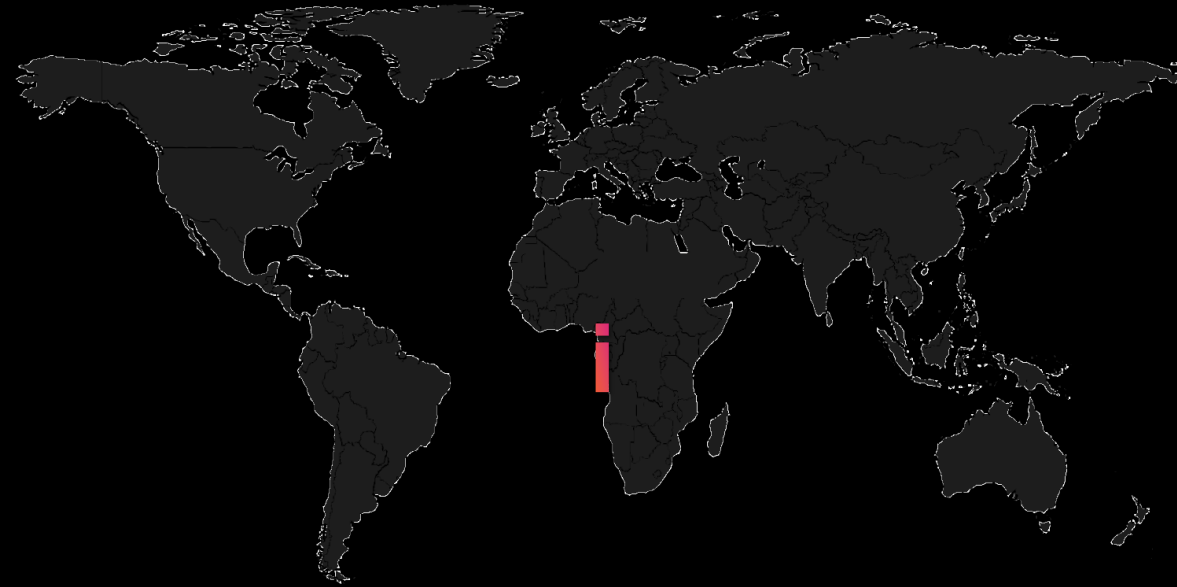




DISCOVERY'S SHARED VALUE DIGITAL ECOSYSTEMS

UBS | DR JONATHAN BROOMBERG
CEO, VITALITY HEALTH INTERNATIONAL
GLOBAL HEAD OF HEALTH INSURANCE, DISCOVERY GROUP
7 OCTOBER 2021

Vitality[®] **Health
International**



GLOBAL EMERGENCE OF DIGITAL ECOSYSTEMS

Global trends, which are transforming insurance markets, have been accelerated by COVID-19

Banking



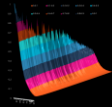
"It's time to tie bank profits to customers financial health"

Motor



"We want revolutionary actuaries" Tesla launching insurance company - premiums based on data collected by cars' internal sensors

Life

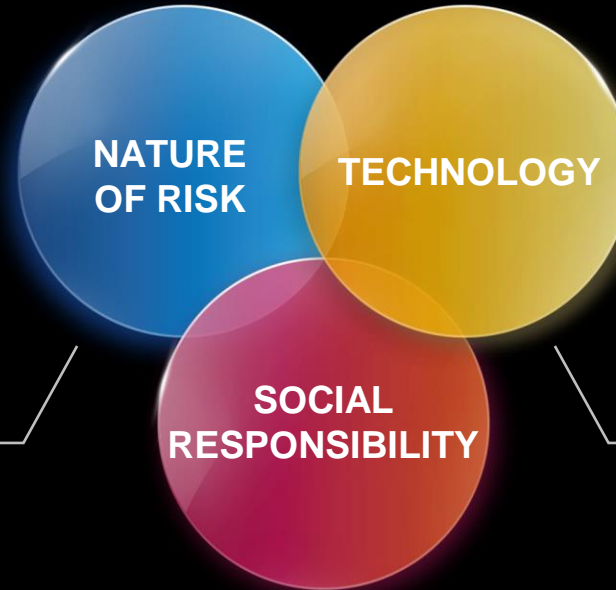


The nature of behaviour on mortality

Health



The nature of COVID-19 risk is behavioural



- The rise of digital
- Ways of work
- Ecommerce
- Telemedicine
- Contactless



The nature of risk is behavioural

Accelerated rush online

"Deep understanding of risk and how to manage it"

"Digitally enabled, customer centric and drive engagement"

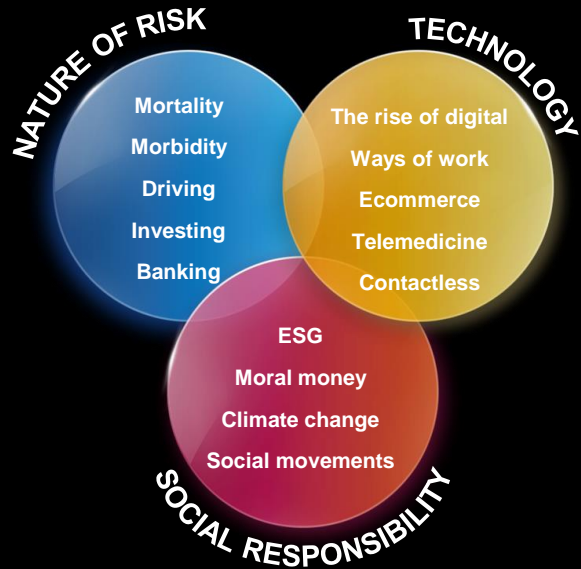


Social and environmental movements amplifying corporate responsibility

"Producing profitable solutions to the problems of people and planet, not profiting from producing problems for people or planet" Colin Mayer

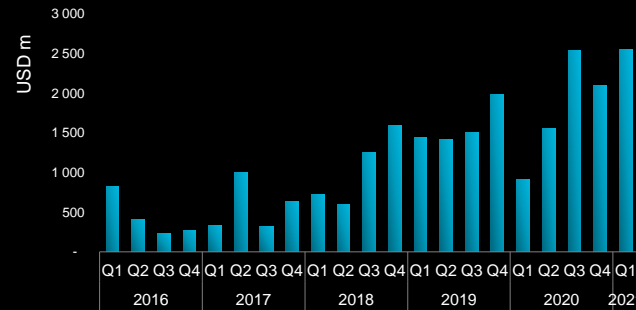
Significant increase in ecosystem strategies globally

Blurring of boundaries in these three trends

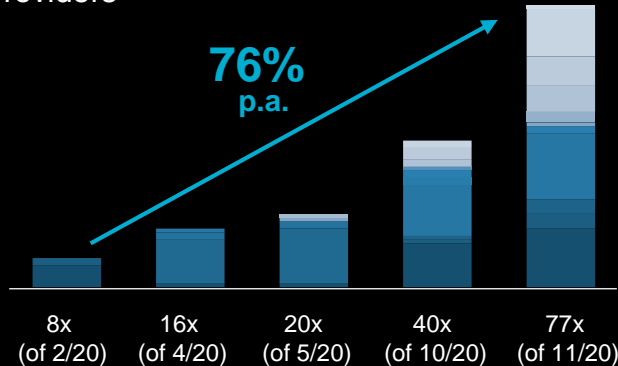


Insurtech and ecosystem strategies are increasing

Record quarter for insurtech investment activity¹

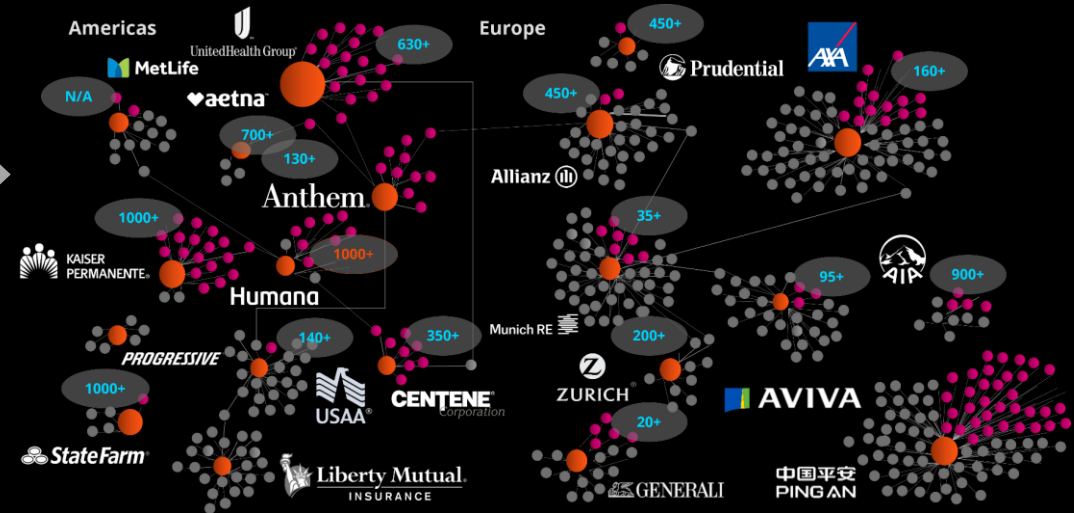


Number of mentions of ecosystems in leading European insurers and medtech providers²



