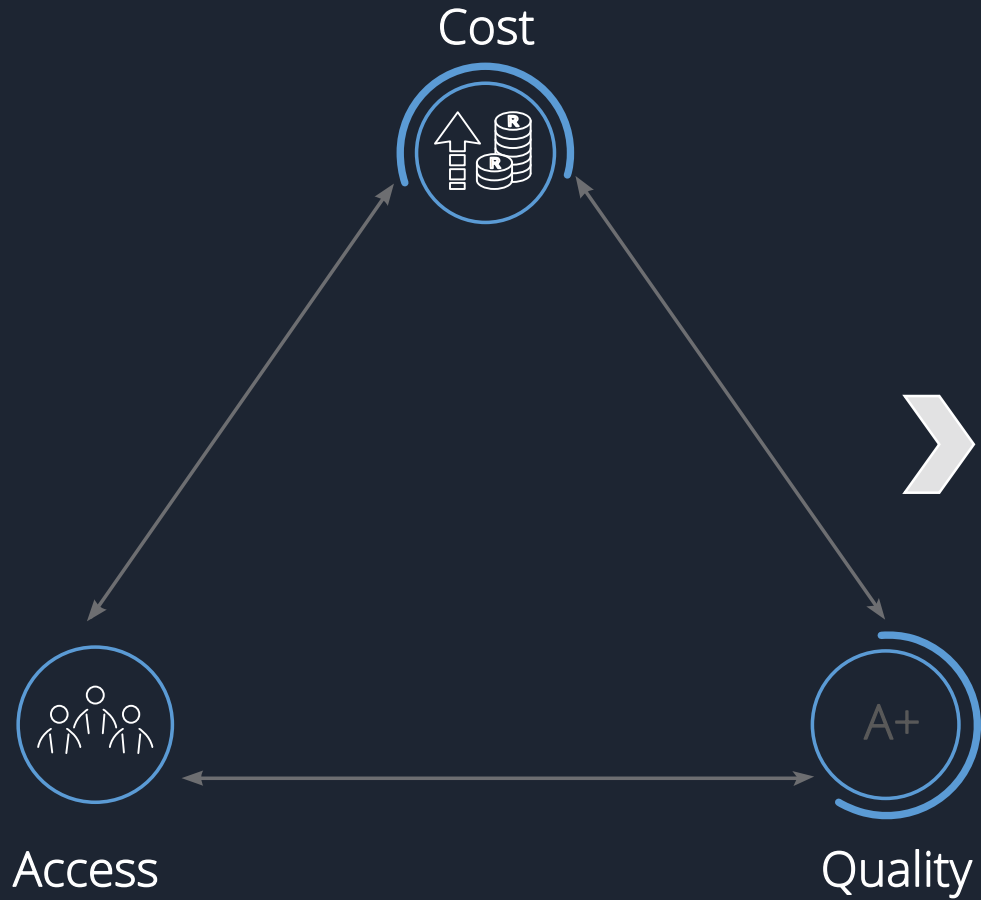
Big data accelerating the competitive landscape

4

Vitality continues to catalyze the growth



The Healthcare Trilemma



$$\frac{\text{COST}}{\text{MEMBER}}$$



$$\frac{\text{DISEASE BURDEN}}{\text{MEMBER}}$$



$$\frac{\text{TREATMENT}}{\text{DISEASE BURDEN}}$$



$$\frac{\text{COST}}{\text{TREATMENT}}$$

PREVENTION

QUALITY

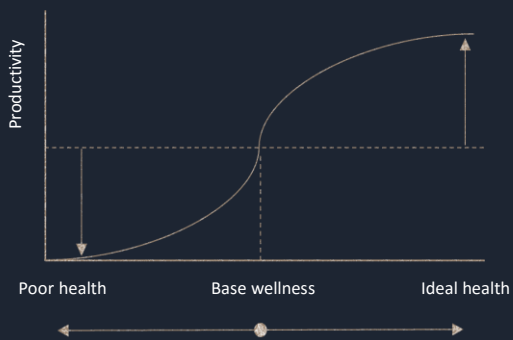
ACCESS AND COST



Discovery Health's Shared Value Solution to the Healthcare Trilemma

Healthier & More Productive Workforce

Impact of employee wellness on productivity



HEALTHCARE PROVIDERS

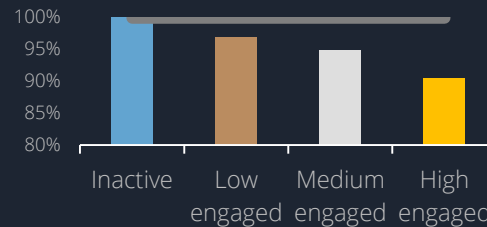
Increased revenues

+R100m

Paid in quality incentives since Aug 2012

Better Health

Fewer hospital admissions



Lower Premiums

-16.1%



Increased Growth & Sustainability

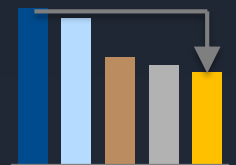
- Solvency: **27.45%**
- Reserves: **R16.4bn**
- Increase in membership: **2.1%**



HEALTH INSURER

Lower Claims

- Heart disease: **-41%**
- Diabetes: **-53%**
- Lung Diseases: **-50%**



Shared value is intrinsic to the Discovery model

DHMS Value Proposition



1



Immediate affordability

- 16.4% lower contributions than next 9 largest open schemes

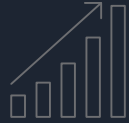
2



Full spectrum of plan choices, richest benefits & extensive networks

- 23 plans with rich benefits – widest range in market
- 97% Overall In-hospital claims payout ratio
- Extensive networks to avoid member co-payments

3



Financial Strength & long term sustainability

- Highest possible credit rating AAA
- 27.44% solvency and rising
- R16.4 bn reserves and rising

4



Best in class claims risk management

- Allows scheme to provide rich benefits at competitive premiums

5



Member satisfaction & servicing

- Continuous investment in member service systems and tools
- 8.8 out of 10: Member Satisfaction Score
- Access to world class digital tools and technologies

6



Sound governance

- Highly Skilled and fully independent Trustees
- Sophisticated and rigorous governance environment with 10 Board Committees
- Ongoing external governance review

7



Peace of mind as healthcare partner for quality

- PaSS: Improvement in hospital and doctor ratings
- Monitoring mortality rates for Acute MI
- Decrease in inappropriate use of hospital acquired infection rates

