BE HE@LTHY BE MOBILE

FACT PACK

World Health Organization

ITU

BE HE@LTHY BE MOBILE

MOBILE TECHNOLOGY FOR A HEALTHY LIFE

What this fact pack is for

This fact pack gives a broad overview of the Be He@lthy, Be Mobile initiative and how it fits into the 2030 Sustainable Development agenda

WHO/NMH/PND/18.10

Contents

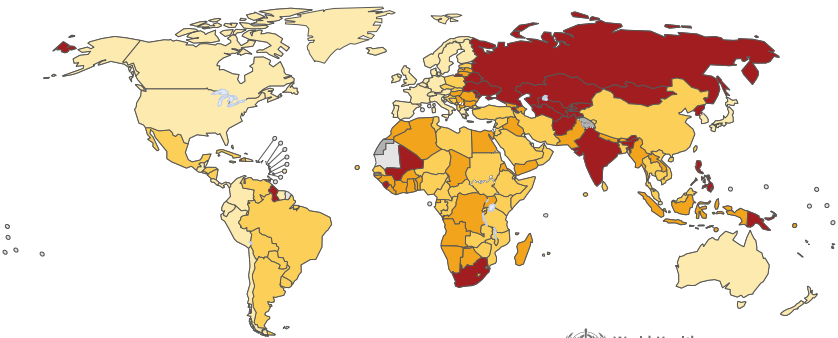
1.

Noncommunicable diseases: a global challenge

		Noncommunicable diseases (NCDs) and their risk factors			
		Risk factors			
		Tobacco use	Unhealthy diets	Physical inactivity	Harmful use of alcohol
Noncommunicable diseases	Heart disease and stroke	✓	✓	✓	✓
	Diabetes	✓	✓	✓	✓
	Cancer	✓	✓	✓	✓
	Chronic lung disease	✓			

- NCDs cause more deaths than all other causes combined
- NCD deaths are projected to increase from 38 million in 2012 to 52 million by 2030
- Over 80% of NCD deaths happen in developing countries

Probability of dying from the four main noncommunicable diseases between the ages of 30 and 70 years, comparable estimates, 2012.



Source: WHO, Global status report on noncommunicable diseases 2014.

9 global targets to be attained by 2025

A **30%** relative reduction in prevalence of current tobacco use

Halt the rise in diabetes and obesity

A **30%** relative reduction in mean population intake of salt/sodium

A **25%** relative reduction in risk of premature mortality from cardiovascular disease, cancer, diabetes or chronic respiratory diseases

At least a **10%** relative reduction in the harmful use of alcohol

At least **50%** of eligible people receive drug therapy and counselling to prevent heart attacks and strokes

A **25%** relative reduction in prevalence of raised blood pressure or contain the prevalence of raised blood pressure

A **10%** relative reduction in prevalence of insufficient physical activity

An **80%** availability of the affordable basic technologies and essential medicines, incl. generics, required to treat NCDs

Cost of inaction

US$ 7T

The cumulative lost output in developing countries associated with NCDs between 2011-2025

Cost of action

US$ 170B

The overall cost for all low and middle income countries to scale up action by implementing a set of "best buy" interventions between 2011 and 2025, identified as priority actions by WHO

Reports are available at www.who.int/ncd

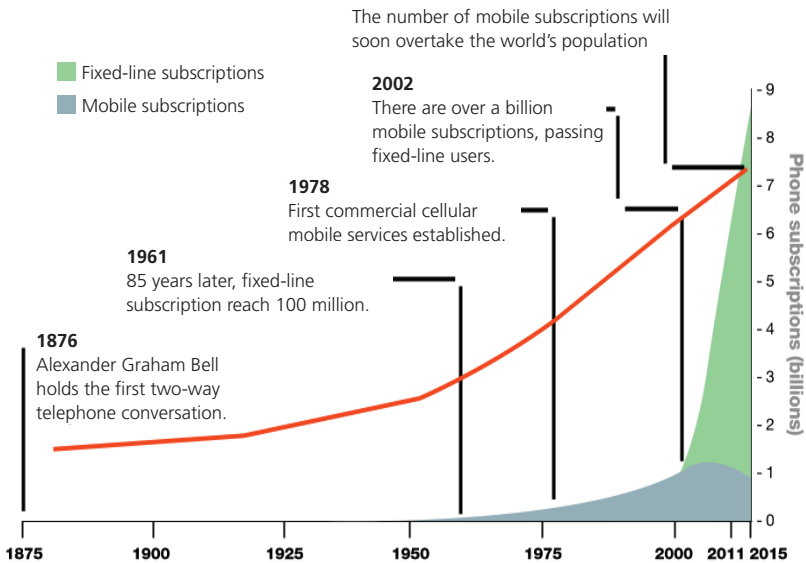
NCDs at the UN: 2011-2018

- For the second time in United Nations history, the UN hosted a high-level summit on a health issue
- NCDs were acknowledged as an international health priority
- Call for innovation and public-private partnerships

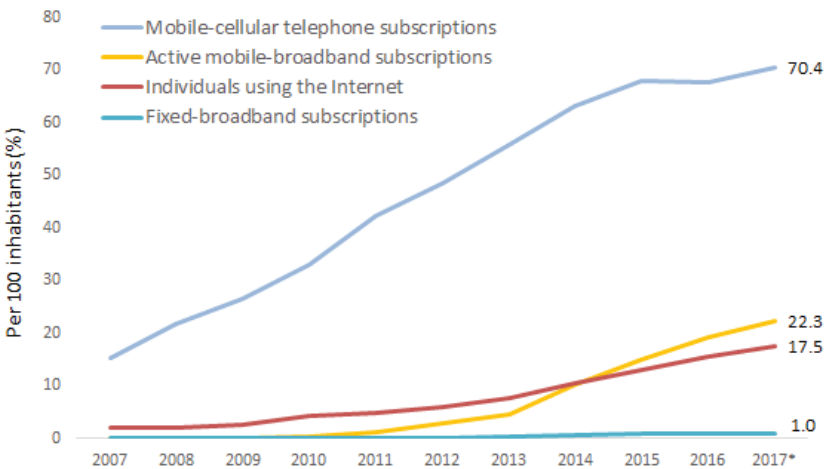
2.

The rise of the mobile phone

Raising your voice:

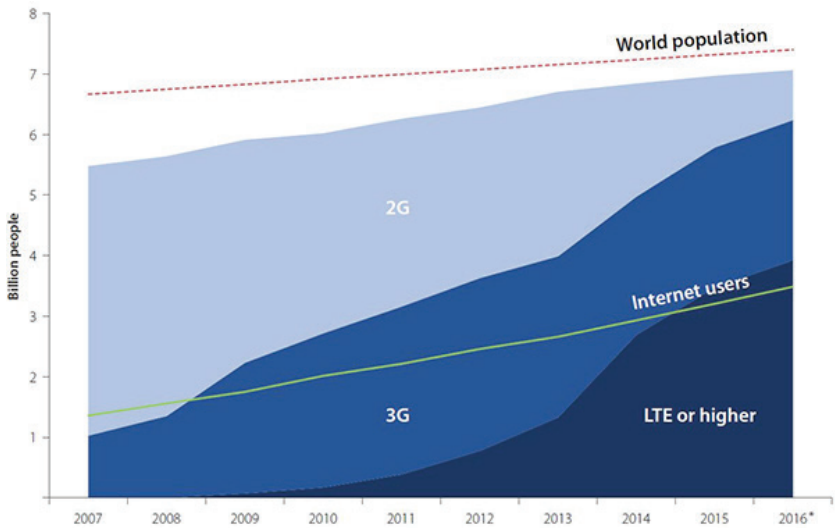


the development and progress of the telephone



Note: * Estimate. Source: ITU World Telecommunication/ICT Indicators database

- >7 billion mobile subscriptions globally
- In 2015, 95% of the world had mobile network coverage



What is mHealth?

"Medical and public health practice supported by mobile devices, such as mobile phones, patient monitoring devices, personal digital assistants (PDAs), and other wireless devices"

(Global Observatory for eHealth, 2011)

What is mHealth?

1. Client education & behaviour change communication (BCC).
2. Sensors & point-of-care diagnostics
3. Registries / vital events tracking
4. Data collection and reporting
5. Electronic health records
6. Electronic decision support
   Information, protocols, algorithms, checklists
7. Provider-to-provider communication
   User groups, consultation
8. Provider workplanning & scheduling
9. Provider training & education
10. Human resource management
11. Supply chain management
12. Financial transactions & incentives

Why mHealth?

Mobile phone subscriptions versus population:

7.194 billion subscriptions
vs
7.5 billion people

Why mHealth?

More people have access to mobile phone than clean water or toothbrushes

Advances in mobile phone and wearable devices means we can record and use our own data for health and behaviour change

3.

NCDs and digital health at the United Nations

The SDGs represent an integrated set of goals that emphasizes cross-sectoral development. These SDGs are important for all UN agencies and determine a number of specific targets for each overall goal.