Many have invested substantially into health ecosystems²

xx Health funding in EUR m Core business Funded health start-ups
 Funded start-ups from other ecosystems (mobility, housing, education, B2B services)



Sample of 20 large insurers globally have strategically invested into various ecosystems over the last few years, with health being a prominent theme (32% of investments)

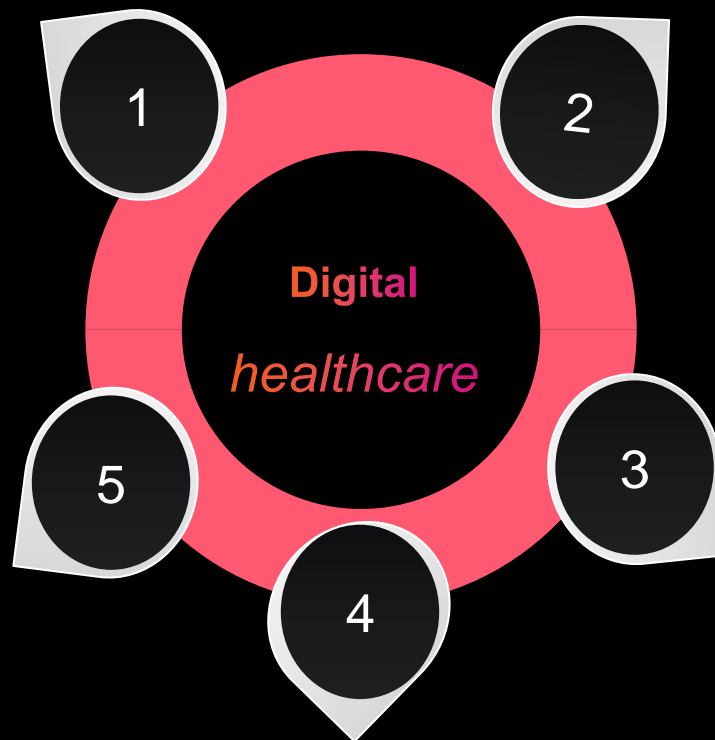
COVID-19 has led to a shift in consumer behaviour, adoption of technology and supporting regulations

Telehealth

From 11% of US consumers using telehealth in 2019 to 46% of consumers in 2020

Remote monitoring

To date, Discovery Health has distributed over 3600 Pulse oximeters for home monitoring of high risk COVID patients



Genomics

Australia is using genomic sequencing to drive the COVID contact tracing strategy and identify “super spreaders”

Digital therapeutics

Germany has approved the Digital Supply Law for apps that can improve patient care

AI diagnosis and care

Alibaba’s AI algorithm can diagnose suspected cases within 20 seconds with 96% accuracy

Unlocking the power of digital health ecosystems is a \$100bn opportunity

The opportunity: Digital health innovation

\$ 100bn unrealized value in digital health

Across major developed countries addressable through improving efficiency and reducing patient demand

A wealth of digital health offerings with no central orchestrator to integrate them

+250k apps addressing singular challenges and lacking scalable business models

Potential to scale globally crossing borders more easily than traditional health systems

No national health system restrictions

Unleash the value with digital health ecosystems

Connect fragmented health systems integrating solutions into seamless journeys

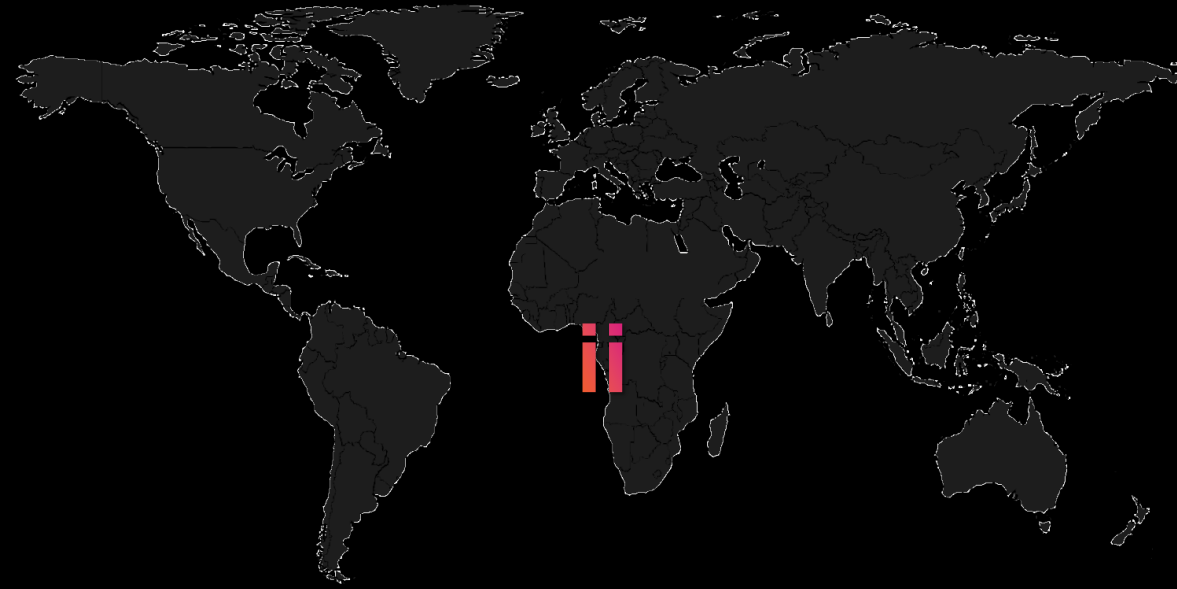
Unlock new sources of value for providers and patients, improving health outcomes, efficiency and satisfaction

Allow flow of data and value attribution complementing traditional health data with patient-generated data

Creating new business models, and spurring innovation

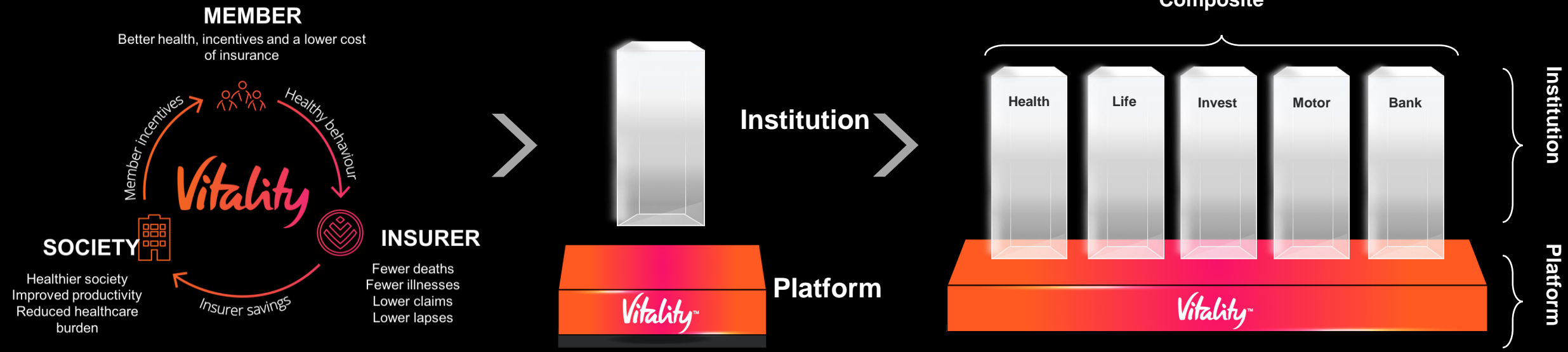
Scale from local to global networks with common infrastructure

