GLOBAL VIEW ON DIGITAL HEALTH

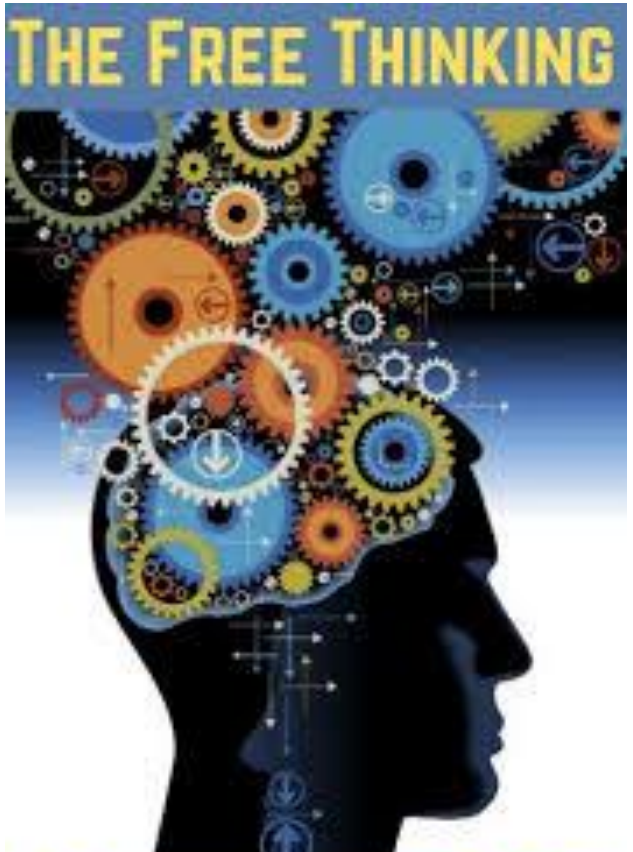
WONCA Europe

16th of November 2021

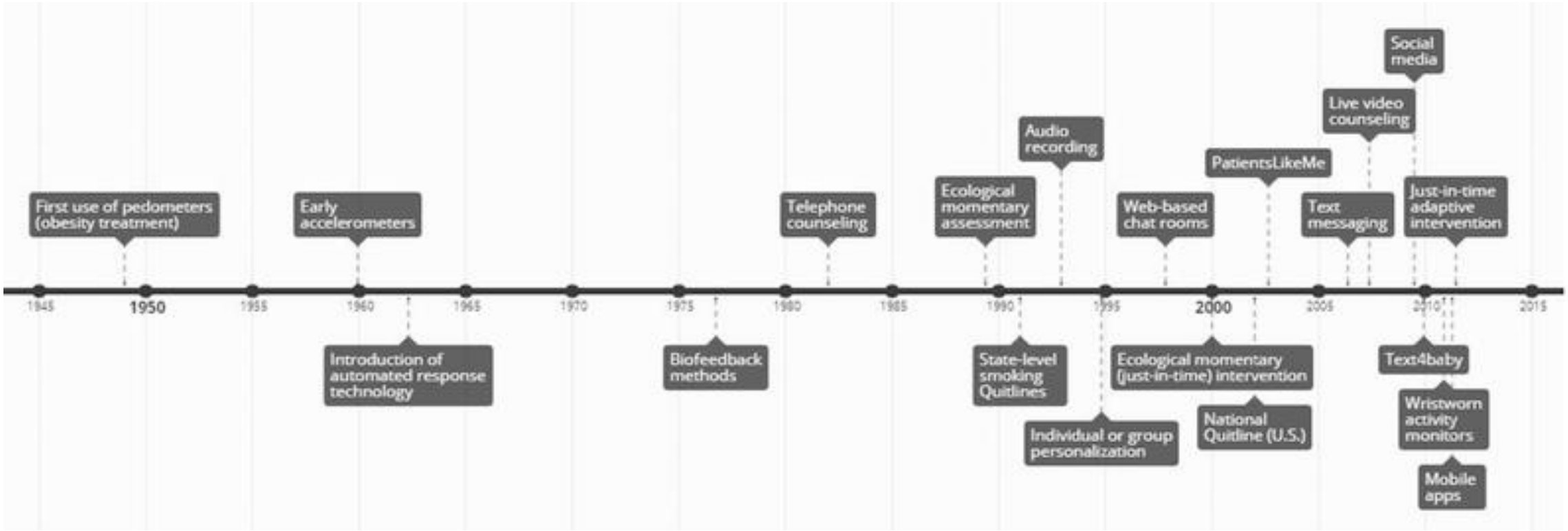
