



# **Patient-centred healthcare:**

## *How workable is it in Asia?*

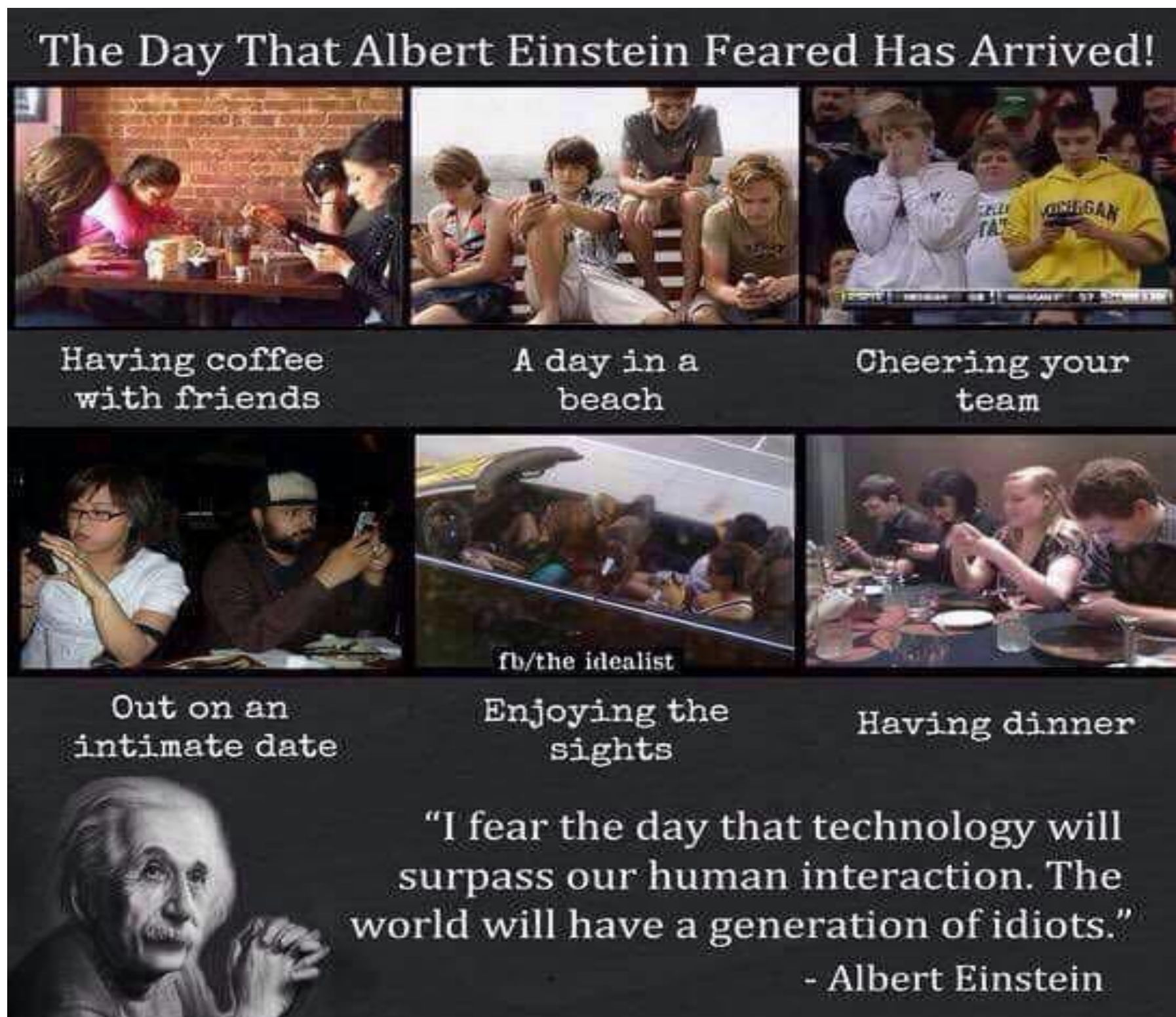
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*Chief Executive Officer, Health Promotion Board*

*Presented at: FT Asia Healthcare & Life Sciences Summit: Shaping the future of healthcare, 25 April 2017, Singapore.*

