

Global Mobile Health

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A GIRL AND A DREAM

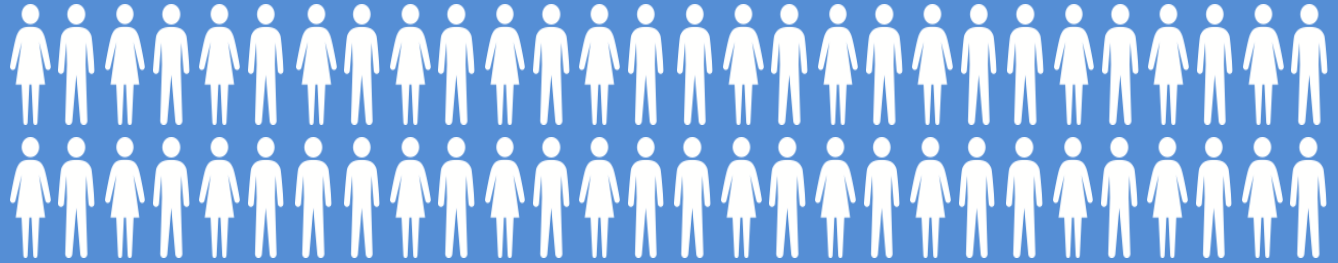
THE GIRL AND THE DREAM

...and a 2-way radio



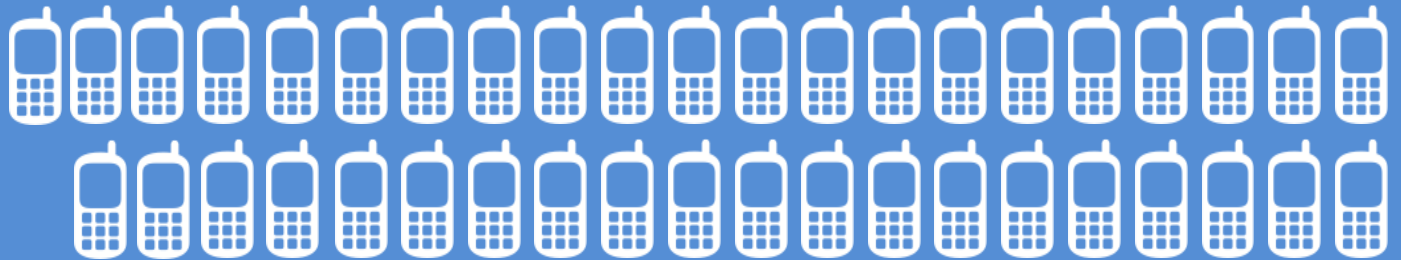
The mHealth Opportunity

7 Billion
People



By 2014

More mobile
phones than
people



Expanding the coverage and reach of
critical health information and services
and moving towards citizen-centered
health and well-being



<http://www.youtube.com/watch?v=S0yqkp1eHel&list=UUfrKXVCB12giyvCpAMs41Ag>

Types of mHealth



Education and Awareness

Messaging in support of public health and behavioral change campaigns.



Diagnostic and Treatment Support

Mobile phones to support provider decisions and as a point-of-care device.



Disease and Epidemic Outbreak Tracking

Sending and receiving data on disease incidence, outbreaks and public health emergencies.



Supply Chain Management

Using mobile solution to improve stock-outs and combat counterfeiting.



Remote Data Collection

Collecting real-time patient data with mobile applications.



Remote Monitoring

Maintaining care giver appointments or ensuring medication regime adherence.



Healthcare Worker Communication and Training

Connecting health workers with sources of information.

mHealth aims to...



**Wise words from
mHealth Champion:**.....
**Dr. Muhammad Ali Pate, Former
Minister of State for Health in
Nigeria**

- ▶ Empower patients/
clients
- ▶ Empower health
workers
- ▶ Empower health
system
- ▶ Provide platform for
shared accountability,
inclusion, and equity



mHealth Adoption Around the World

- 83% of WHO member countries reported having at least one mHealth initiative in their country¹.
- 77% of responding low-income countries reported at least one mHealth initiative in their country, making them only ten percent behind high-income countries¹.
- From Rwanda to Sweden to China, many countries are building and implementing national mHealth strategies and programs.
- In late 2009, a literature review to identify policy barriers to mHealth scale and sustainability and research gaps identified 2,449 research papers, indicating a growing evidence base for mHealth².