Local and global use cases



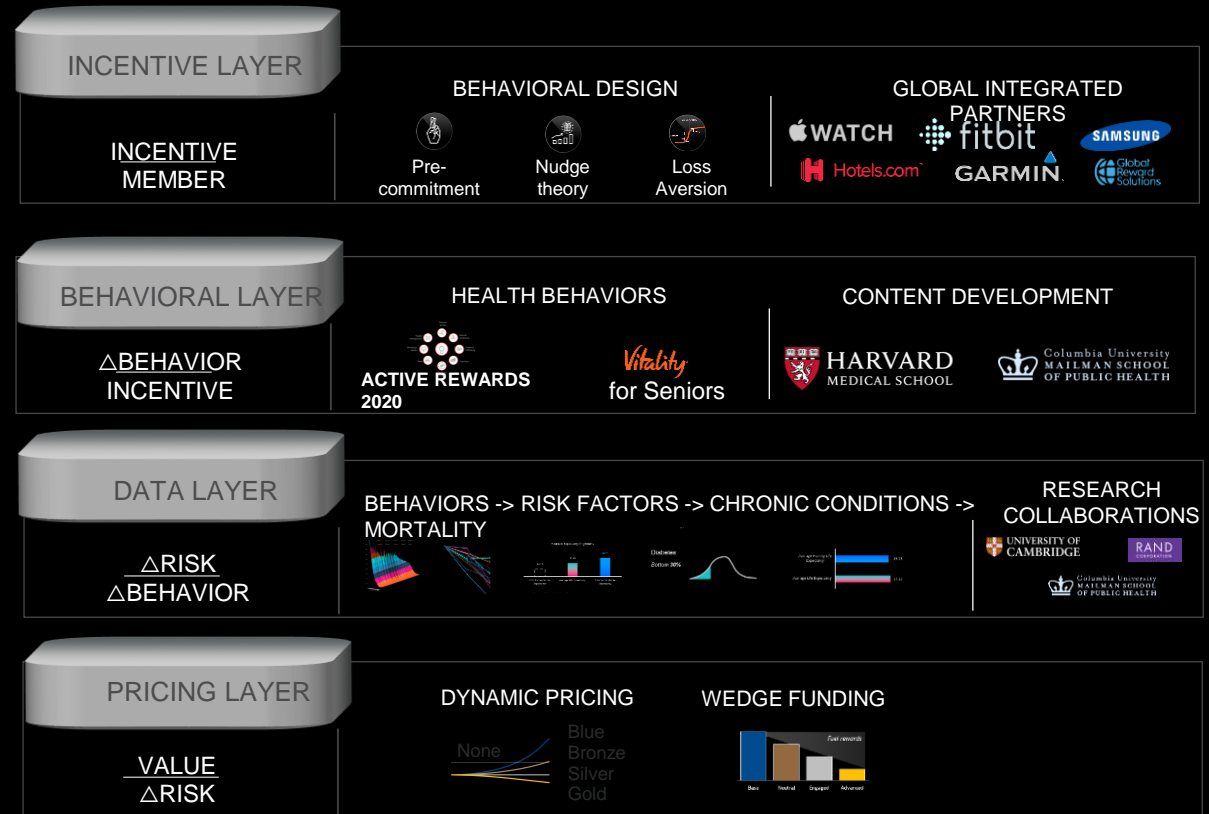
DISCOVERY'S DIGITAL ECOSYSTEM STRATEGY

Evolving the business model to an ecosystem



“Make people healthier”

The Vitality platform is the foundation of Discovery's integrated eco **Vitality** Health International

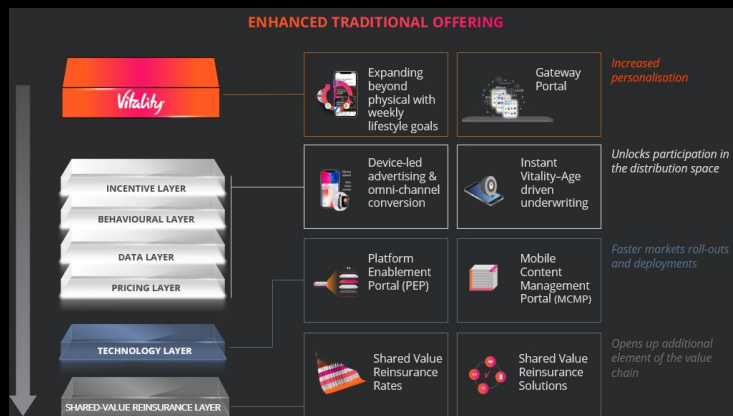


The Vitality platform allows an expansion from 1 ecosystem to 3

ENHANCED TRADITIONAL OFFERING

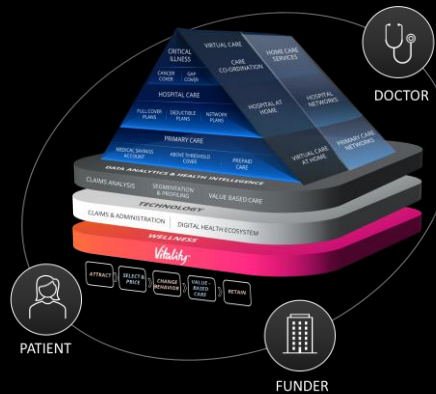
HEALTH ECOSYSTEMS

NASCENT DRIVE ADJACENCY



Comprehensive Digital Health Ecosystem

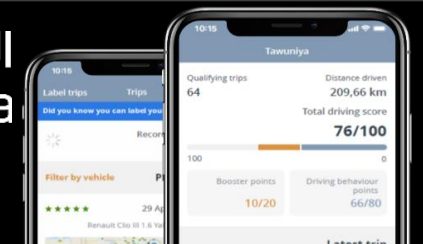
Shared value health insurance approach underpinned by a sophisticated technology stack, assets & expertise