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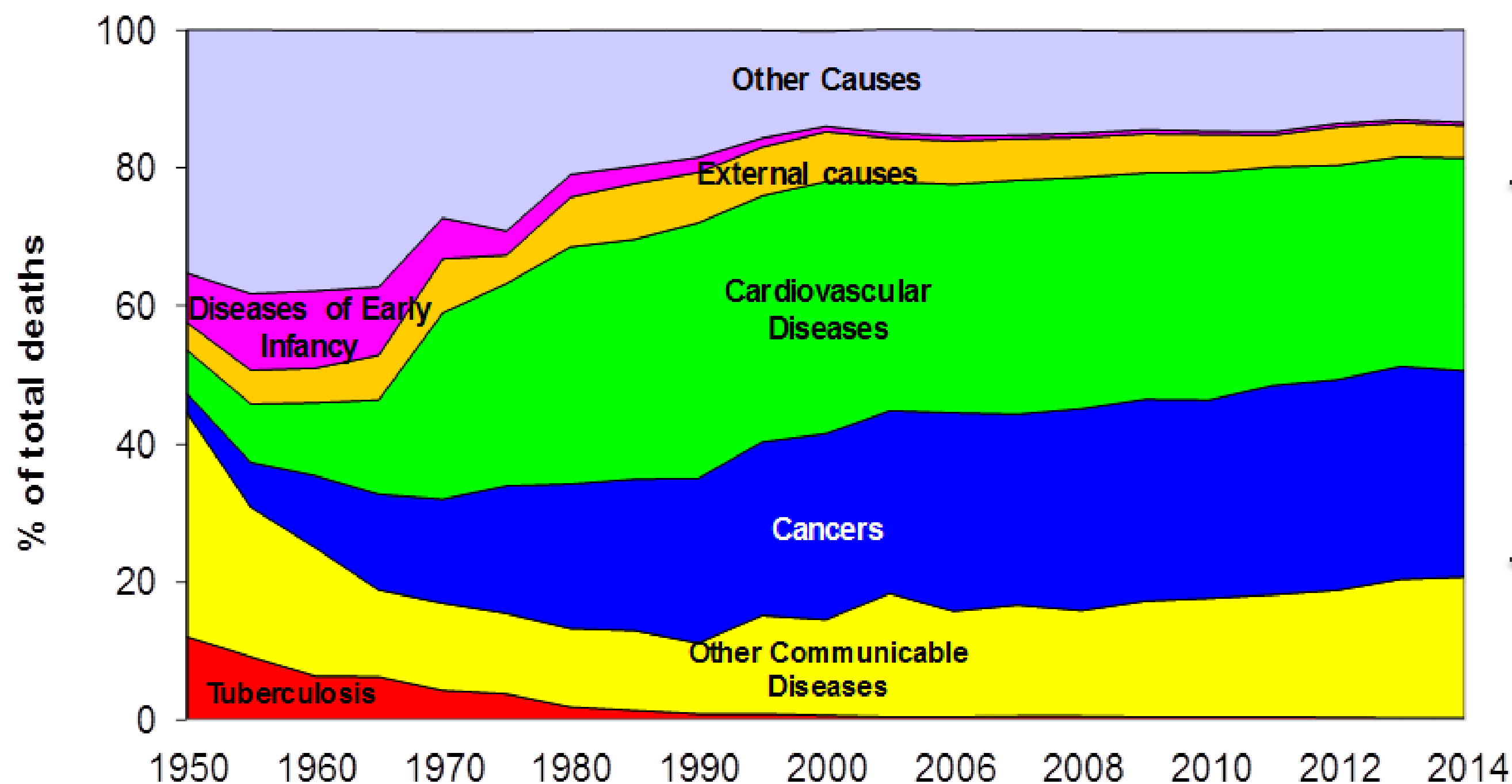