Photo: Chris Martino,
<http://www.flickr.com/chrismar/>

Sources: 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. Accessed Oct. 11, 2011

2. Mechael, P. et al. Barriers and Gaps Affecting mHealth in Low and Middle Income Countries: Policy White Paper. http://www.globalproblems-globalsolutions-files.org/pdfs/mHealth_Barriers_White_Paper.pdf. Accessed Oct. 11, 2011

Growing Evidence

1. In 2010, a study reported that text messages to remind Kenyan patients to take their HIV drugs properly improved adherence to the therapy by 12%¹.
2. In 2011, a study reported that text messages to remind health workers, also in Kenya, the proper guidelines for malaria management improved management by 23.7% immediately after intervention and continued to 24.5% six months later².
3. In the United States, WellDoc, together with the University of Maryland School of Medicine reported that its mHealth coaching system, when combined with an online coaching system, reduced A1C results by an average of 1.2% among patients with type 2 diabetes³.
1. In 2014, the wired mothers' mobile phone intervention in Zanzibar reported significantly increased proportion of women receiving the recommended four antenatal care visits during pregnancy and there was a trend towards improved quality of care with more women receiving preventive health services, more women attending antenatal care late in pregnancy and more women with antepartum complications identified and referred.

Sources: 1. The Lancet Infectious Diseases, Volume 11, Issue 12, Pages 942 - 951, December 2011. Accessed Jan. 11, 2012. 2. The Lancet, Volume 378, Issue 9793, Pages 795 - 803, 27 August 2011. Accessed Jan 13, 2012. 3. DiabetesCare, vol.34no 91934-1942.Pages1934-1942. September2011. 4. *BMC Pregnancy and Childbirth* 2014, **14**:29 (17 January 2014).



PATIENT PRIVACY
IN A MOBILE WORLD
A FRAMEWORK TO ADDRESS
PRIVACY LAW ISSUES
IN MOBILE HEALTH

JUNE 2013



ADDRESSING GENDER AND WOMEN'S EMPOWERMENT IN MHEALTH FOR MNCH

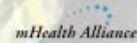
An Analytical Framework

MADHU DESHMUKH
PATRICIA MICHAEL
MHEALTH ALLIANCE, UN FOUNDATION
MARCH 2013



The State of Standards and Interoperability for mHealth

among Low- and Middle-Income Countries



JONATHAN D. RAYNE
MHEALTH ALLIANCE
MARCH 2013

Sustainable Financing for Mobile Health (mHealth):
Options and opportunities for mHealth financial models in low and middle-income countries



Baseline Evaluation of the mHealth Ecosystem and the Performance of the mHealth Alliance



ADVANCING THE DIALOGUE ON MOBILE FINANCE AND MOBILE HEALTH: COUNTRY CASE STUDIES



Lead Author, Menekse Gencer, mPay Connect
Co-Author, Jody Ranck

March 2012



MHEALTH AND MNCH: STATE OF THE EVIDENCE

Trends, Gaps, Stakeholder Needs, and Opportunities For Future Research on the Use of Mobile Technology to Improve Maternal, Newborn, and Child Health

WILLIAM C. PHILBRICK
MHEALTH ALLIANCE, UN FOUNDATION
JANUARY 2013



Using Mobile Technologies for Healthier Aging

By Aca Keen

mHealth Alliance, United Nations Foundation



LEVERAGING MOBILE TECHNOLOGIES TO PROMOTE MATERNAL & NEWBORN HEALTH: THE CURRENT LANDSCAPE & OPPORTUNITIES FOR ADVANCEMENT IN LOW-RESOURCE SETTINGS

