Introduction to mHealth

mHealth Alliance

mHealth for Sexual Reproductive and Maternal Health

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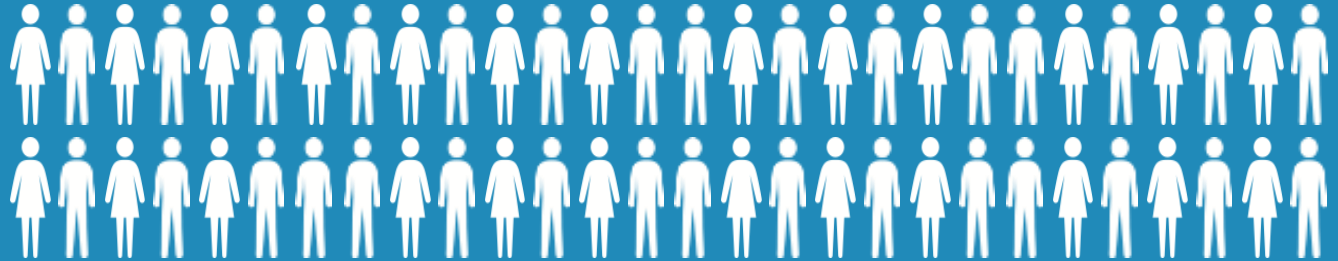
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Definition of mobile health or mHealth

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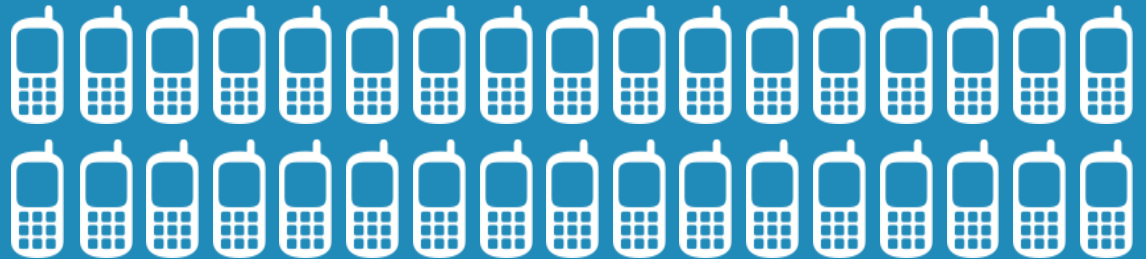
The Crisis

7 Billion
People

6 Billion
Mobile Phone
Users

1 Billion
Mobile Phone Users
Have No Healthcare

Lack of Basic Health Care

1: 250,000

The average ratio between doctors and patients in developing countries.

Top 10 Causes of Death in Low-Income Countries

- Lower respiratory infection
- Diarrheal diseases
- HIV/AIDS
- Ischemic heart disease
- Malaria
- Stroke and other heart disease
- Tuberculosis
- Prematurity and low birth weight
- Birth asphyxia and birth trauma
- Neonatal infections
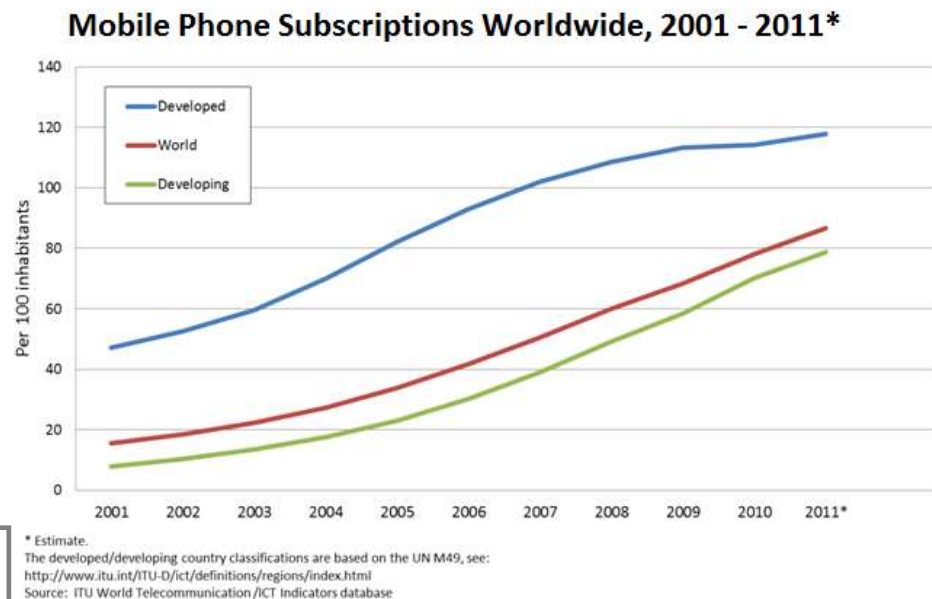
mHealth Around the World