8



Strong focus on employee wellness

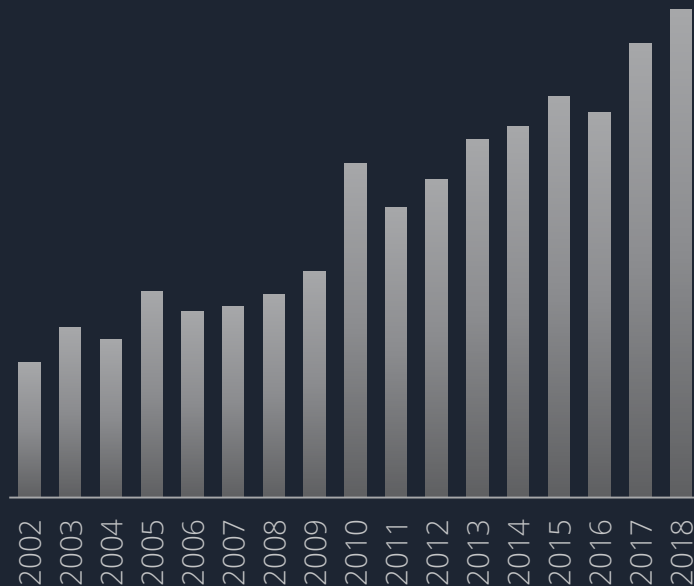
- World leading wellness programmes
- Discovery HealthyCompany
- Vitality