The changing face of global health

Previous focus of global health

- Communicable diseases
- Vertical programs
- Disease management

Post-2015: the changing agenda

- Move from vertical to comprehensive programs (holistic health)
- Universal health coverage
- Disease prevention, especially noncommunicable diseases

mHealth and the Sustainable Development Goals

Mobile technologies have the potential to play an important role in advancing universal health coverage and are well-positioned to contribute to the achievement of many of the Sustainable Development Goals (SDGs)

mHealth to support NCDs (SDG 3.4), Universal Health Coverage (3.8) and tobacco control (3a) through:

- Behaviour change communication
- Data collection
- Health worker training
- Reminders
- Empowering women

3 GOOD HEALTH AND WELL-BEING

Be He@lthy, Be Mobile is supporting SDG 9 by:

- Encouraging ministries of health and technology to work together to deliver health services using ICT infrastructure
- Fostering national innovation by supporting technology development, research and innovation in developing countries (SDG 9.b)

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Be He@lthy, Be Mobile is supporting SDG 11 by:

- Supporting mHealth programmes at the individual level, municipal level, and the national level

11 SUSTAINABLE CITIES AND COMMUNITIES

Be He@lthy, Be Mobile is promoting partnerships for sustainable development through:

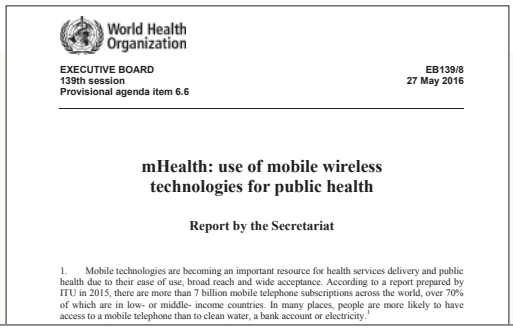
- A multisectoral partnership models for mHealth (SDG 17.17)
- Horizontal collaboration between countries to share knowledge and expertise (SDG 17.6)

17 PARTNERSHIPS FOR THE GOALS

mHealth and NCDs at WHO

- WHO resolutions have recognized the centrality of NCDS and digital health to the core work of the organization

- WHO declarations on NCDs and digital health from 2011-2018 include:
  - Resolution WHA 58.28
  - Resolution WHA 64.11
  - Resolution A/RES/66/2
  - Resolution EB 139/8
  - Resolution WHA 66.24
  - Draft resolution for WHA 71



World Health Organization

EXECUTIVE BOARD
139th session
Provisional agenda item 6.6

EB139/8
27 May 2016

mHealth: use of mobile wireless technologies for public health

Report by the Secretariat

1. Mobile technologies are becoming an important resource for health services delivery and public health due to their ease of use, broad reach and wide acceptance. According to a report prepared by ITU in 2015, there are more than 7 billion mobile telephone subscriptions across the world, over 70% of which are in low- or middle- income countries. In many places, people are more likely to have access to a mobile telephone than to clean water, a bank account or electricity.[1]

10. Significant technical engagement by the Secretariat towards the development and implementation of mHealth programmes, include:

- the joint initiative with ITU "Be He@lthy Be Mobile" for the prevention and management of noncommunicable diseases;
- the development of guidance for mHealth applications in the area of reproductive health through the mHealth Technical and Evidence Review Group for reproductive, maternal and child health;
- building on digital solutions to help tuberculosis patients.

4.

Be He@lthy, Be Mobile

mHealth challenges

- Suffering from “pilotitis” – many small-scale mHealth pilot and research studies
- Programs not designed for sustainability or SCALE
- Leads to fragmented evidence base

- Be He@lthy, Be Mobile was created in 2012 to address these challenges and opportunities and help countries scale up national mHealth programs for NCD prevention and management

BHBM Objectives

Mission:
Save lives and improve the world's health through digital.

1. Help committed countries build, scale, sustain digital health programmes.
2. Develop content that works
3. Enter into meaningful partnerships
4. Explore and expand innovations

WHO Mission

"The attainment by all peoples of the highest possible level of health."

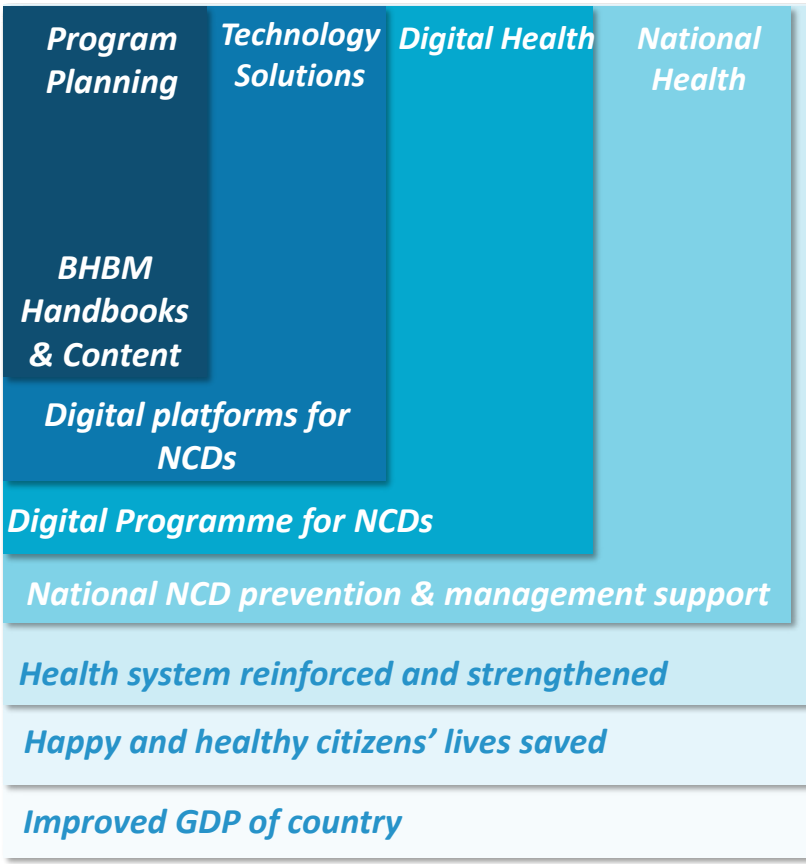
WHO Strategic Priorities

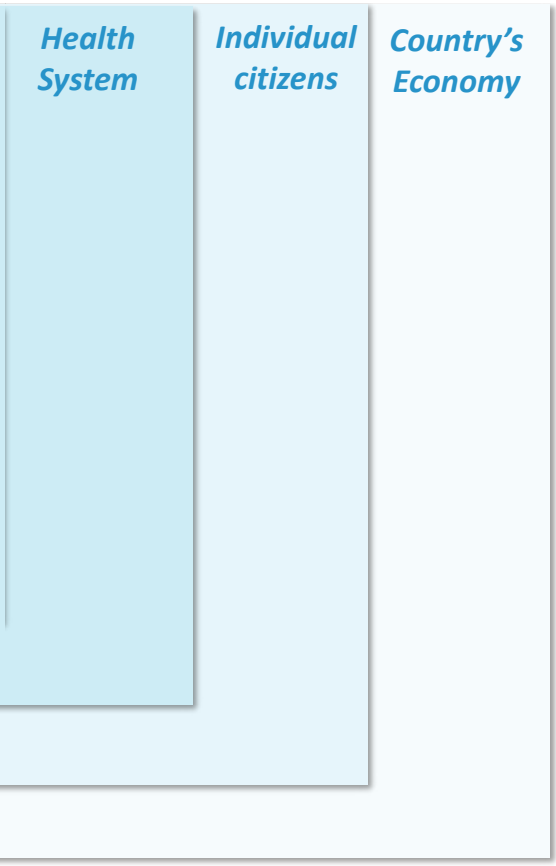
- Health coverage – 1 billion more people covered
- Health emergencies – 1 billion more people safe
- Health priorities – 1 billion lives improved

BHBM contribution to strategic priorities

Digital platforms, digital content, digital programmes to reach these 3 billion people

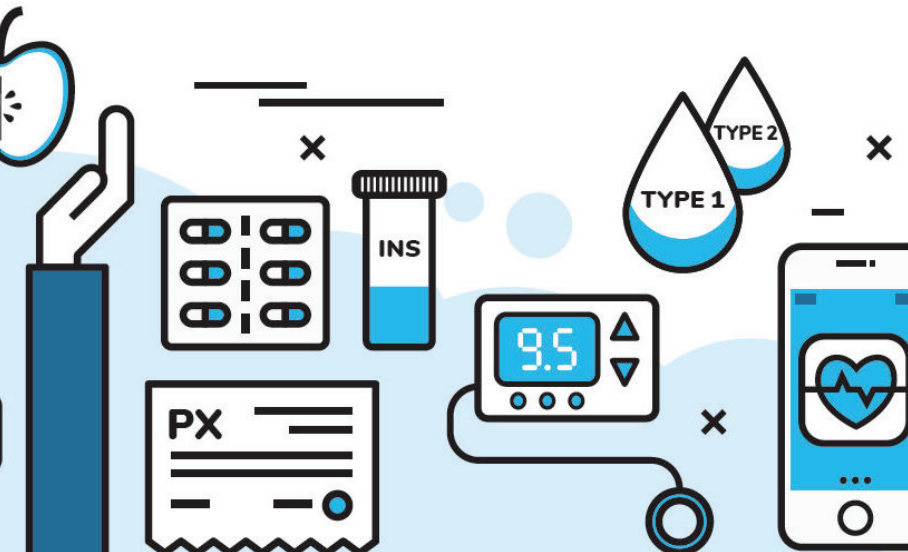
Our impact is more than just numbers




Health System
Individual citizens
Country's Economy

- Joint UN program between WHO and ITU
- Looks at SCALE: institutionalising mHealth tools
- Inter-UN, multisectoral structure