THE COVER FOR AN OVERVIEW & TECHNOLOGY IN PUBLIC HEALTH
PUBLIC HEALTH INSTITUTE, CALIFORNIA



LEVERAGING MOBILE TECHNOLOGIES FOR MATERNAL, NEWBORN & CHILD HEALTH: A FRAMEWORK FOR ENGAGEMENT

NOVEMBER 2012
WILLIAM C. PHILBRICK
MHEALTH ALLIANCE, UN FOUNDATION



mHealth

New horizons for health through mobile technologies

Based on the findings of the second global survey on eHealth

Global Observatory for eHealth series - Volume 3



HEALTH INFORMATION AS HEALTH CARE

THE ROLE OF MOBILES IN UNLOCKING HEALTH DATA AND WELLNES

DISCUSSION PAPER



Amplifying the Impact: Examining the Intersection of Mobile Health and Mobile Finance

A discussion guide for collaborative insight presented by the World Economic Forum, in partnership with the mHealth Alliance



The Economics of eHealth

One of a series of discussion papers published by the mHealth Alliance



mHealth for Development

The Opportunity of Mobile Technology for Healthcare in the Developing World



**Every Women Every Child Innovation Working Group
Catalytic mHealth Grants Program**



Scaling mHealth



Nigeria's Saving One Million Lives

COMPONENT	DESCRIPTION	POTENTIAL LIVES SAVED
Maternal and Neonatal health	Scale up of Maternal, Newborn, and Child health interventions	Maternal – 84,000 Neonatal – 252,000 Child – 465 300
eMTCT	Increasing coverage of PMTCT interventions	75,000 (50,000 -100,000)
Essential Medicines	80% coverage of effective treatments for Diarrhoea, Malaria ² and Pneumonia	350,000 (157,000 – 500,000)
Immunization	Scale up routine immunization and Introduce new vaccines	150,000 (50,000 - 250,000)
Malaria Prevention	100% Scale up coverage of LLINs	455,000 (350,000 - 700,000)
Nutrition	Scale up of CMAM and other interventions	250,000 (100,000 - 400,000)
TOTAL LIVES SAVED		1.1m (adjusted for overlaps)



MATCHMAKING SERVICE

We identify what organizations or countries are trying to achieve, and matchmake to individuals and organizations to help them achieve it.



QUALITY ASSURANCE SUPPORT

All engagements are overseen by mHELP for quality control. mHELP will ensure that the client receives high quality support.



NEUTRAL BROKER

We provide targeted, straightforward, recommendations that are not beholden to specific technology.