New business

+8%

to R6 573m

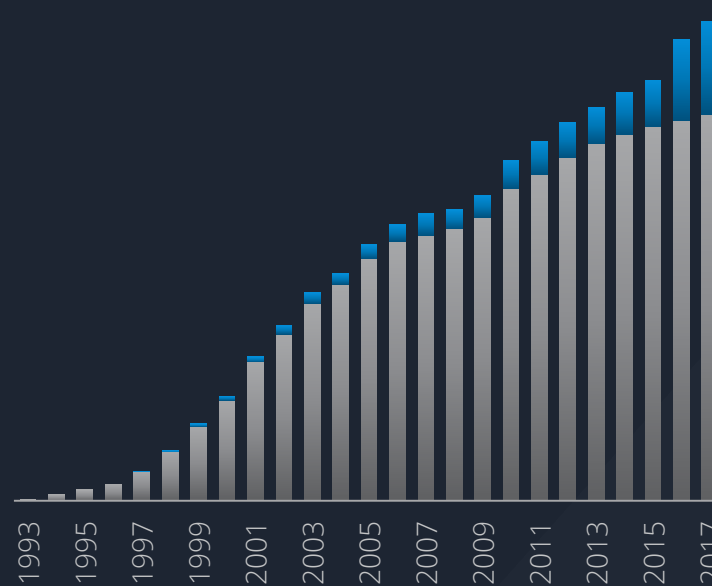
excl. take-on of new closed schemes



Membership

>3.5m

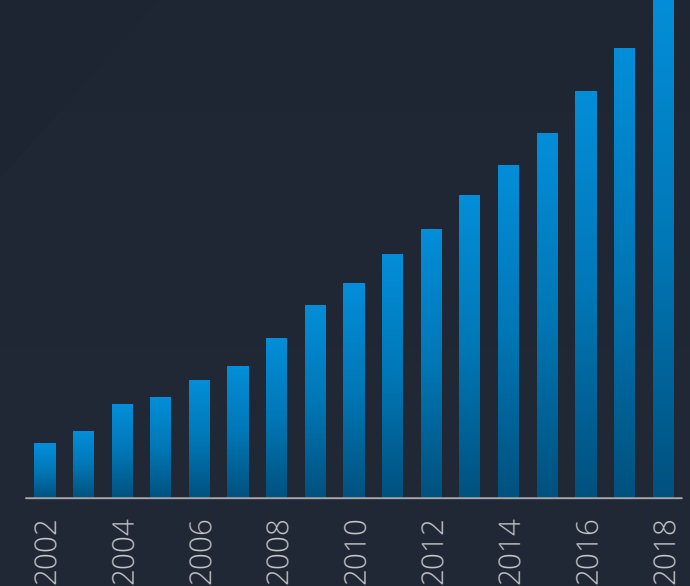
under administration



Operating profit

+11%

to R2 777m



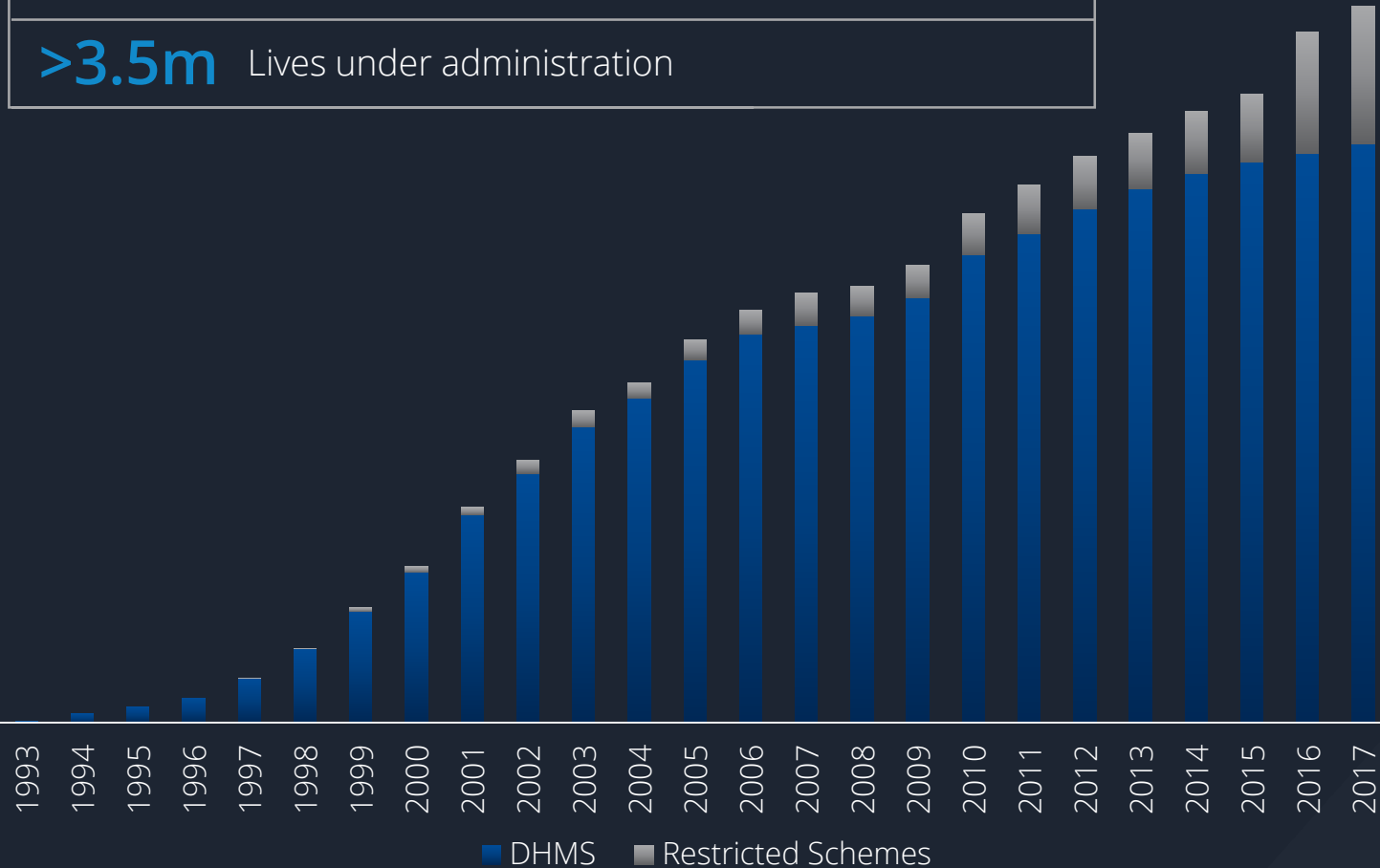
Scale of Discovery Health



16/17 Restricted schemes won over the previous 10 years

40% Total market share

>3.5m Lives under administration



18 Restricted schemes



17%

Restricted scheme market share

>670 000

Lives

1 Open scheme



56.0%

Open scheme market share

>2.8m

Lives

Competitive advantage

-16.4% Lowest premiums in the scheme market
(2017: -15.1%)

10.1% DHMS admin and managed care fees in bottom quartile

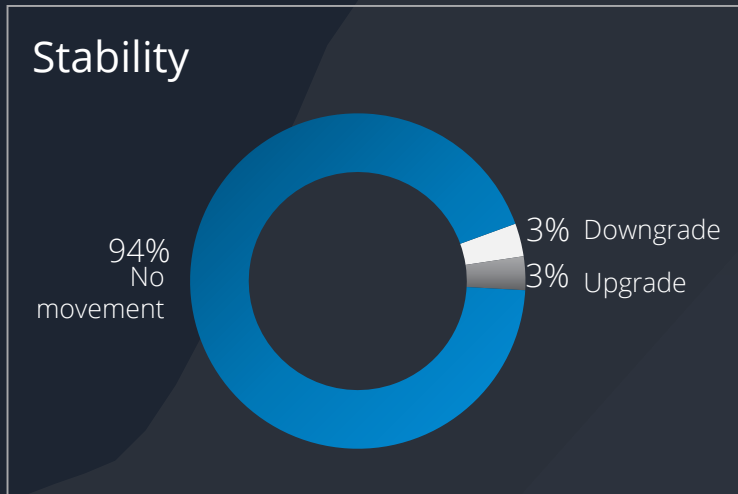
R2.10 Value generated for every R1 paid to Discovery Health