# The world we live in today tempts us to indulge & be physically inactive





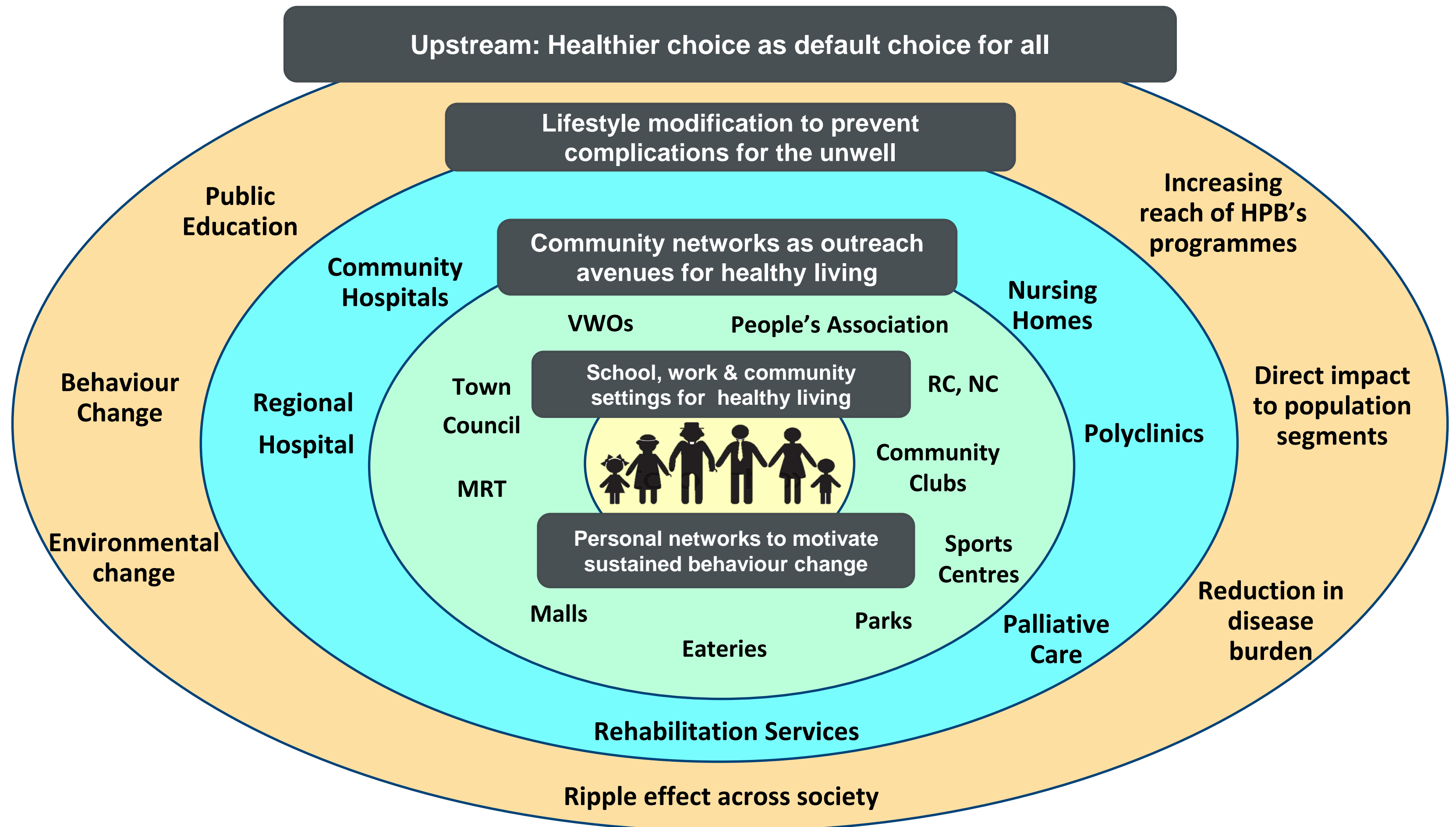
# Since 1970s, non-communicable diseases (NCDs) are the leading causes of death among Singaporeans



Non-communicable conditions that can be caused by modifiable lifestyle risk factors such as high body mass, physical inactivity and cigarette smoking.


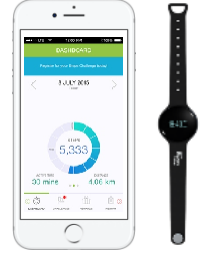

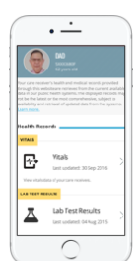
Source: Registry of Births and Deaths, 2014

# HPB has a strong presence across society to empower the population to lead a healthy lifestyle



# Leveraging technological connectedness, HPB customises and extends our reach to diverse population segments, enabling population ownership for health



 <b>CHILD &amp; YOUTH</b> Child Health Records Parents Engagement Journey	 <b>HEALTH &amp; WELLNESS</b> Wearables: Activity Tracking Food Image Recognition Incentives & Rewards	 <b>MANAGE CONDITIONS</b> Healthy Pregnancy Diabetes Prevention /Management Chronic Conditions	 <b>MANAGE PATIENTS</b> Appointments Lab Results Medication Adherence Tele-Health
<b>PREVENTIVE SCREENING</b>		Chronic Diseases, Selected Cancers, Functional	
<b>BEHAVIOUR CHANGE</b>		Gamification, Incentives via Health Points,	
<b>POP HEALTH SURVEY</b>		National Nutrition, Health Behavioral Surveillance, Student Health	
<b>POP HEALTH ANALYTICS</b>		DIY Analytics; Personalised Services; Programme & Policy	