- Builds country capacity for innovation management in mHealth and digital health care
- Develops validated content



2013 – 2016

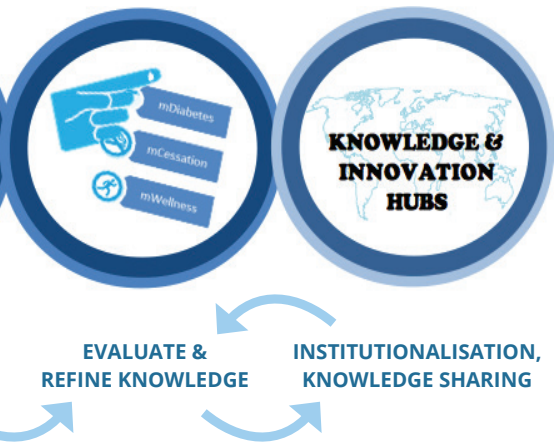
Be He@lthy, Be Mobile Programme

- Develop best practices for mHealth at scale in 9 countries
- WHO-ITU build & trial technical guidance to be shared globally
- Cross-sectoral partnership model
- Sustainability models in countries

RESEARCH INTERVENTIONS → DEVELOP 'TOOLKITS' → SCALE OR BUILD CAPACITY IN COUNTRY

2017 – 2020

- Share experience quickly through knowledge and innovation hubs
- Explore apps, wearables for NCDs
- Explore cities and workplaces for NCDs



The three pillars of Be He@lthy, Be Mobile

1.
Handbook development

2.
Country implementation

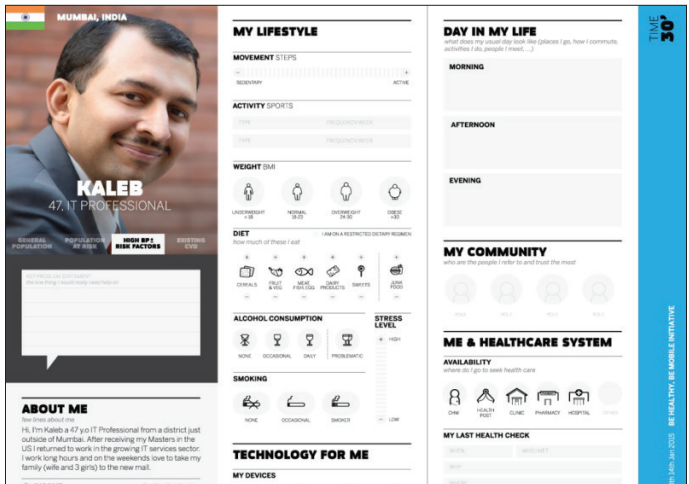
3.
Partnerships

5.

Pillar one: Handbook Development

The end-user is the starting point in the handbook development process

Be He@lthy, Be Mobile has borrowed from the tech industry, implementing an innovative process is which end-user needs, limitations and context are given extensive attention at each stage of the product-development process.



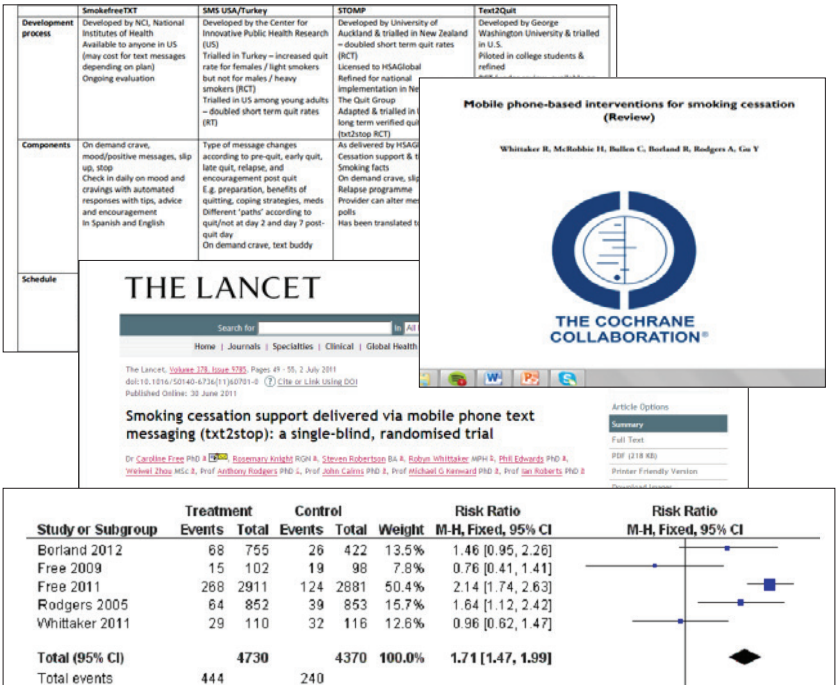
What is an mHealth handbook?

Be He@lthy, Be Mobile mHealth handbooks:

- Present all information necessary to implement an mHealth program in the form of ready-to-use options
- Are developed for each Be He@lthy, Be Mobile intervention by an informal expert group in collaboration with WHO, ITU, and other relevant stakeholders
- Are based on the best available evidence from the literature and experience

The evidence base: BHBM handbook foundation

- WHO has reviewed numerous studies and clinical trials where mHealth has been used successfully in the prevention and management of NCDs.
- The results of this systematic review of evidence are the basis for the BHBM handbooks.



	SmokefreeTXT	SMS USA/Turkey	STOMP	Text2Quit
Development process	Developed by NCI, National Institutes of Health Available to anyone in US (may cost for text messages depending on plan) Ongoing evaluation	Developed by the Center for Innovative Public Health Research (US) Trialled in Turkey – increased quit rate for females / light smokers but not for males / heavy smokers (RCT) Trialled in US among young adults – doubled short term quit rates (RT)	Developed by University of Auckland & trialled in New Zealand – doubled short term quit rates (RCT) Licensed to HSAGlobal Refined for national implementation in Ne The Quit Group Adapted & trialled in long term verified qui (txt2stop RCT)	Developed by George Washington University & trialled in U.S. Piloted in college students & refined
Components	On demand crave, mood/positive messages, slip up, stop Check in daily on mood and cravings with automated responses with tips, advice and encouragement In Spanish and English	Type of message changes according to pre-quit, early quit, late quit, relapse, and encouragement post quit E.g. preparation, benefits of quitting, coping strategies, meds Different 'paths' according to quit/not at day 2 and day 7 post-quit day On demand crave, text buddy	As delivered by HSAG Cessation support & t Smoking facts On demand crave, slig Relapse programme Provider can alter me polls Has been translated t	
Schedule				

Mobile phone-based interventions for smoking cessation (Review)

Whittaker R, McRobbie H, Bullen C, Borland R, Rodgers A, Gu Y

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The Lancet, Volume 378, Issue 9785, Pages 49 - 55, 2 July 2011
doi:10.1016/S0140-6736(11)60701-0 Cite or Link Using DOI
Published Online: 30 June 2011

Smoking cessation support delivered via mobile phone text messaging (txt2stop): a single-blind, randomised trial

Dr Caroline Free PhD a, Rosemary Knight RGN a, Steven Robertson BA a, Robyn Whittaker MPH a, Phil Edwards PhD a, Weiwei Zhou MSc a, Prof Anthony Rodgers PhD c, Prof John Cairns PhD a, Prof Michael G Kenward PhD a, Prof Ian Roberts PhD a

Article Options
Summary
Full Text
PDF (218 KB)
Printer Friendly Version

Study or Subgroup	Treatment Events	Total	Control Events	Total	Weight	Risk Ratio M-H, Fixed, 95% CI
Borland 2012	68	755	26	422	13.5%	1.46 [0.95, 2.26]
Free 2009	15	102	19	98	7.8%	0.76 [0.41, 1.41]
Free 2011	268	2911	124	2881	50.4%	2.14 [1.74, 2.63]
Rodgers 2005	64	852	39	853	15.7%	1.64 [1.12, 2.42]
Whittaker 2011	29	110	32	116	12.6%	0.96 [0.62, 1.47]
Total (95% CI)		**4730**		**4370**	**100.0%**	**1.71 [1.47, 1.99]**
Total events	444		240			