Growth and stability

56% Market share

+2.08% Membership growth

4.8% Annualised lapse rate



Security

27.44% Solvency

R16.4bn Reserves

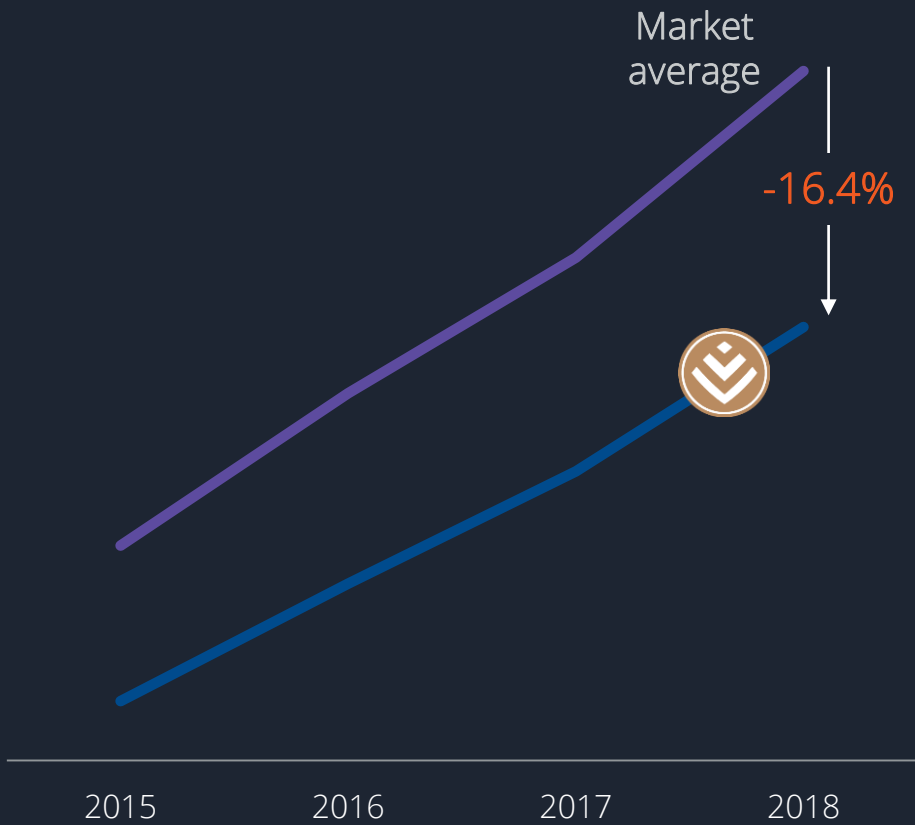
R2.45bn Net surplus

AAA GCR credit rating

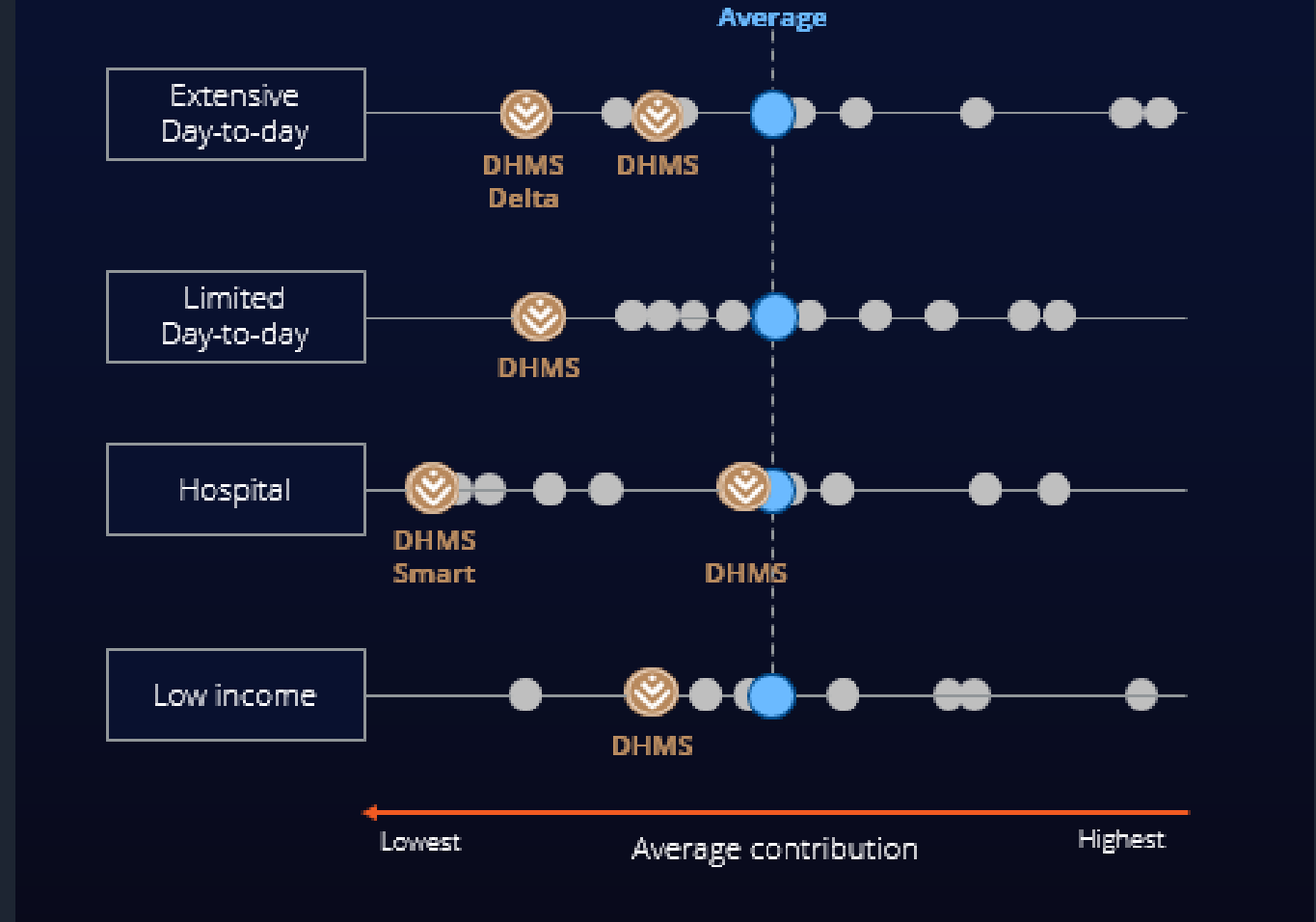
Contributions are competitively priced across all segments, usually with superior benefits



DHMS relative contribution differential



Comparative affordability by plan segment

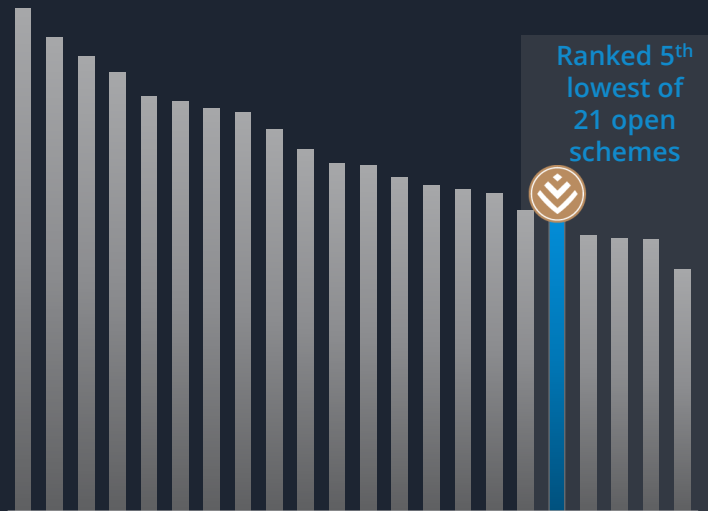


Sources: Published contributions for 2018
 P + A + C = Principal member + Adult dependant + Child dependant
 DHMS vs the next 8 largest open schemes

