International Federation
of Pharmaceutical
Manufacturers & Associations

Health
at your
fingertips

**A collection
of mHealth
initiatives from the
research-based
pharmaceutical
industry**

July 2013

IFPMA

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Foreword

Information, communications technological innovations are changing the landscape of disease prevention, diagnosis and control. The widespread availability of mobile technology, including in many of the least developed countries, is an exceptional opportunity to expand the use of mobile phones for health (mHealth).

Mobiles are the most rapidly adopted technology in the world. Access to mobile networks has now reached 90% of the world's population and it is foreseen to have 6.8 billion mobile subscriptions for a world population estimated at 7.1 billion by the end of this year. Mobile applications and services can help raise awareness and induce behavioral changes, empower patients and provide them with solutions to help them better manage their conditions, train and support healthcare professionals, strenghten health systems and facilities, and provide access to services for people who are unable to engage officially with the health system.

Successes from pilot projects have shown that mobile applications can support the achievement of the Millennium Development Goals (MDGs) and could play an even more significant goal in the final push to meet the targets agreed in 2000 and the new ones that will be agreed on in 2015.

As this report shows, there are several initiatives that use mobile to help improve early infant diagnosis of HIV or, in other cases, adherence to antiretroviral treatment. Other initiatives focus to improve tuberculosis and malaria treatments by reducing stock-outs of essential medicines. mHealth is being leveraged to deliver vital information to new and expectant mothers, and also to boost immunization rates by encouraging them to take up vaccination services for their children. Programs like these bring us closer to achieving MDG 4 (reduce child mortality), MDG 5 (improve maternal health) and MDG 6 (combat HIV/AIDS, malaria and other diseases).

In the field of non-communicable diseases (NCDs), mobile phones are already used to help people quit smoking, to better support diabetic patient through their treatment, to help health workers conduct household surveys to measure NCD prevention levels, to inform young people about sporting and fitness opportunities, and to help people maintain healthy diet.

mHealth provides strong opportunities for public-private partnerships. One example is the recently launched International Telecommunication Union (ITU)-World Health Organization (WHO) initiative Be He@lthy, Be Mobile of which IFPMA is an active partner. The program will provide evidence-based operational guidance to encourage partners worldwide, especially governments, to implement mHealth interventions to address prevention and treatment of NCDs and their common risk factors – tobacco use, unhealthy diet, physical inactivity and the harmful use of alcohol.

This report *Health at your fingertips*, documenting a wide array of mHealth programs carried out by IFPMA member companies and associations, shows how private sector contributions and expertise and products are particularly important to addressing current and future health challenges. Working together, we can help reduce global, national and individual burdens of diseases.

Mr. Eduardo Pisani

Director General,
International Federation
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& Associations

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Health at your fingertips

The research-based pharmaceutical industry and mHealth

54%
focus on adherence to treatment

54%
aim to increase health literacy

62%
use apps

37 initiatives
since 2009

43%
focus on NCDs and mental disorders

24%
focus on disease management

24%
use SMS

6 billion
people have access to a mobile

Connecting with the general public, patients, and healthcare professionals at home or on the move, at the local dispensary, pharmacy, or hospital through SMS and applications

Partnering with governments, NGOs, academia, patient groups, information and communication technology (ICT) companies to
Promote general health
Manage infectious diseases
Prevent and control non-communicable diseases (NCDs)
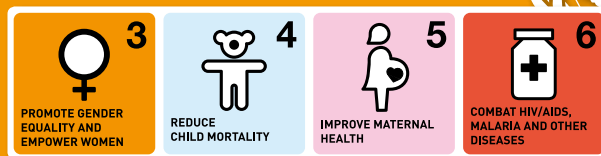Address mental disorders
Improve women's and children's health
Support emergency aid

mHealth and the final push to meet the

Millennium Development Goals (MDGs)

3	4	5	6
PROMOTE GENDER EQUALITY AND EMPOWER WOMEN	REDUCE CHILD MORTALITY	IMPROVE MATERNAL HEALTH	COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES

- mHealth gives women better access to health information and services and empowers them to make better choices for their families (MDG 3)
- mHealth delivers vital health information to new and expectant mothers and help boost immunization rates (MDG 4 & 5)
- mHealth improves early diagnosis, adherence to treatments, and reduces stock-outs of essential HIV/AIDS, tuberculosis and malaria medicines (MDG 6)

mHealth and the NCDs challenge

- mHealth helps measure long-term risks of developing chronic diseases and helps make better lifestyle choices, by avoiding common risk factors – tobacco use, unhealthy diet, physical inactivity and the harmful use of alcohol.

- mHealth offers assistance to patients to manage lifelong conditions such as diabetes, hypertension, and other chronic diseases.

- mHealth supports task-shifting (from physicians to nurses and other health workers) as a promising approach to expanding access to NCD services.