Steven Van de Vijver, MD, PhD

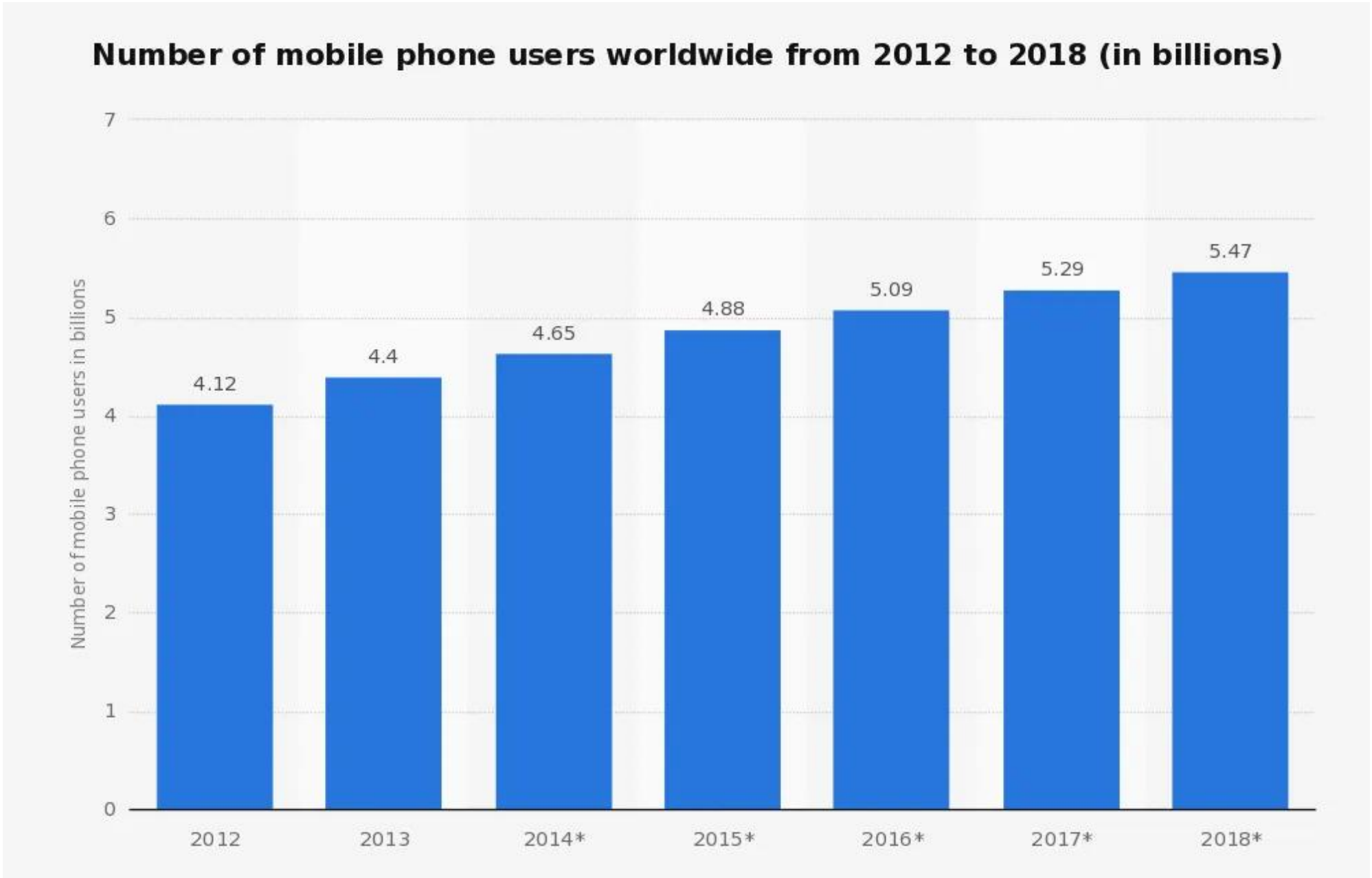
Amsterdam health & technology institute