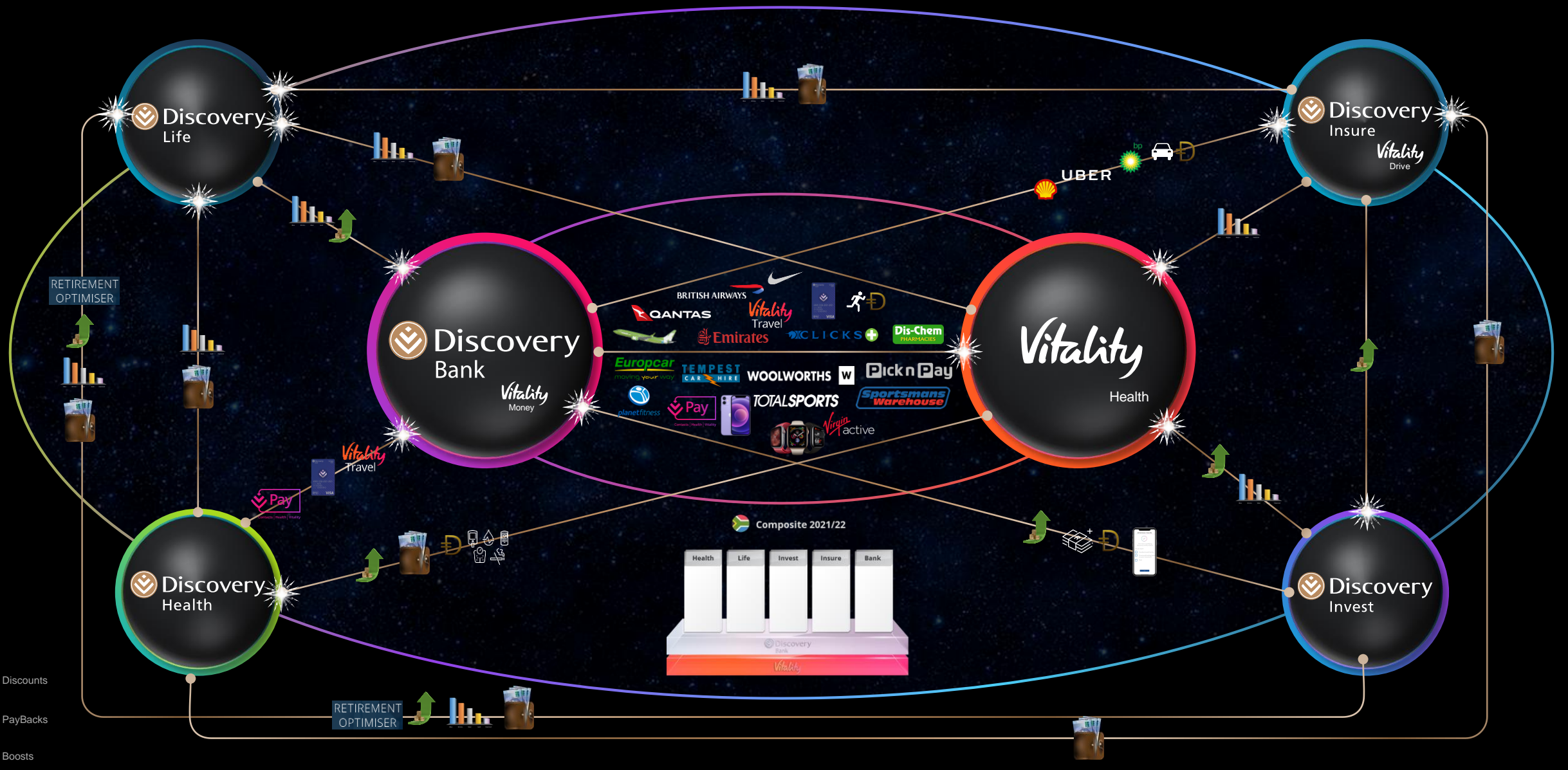
التعاونية Tawuniya

Tawuniya Drive, Get the Most Out of Your Car Insurance

COVEA Insurance



Deep and wide integrated ecosystem strategy in South Africa



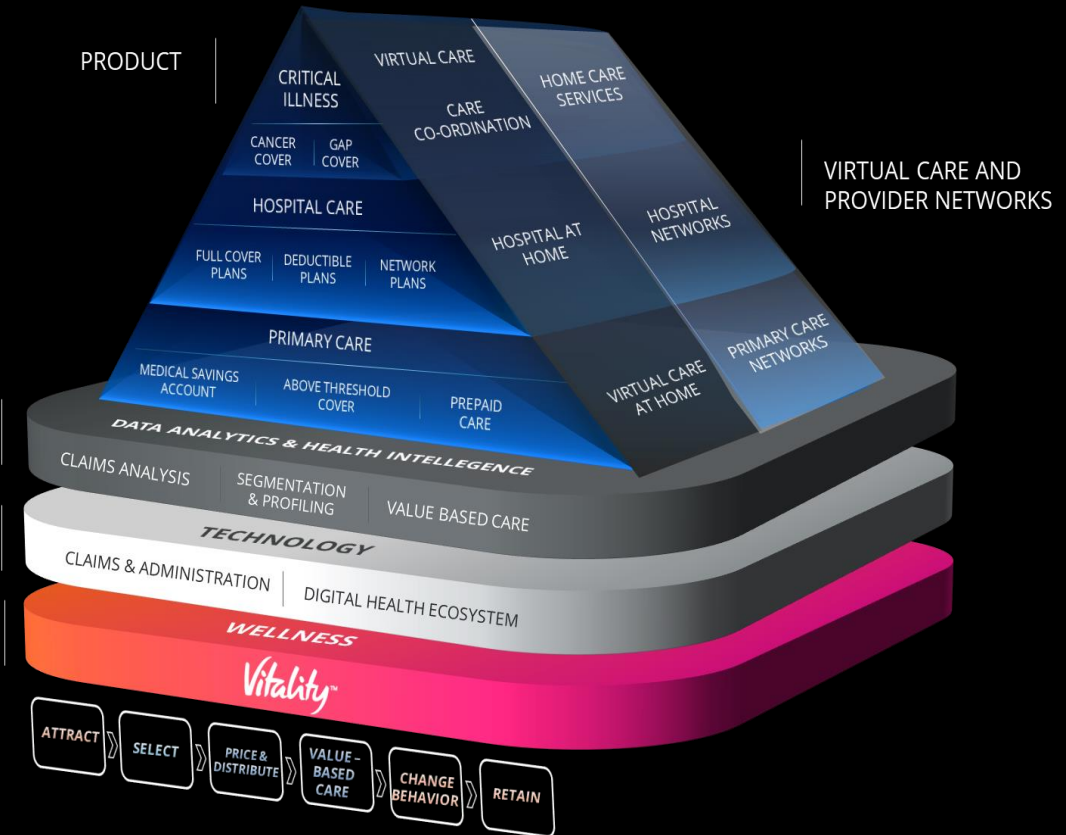
Discovery's Shared value health insurance model is underpinned by a sophisticated battle tested technology stack and expertise



DATA ANALYTICS & HEALTH INTELLIGENCE

HEALTH INSURANCE TECHNOLOGY

WELLNESS PLATFORM



Discovery's health value chain: Ecosystem integrating Vitality and Health International capabilities transforms health insurance performance

■ Vitality capability
 ■ Health insurance capability



Attract a disproportionate share of young & healthy lives

Use rich datasets to underwrite risk accurately and price appropriately, and leverage D2C capabilities for sales

Incentivize members to increase their healthy behaviour through Vitality programs

Reduce claims costs through procurement and network design, and align quality outcomes through value-based care payment arrangements

Structure incentives and member engagement to drive selective retention of young and healthy lives

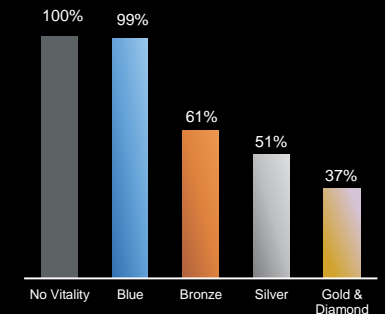
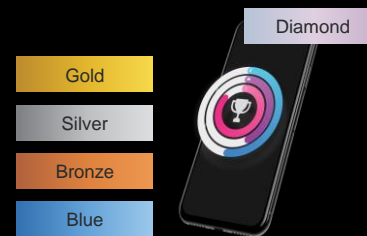
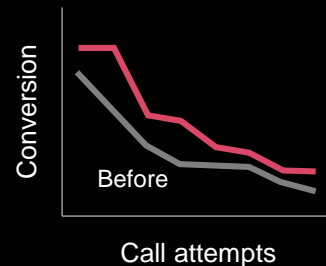
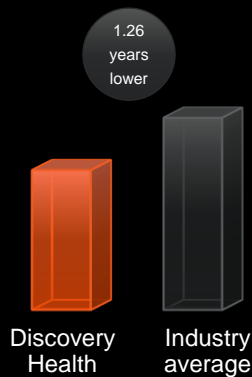
Average age of policy holders

D2C capabilities in the UK

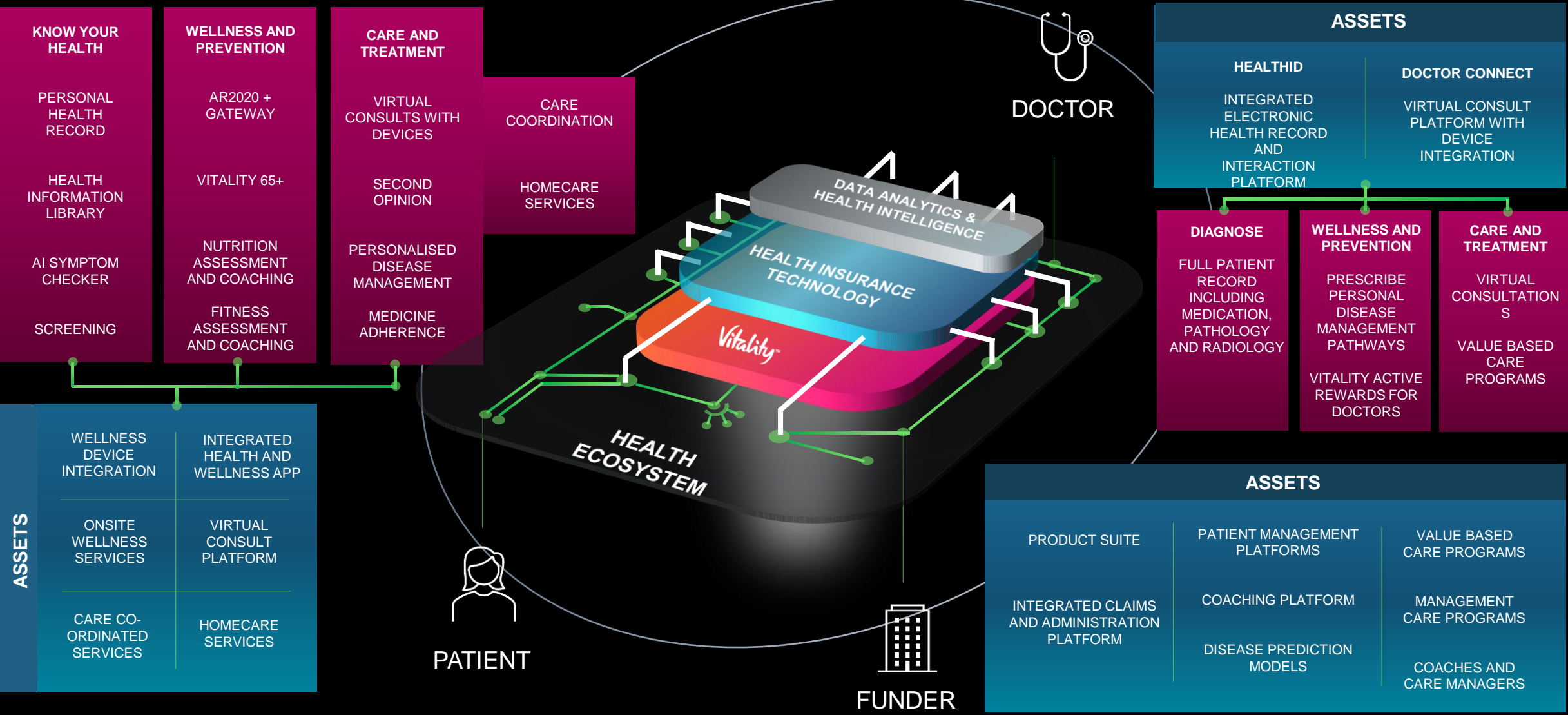
Vitality platform & disease mgmt

Savings against potential risk claims, %

Standardized lapse rate by Vitality status



Discovery deploying fully integrated, production tested digital health ecosystem globally