Becoming the lowest cost administrator

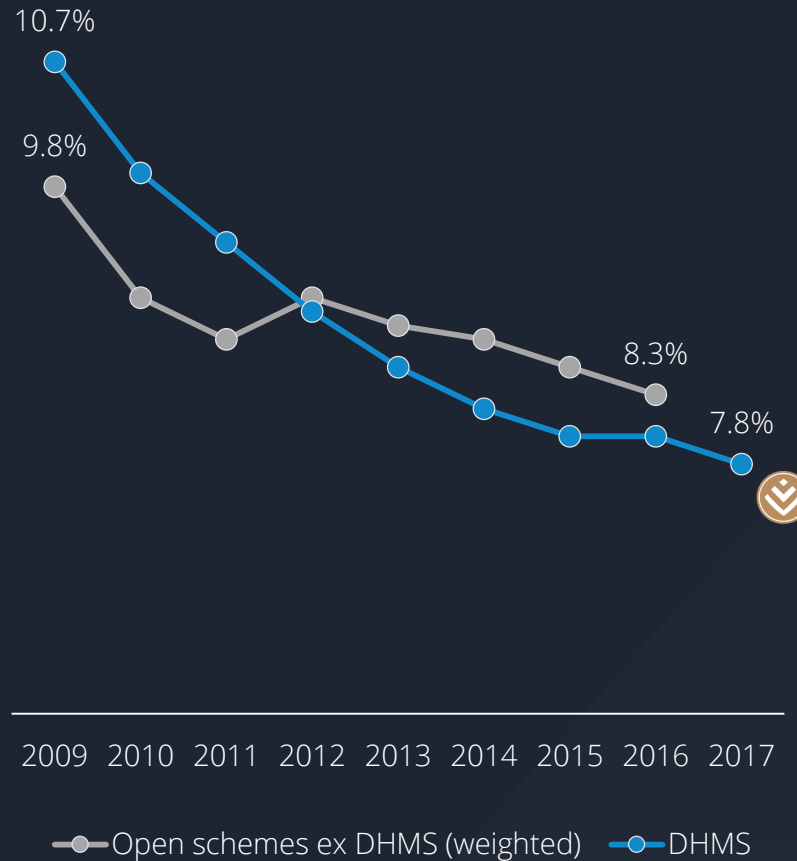
Lowest quartile admin fees

10.1% DH total fees as a % of GCI



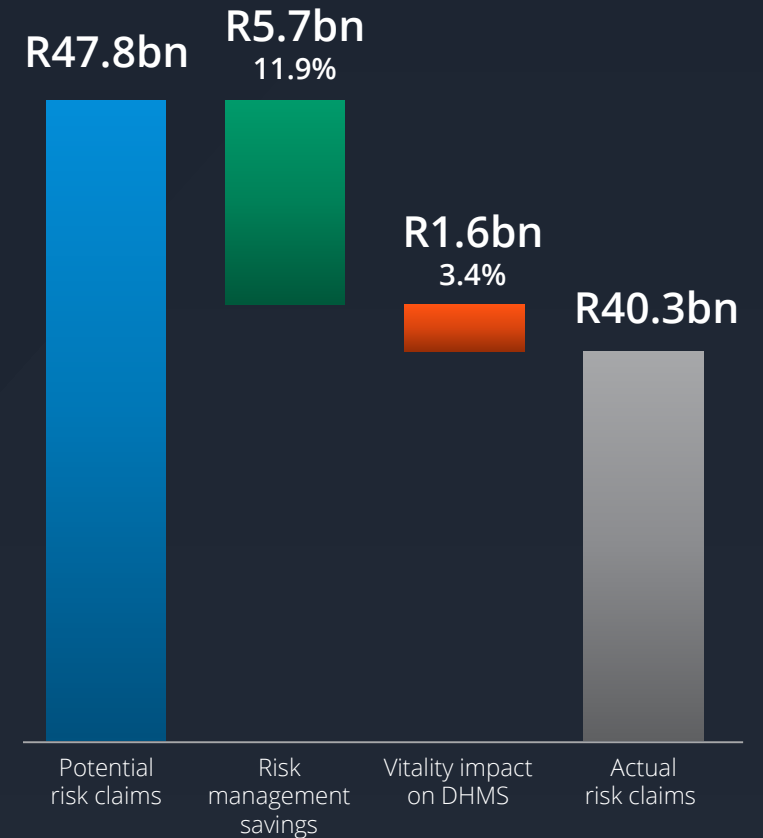
Decreasing real admin fee increases

Administration expenditure as % of GCI over time



Effective interventions to manage claims costs

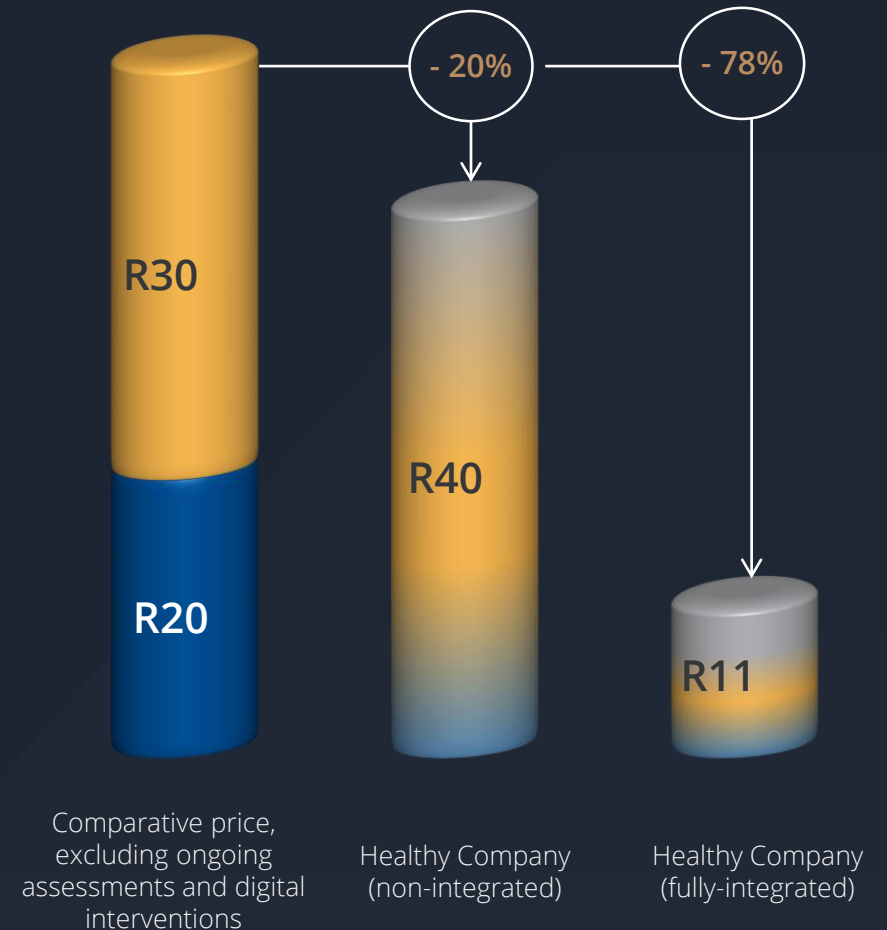
Impact of Discovery Health and Vitality on DHMS risk claims in 2017



New products driving growth - Healthy Company | Digitally-enabled, comprehensive employee assistance programme and wellness solution