Risk Ratio M-H, Fixed, 95% CI

Steps in designing a text messaging intervention

Conduct formative research for insights into target audience and target health behaviours

Design the text message programme

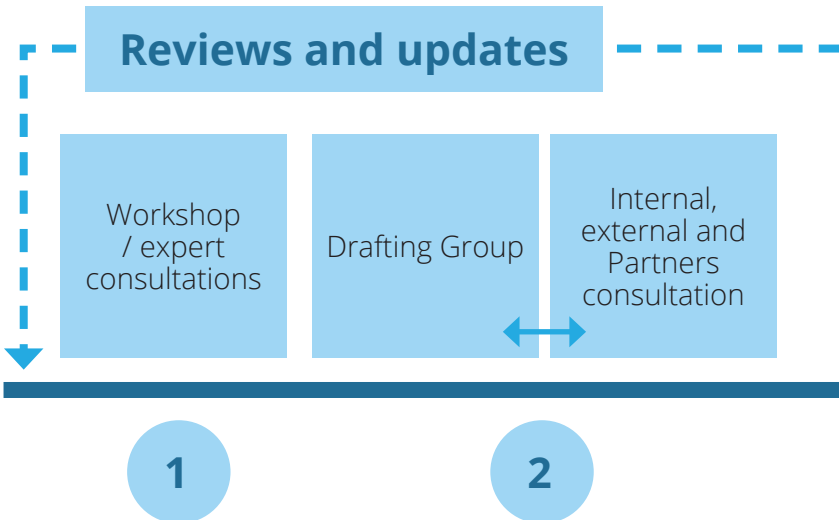
- Review functional outcomes and incorporate country-specific findings from needs assessment (list examples)
- Review and adapt communication objectives (such as beliefs, attitudes, knowledge) and behavioural techniques (such as actions)
- Review and adapt the framework or algorithm for the programme (timing and frequency of messages)
- Adapt the message library

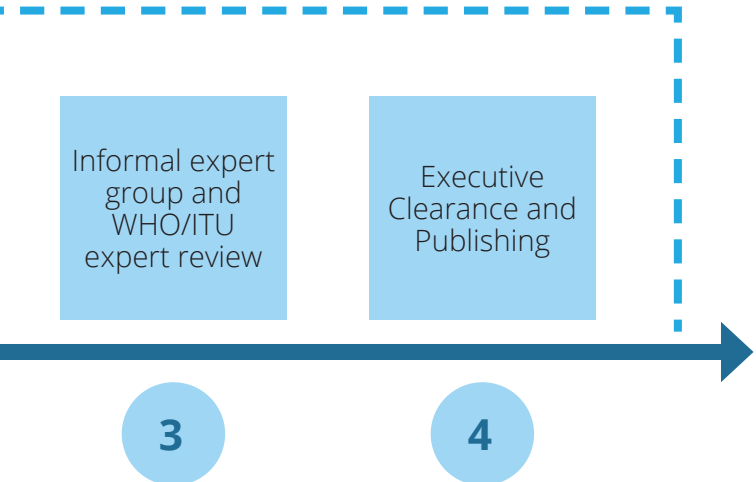
Pre-test the text messaging programme concept and messages

Revise the text message programme

mHealth handbook development process

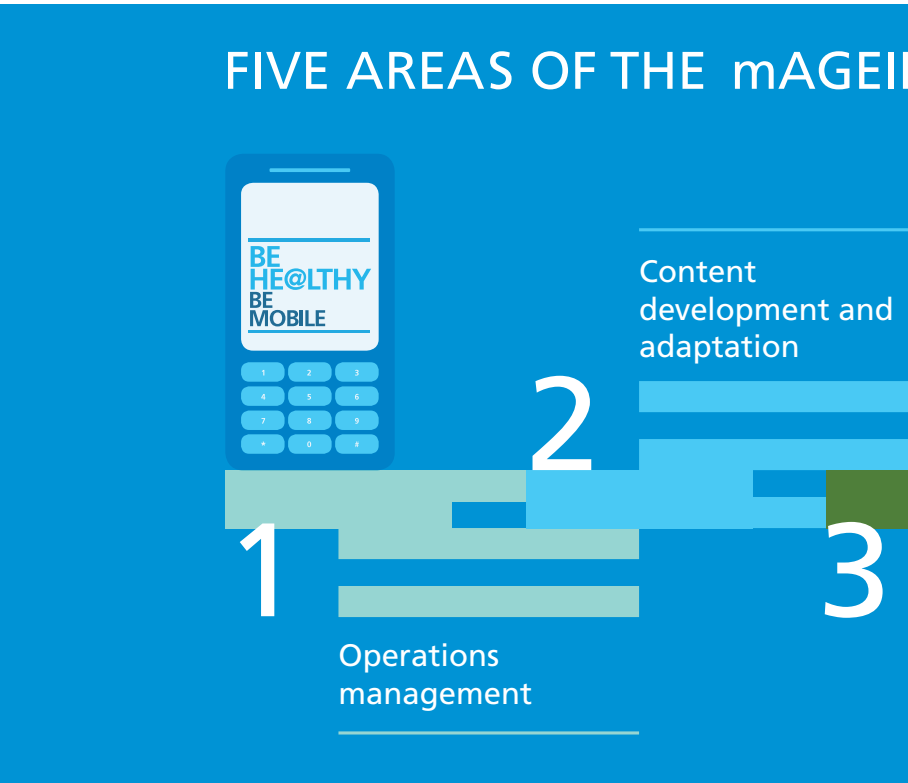
Each Handbook is tailored for country use during national workshops, to suit the specific needs of each country.




Informal expert group and WHO/ITU expert review
Executive Clearance and Publishing
3
4

The 5 core handbook content areas

Handbook annexes also include content libraries and algorithms, templates, literature, and additional resources



NG PROGRAMME

Technology specifications

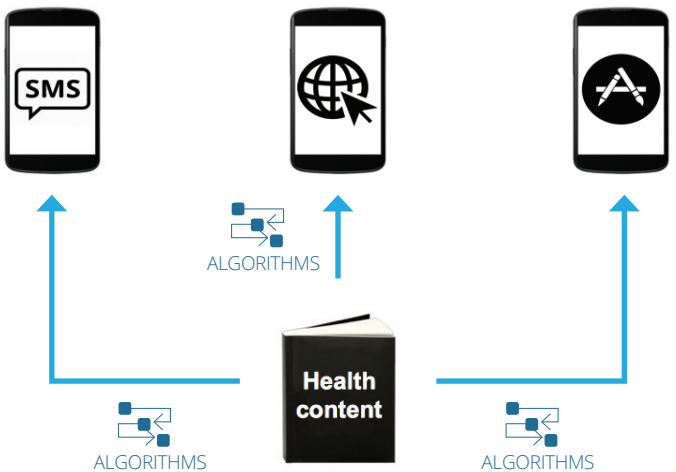
4

5

Promotion and recruitment

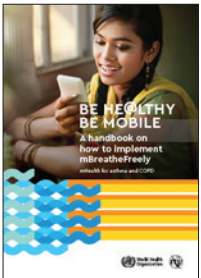
Monitoring and evaluation

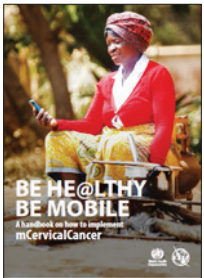
The handbook content is technology agnostic and can be delivered via numerous platforms



mHealth Handbooks

- mDiabetes
- mTobacco Cessation
- mCervical Cancer
- mTB-Tobacco
- mBreatheFreely
- mAgeing
- mHypertension
- mActive
- mSmartLife





mHealth handbooks by type of prevention			
Prevention Type	**Primary (Wellness)**	**Secondary (Diagnostics)**	**Tertiary (self-care)**
What is it?	Primary prevention avoids the development of disease	Secondary prevention activities are aimed at early disease detection and treatment	Tertiary prevention reduces the negative impact of an already established disease
Key drivers	collect data, identify patients, increase awareness, calculate risk, effective promotion, improve enrolment and change	Stratify risk, target at risk groups, change attitudes, increase uptake and streamline follow-up	Help patients take charge of managing their condition through improved understanding, recording/ monitoring, adherence to treatment, sharing of information
Be He@lthy Be Mobile handbooks	mTobacco-Cessation mDiabetes mSmartLife mActive mHyper-tension	mCervical Cancer mDiabetes mHyper-tension mBreathe-Freely	mDiabetes mTB-Tobacco mAgeing mBreathe-Freely