Supported by multiple face to face touch points across Singapore

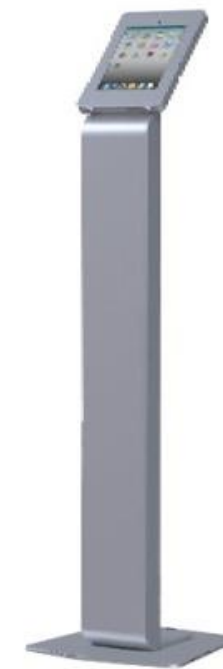




# Delivering health & wellness via technology: The National Steps Challenge (NSC) example



OR



Steps per day	Points
5,000	15 pts
7,500	45 pts
10,000	60 pts (max)

Prize Tier	Points	Rewards Value
Tier 1	600 pts	From \$5
Tier 2	+1,800 pts	From \$15
Tier 3	+1,200 pts	From \$10

Register & collect Steps Tracker or choose your preferred tracking mode

Download the Healthy 365 App

Sync to island-wide NSC kiosk

Start walking to collect rewards!

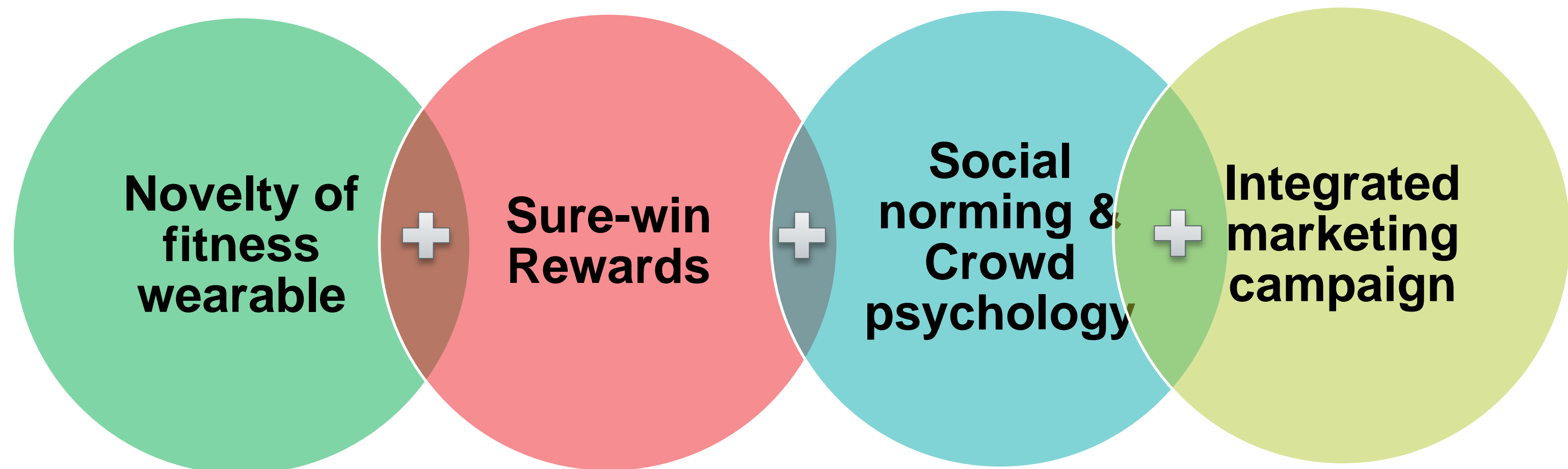
An accompanying nationwide, 360 integrated marketing campaign