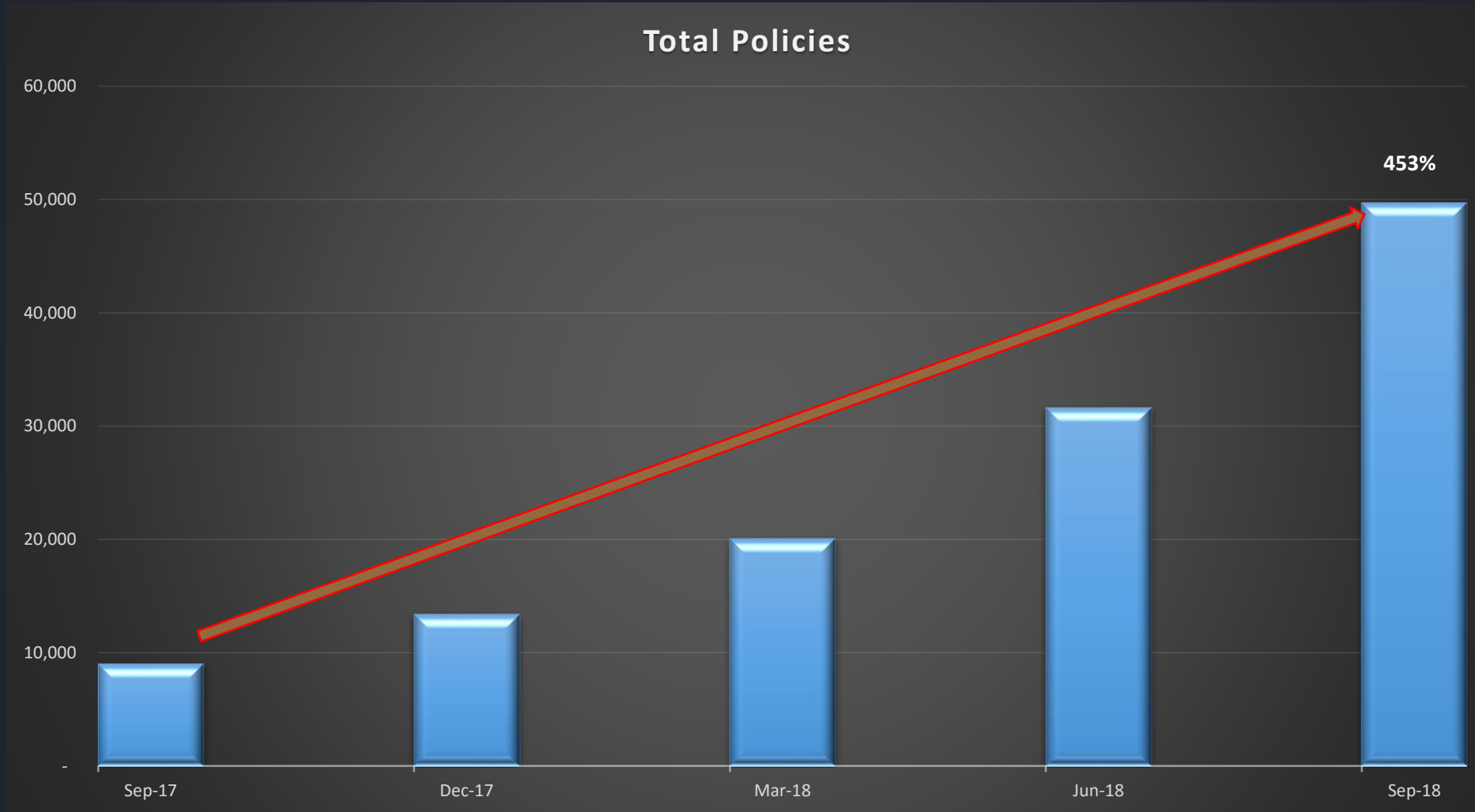


Cost per employee per month





Rapid growth in Non Scheme products.



Discovery Health is actively supporting the development of the NHI and remains committed to growing shared value in South Africa's healthcare system

National Health Insurance Bill



1. Slow and phased-in process
2. Focus on vulnerable groups
3. Medical schemes to co-exist with NHI
4. Voluntary contracting for private sector entities
5. No clarity on funding

Pragmatic and workable

Medical Schemes Amendment Bill



1. Most recommendations are pragmatic
2. Some concerns regarding scheme rules and governance

More clarity required

Health Market Inquiry



1. Majority of findings and recommendations are sound and workable
2. Critical supply side recommendations will have significant positive impact if implemented as proposed

Comprehensive and insightful



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Data is substantial

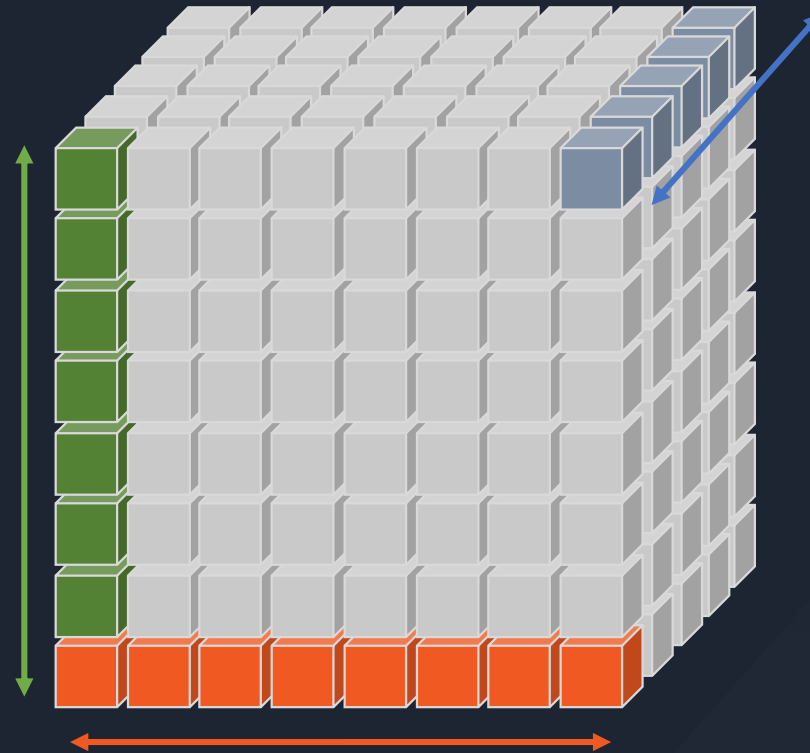


>2 petabytes

of behaviour-linked insurance data

Driving data

- Demographic information
- Kilometers driven
- Driver behaviour
- Accident impact
- Driver routes
- Harsh braking
- Acceleration
- Cornering
- Mobile phone usage
- Time and distance of trips