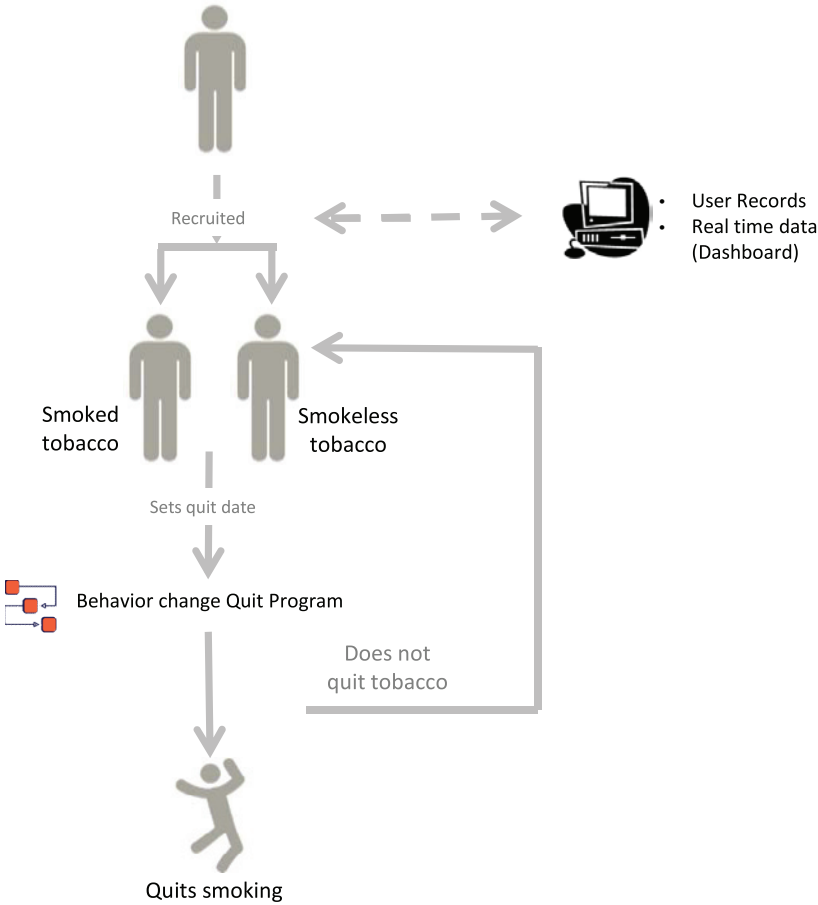
Country implementation of a handbook: a learning cycle

mHealth for Tobacco Cessation

Key: Digital solutions

Database

Algorithm


Recruited
User Records
Real time data
(Dashboard)
Smoked
tobacco
Smokeless
tobacco
Sets quit date
Behavior change Quit Program
Does not
quit tobacco
Quits smoking

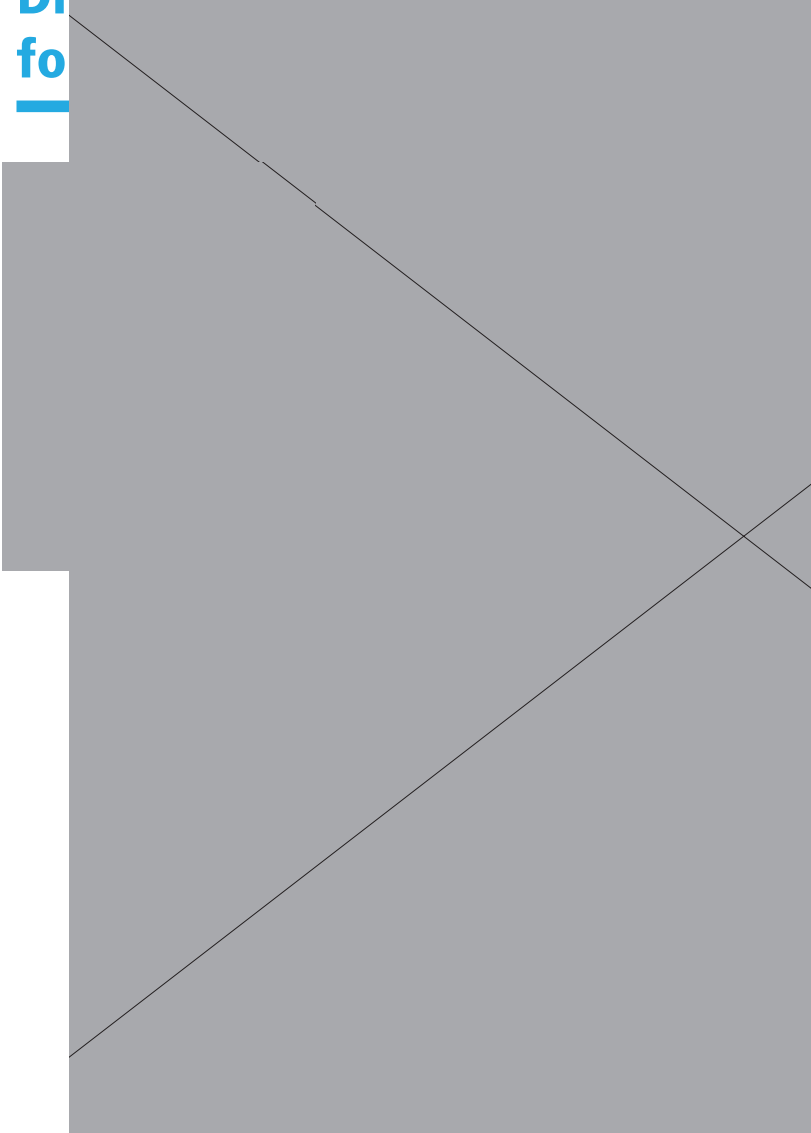
mHealth for Diabetes

Key: Digital solutions

Database

Algorithm

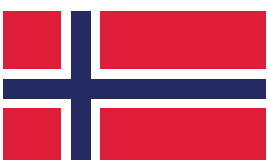
Di
fo



6.

Pillar two: Countries

Be He@lthy Be Mobile Programmes 2012-2018

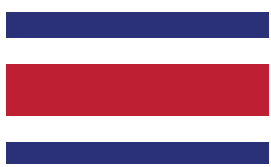




Be He@lthy Be Mobile is currently working in 10 countries, and has received requests for support from more than 90 more...

- Burkina-Faso
- Costa Rica
- Egypt
- India
- Norway
- Philippines
- Senegal
- Tunisia
- United Kingdom
- Zambia




Country	Selected mHealth programme and achievements
India	mTobaccoCessation has ~2.1 million users as of Q1, 2018. Full scale program evaluation (May 2017) showed 6 month quit rate at ~ 7%. Program to introduce new languages and IVRS. MoH added mDiabetes program within 6 months of launch of the mCessation program. Will introduce mAging and mTB/ Tobacco program in 2018.
Philippines	Launch of mTobaccoCessation and tobacco quitline took place in June 2017.
Senegal	mRamadan 2017 had ~ 117,834 diabetic patients and ~5000 health care providers. The program has consistently seen an increase in subscriber base since its launch in 2014. Results from biometric evaluation indicate that SMSs have positively influenced control of diabetes in the intervention group.
Zambia	mCervicalCancer national program launched in October 2016 by the First Lady. 600,000 clients received text messages on cervical cancer on the launch day. Since Feb 2017, SMS have been sent to 500,000 men and women in Lusaka province. Program being developed as a continumm of care model for cervical cancer.
Egypt	mRamadan program (April 2016) reached out to to 50,000 people with diabetes. 2017 edition reached out to 180,000 diabetics. mTB-Tobacco program to be launched in 2018.

Costa Rica	National platform set up and sharing experiences with regional counterparts
Tunisia	mTobaccoCessation service launched nationally in December, 2017 and has more than 65000 users as of Q1, 2018. mDiabetes under design.
UK	Looking at digital hypertension and the process for scaling digital health in government systems.
Norway	BHBM activities are linked to the national program on Continued Chronic Healthcare (CCH), a broad program including services for COPD. Four different COPD systems are being trialled to show remote support can be helpful.
Burkina Faso	Setting up a program for mTobaccoCessation and mCervicalCancer

Example of a country mHealth management team

WHO, ITU, and informal expert group

Group of ageing and mHealth experts to assist in drafting the handbook and advising on implementation

International mAgeing steering committee

With representatives from the ministries of health and telecommunications and national and international representatives of WHO and ITU, to decide the overall direction and agreements

National technical advisory group

Government sectors (including health, telecommunications, business, media, treasury and planning) to set up the legal, technical and financial framework for a sustainable programme. This group will network with a large group of potential partners such as the telecommunications and software industry, local telcoms and mobile network providers, non-governmental organizations, health professionals, academic and research organizations, health insurance groups, health service providers, civil society groups, opinion leaders, the media and others as appropriate

National operations, content, promotion, technology, and monitoring and evaluation project leaders (subset of the TAG)

Management of overall programme operations, including needs assessment, work-plan, budget and legal aspects

Development and adaptation of the content of the intervention

Management of recruitment, communications, marketing and dissemination

Management of technical aspects of programme development and implementation

Management of the development and implementation of monitoring and evaluation plans