- mHealth supports diagnosis and documentation of cancer cases.

mAwareness mBehavior change

Raise awareness, **increase public knowledge** of health risks and induce behavioral changes

Imagine... smokers having a companion available every day at every hour to help them quit smoking... Yes, we are sending supportive messages and tailored images to smokers...15,392,340 cigarettes were not smoked!
Imagine... if you could measure your health in just a few simple steps and learn how small changes can lead to a healthier life?... Yes, it's possible: answer seven questions about health indicators and habits and you will know how healthy you are and what you can do to lessen the long term risk of developing chronic diseases such as diabetes, cancer and heart disease.

mDisease management

Empower patients and provide them with health solutions to help them manage their conditions

Imagine... if you could track symptoms you're experiencing and share and discuss them with your doctor?... Yes, you can now register your symptoms and send a report to your doctor so that you can discuss appropriate solutions.
Imagine... if you could keep track of your medications... taken or missed?... Yes, you can setup medication and healthcare appointment reminders to improve adherence to your treatment.

mHealth solutions
that are happening
right now

mTraining

**Training healthcare professionals** and support task-shifting

Imagine... healthcare workers trained to manage hypertension and diabetes... Yes, we are supporting healthcare workers with trainings and real-time advice in dispensaries in Kenya.
Imagine... if caregivers would be better prepared to treat patients with mental disorders... Yes, we support best practices in the treatment of schizophrenia and transfer of knowledge from psychiatrists to caregivers in clinics in Mexico.

mMonitoring mScreening

Improve health coverage and **strenghtening health systems** and facilities
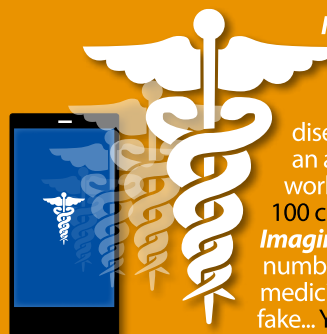
Imagine... if all mothers could receive SMS telling them about vaccines against common childhood diseases and when to schedule an appointment with health workers... Yes, we are testing it in 100 clinics in Mozambique.
Imagine... it there was a free text number that tells you whether the medicine you bought is genuine or fake... Yes, it exists and more than 100,000 users have used this service in Nigeria.

Niquitin

https://www.24plan.ru/en-ru/

Partners
- University College London
- University of California at Los Angeles

Types of partners
- Academia

Therapeutic focus
- Non-communicable diseases - Tobacco cessation

Initiative type
- mAwareness,
- mBehavioral changes

Technology
- Apps

Targeted population
- General population

Countries
- Russia
- USA

Timeframe
Start Date: 2009
Anticipated Termination Date: N/A

Objectives: To enable consumers to track their temptations on a mobile device.

Problem: A number of studies have shown that tracking behavior is a core technique of behavioral change. Niquitin have developed a web based solution that tries to encourage this and many other techniques that will increase the chances of quitting. However temptation can happen anytime and anywhere so consumers need something at their fingertips to track their temptations as they happen and to offer solutions to their temptation.

Solution: Distribute the functionality that currently resides on the web based platform, enabling it on mobile. Hence whenever a consumer feels the urge to smoke, they can pull out their mobile and immediately track their temptation. The end point of this process is the synchronizing of their temptation with the web-based system whilst supportive messages and imagery are sourced from their web-based profile, tailored to the consumer's particular needs.

Sustainability: Removes the need for paper-based diaries and subsequent reports back to the consumer which would be too expensive to maintain.

Challenges: Beyond the investment in the app, there is a cost in raising awareness of the app to consumers. Once consumers have downloaded the app, there is a competition for their attention amongst the plethora of other apps available, both in the same and in competing space.

Lessons learnt: Driving traffic to the app are as important as the initial build. Ultimately the app is about helping with the temptation in real time. This requires huge amounts of content to ensure the message speaks to the exact situation the consumers finds themselves in, is not repetitive and takes account of their history as well as the present temptation.

Impact: The aim moving forward is to replace the hard coded locations with a check-in style functionality and develop the content that is served to the consumer. The app is now being extended to include additional opportunities for user generated content to help motivate the person to beat temptation in the form of videos. Registration will also form part of the next release removing the need to first set up an account on the website.

Measurement of progress
- 45 new plans created.
- 15,392,340 cigarettes not smoked.
- P.19,842,446 money saved.
- 2360 quit plans completed.

The mobile app is a subset of the full behavioural support programme which is live in Australia, United Kingdom, USA, Malaysia and Russia. In total over 50,000 people have registered on the system across all countries.

About IFPMA

IFPMA represents the research-based pharmaceutical companies and associations across the globe. The research-based pharmaceutical industry's 1.3 million employees research, develop and provide medicines and vaccines that improve the life of patients worldwide. Based in Geneva, IFPMA has official relations with the United Nations and contributes industry expertise to help the global health community find solutions that improve global health.

IFPMA manages global initiatives including: IFPMA Developing World Health Partnerships initiative studies and identifies trends for the research-based pharmaceutical industry's long-term partnership programs to improve health in developing countries, IFPMA Code of Practice sets standards for ethical promotion of medicines, IFPMA Clinical Trials Portal helps patients and health professionals find out about on-going clinical trials and trial results.

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