83% of WHO member countries reported having at least one mHealth initiative in their country.[1]

77% of responding low-income countries reported at least one mHealth initiative in their country, making them only ten percent behind high-income countries.[1]
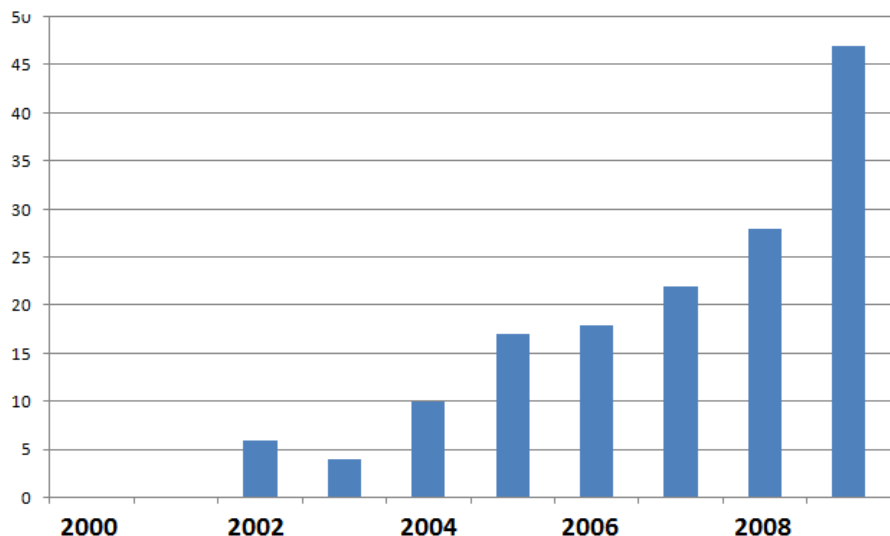
[1]World Health Organization. mHealth: New horizons for health through mobile technologies: second global survey on eHealth. http://www.who.int/goe/publications/goe_mhealth_web.pdf.

Progression of mHealth

With the rise in mobile subscriptions worldwide...

Mobile Phone Subscriptions Worldwide, 2001 - 2011*

Per 100 inhabitants

- Developed
- World
- Developing

* Estimate.
The developed/developing country classifications are based on the UN M49, see:
http://www.itu.int/ITU-D/ict/definitions/regions/index.html
Source: ITU World Telecommunication /ICT Indicators database

Number of mHealth Articles Used in 2010 Literature Review

... comes a rise in mHealth initiatives in countries around the world.

Mobile Technology Changes the Face of Access to Information

77%

of mobile subscriptions are in developing countries

75%

of the world now have easier access to a mobile phone than a bank account, electricity, or clean water

Informed = Preventable

For hundred of millions of people in developing countries, lack of basic health services is an issue of access to basic information and intervention.

For hundreds of millions of people in developing countries, lack of basic health services is an issue of access to basic information and intervention.

Mobile Devices + Health Information can **Effectively and Efficiently** help people across the globe.

How?
mHealth is a Cross-Cutting Tool Providing:

Education & Awareness

Healthcare Worker Communication & Training
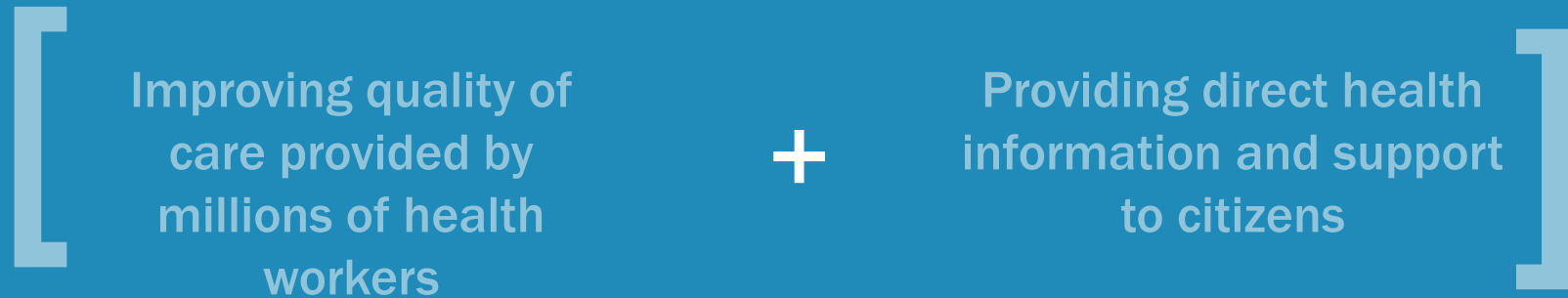
Diagnostic Treatment & Support