Estimated timeline to implement an mHealth program

Task	Year 1				Year 2			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
TAG formation	x							
Stakeholder engagement	x							
Needs assessment	x	x						
Resource assessment	x	x						
Creation of target population database		x						
Refinement of SMS content and delivery algorithm		x						
mHealth program pilot testing			x	x				
Refinement of target population and intervention					x			
Implementation of mHealth intervention						x	x	x
Monitoring and evaluation						x	x	x

Logic model to evaluate an mHealth program

PERSON CENTERED DOMAIN

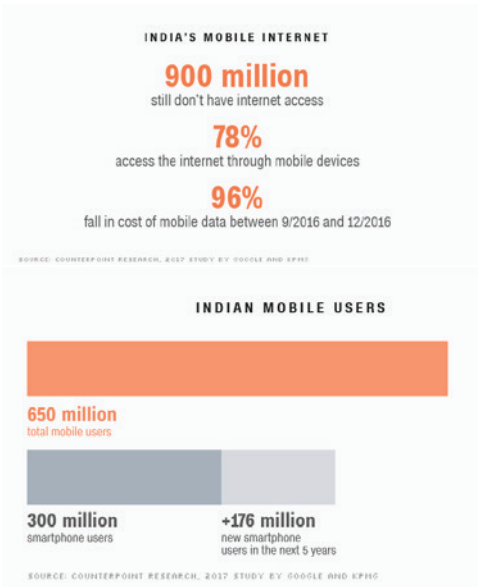
INPUT	OUTPUT	OUTCOME	IMPACT
Outgoing messages Incoming messages Surveys, Interviews	Reach and registration Information about the user population Ease of understanding messages	Improved literacy/ knowledge/ outreach Behavior change Return on investment Technology performance	Improved health outcome Improved use of resources

PROGRAM CENTERED DOMAIN

INPUT	OUTPUT	OUTCOME	IMPACT
Governance Policy data Resources (Finance, Human resources, ICT architecture Content development Outreach and promotion Data from "Person centered domain"	Coverage of intervention Intervention quality Interoperability	Integration with health systems Improved health literacy Access to intervention	Improved health outcomes (SDG 3) Improved digital capacity (SDG 9) Efficiency & efficacy

Case study: mTobacco Cessation in India

- About Half of the tobacco users in India want to quit (GATS).
- Limited face to face counselling facilities.
- High interest and commitment in the under Digital India initiative.



mTobacco Cessation in India: current status

- National services launched in Jan 2016 as part of Prime Ministers Digital India Initiative
- Innovative registration method
- •Real time data dashboard
- 2.2 Million users registered as of Nov. 2017
- The initiative is listed in the top 100 innovations of the Prime Minister's Office
- mDiabetes launched within 6 months, using same platform
- mAgeing and mTB-Tobacco expected in 2018

Full-scale program evaluation completed in May 2017 showed the effective 6 month quit rate at 7.2% (7.2 % of users who subscribed to the program were able to quit tobacco use at 6 months).

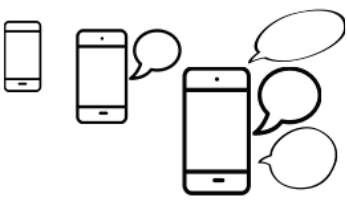
Example mTobacco Cessation messages	
Day 1	Welcome to the programme! Congratulations on your decision to quit smoking. To opt out at any time, text STOP to this phone number.
Day 10	It has been 9 days since you quit smoking. Congratulations! How are you feeling today? Text back: GOOD, OK, or BAD
Day 15 (1)	You are on the right track! Quitting smoking is hard but stay confident. You can do this.
Day 15 (2)	Your kids can get sick from secondhand smoke. It sinks into lungs, eyes, and skin. Think again before you smoke.
Trigger words e.g CRAVE	We know how you are feeling. Think about what you are gaining and why you want to quit smoking. Stay focused. It will get easier.

mTobacco Cessation user journey

1. Tobacco user wants to quit but needs support

2. User self-enrolls in program or is enrolled by health care worker or family through missed call, website, or SMS

6. User receives gradually less messages as their tobacco-free time increases.



7. After 6 months of support the tobacco user is tobacco-free.

3. User is put into a message group based on criteria such as type of tobacco use (smoked vs. smokeless)

4. User receives support until quit date, followed by daily messages offering guidance on managing cravings, coping with withdrawal, etc.

5. User can text key words to if they need specific support at any moment.

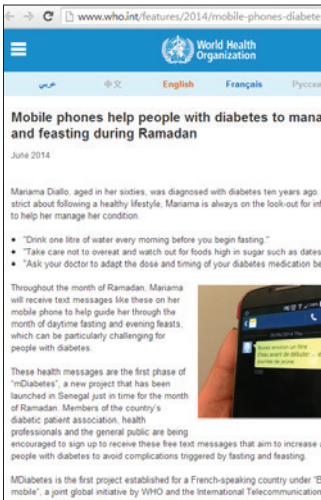
Case Study: mHealth in Senegal

First phase

- SMS messages sent during Ramadan to help diabetics manage their diabetes
- High visibility and engagement at the population level

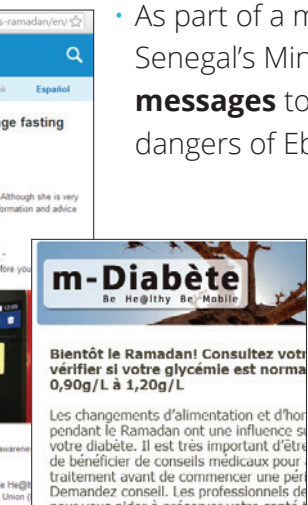
Second phase

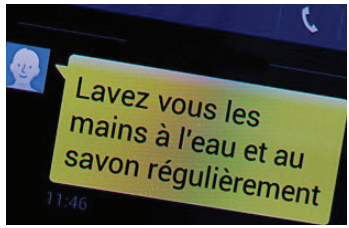
- Three tracks:
  - Prevention (general population risk awareness)
  - Management for diabetics
  - Health care worker training



Adapting mDiabetes for Ebola

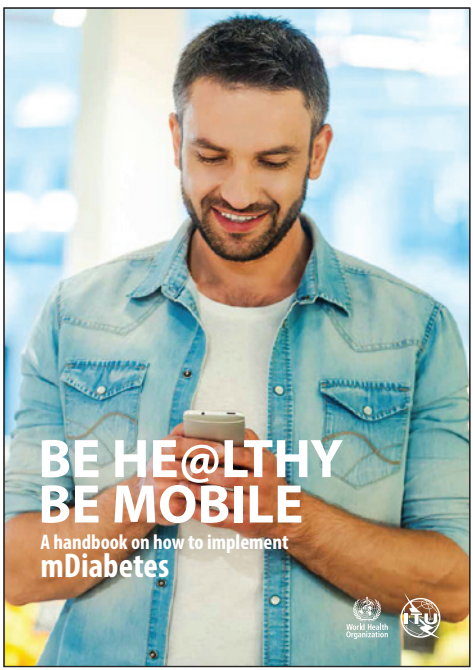
- Senegal used mDiabetes partnerships and platform to encourage people to alert health authorities of anyone showing signs of a fever and bleeding by calling a toll-free number. **Messages were shared ahead of large-scale public events, including football matches and rallies.**
- Senegal's SMS Ebola campaign was rolled out at top speed thanks to the **existing collaboration among stakeholders** created by the mDiabetes platform.
- As part of a massive public awareness effort, Senegal's Ministry of Health sent **4 million SMS messages** to the general public warning of the dangers of Ebola and how to prevent it





Case Study: mDiabetes in Egypt

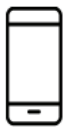
- Egypt used the mDiabetes handbook and experience from Senegal's mDiabetes program to launch their initiative
- The mDiabetes program in Egypt was launched in November, 2015 as a national application of the global mHealth initiative.



Example mDiabetes messages	
Day 1	Walking is the best physical activity for good health.
Day 2	Healthy diet, regular exercise and regular medication are the 3 main pillars of blood sugar control
Day 3	Soft drinks contain lots of sugar; avoid them!
Day 4	30 mins a day and 5 days in a week of walking or cycling or any activity which increase your breathing is healthy for a person
Day 5	To find out more about any of these messages, visit [govt website]

mDiabetes user journey (customised for user groups)

1. Healthcare worker needs suppor to help patients prevent and manage diabetes



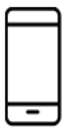
2. Healthcare worker self-enrolls in program (text code, online, or missed call)

1. General population/pre-diabetic individual needs support to prevent diabetes

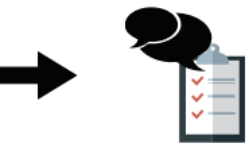
2. Individual self-enrolls in program or is enrolled by a healthcare worker for family member (text code, online, or missed call)

3. Patient is put into a message group based on criteria such as age, gender, pregnancy status, risk factors

1. Diabetic patient needs support to manage and control their diabetes



2. Patient self-enrolls in mRamadan or mDiabetes program or is enrolled by a healthcare worker for family member (text code, online, or missed call)



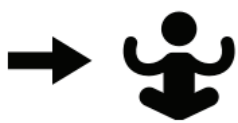
3. Receives regular support on diabetes evaluation, diagnosis, management, and patient education

4. HCW can more effectively recognize, diagnose and treat patients with diabetes or pre-diabetes

4. Individual receives SMS-based advice on small changes they can make to reduce risk factors for diabetes – e.g. diet, exercise

5. patient prevents onset of diabetes

3. Receives regular support and advice on diabetes care and management strategies, through diet, foot care, reminders to measure A1c



4. patient reduces diabetes-related emergencies and complications, and increases overall health and quality of life

Case Study: mCervical Cancer in Zambia

- National launch by the First Lady of Zambia took place in October 2016
- The objective of the initial phase of mCervicalcancer program is to increase awareness on cervical cancer prevention via the use of SMS, thereby increasing demand and uptake of screening services among women in Zambia.