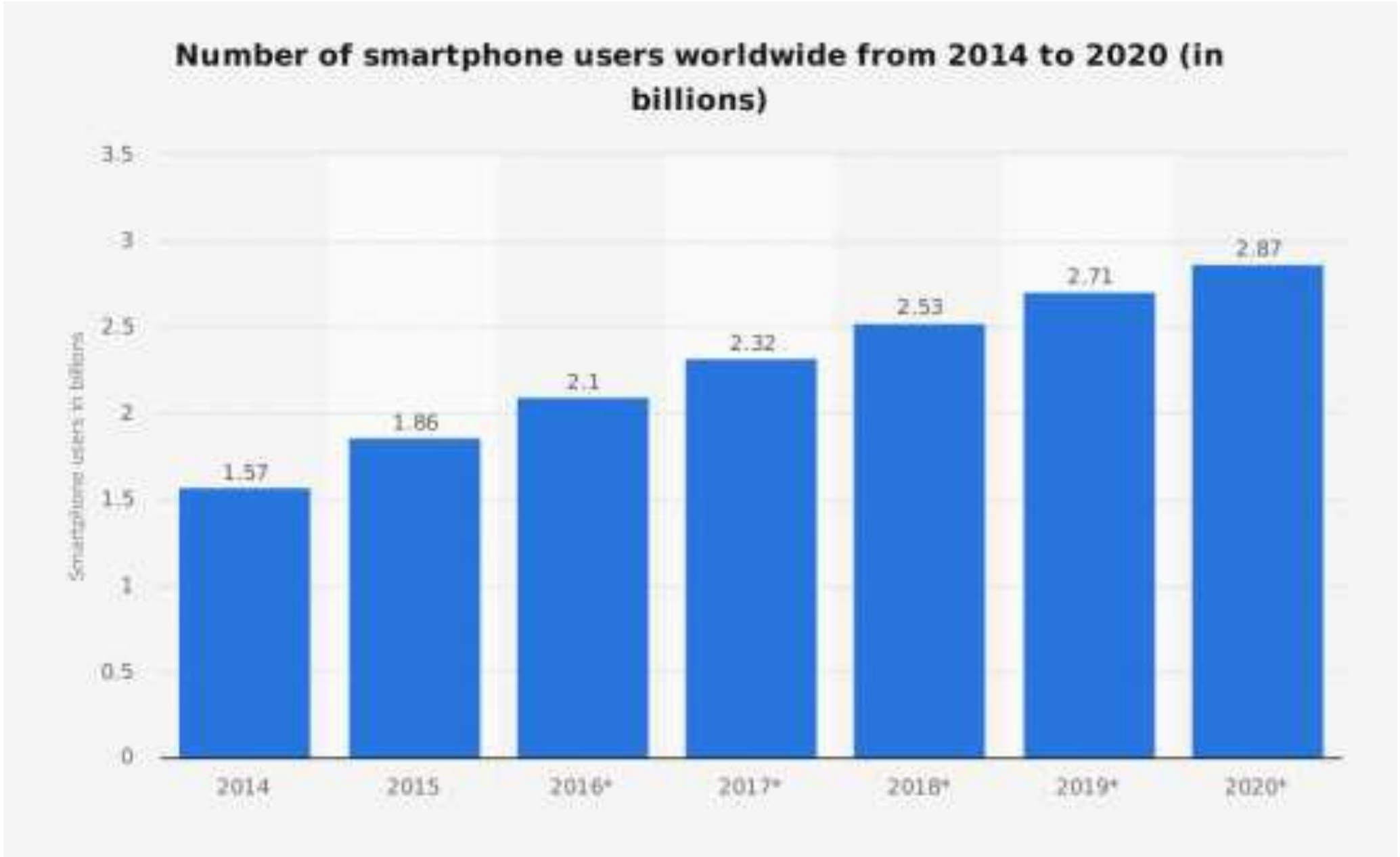
“How best can we use digital health to support primary health care for universal health coverage in Africa?”