Remote Monitoring

Disease & Epidemic Outbreak Tracking

Remote Data Collection

The Potential Impact of mHealth

[Improving quality of care provided by millions of health workers **+** Providing direct health information and support to citizens]

= A holistic and personalized approach to healthcare

mHealth Focus Areas

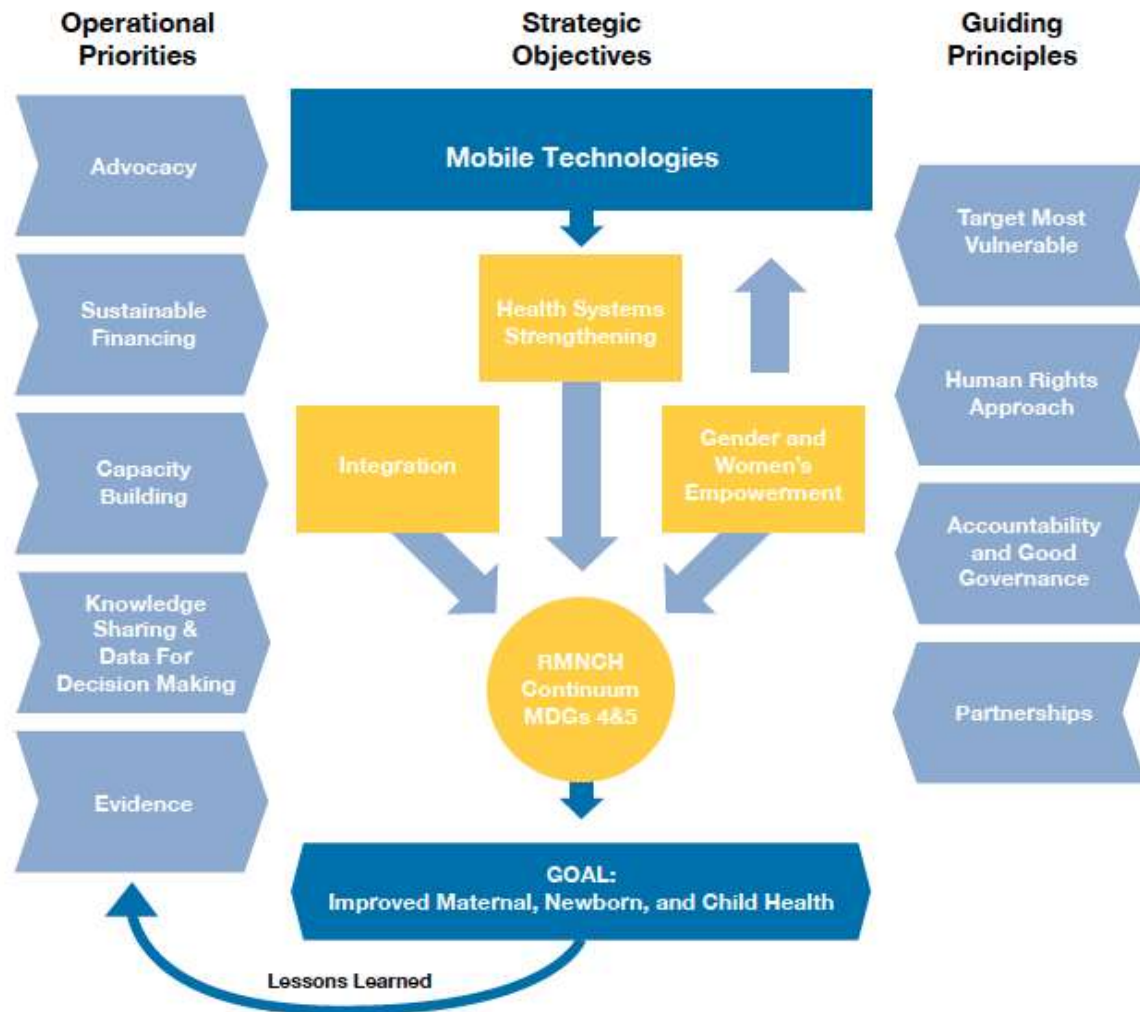| CAUSE OF DEATH	mHEALTH INTERVENTION
Prematurity, low birth weight and neonatal infections	Maternal and prenatal care
HIV/AIDS	Awareness and testing
Heart disease	Smoking cessation
Tuberculosis	Vaccination

The Continuum of CARE for SRMH

PMNCH (2011). Adapted from WHO (2005) - Make every mother and child count.