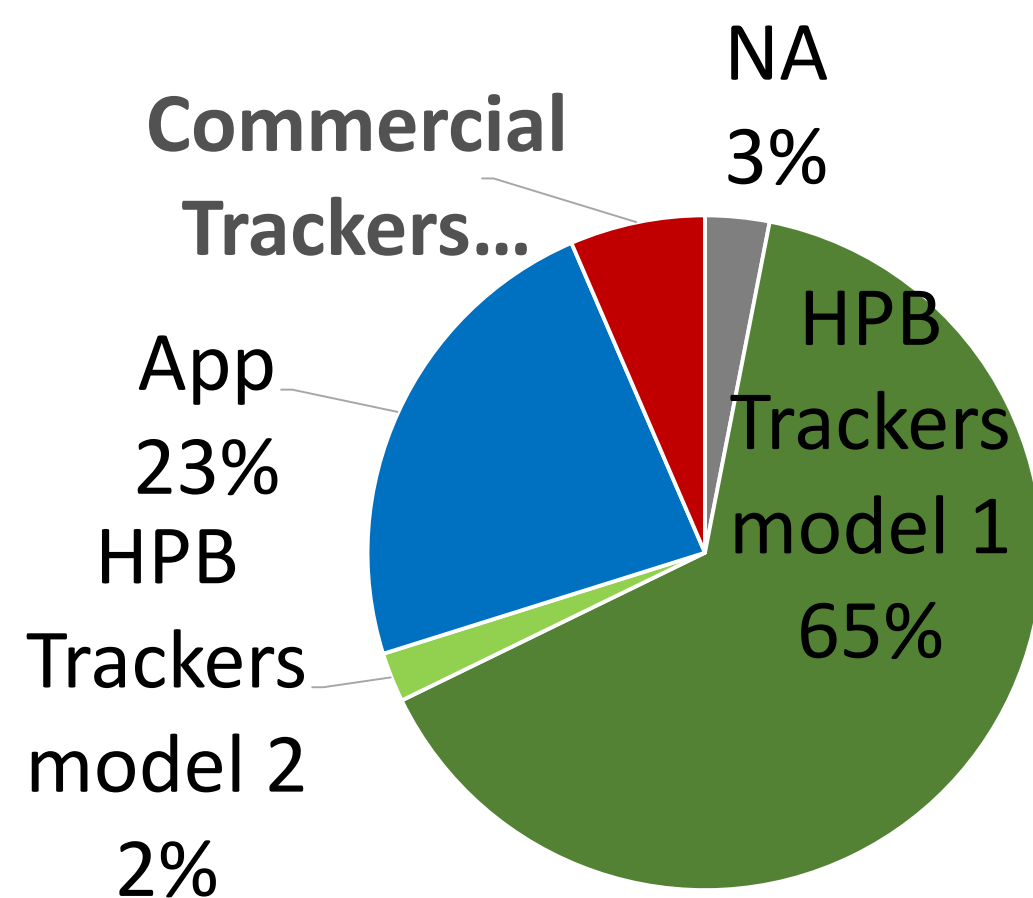
# The NSC is an unprecedented physical activity movement, mobilizing 500,000 Singapore residents over 2 seasons

## *Key Success Factors of NSC*



# Stronger engagement seen among commercial tracker users in NSC compared to industry reports about use of commercial trackers

**Among the 300,000 NSC 2 participants**



**7% or about 20,000 of participants wore commercial trackers (e.g. Fitbit)**

*“Around 40 per cent of participants stopped using the activity tracker (Fitbit Zip) in the first six months”  
– The Lancet Diabetes & Endocrinology (4 Oct 2016)*

*“15% of Fitbit users “disconnect” within the first 30 days” – Forbes (7 May 2015)*

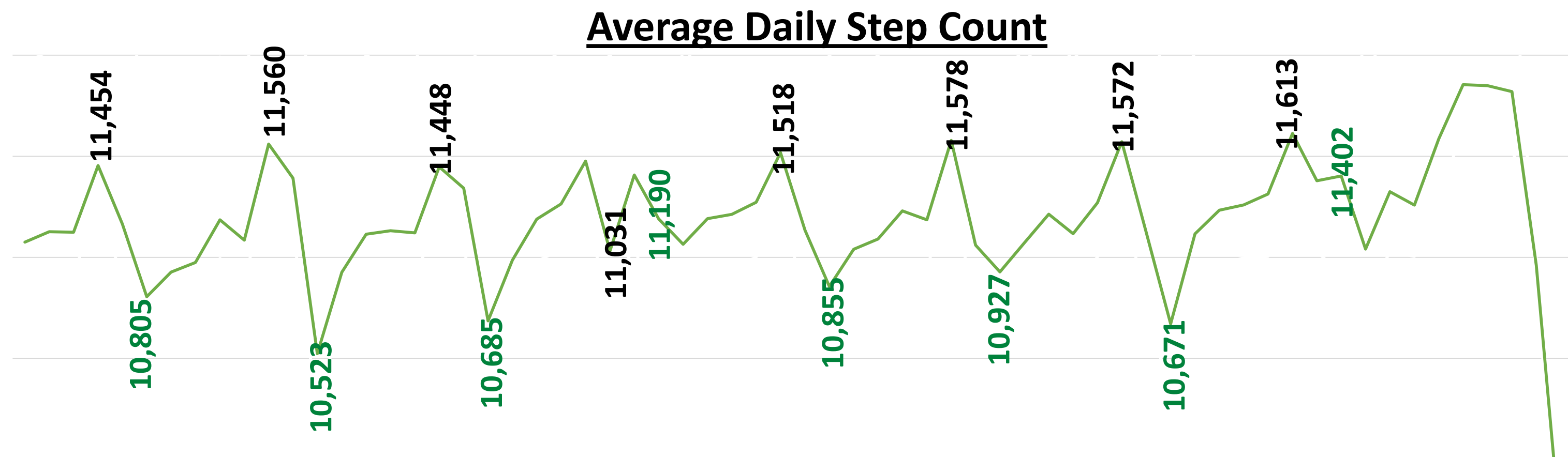
*“Industry reports show that 30-50% of employees (in company based programmes) stop using their fitness tracker in less than six months, despite the compensation for the device and additional incentives to encourage exercise and tracking.” -  
Integrating Population-based Patterns with Personal Routine to Re-engage Fitbit Use (16 May 2016)*