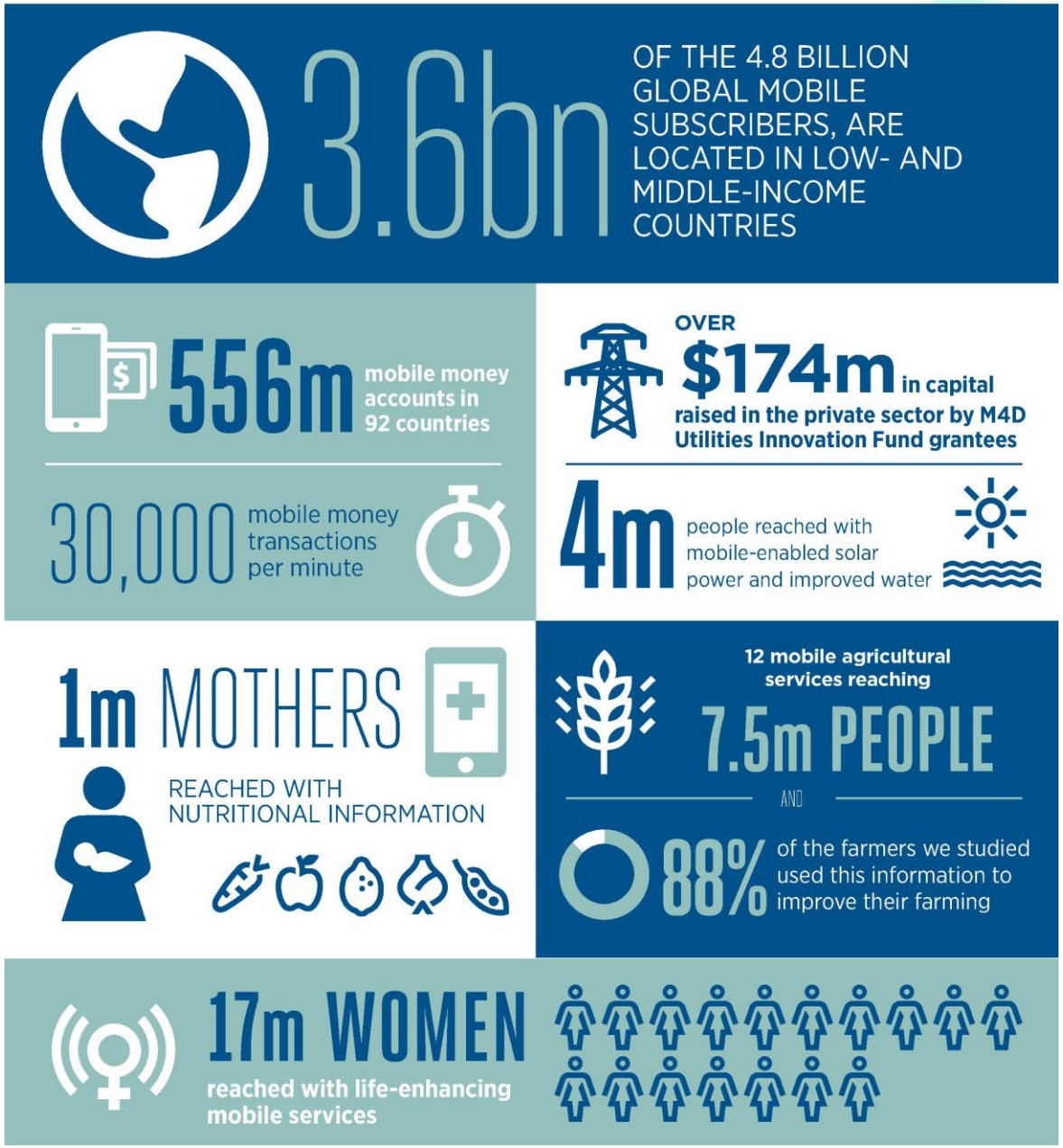
Timeline digital health




Number of mobile phone users worldwide from 2012 to 2018 (in billions)
Number of mobile phone users in billions
7
6
5
4
3
2
1
0
4.12
4.4
4.65
4.88
5.09
5.29
5.47
2012
2013
2014*
2015*
2016*
2017*
2018*


Number of smartphone users worldwide from 2014 to 2020 (in billions)
Smartphone users in billions
3.5
3
2.5
2
1.5
1
0.5
0
1.57
1.86
2.1
2.32
2.53
2.71
2.87
2014
2015
2016*
2017*
2018*
2019*
2020*

Digital transactions in LMIC