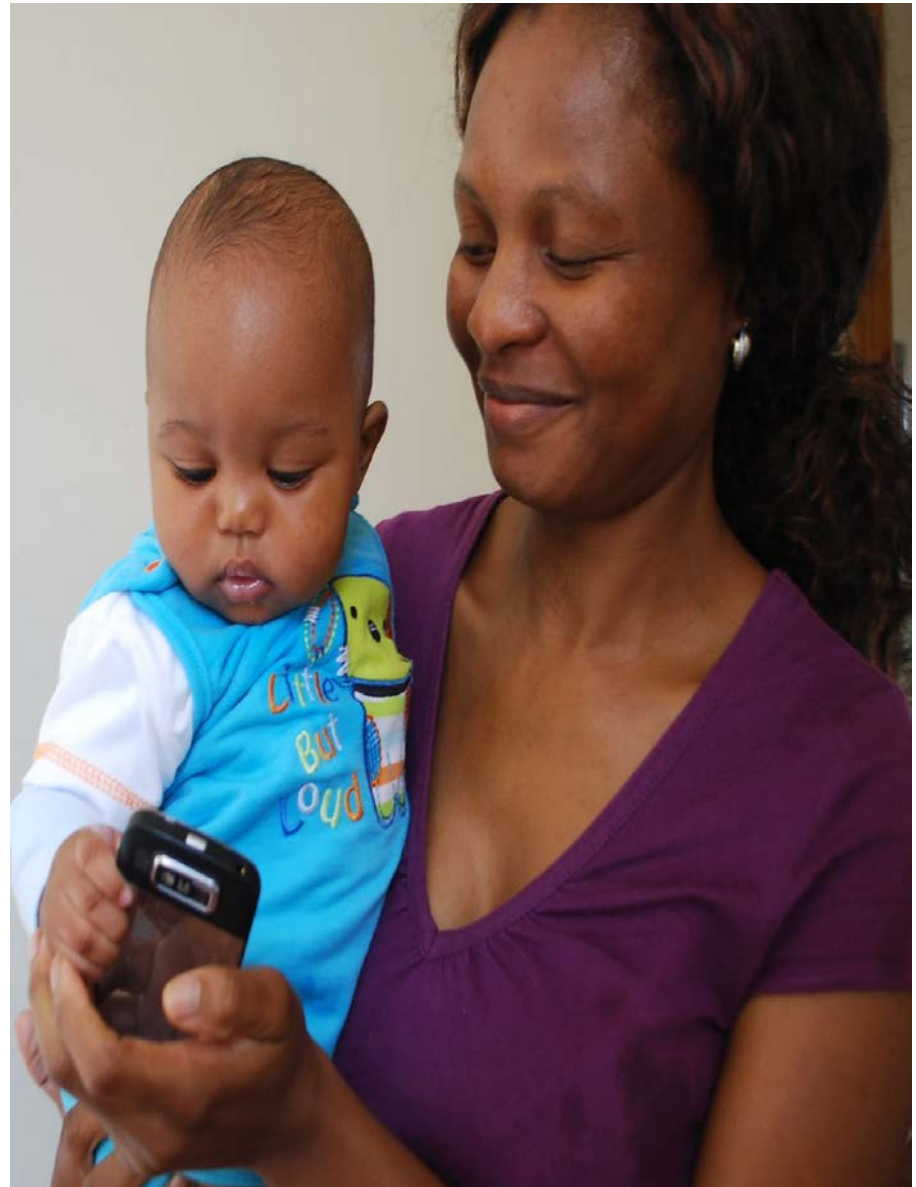
VETTED NETWORK OF EXPERTS

Our network of experts include global leaders in mHealth and experienced people in many countries in Africa and Asia. We draw on the expertise of the 300 member organisations of the mHealth Alliance.



**SOUTH AFRICA NATIONAL
DEPARTMENT OF HEALTH**

- Created a framework for linking over 40 projects
- Provided technical assistance to support the development of a system to improve antenatal and postnatal care by:
 - Registering pregnant women and mothers of infants
 - Subscribing pregnant women and mothers to maternal health messaging
 - Improving access to maternal health services
- Aiming to reach 1 million women by the end of 2014
- Approved by the Minister of Health, Dr Aaron Motswaledi, for launch in second quarter of 2014