MNCH mHealth Framework

mHealth Focus Areas

CAUSE OF DEATH	mHEALTH INTERVENTION
Prematurity, low birth weight and neonatal infections	Maternal and prenatal care
HIV/AIDS	Awareness and testing
Heart disease	Smoking cessation
Tuberculosis	Vaccination

Gender Mainstreaming Framework

mHealth Intervention Components

Enhancing Women's voices, access to and participation in mHealth

In the development of technology

As providers of health services

As clients of mobile technology services

In policy making

Men as partners; gatekeepers

Addressing gender, cultural and Social norms

MNCH

HIV/AIDS

TB & Malaria

Addressing GBV

Achieving MDG 4, 5 & 6
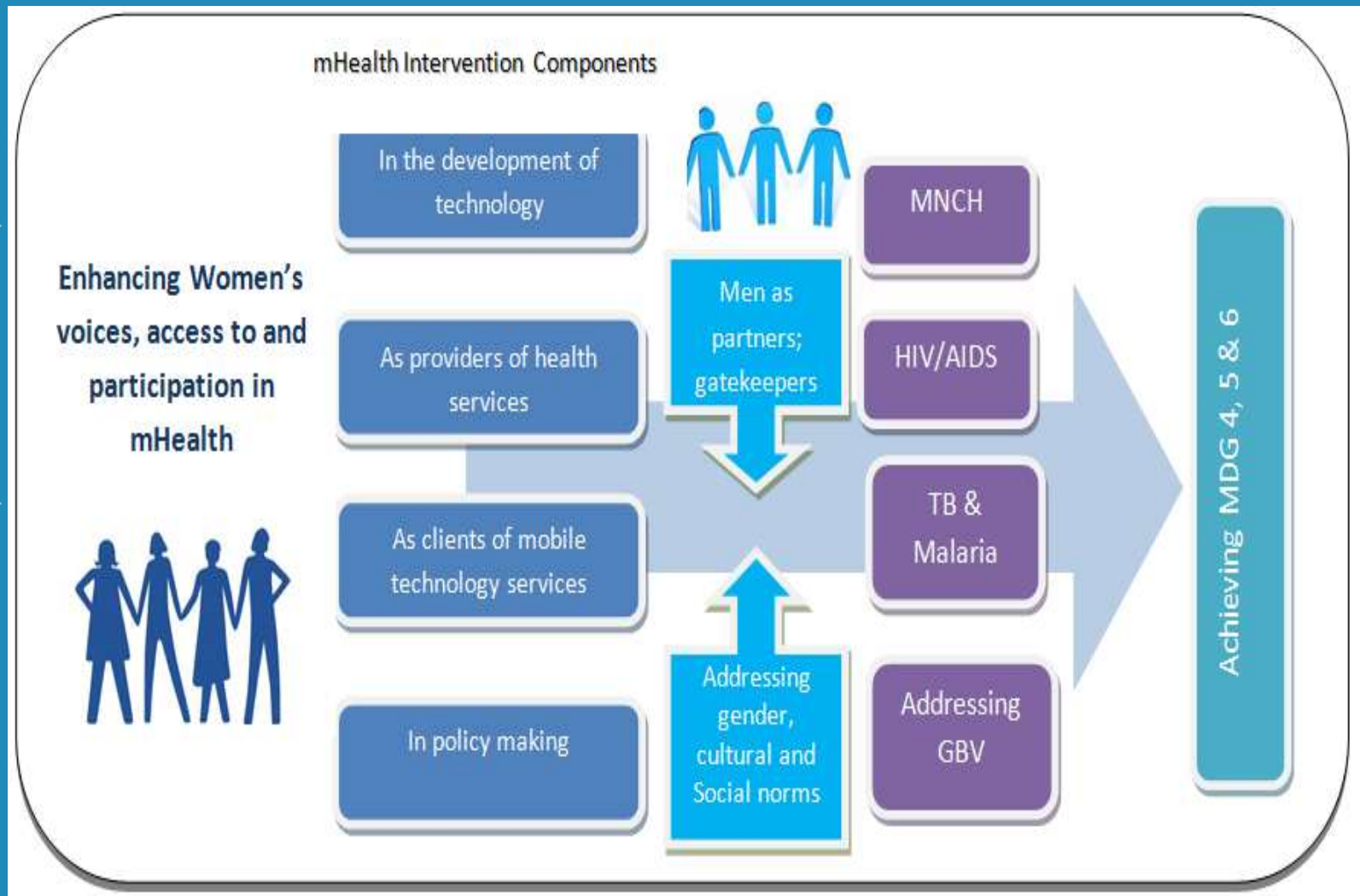
The mHealth Opportunity

Ministers of Health are making the mHealth connection.