LEAPFROGGING:

THE KEY TO AFRICA'S DEVELOPMENT?

FROM CONSTRAINTS TO INVESTMENT OPPORTUNITIES

Example of other digital innovations

GLOBAL DIGITAL HEALTH INDEX

World Map | Indicators

Search by country name | English

State of Digital Health around the world today

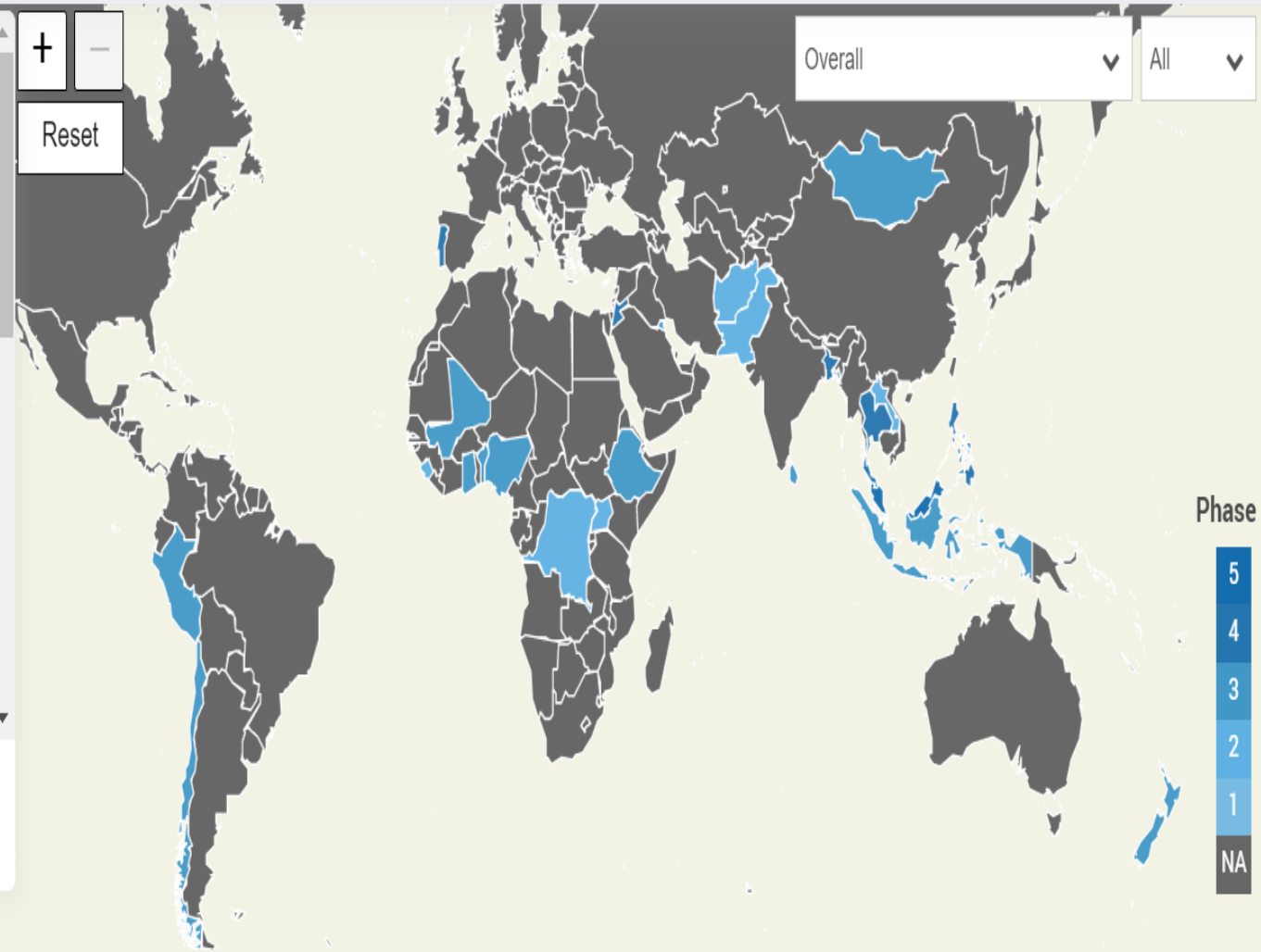
The Global Digital Health Index (GDHI) is an interactive web-based resource that aims to track, monitor, and assess the enabling environment for digital health throughout the world.