**As of end Feb 2017, 5 months into NSC 2 and after the conclusion of sure-win incentives, 74% of commercial trackers participants continue to be active users.**



# NSC provided us with step count, attitude towards and information on physical activity patterns from our participants

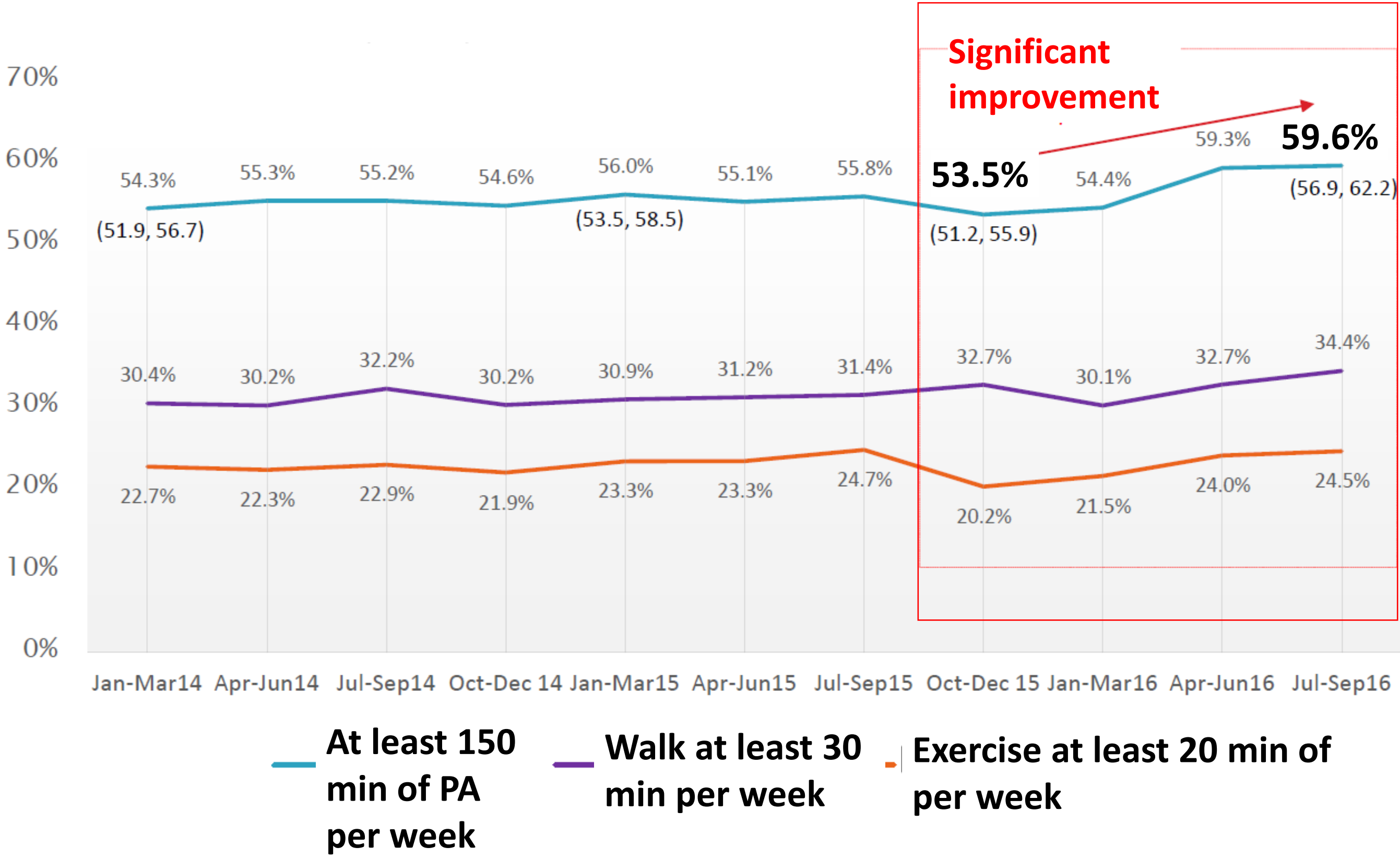
A glimpse into Singaporeans' walking habits (e.g. weekend warriors vs. work week daily 10,000 steppers)



- Noticed the lowest usage and activity levels among adults on Sundays, suggesting most of their Physical Activity come from work-related commuting.
- Developed and introduced booster activities during the weekend to increase the step count (physical activity levels) on a momentum

# Positive impact on Population-Level Physical Activity: Significant increase in sufficient physical activity in Singapore since NSC started.