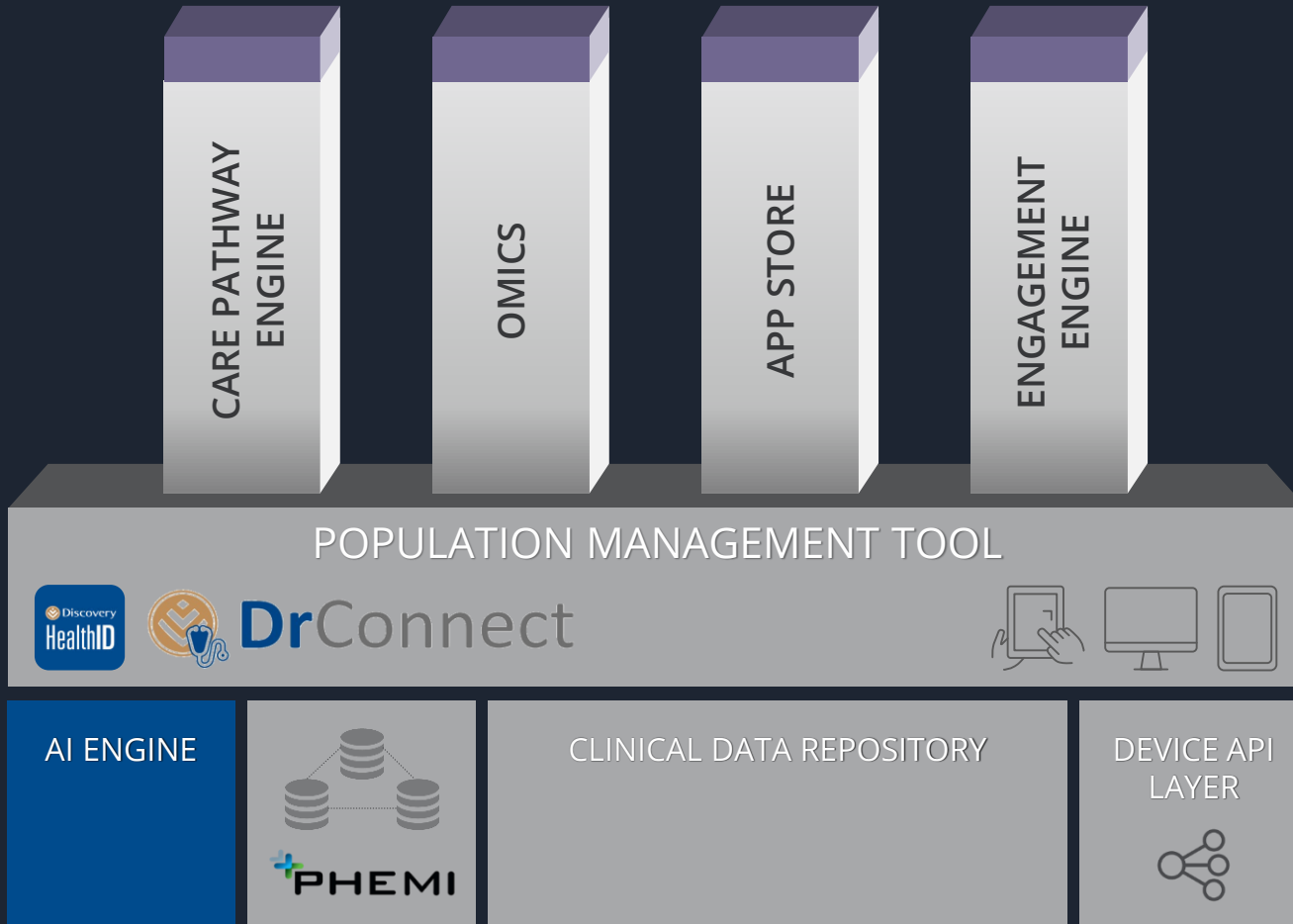
Health data

- Demographic information
- Cost of claims
- Provider visits
- Hospital admissions
- Condition management
- Health outcomes
- Out of hospital spend
- Chronic condition history
- Physical activity
- Biometrics and screenings
- Nutrition
- Smoker status
- Vitality status

Financial data

- Customer loyalty
- Customer spend behaviour
- Price sensitivity
- Credit riskiness

Significant progress in building a fully integrated digital platform to enrich interactions and drive engagement



HealthID



Over **1 993** doctors
Over **1.7 m** member consents

DrConnect

329 543 members and **2 700+** doctors enrolled onto DrConnect since launch in August 2017

Data collected through a comprehensive digital member platform



Information



Exercise data 500 000 workouts logged per day



Claims information



Discovery babies born Discovery baby born every 6 minutes



Vitality Health Check data 32 000 health screenings per month



Geolocation 2 200 000 pings per month



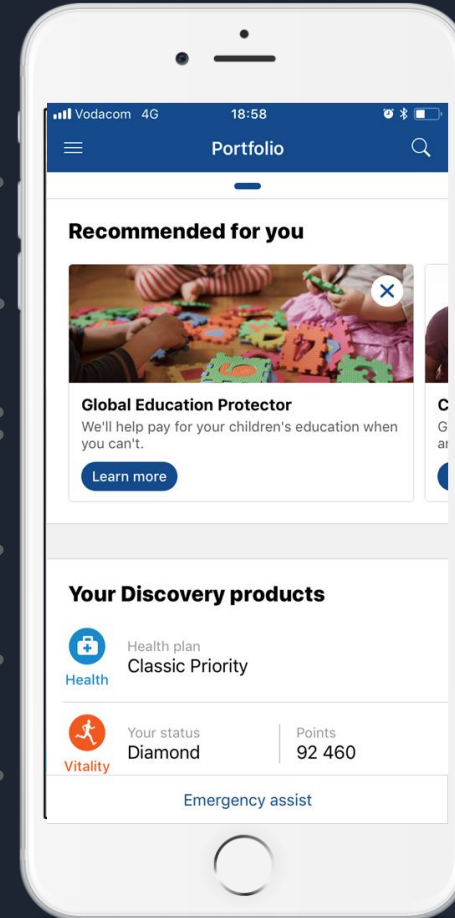
Healthy Food 55 000 baskets per day



Call centre data 35 000 calls per day

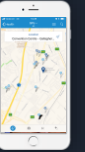


Driving data



Find a doctor

4 400 000 requests per annum



Order medicine

480 000 orders per annum



Health ID

2 000 doctors and
1 700 000 member consents



Active Rewards

>400 000 users



MyPregnancy

>25 000 members registered



1.4m downloads



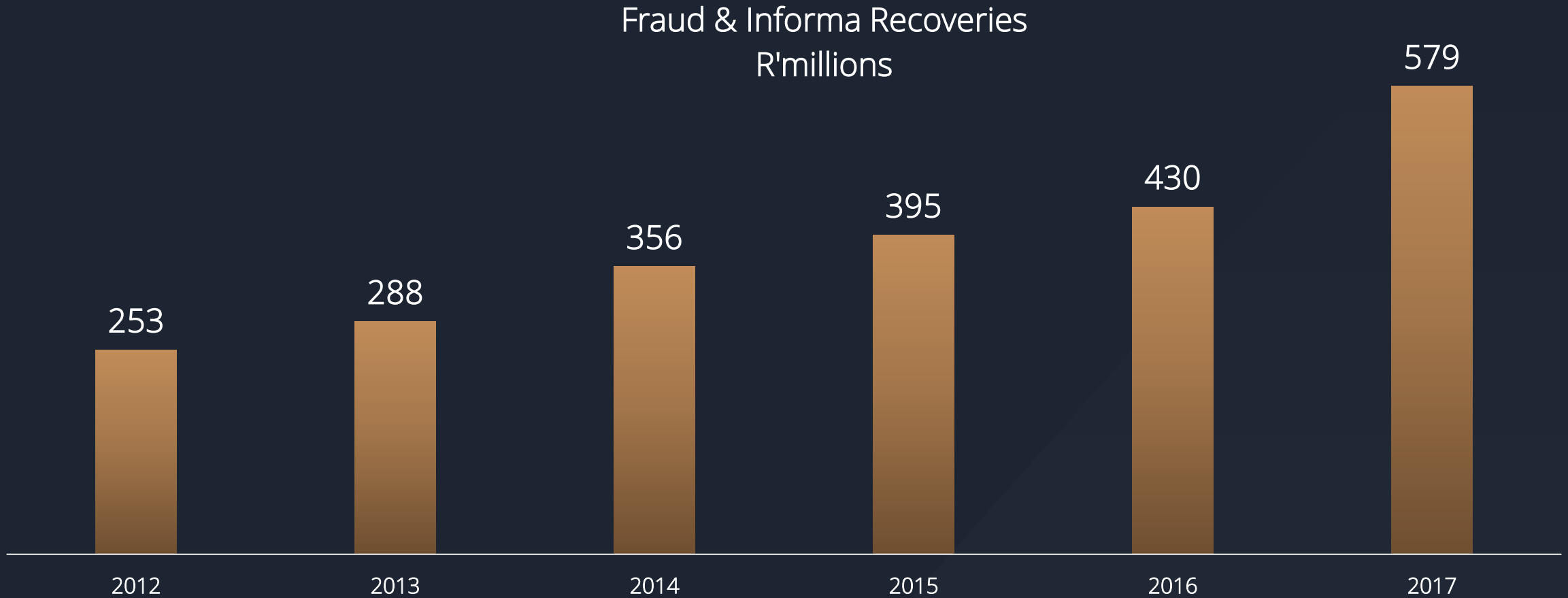
On average 3 app logins per week per active user