OVERALL

Phase 3

LEADERSHIP AND GOVERNANCE

VIEW COUNTRIES



OECD ranking

Digital Health Index		
Rank	Country	Index
1	Estonia (EST)	81.92
2	Canada (CAN)	74.73
3	Denmark (DNK)	72.47
4	Israel (ISR)	72.45
5	Spain (ESP)	71.36
6	NHS* England (GBR)	69.98
7	Sweden (SWE)	68.26
8	Portugal (PRT)	67.19
9	Netherlands (NLD)	66.05
10	Austria (AUT)	59.81

The Estonian example

- Independence in 1991 from Soviet Union, origin of Skype in 2003
- Introduction of E-Health system > EHR (2008) > now 99% digitised
- Contact doctor: mail, chat, phone, Skype, real life
- E-prescription (easier repeat, interaction control, 99%)
- E-ambulance (pre filled forms after ID input)
- Patient can access data, and decides who has insight
- Easier transition from curative to preventive medicine
- Next step personalised medicine > decision support for GP's
- Data privacy and use of blockchain
- High quality, cost efficient and sustainable

E-education

E-tax

I-voting

E-banking

E-land

Digital health is not just digitizing health

Current view	Evolving model of care
Geared towards acute conditions	Geared towards long-term conditions
Hospital centred	Embedded in communities
Doctor dependent	Team based
Episodic care	Continuous care
Disjointed care	Integrated care
Reactive care	Preventative care
Patient as passive recipient	Patient as partner
Self care infrequent	Self care encouraged and facilitated
Carers undervalued	Carers supported as partners
Low tech	High tech

Different elements of digital health

- Telemedicine
- Medical devices
- Artificial intelligence and Machine learning
- Virtual ward
- Electronic Health Records