"Women should not die from highly preventable diseases such as cervical cancer due to lack of access to information. We are excited that Zambia will be launching the mCervicalCancer program, the first in the world. mCervicalCancer will enable women in hard to reach areas of Zambia have access to life-saving information..."

Her Excellency, Mrs Esther Lungu,
First Lady of the Republic of Zambia

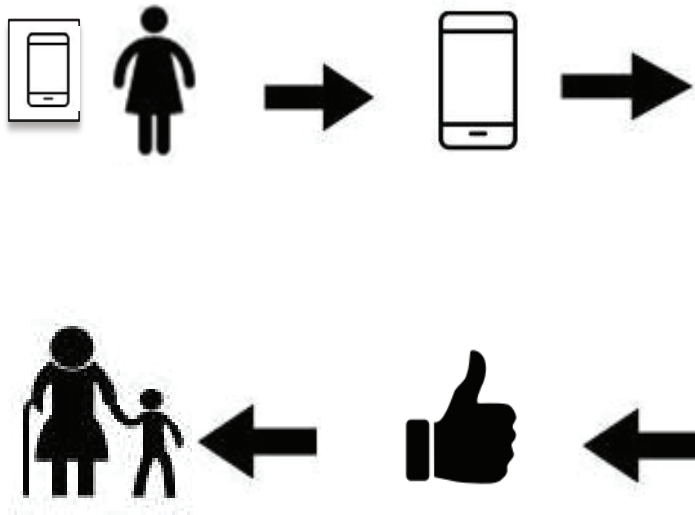

"I got this message today and I am going for cervical cancer screening."
Health Fact!
Early screening prevents cervical cancer. Women 25 years and above should come for screening at the nearest clinic.
Be He@lthy. Be Mobile.
ITU

Example mCervicalCancer messages	
Monday	Health Fact! Did you know that Cervical Cancer is the most common cancer in Zambia? Women 25 years and above should come for screening at your nearest clinic.
Thursday	Health Fact! Human Papillomavirus is the main cause of early changes on the cervix that lead to cervical cancer if left untreated. Get screened!
Sunday	Health Fact! Healthy looking women may have changes on the womb without knowing. These changes are treatable. Get screened for Cervical Cancer!

mCervicalCancer user journey

Woman aged between 25-29 receives SMS inviting her to join the program

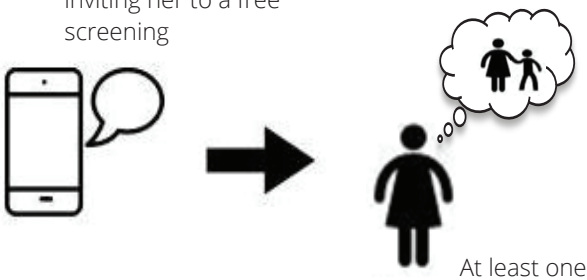
She self-enrols by sending an SMS to the number



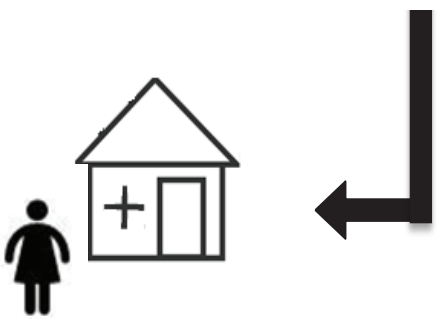
She is around for her children and her children's children

The screening finds she has very early symptoms and treats her for them

She receives SMS every day for 2 weeks with different information on how a cervical cancer screening could save her life and inviting her to a free screening



At least one of the SMS makes her think of her family and friends and how they need her



She goes to a nearby clinic for screening

7.

Pillar three: Partnerships

- Be He@lthy, Be Mobile's multi-sectoral partnership approach is designed to engage partners whose skill sets match the needs of the global initiative or country-level work in technology, health, governance and innovations management.
- By approaching mHealth from an ecosystems perspective, the aim is for programs to be more sustainable as they are less vulnerable to shifts in the broader mHealth landscape.

The mHealth ecosystem

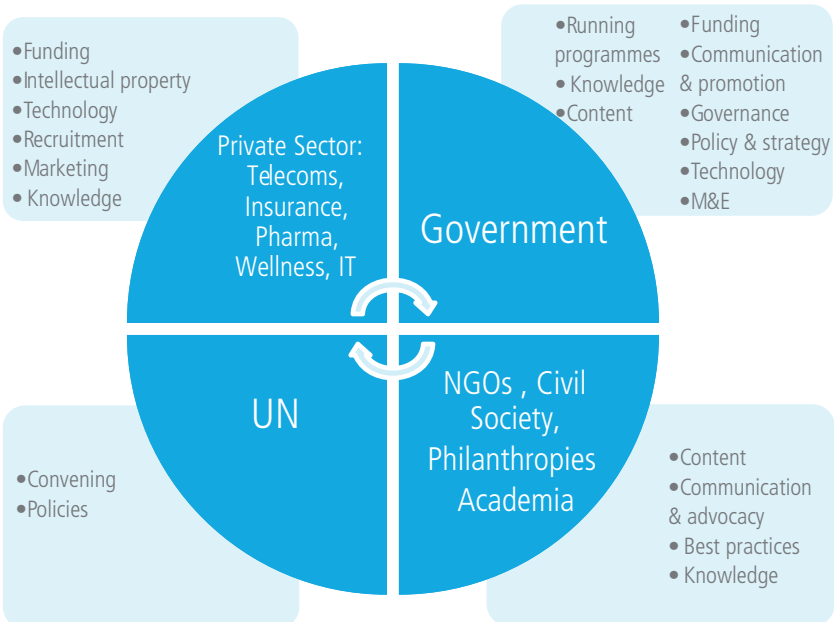
New care provision

New engagement platforms

New funding models

New sustainability frameworks

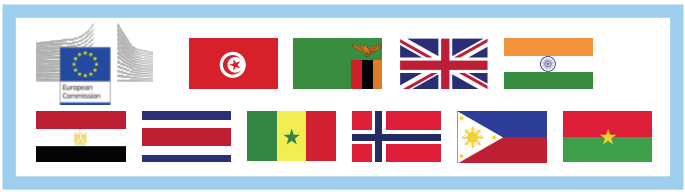
Be He@lthy, Be Mobile is a unique initiative in that it adopts a multi-sector partnership structure and engages country partners and governments to maximize success.



Be He@lthy Be Mobile partners

Private Sector

Country governments



NGOs, Civil Society, Academia, Philanthropies

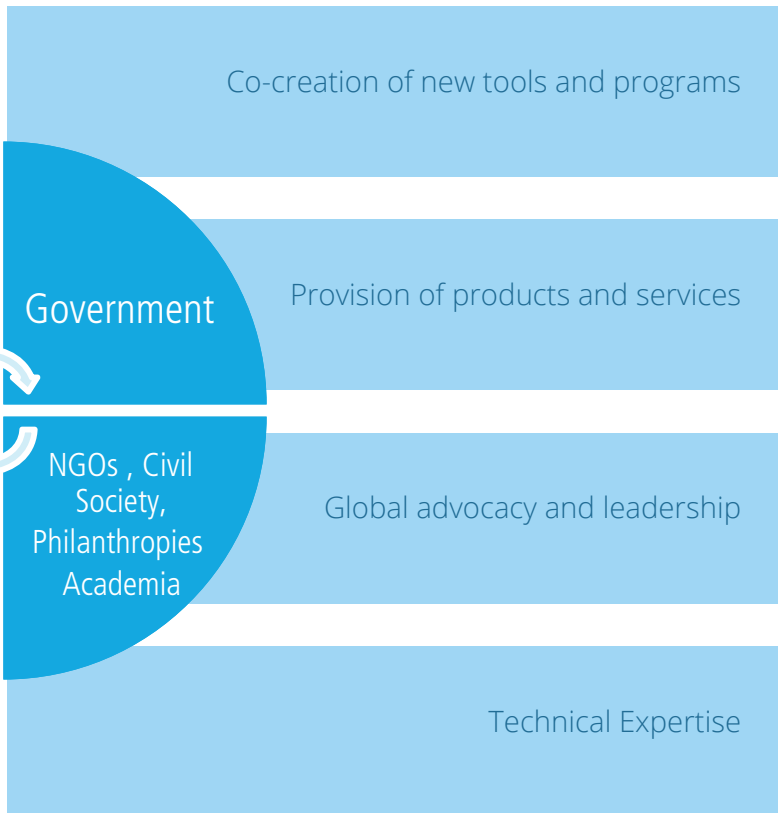
Why partners are so important

Knowledge and data sharing

Funding support

Public relations, communications and advocacy

Country-specific support


Co-creation of new tools and programs
Government
Provision of products and services
NGOs , Civil Society, Philanthropies Academia
Global advocacy and leadership
Technical Expertise

BHBM is an opportunity for learning and innovation

- Egypt is learning from Senegal
- Zambia is utilizing existing screening capacity
- India is adapting content and adding services on their national digital platform
- Senegal used their infrastructure and network with telecoms to send messages to rural areas during Ebola crisis
- BHBM informal expert groups and partners are learning from country experiences

2015 Global Consultation on Lessons Learned

8.