Stuff magazine's App of the year



Data driving Fraud & Informa savings and recoveries



Includes total savings and recoveries, hospital group settlements and deferred amounts



Applying behavioural science to fraud

Members who complain on Twitter tend to be more costly for medical schemes



Admin Intensity



25% higher

Electronic Claims



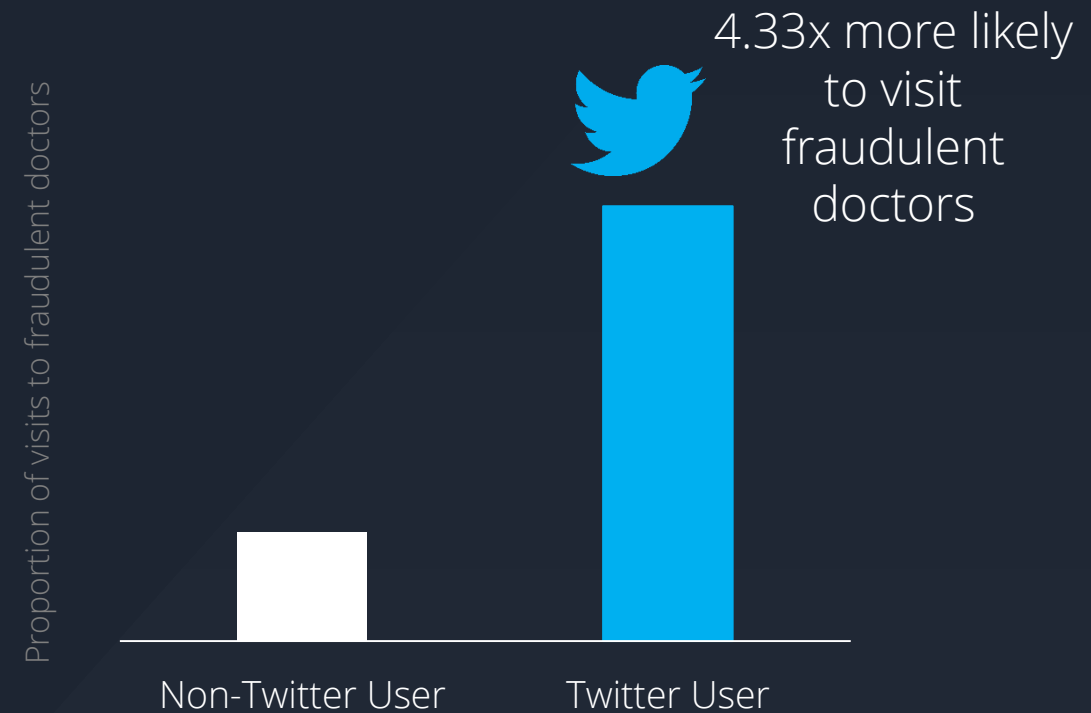
2x more

Paper Claims



3x more

Twitterati are significantly more likely to visit fraudulent providers



“Unusual” information beyond claims data is being used to combat fraud



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Active Rewards is a global success



Scale



430k
members



>5m
members across
9 countries

Exercise



2m
exercise activities a day

Rewards

>4m



Coffees earned
per month
Or coffee equivalent in market

>175k

Apple
Watches
sold



Data

Increase in exercise days after
taking up Apple Watch



+35%



+110%



+39%





Engagement and activity generates additional data unique to Vitality, emphasizing the depth of data underpinning analyses

Getting Healthy



250 000

Vitality Health Checks



10 million

discounted gym visits



20 million

HealthyFood baskets bought



Over 10 000

Team Vitality members

Getting Rewarded



R1 billion

HealthyFood cash back



1 million

discounted flights booked



2.5 million

discounted movies



1.8 billion

Discovery Miles earned

On an average day in Discovery Health ...



19

schemes administered



37,000

telephone calls



2,700

hospital admissions



250,000

Claims received



31,500

Health professionals



Discovery

>62m Physical activity days  **380k** Vitality Health checks  **Vitality™** **28m** Gym visits  **7x** higher proportion of Gold and Diamond members 

1.2m flights 
5.2m smoothies 

R1 bn cash backs 
>R1.4 bn premium savings

>R 1bn boosts and fee refunds 

>R120m in Fuel rewards 



Catalogue

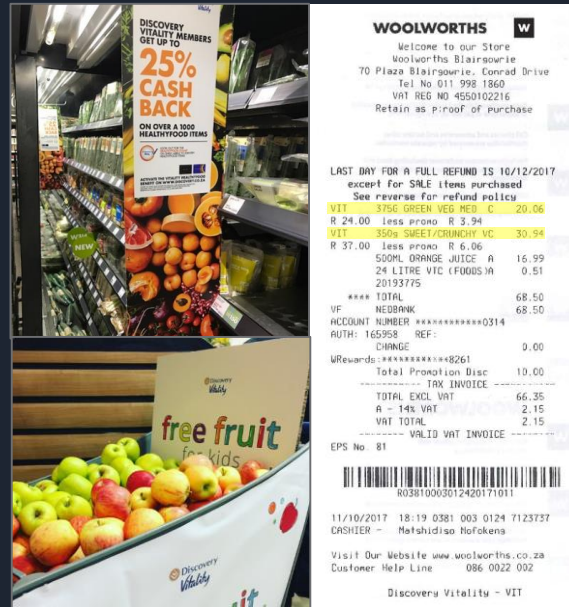
>10,000
Healthy Food items



WOOLWORTHS **W**

Pick n Pay

Awareness



Frequency

>20m
Healthy Food baskets



Rewards

R274m
Healthy Food cashback





Health behaviours

Personalisation

Reward mechanics

Incentives

Vitality Active Rewards 1.0

Physical Activity



Weekly activity goals



Static rewards



Defined micro-reward on goal achievement



Vitality Active Rewards 2.0

Multiple risk factors



Personalised Vitality health goals



Dynamic game play



Vitality reward points, plus instant prizes





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