Continuum of care

Feb 2020

10 year partnership with the Government of Rwanda

Jan 2020

1 million completed consultations

Apr 2018

30% adult population registered with Babyl

Sep 2016

Launch of Babyl

Babylon UK > Babyl Rwanda

AfyaPro is linked to Philips VitalHealth

Care Decision Support Referral Management
VitalHealth Platform
United States

Value-Based Care
VitalHealth QuestLink
United States

Value-Based Care
VitalHealth QuestLink
Netherlands

Eldery care
VitalHealth Care
Netherlands

Care Management and eHealth Solutions
VitalHealth Platform
Africa

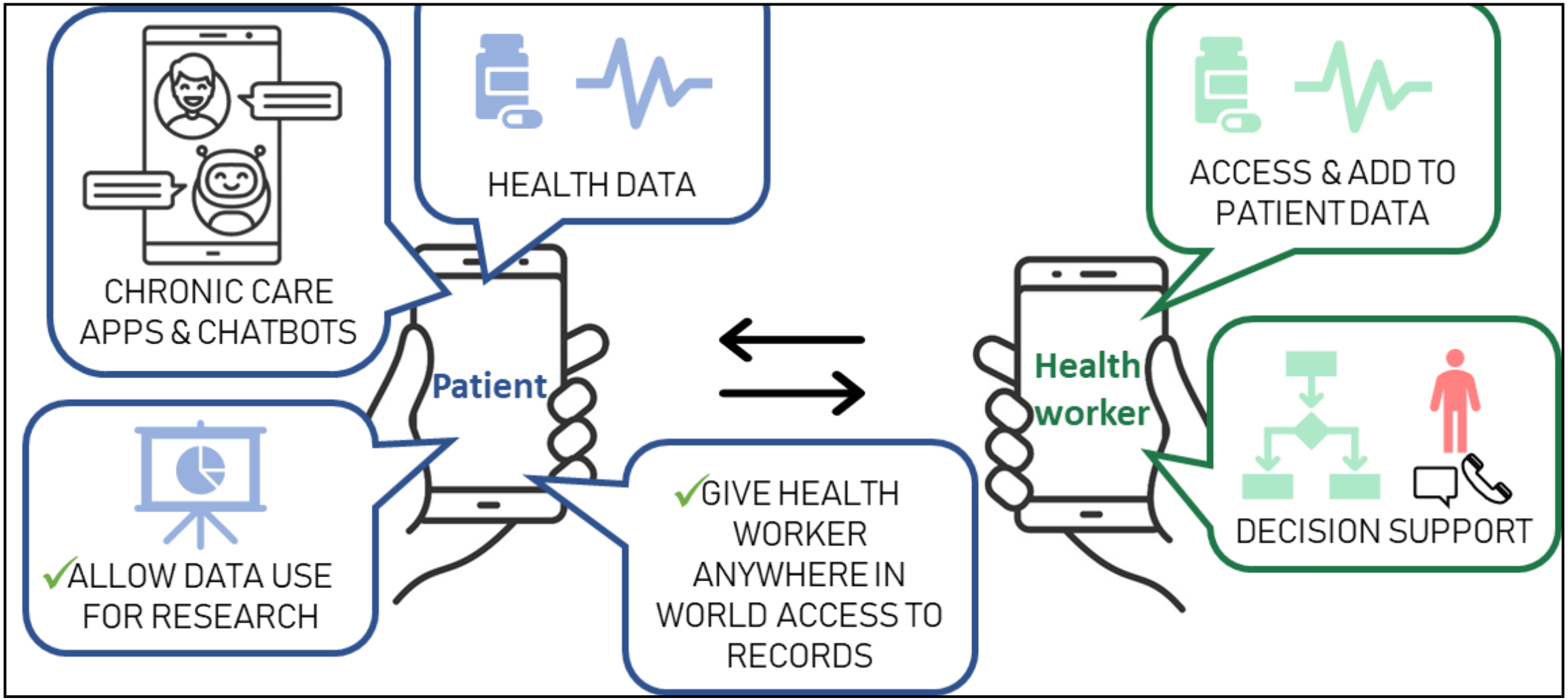
eHealth Solutions
VitalHealth Platform
Global

Patient Engagement
VitalHealth Engage
Germany

Value-Based Care
VitalHealth QuestLink
India

Regional Patient Portal
VitalHealth Engage
Netherlands

40 care groups
Ca. 3000 GP's
Regional eHealth Platform
Netherlands



Initial idea: mobile based, patient-owned digital health records

WHO Principles for Digital Development

- Design With the User
- Understand the Existing Ecosystem
- Design for Scale
- Build for Sustainability
- Be Data Driven
- Use Open Standards, Open Data, Open Source, and Open Innovation
- Reuse and Improve
- Address Privacy & Security
- Be Collaborative

Conclusions

- Digital health is not just digitizing steps but innovating the system
- Many different tools already available to use
- Interoperability is key
- Check where the data are going
- Person centered > and include all risk digital divide


USE IT
OR
LOSE IT!