Vitality led strategy has achieved substantial global footprint – continuing to expand quickly



SA COMPOSITE MODEL



UK COMPOSITE MODEL



PARTNER COMPOSITE MODEL



VITALITY HEALTH INTERNATIONAL



Markets

30

Vitality lives

>20m

New members per month

>300k

Gross annual revenue

>\$10bn

... across insurance lines and adjacencies

Insurance Partner Markets



Vitality Health International



Powered by Vitality



13 Insurance partners

30 Markets

>20m Vitality lives

Vitality™

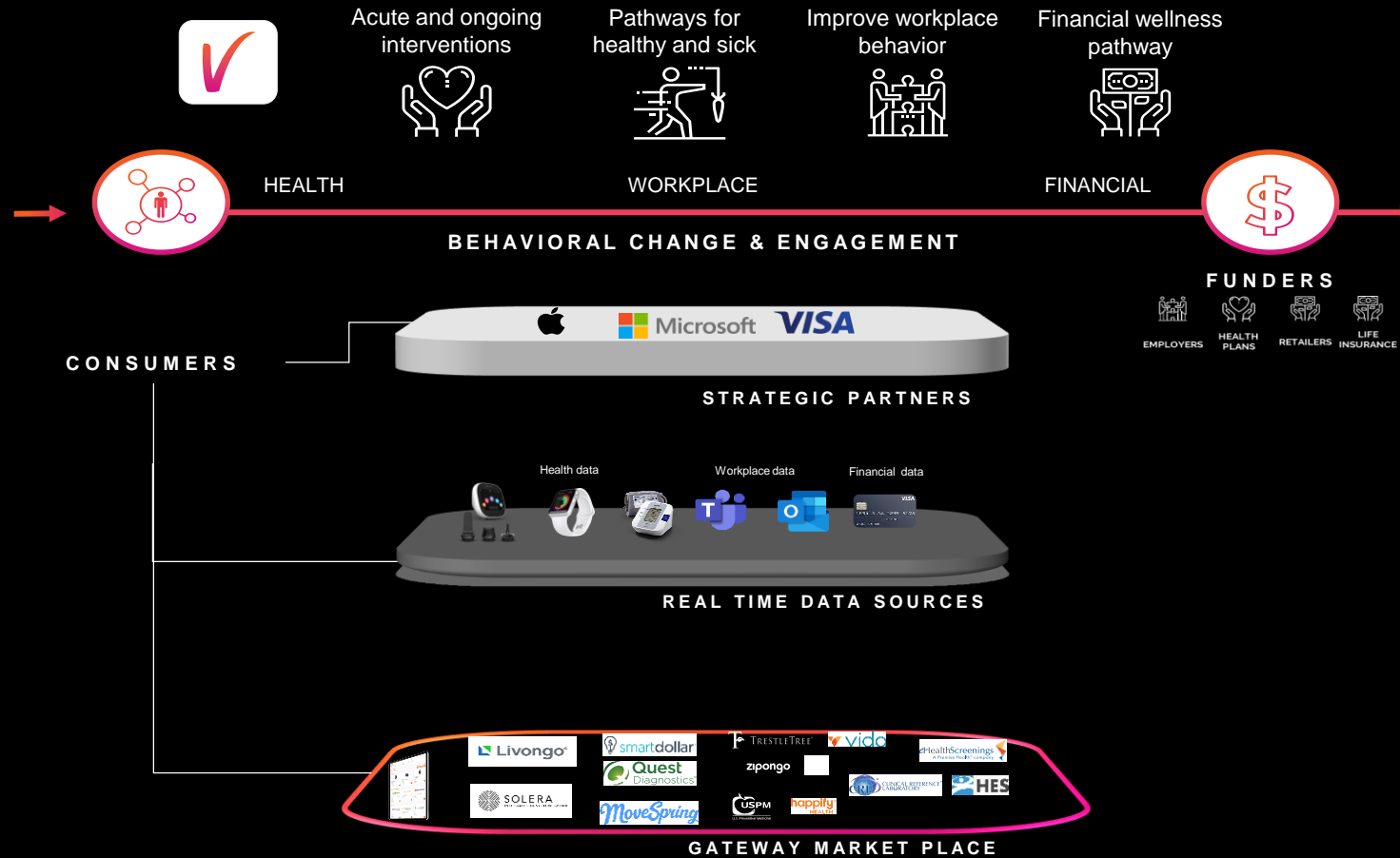
GYM & DEVICES	GROCCERS	TRAVEL	OTHER	ACTIVE REWARDS
GARMIN, fitbit, Virgin active, Curves, POLAR, LA FITNESS, 24 FITNESS	Walmart, Cold Storage, MARKET PLACE	HYATT, Royal Caribbean, Emirates, Marriott, AZAMARA, QANTAS, Expedia, Hotels.com, SK Telecom	JD.COM, guft, HOYTS, amazon, UNDER ARMOUR, NIKE	BOOST, KFC, Juan Valdez Cafe, CINEMARK, Apple

Vitality™ 1

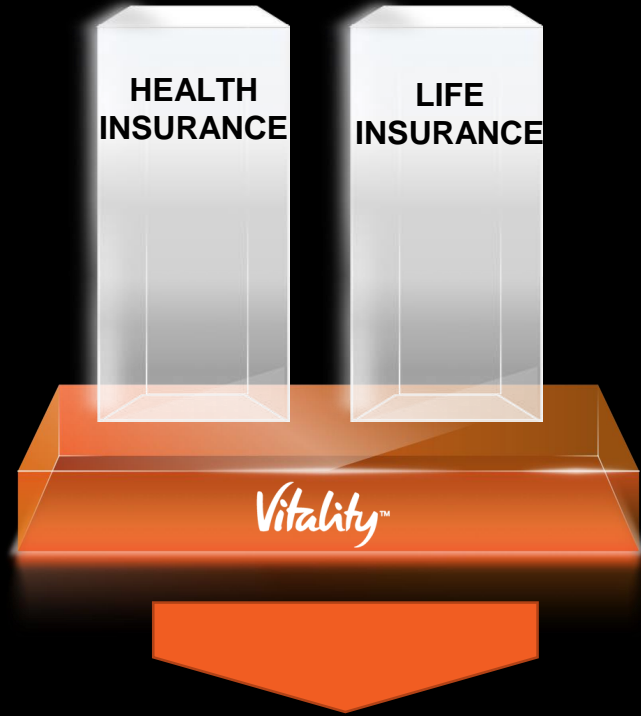
Vitality in the USA has built a successful corporate wellness business supported

By an integrated digital health platform open to any wearable and health app

Wellness ecosystem offering to employers and other funders...



Discovery's technology and tools support Ping An's health ecosystem **Vitality** Health International



Ping An Healthcare Ecosystems across 12 entitles



Highlighted tools

INCENTIVE LAYER

INCENTIVE MEMBER

BEHAVIORAL DESIGN

- Pre-commitment
- Nudge theory
- Loss Aversion

GLOBAL INTEGRATED PARTNERS

- Apple WATCH
- Hotels.com
- fitbit
- GARMIN
- SAMSUNG
- Global Reward Solutions

BEHAVIORAL LAYER

ΔBEHAVIOR INCENTIVE

HEALTH BEHAVIORS

- ACTIVE REWARDS 2020
- for Seniors

CONTENT DEVELOPMENT

- HARVARD MEDICAL SCHOOL
- Columbia University MAILMAN SCHOOL OF PUBLIC HEALTH

DATA LAYER

ΔRISK ΔBEHAVIOR

BEHAVIORS -> RISK FACTORS -> CHRONIC CONDITIONS -> MORTALITY

RESEARCH COLLABORATIONS

- UNIVERSITY OF CAMBRIDGE
- RAND
- Columbia University MAILMAN SCHOOL OF PUBLIC HEALTH