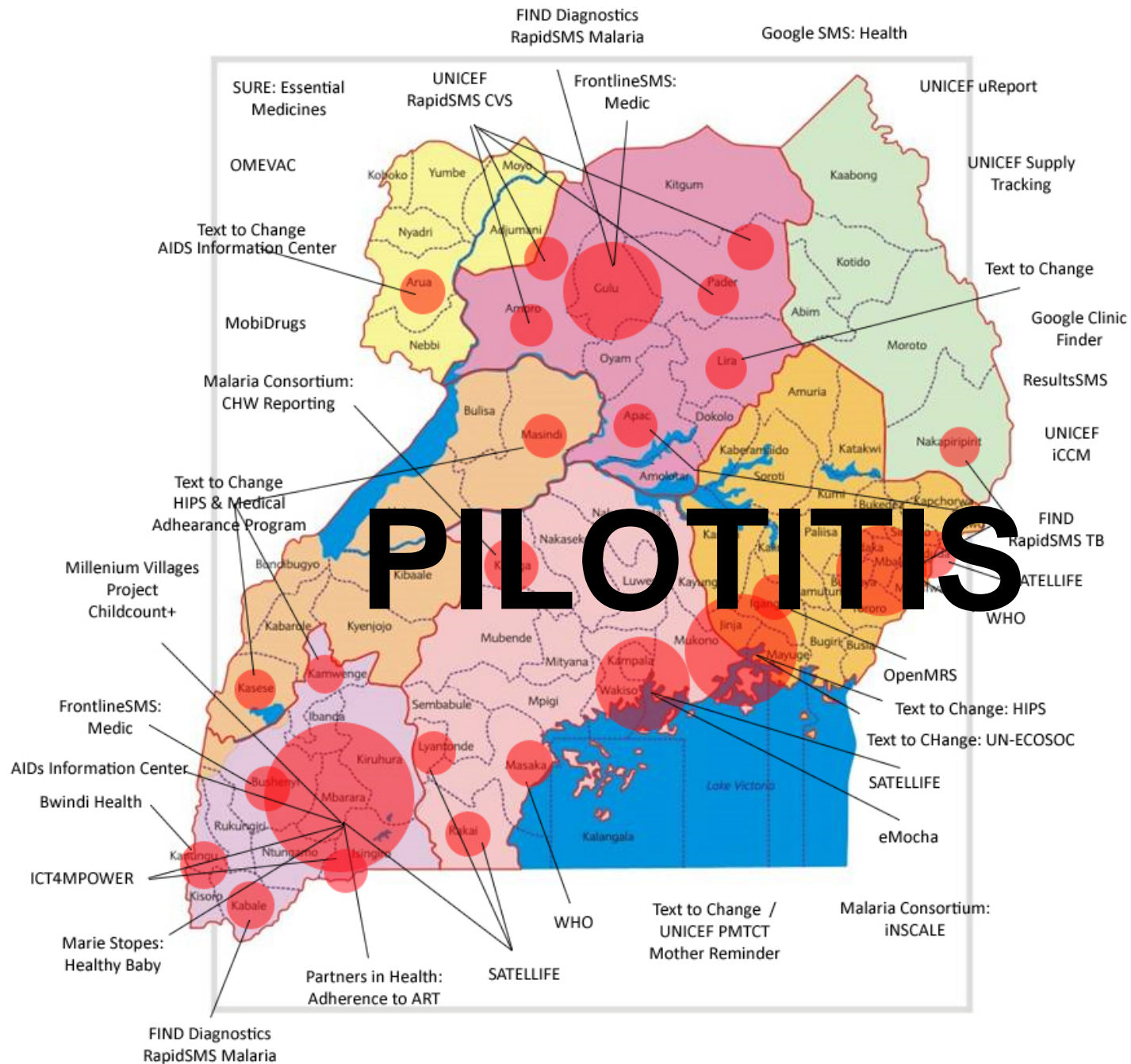


Top 10 Lessons Learned List

1. Capitalize on what others have done, what others have learned.
2. Evaluate the impact of mobile technologies to support behavior change.
3. Locally-generated content is key. Being sure to appropriately contextualize information makes it more meaningful. Invest in ethnographic research.
4. Adapting materials to mobile is a challenging undertaking.
5. Move away from research focused on user satisfaction and actually evaluate the impact on health outcomes.
6. Be realistic and don't get caught up in the hype. Tone it down, at least.
7. Take a systems-thinking approach and move away from single-issue focus.
8. Recycle, repurpose, reuse; don't reinvent the wheel, (especially if it's a flat or square tire).
9. mHealth at scale can only come from strong leadership linking technology with health priorities and looking for most appropriate tools that exist. Engage in public-private partnerships.
10. It's not about technology.