Be He@lthy, Be Mobile programme results

Phase 1 achievements (2013-2016)

- Nomination for a sustainable business award (May 2015)
- WHO DG Award for Excellence (March 2016)
- Programmes in 10 countries
- 3 toolkits published (mTobaccoCessation, mDiabetes, mCervicalCancer) and 4 under development
- Partnerships/collaborations with 10 countries and over 18 international organizations

Harnessing the power of mobile technology to improve health

Private healthcare business is contributing to a global effort to t
communicable diseases using mobile technology

Lord Leitch, chairman of Bupa, and Hamadoun I. Touré, former secretary-general, Inte
Telecommunication Union (ITU). Photograph: Bupa

Bupa is collaborating with several partners to help tackle non-comm
(NCDs) including cancer, heart disease, diabetes and respiratory illnesses by reaching
patients and carers via mobile technology.

Be He@lthy, Be Mobile 2017-2018 country results

INDIA, mTobacco Cessation:
Effective 6 month quit rate ~ 7%*

*respondents who after 6 months of being enrolled in the program reported that they did not use tobacco in the last 30 days and had read the mCessation messages

INDIA, mDiabetes:
Full scale evaluation of the program indicated that mobile technology has the potential to positively change behaviour in the context of diabetes, and serve as an enabler to reach a large number of people in a short time with minimum effort and cost

ZAMBIA, mCervical Cancer:

~ 6% increase in first time screens*

*attributable to the mCervical Cancer program; preliminary data collated from 12 out of 19 clinics in Lusaka province between the period of Feb- July 2017

SENEGAL, mDiabetes:

Results of a biometric evaluation indicate that sending SMS was associated with an improvement in glycaemic control in people with type 2 diabetes

BMJ Innovations special edition on digital health and innovation

- First international interdisciplinary journal focused on innovations
- BHBM special issue on digital health and innovation, including country results
- Publication date in mid 2018

Staying in touch: monthly postcards

9.

Be He@lthy, Be mobile programme innovations

Talking Book

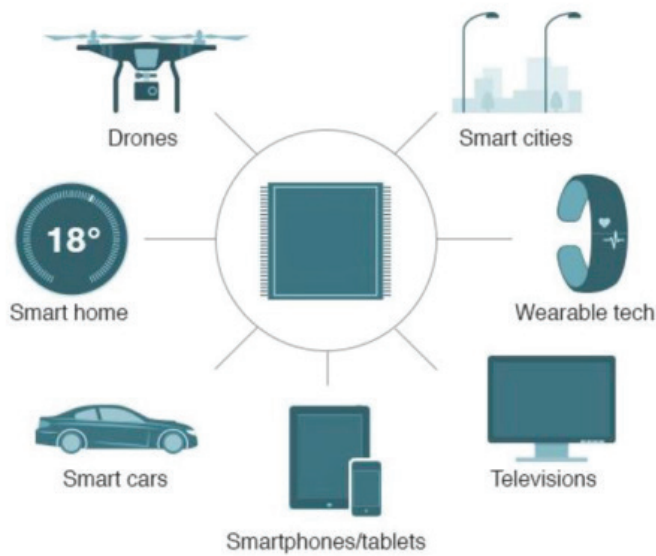
- Partnership between Literacy Bridge BHBM, ARM
- Provides health messaging orally
- Funded for pilot testing in Gabon

Features:

- Speaker for group listening
- Speakers the local language
- Updated and monitored over USB
- Mic for user feedback
- Embossed for use in the dark or when blind

Robust tablet for health care workers in LMICs

- Partnership between WHO, DFID, ARM
- Currently in development



mHealth Knowledge & Innovation Hub (2017-2020)

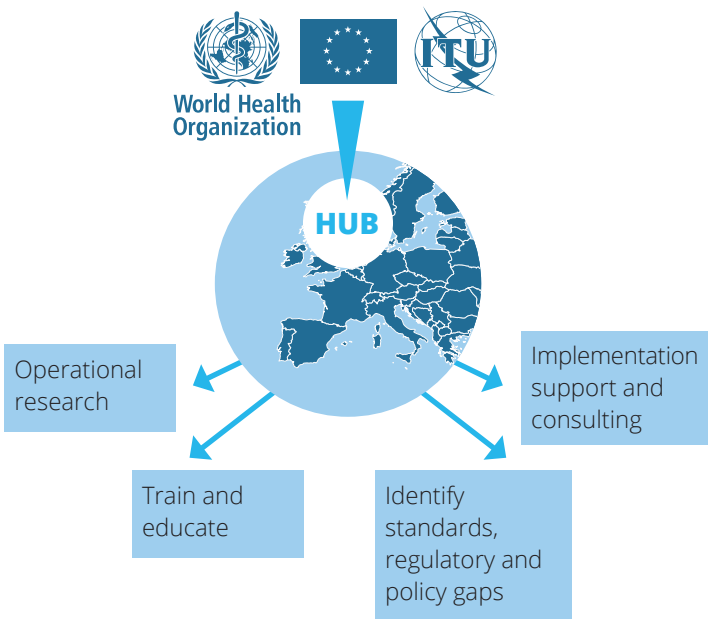
Objective of hub

- Scale-up mHealth services
- Compile best practices
- Focus innovation around key needs and gaps

Structure

- Jointly managed by WHO, ITU & EC
- Three-year project with:
  - Hub selection
  - Set-up
  - Scale-up
- National and international experiences solicited

Core Functions



mHealth Knowledge and Innovation Hub – EU Project

- Four year project funded by the Horizon 2020 Program (2016-2017 Work Programme)
  – 1st March 2017 – 28th February 2021
- ITU and WHO are Partners

- Objectives:
  - Establish an EU mHealth Hub for collecting and disseminating research and experience relating to large-scale implementations of mHealth programs
  - Build capacity for the Hub to be able to support Member States in implementing national mHealth programs

European Community expected impact of the project

1. Creating evidence on health outcomes, quality of life and care efficiency gains in the NCD management by using mHealth solutions.
2. Enabling mHealth to be deployed in national and regional level health services and to deliver large-scale benefits, first of the selected entities, and later in the rest of Europe.
3. Becoming the focal point for expertise on mHealth in the EU and identifying and highlighting trends and gaps in policies, standards, regulations, etc. and best practices and barriers to the creation of consistent mHealth infrastructure and strategy.
4. Unique platform to support innovation in and up-scaling of mHealth by convening cross sector stakeholders (young entrepreneurs, start-ups, governments, technical officers etc.).
5. Creating synergies with the existing EU platforms of stakeholders such as eHealth network of Member States and also the EU EIP on Active and Healthy Ageing (requirement, scope, impact).

Beyond the EU project

- Use as a model for regional mHealth Hubs
- Strengthen regional/local context for mHealth
- Network of Hubs
- Strengthen Be He@lthy Be Mobile outreach and knowledge base
- Will have to balance local role and relationship to other regional mHealth stakeholders with relationship to network of Hubs and relationship with ITU and WHO
- Avoid becoming another project and pilots operator

"eHealth: Harnessing technology on the road towards universal health coverage ...
An example is the initiative Be He@lthy Be Mobile, which promotes the use of mobile technology to help Member States combat the growing burden of noncommunicable diseases"

Carissa F. Etienne
Director,
Regional Office of the World Health Organization for the Americas, Washington, D.C., United States of America.

"The WHO ITU joint initiative on mHealth for NCDs is a promising innovative intervention to see how to use new technologies to better health outcome"

Helen Clark • Former UNDP Administrator • 31 January 2013 • Harvard School Public Health• Boston, Massachusetts

"I firmly believe that technology has a pivotal role to play in helping the world achieve Universal Health Coverage"—@DrTedros to #ITUWTDC.

"WHO and ITU are successfully using eHealth to address non-communicable diseases and risk factors via their mobile phones"—@DrTedros @Broadband commission UNGA.

Dr Tedros at the ITU WTDC and Broadband commission

For more information, please contact:
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