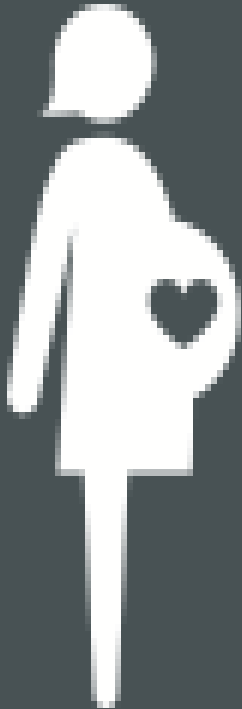↑ Huge penetration of mobile phones.

↑ Rising endemic health issues.

Ruma's Story: "m" is for Mothers

Ruma's Story

17-year-old Ruma is pregnant and living in Bangladesh, ranked 11th in child-death.

She is diabetic with no access to basic maternal or prenatal care.

Ruma's Story

Her home is 100 miles from the closest medical clinic.

Ruma's Story

What Ruma does have is a **mobile phone.**

Through voice and text messages on her prepaid mobile phone Ruma gets news on her baby's development and nutrition recommendations to support prenatal health.

Ruma's Story

An app helps her manage and track her insulin and blood sugar and
she can text questions to her health care
worker who can help her in real-time.

Ruma's Story

After her baby is born, Ruma gets **pre-recorded voice messages** reminding her of her son's immunization schedule.

She's informed in her decision to breastfeed and now her baby is **6 times more likely to survive** his precarious early months.
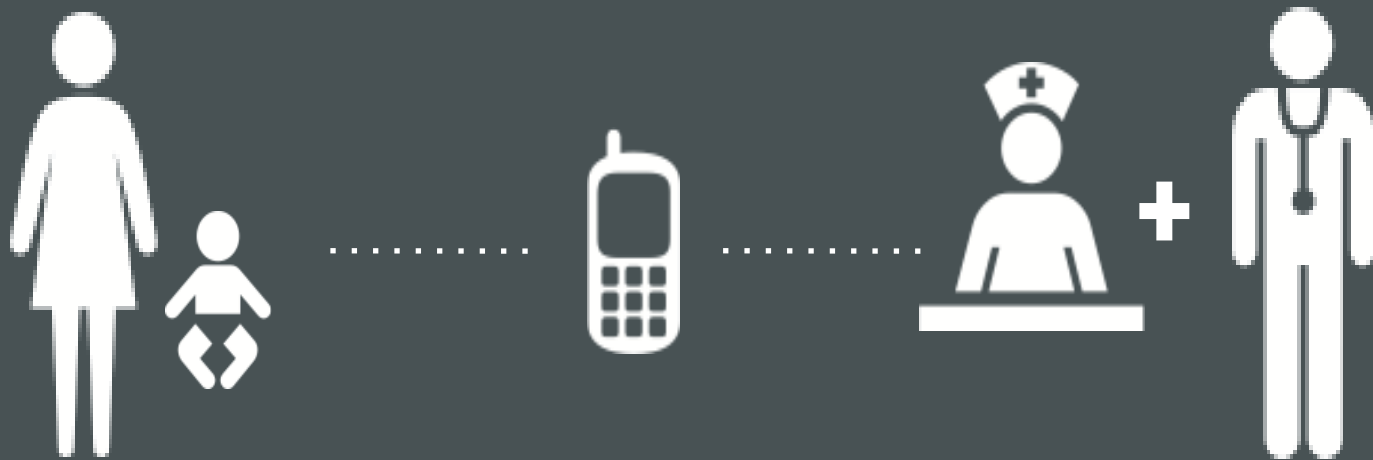
Ruma's Story

Her frontline health worker, hospital, and medical clinic are linked through **Ruma's Health ID**.

Her son's birth does not go unnoticed—**the baby now has a Vital Registry ID and counts in the system.**

Ruma's Story

Ruma is no longer lost in a fragmented health system.
She feels connected and that her family is cared for.

The mHealth Challenge

But coordination in the crowded mHealth space is

fragmented, unsynchronized, and duplicative.

In Kenya alone, there are more than 30 different mHealth initiatives active simultaneously.

mHealth Alliance

Thank You.