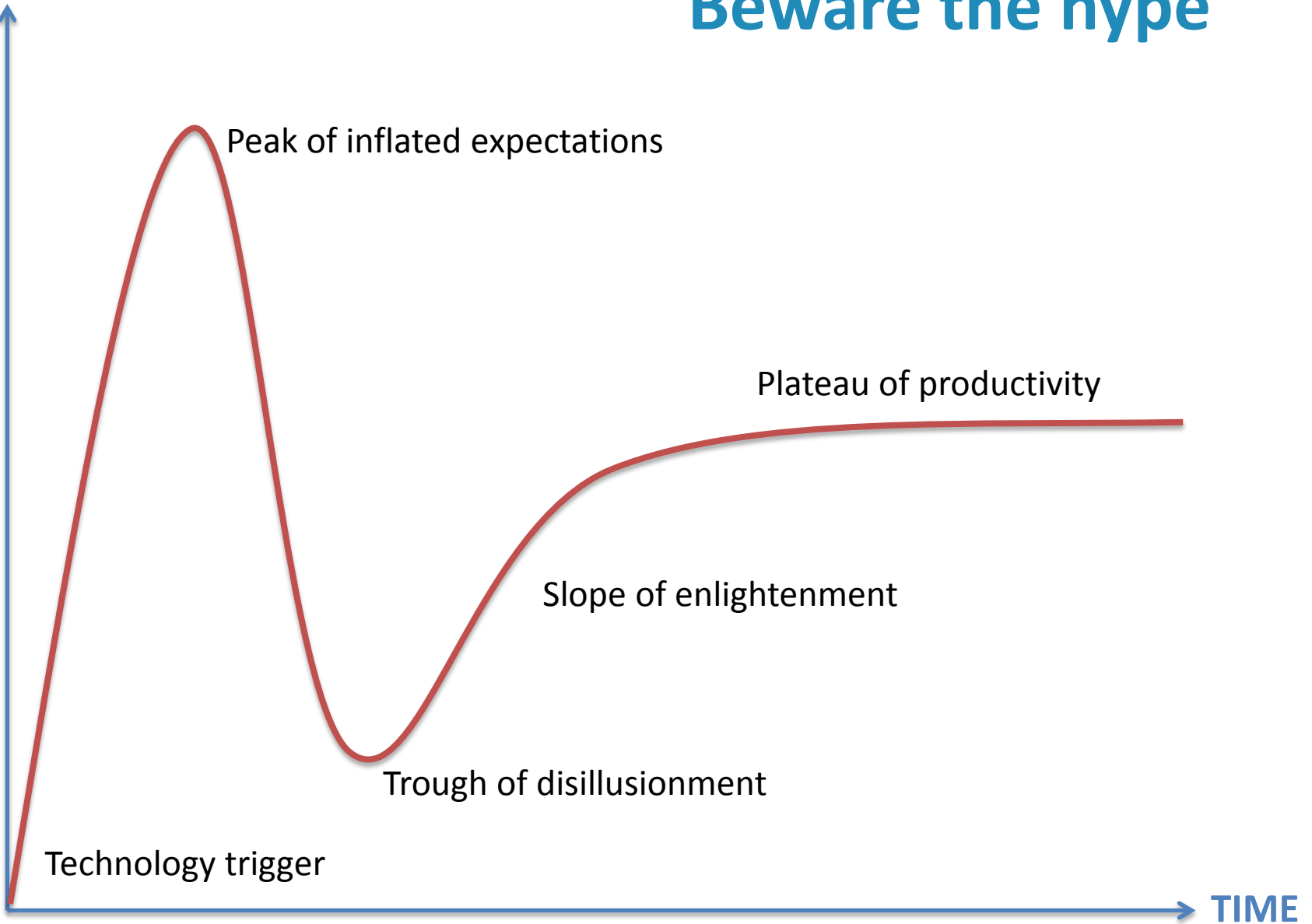


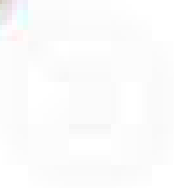
***"I call my invention 'The Wheel,' but so far I've
been unable to attract any venture capital."***



Beware the hype

VISIBILITY





LEGO

Friends

Meet the Girls





and Discover their World

▶ [Learn more](#)