PRICING LAYER

VALUE ΔRISK

DYNAMIC PRICING

- None
- Blue
- Bronze
- Silver
- Gold

WEDGE FUNDING

TECHNOLOGY AND ANALYTICS LAYER

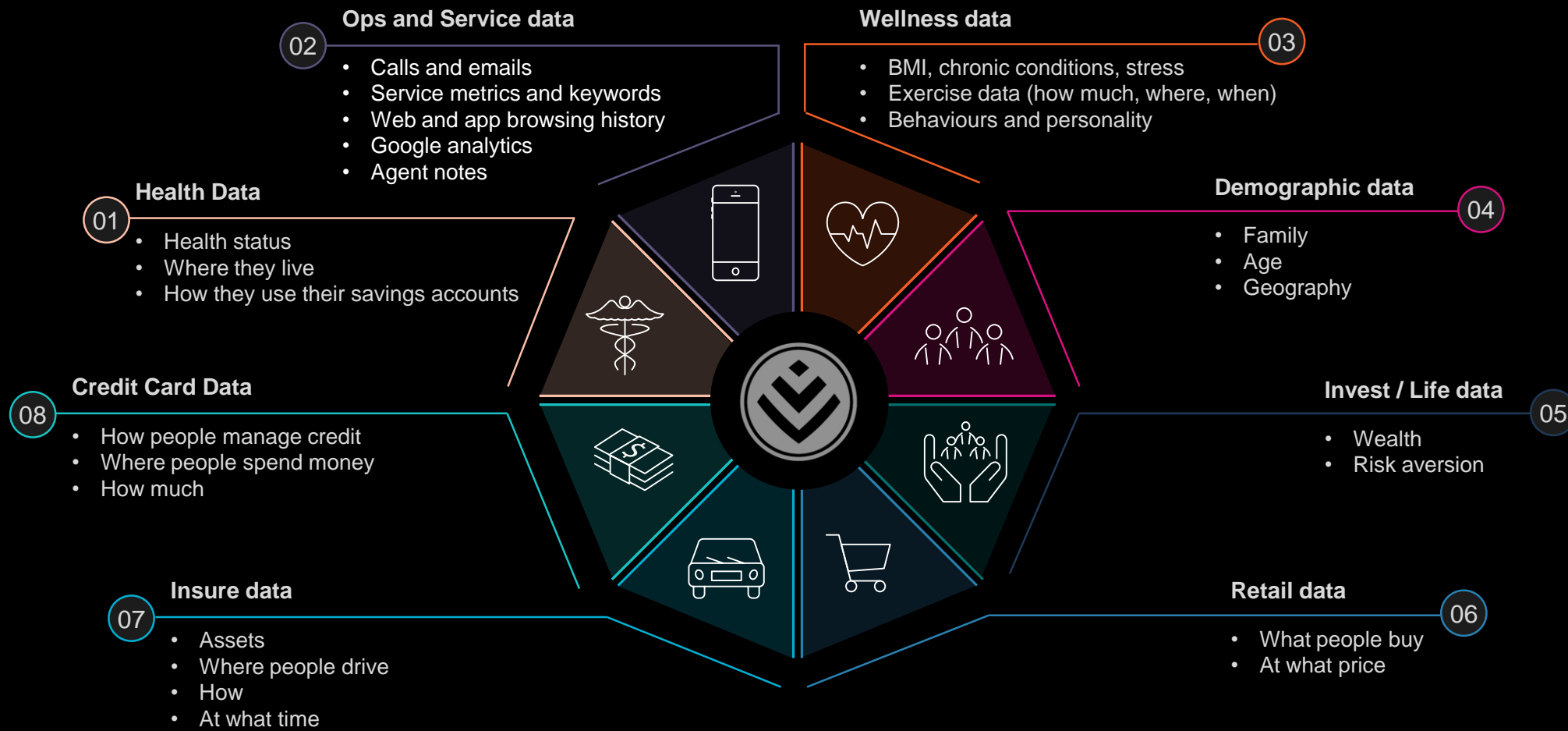
FRAMEWORK AND CO-DEVELOPERS

- Vitality 1
- accenture

CLIENTS

- KOREA: SUMITOMO LIFE, IGI Life, Saluda
- ARGENTINA: Prudential, Equivida
- GERMANY: OrangeTheory, MANULIFE GROUP
- FRANCE: MANULIFE GROUP
- AUSTRIA: MANULIFE GROUP

Massive, growing datasets from multiple sources allow sophisticated data analytics capabilities with shift from insights to powerful predictive and personalisation capabilities



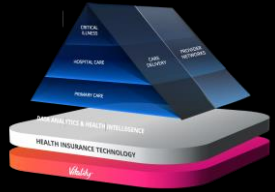
>10 terabytes
of behaviour-linked insurance data

521 million
Unique claims since 2008

10 million
Hospital admissions

1 billion
Total physical activity data points since 2008

Superior health insurance performance

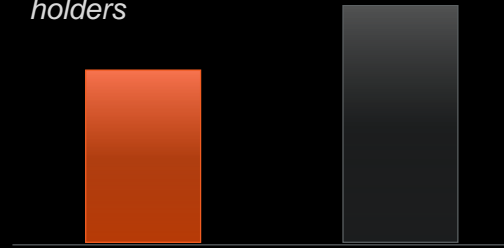


VALUE CHAIN



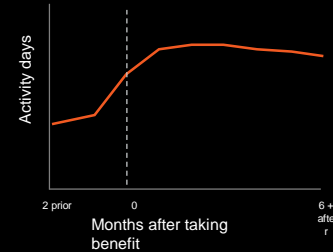
Discovery Health
1st Largest health insurer in SA
15.6% Annual risk mgmt. savings
>4% From Vitality

Average age of policy holders



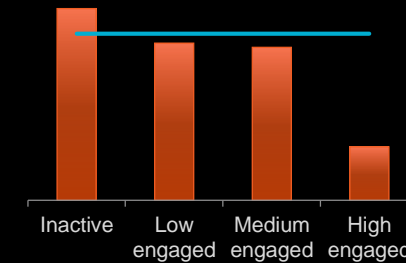
1.26 Years younger

Physical activity after Vitality uptake

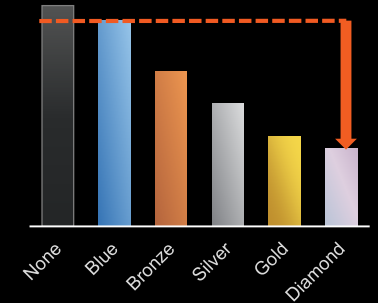


+109% Increase in physical activity for members with a **BMI > 30**

Healthcare cost by Vitality engagement

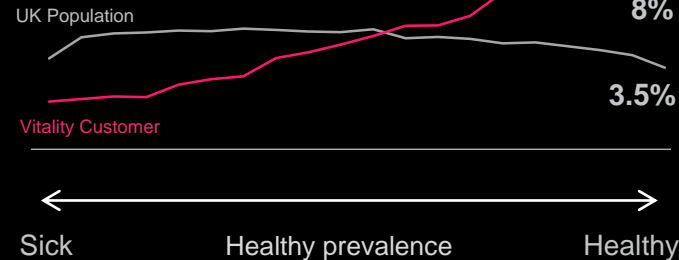


Lapse Rate, %



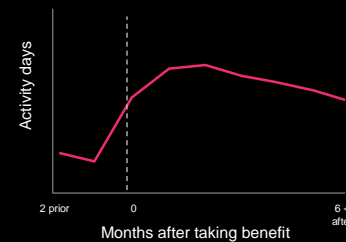
VitalityHealth
4th Largest health insurer in the UK
56% Loss ratio

Vitality customers against UK census data



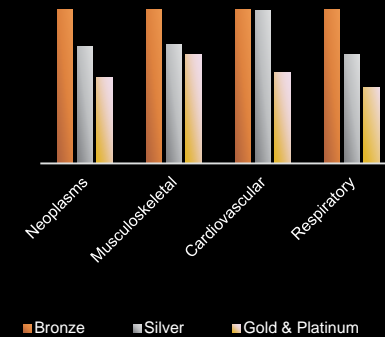
>2x Healthy prevalence

Physical activity after Vitality uptake

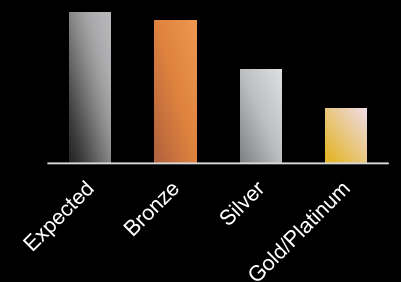


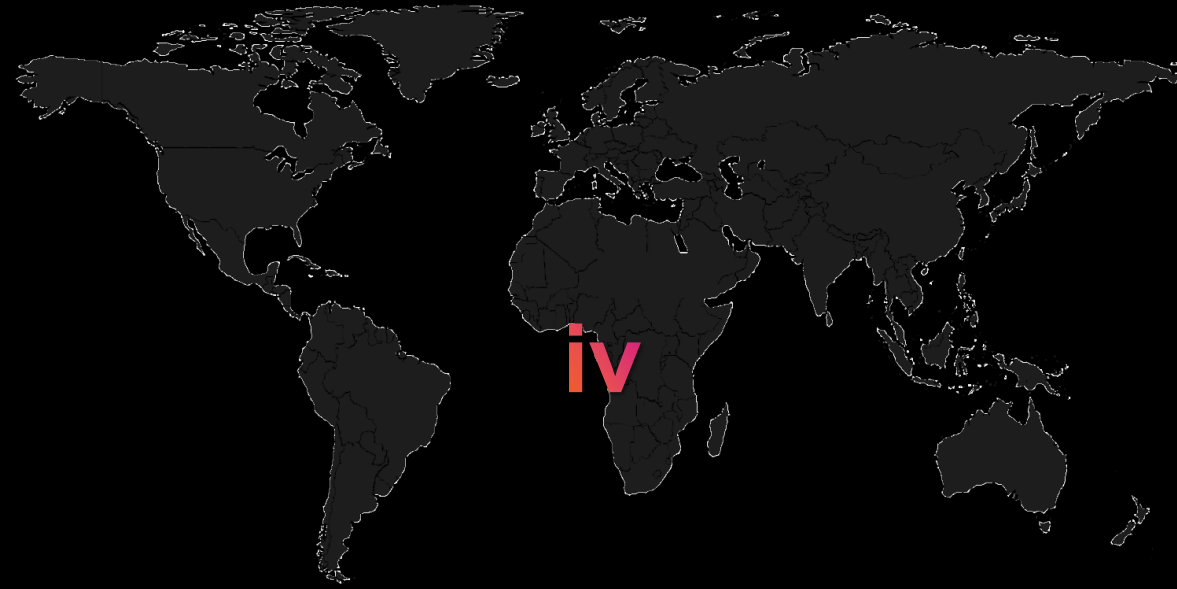
+160% Increase in physical activity for members with a **BMI > 30**