Prevalence of sufficient physical activity in Singapore



Source: Health Behaviour Surveillance of Singapore, among Singapore Residents aged 18-69 years



# Empowering health conditions management via technology: The HealthHub example

The Health Hub integrates content and services to influence health behaviour and simplify interaction with health service providers

## Content & Services

### Health Content

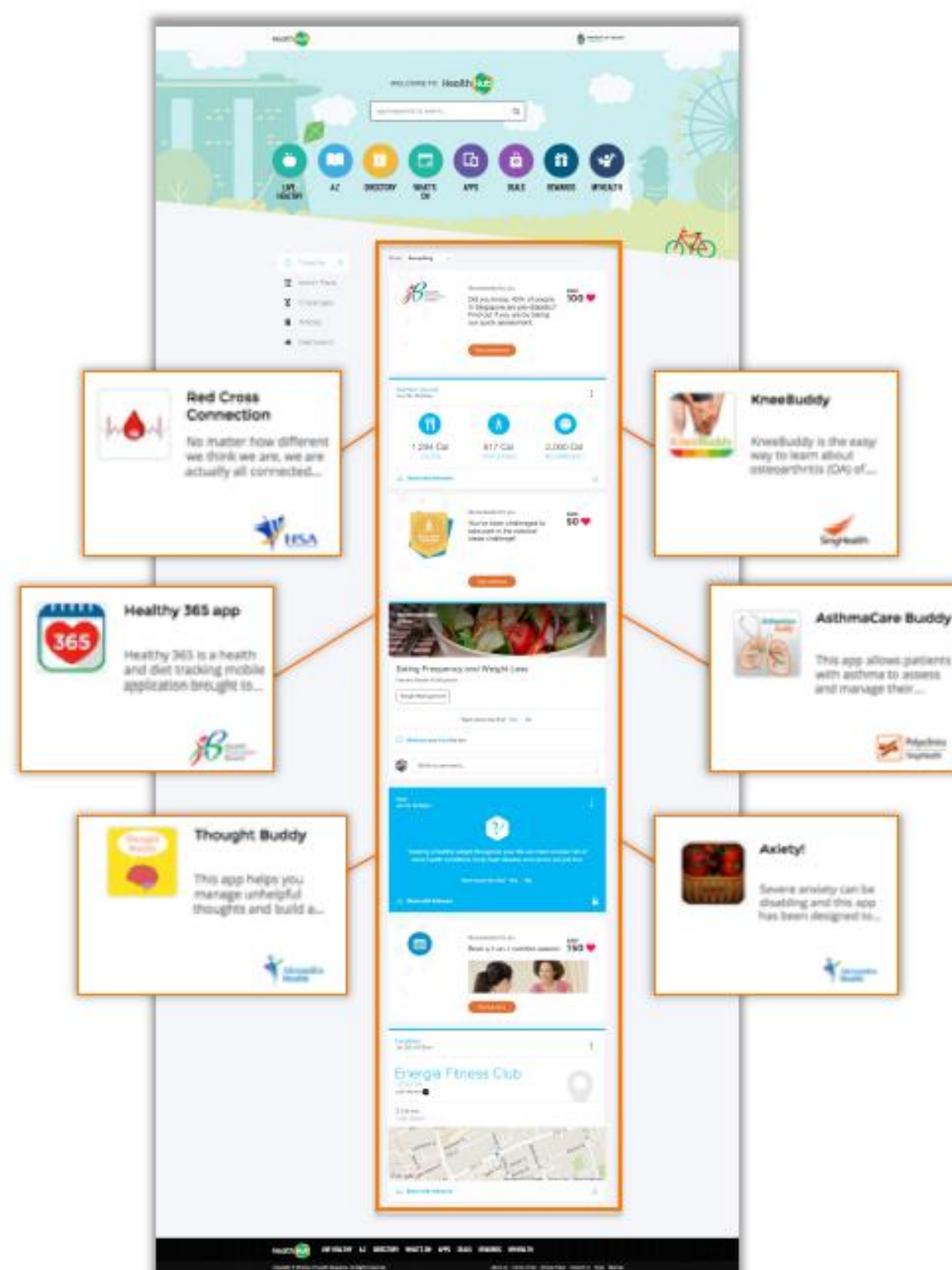
Trusted source of information, tips and advice on healthy living