Sustainable Financing

Figure C: Common mHealth Value Propositions TM

Stakeholder					
	Public	Non-Profit	For-Profit	Health Worker	Individuals & HH
Comparative Net Utility	<ul style="list-style-type: none"> • Improved health outcomes (e.g., longer life, higher quality of life) • Efficiency gains and cost savings for health delivery • Higher productivity levels for the overall economy 	<ul style="list-style-type: none"> • Improved health outcomes • Efficiency gains and cost savings in achieving mission • Increased donations/sales/revenues 	<ul style="list-style-type: none"> • Increased sales/revenues • Efficiency gains and cost savings in delivering products and services • Improved health outcomes • Note: Improved branding/PR is not a driver for long-term participation 	<ul style="list-style-type: none"> • Improved health outcomes • Efficiency gains and cost savings for health delivery • Reputational benefits (i.e., standing in community) 	<ul style="list-style-type: none"> • Improved health outcomes • Efficiency gains and cost savings in seeking health care • Reputational benefits (i.e., standing in community) • Higher productivity levels for household

The Greentree Principles

We support the following principles, which will be realized through our collaboration:

- Recognizing and embracing the diversity of approaches and initiatives underway, we agree to coordinate our work, and collaborate on and/or share experiences to strengthen health systems. (Coordinated Approach)
- We will respond to capacity development needs articulated and driven by local constituencies to ensure appropriate support and partnerships, and development of local capacities. (Country Ownership & Capacity Development)
- We are committed to openness, including promotion and use of open architecture, industry-based standards, transparent, shared processes and methodologies, and open sharing of requirements and other technology knowledge components. (Openness)
- We will organize to extract reusable components from appropriate projects, and build new, shared components and platforms as required (Strategic Reuse)
- We will contribute to the body of knowledge that informs future investment through utilization-focused research and evaluation activities. (Research and M&E)

[Home](#) » [MNCH Resources and Database](#)



Every year, approximately 350,000 women die worldwide as a direct result of pregnancy and childbirth, and for each woman who dies, approximately 20 others suffer from pregnancy-related consequences. Additionally, three million babies die every year before they are a month old, and a similar number are stillborn. When stillbirths are included, about half of all 7.5 million deaths in children under age five occur before the end of the neonatal period, or the first 28 days of life. For women and newborns in many low- and middle-income countries (LMICs), the rapid expansion of mobile technology infrastructure presents an unprecedented opportunity to increase access to health care and save lives that are lost from preventable and avoidable conditions.

How can we leverage the power of mobile technologies to save the lives of mothers and newborns each day?

Leveraging Mobile Technologies for Maternal, Newborn, and Child Health: The Current Landscape & Opportunities for Advancement in Low-resource Settings

Framework for Engagement: Leveraging Mobile Technologies for Maternal, Newborn, and Child Health

State of Evidence: mHealth & MNCH

Search the PHI Database

The Public Health Institute (PHI) database of mHealth programs was created to inform the report on the current landscape of leveraging mobile to echnologies for maternal, newborn, and child health (MNCH). This is by no means an exhaustive list, and we welcome you to add your own project to the database so that we have a dynamic list that is as reflective as possible of the current state of mHealth for MNCH.

I'm looking for...

Additional Resources

PROGRAM

NACER

A phone- and web-based application that was developed to reduce maternal and infant mortality through the combined functionality of traditional interactive voice response systems, unified messaging and voicemail services, and web-based transaction and workflow management tools. The application supports timely exchange of critical information between health professionals, medical experts and regional hospitals in remote regions to improve...

PROGRAM

HealthLine

The HealthLine project is an information access system for health workers, to help them fill gaps in their knowledge. Health workers can call a toll-free number and learn about a variety of topics through audio transmissions in their native language. The solution is based on Microsoft Speech Server 2007 data archives. The menu-driven program can be accessed via landlines or mobile phones. Callers specify a topic (or disease) and are walked through...

PROGRAM

TulaSalud

TulaSalud is an organization based in Guatemala that is leveraging ICT – specifically mobile phones – to improve the delivery of health care services for indigenous communities. The organization's vision is to use ICT and mobile technology to reduce maternal and infant mortality and to monitor disease outbreaks in the remote highlands of Alta Verapaz. Using mobile phones, TulaSalud has been able to improve the flow of information between...

Thank you!

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www.healthunbound.org