Healthcare cost by Vitality engagement



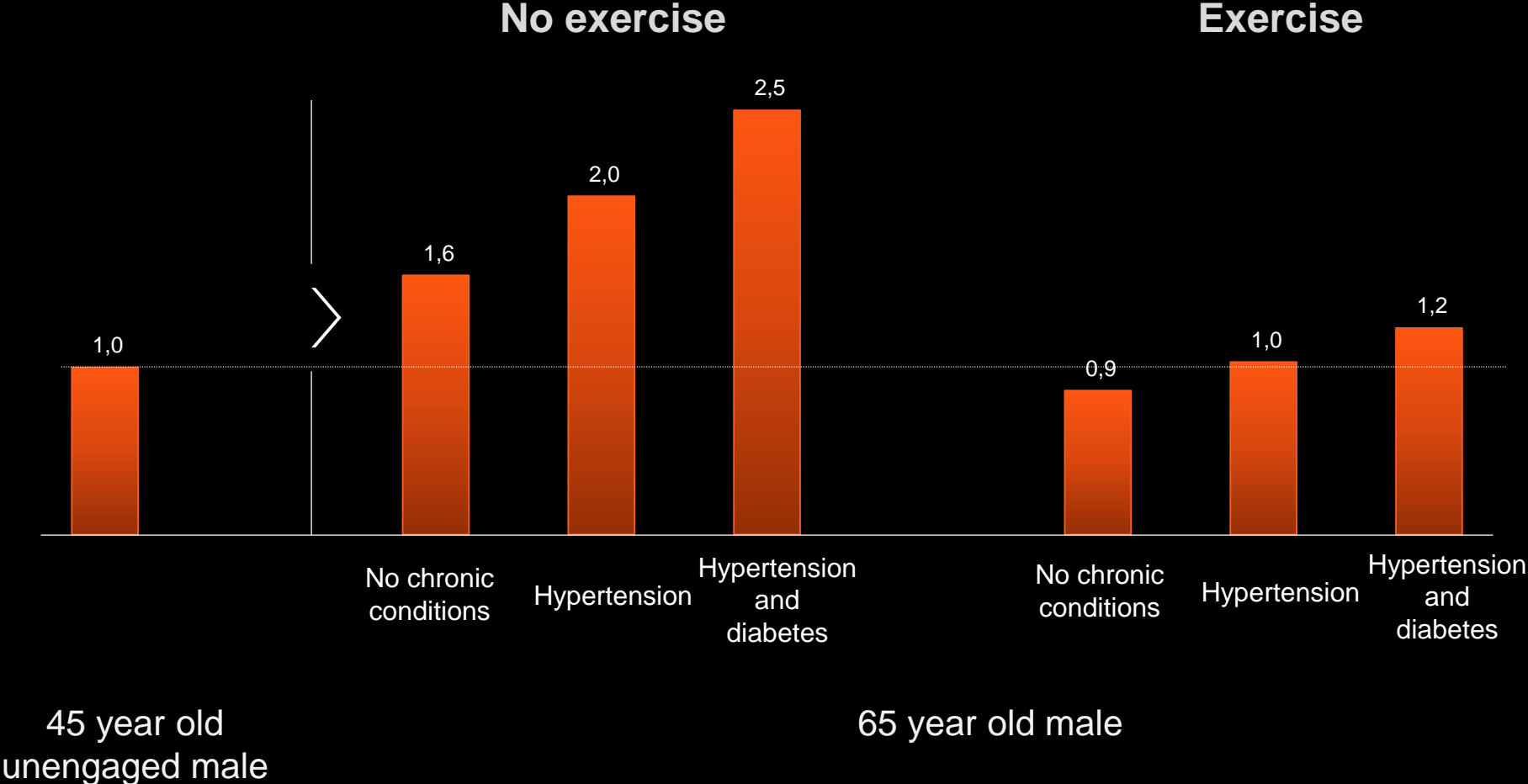
12 month rolling lapse rates



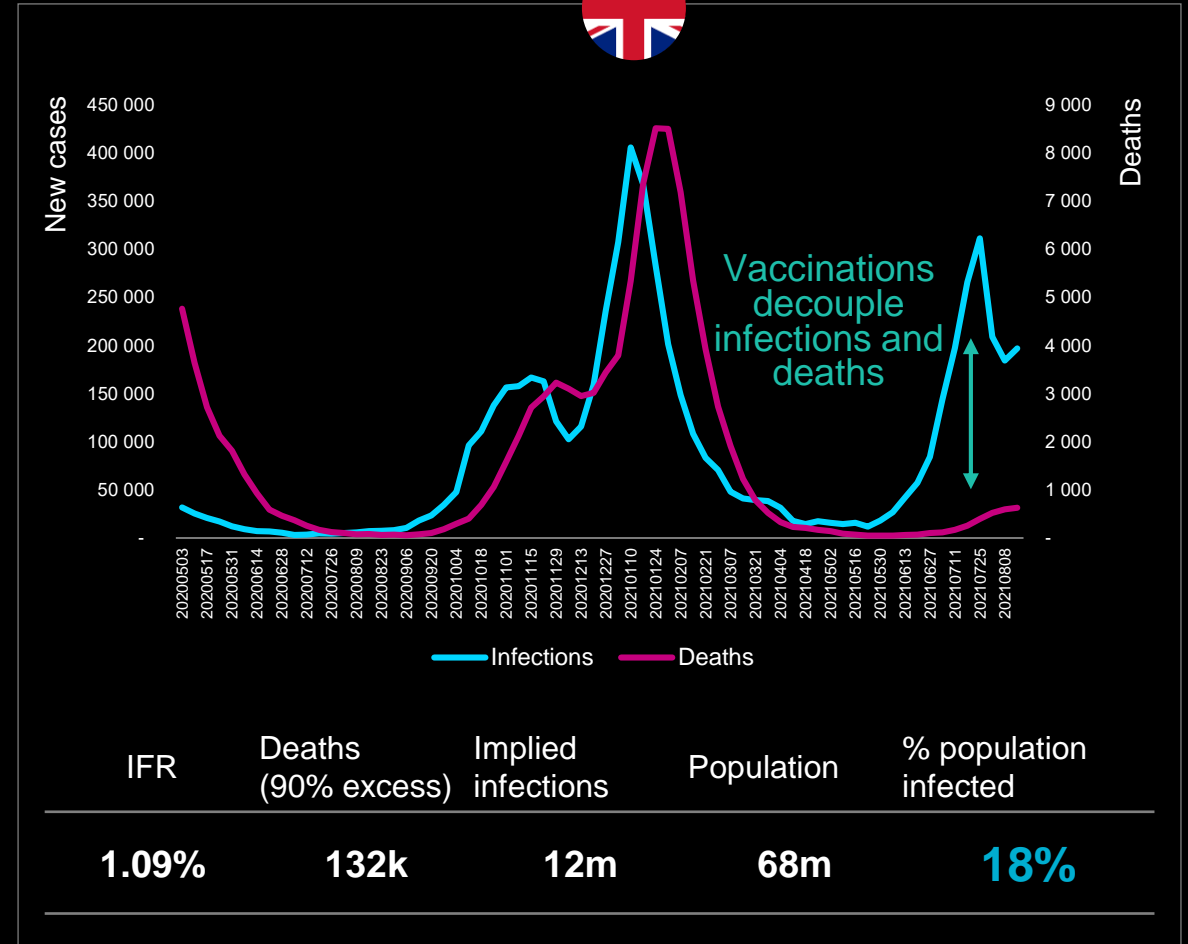
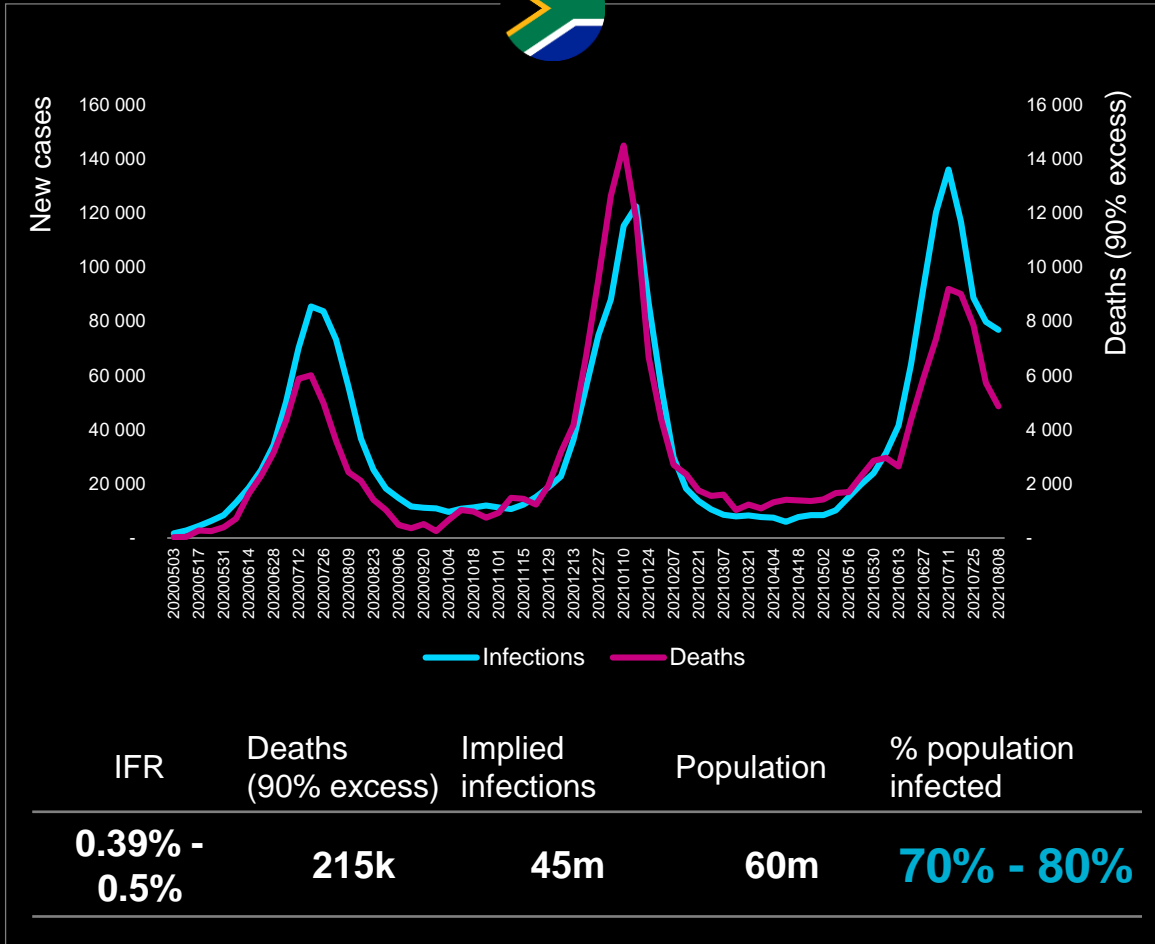