### Health Services & Navigation

Locate health services, facilities & healthcare professionals from one place

### Health Admin & Finance

Single point of contact to various health service transactions e.g. view blood donation history, appointments, view CHAS balance



### Personal Health Records

Simplified access to individual health records and wellness data for ease of use

### Personal Health Management

Personalised content and enrollment for preventive care programmes & condition-specific action plans to self-monitor and self-manage i.e. user engagement journey

### Communities & Marketplace

Source of community support and care services

# Adoption metrics for HealthHub surpassed our expectations and continues its growth momentum



	Achieved By Oct 2016	Achieved by Feb 2017	Benchmarks	
Total Account sign-up <sup>1</sup>	36,000	45,000	NA	NA
Total App Downloads <sup>1</sup>	41,000	90,000	Healthbuddy (V1 launched 2012)	33,000
Total website Page Views <sup>1</sup>	7,200,000	9,300,000	Webmd.com	15M
Customer satisfaction score	62%	NA	NA	NA

\*Estimates: Total  
downloads/app tenure  
X 12 months

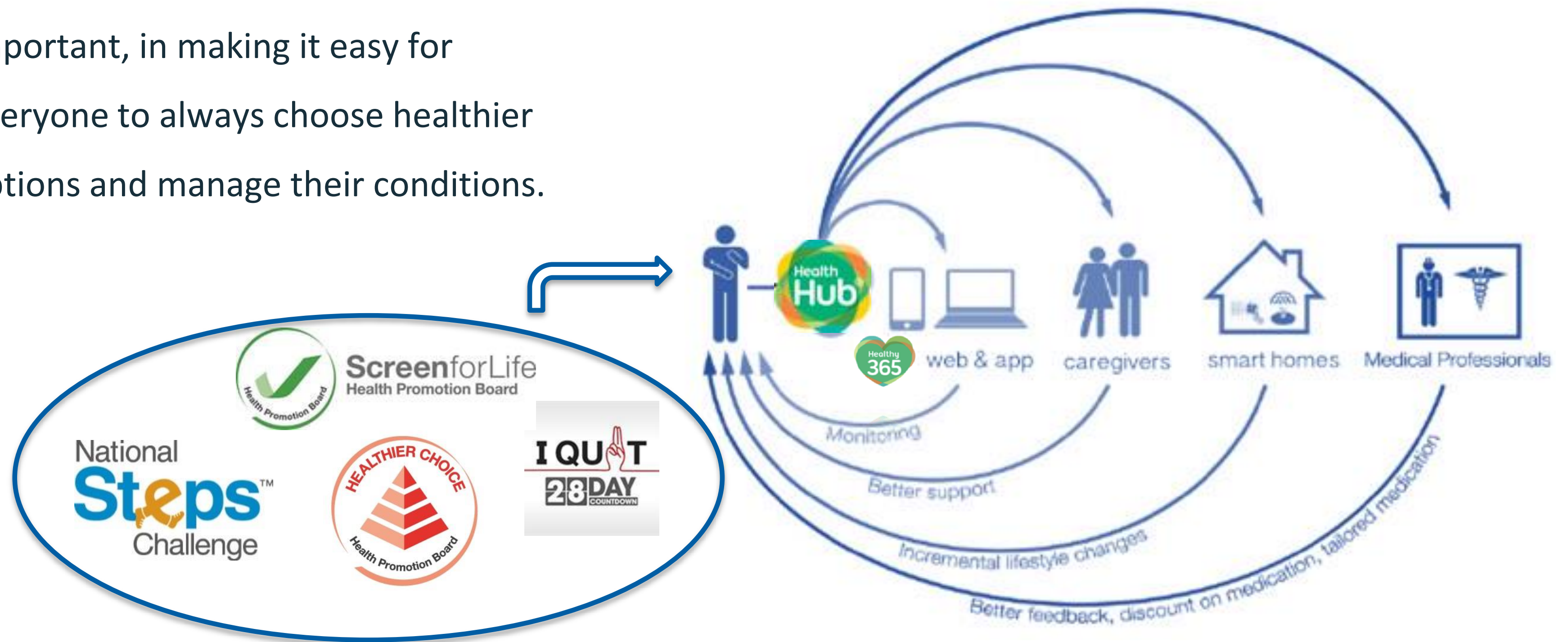
\*Estimates: Total PV  
from Oct 2014-Oct 2015

<sup>1</sup>Cumulative figures since launch on 15 Oct 2015  
Data sources: Comscore & Google Analytics



# Technology will continue to be a strong enabler to instill strong individual ownership of health

Continued awareness, accessibility and affordability of healthier options equally important, in making it easy for everyone to always choose healthier options and manage their conditions.



**Thank you.**