REFLECTING ON COVID

Recent Discovery Health and Vitality data demonstrates the impact of physical activity on COVID-19 mortality risk



SA's epidemic 5x worse than the UK's so far

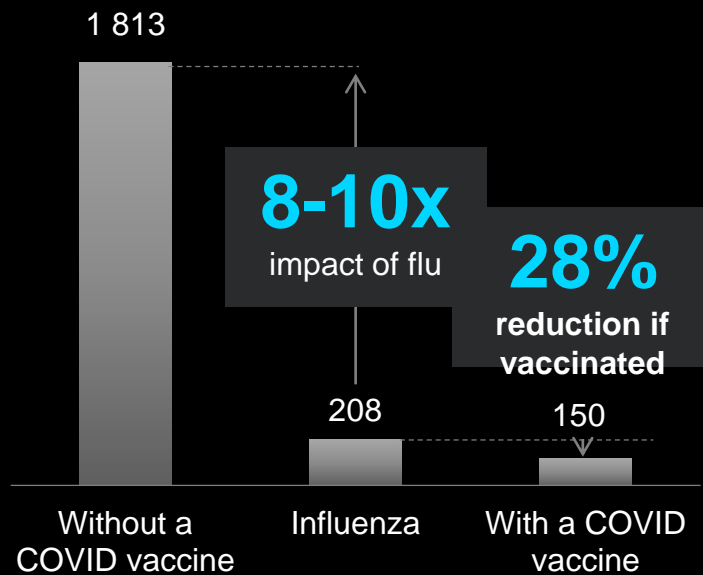


Given SA's younger age profile, expect deaths to be 64% lower, but when adjusting for population size (12% smaller) the data indicates epidemic currently **5.5x** worse than UK

Data supports efficacy of vaccines against COVID-19

COVID-19 vaccination reduces risk of mortality relative to influenza¹

Deaths per million of the population

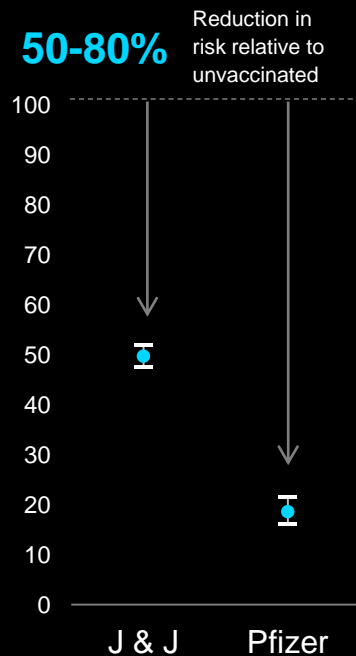


Vaccine is >90% effective in reducing death

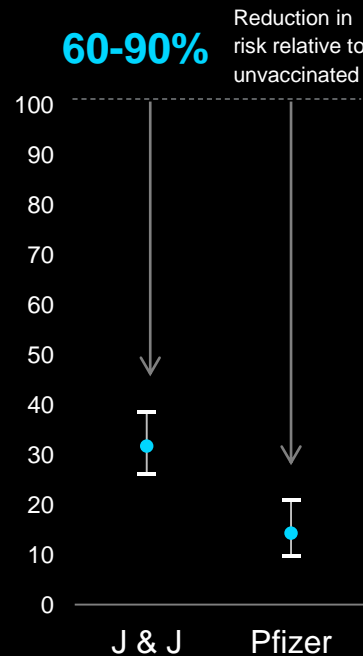
Discovery Health data on vaccine effectiveness*



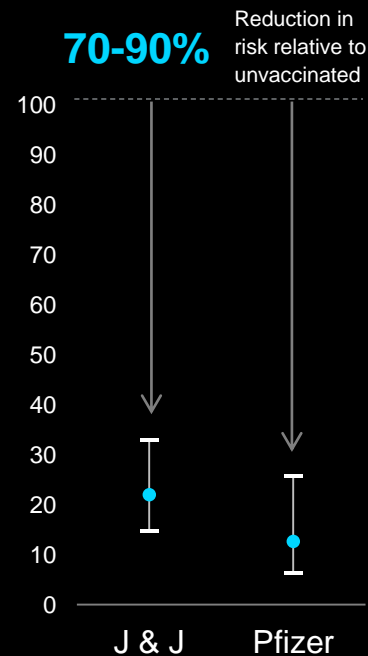
Confirmed infection



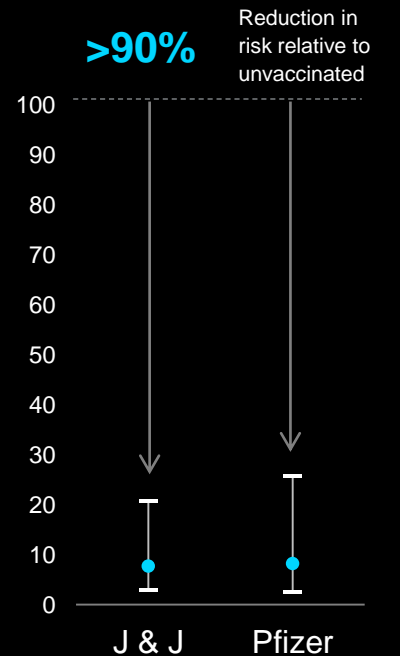
Admission



High care/ICU



Death



J & J 28+ days since vaccination²

Pfizer 7+ days - second dose³

*Excludes data on members vaccinated in the public sector. To be submitted for peer review and publication

1 Surveillance of influenza and other respiratory viruses in the UK Winter 2019 to 2020
 2 Sisonke and SAMRC, test negative refreshed to 17 July
 3 Test negative study refreshed to 15 August