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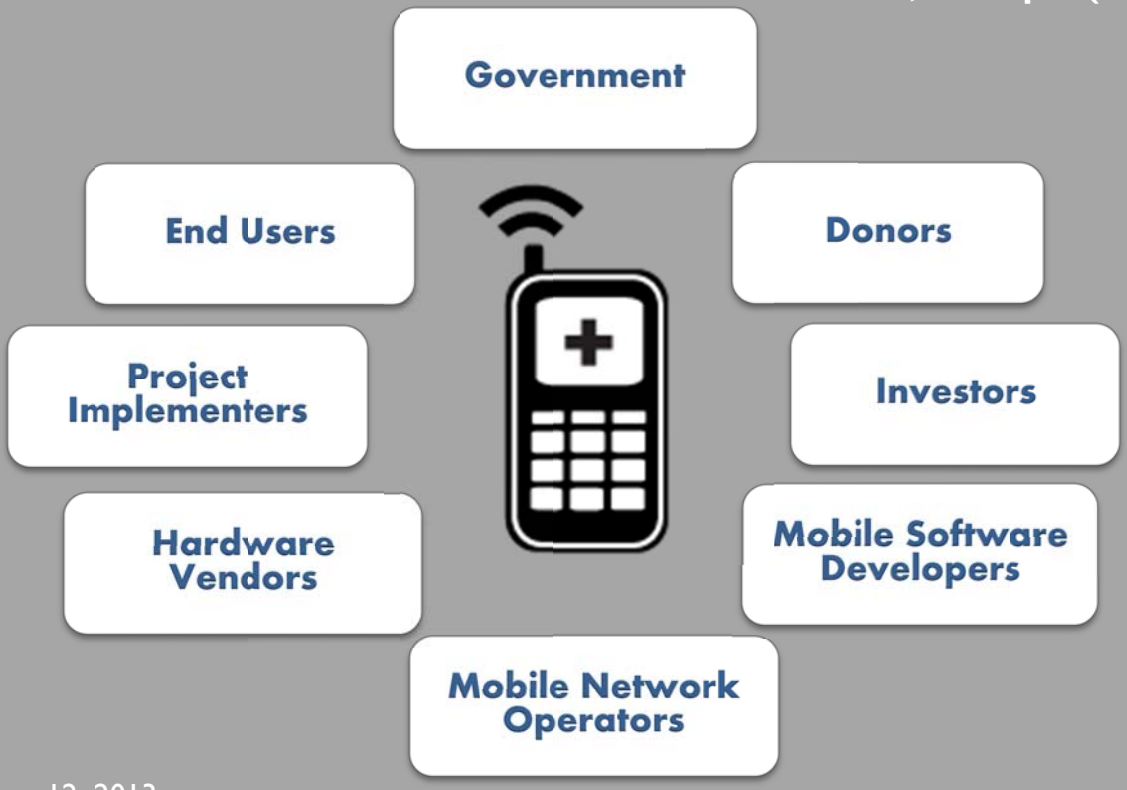
Scaling Up Mobile Technology

Applications for Accelerating Progress on **Ending Preventable Maternal and Child Deaths**

Technical Meeting Report

USAID mHealth Meeting
Addis Ababa, Ethiopia (2013)



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Acknowledgments

The meeting on "Scaling Up Mobile Technology Applications for Accelerating Progress on Ending Preventable Maternal and Child Deaths" was hosted by the Federal Ministry of Health and Social Welfare of Ethiopia and USAID/Ethiopia. It was organized and driven by the country teams who made remarkable efforts towards its success through extensive preparation and exchange of experiences at the meeting. The United States Agency for International Development's Bureau for Global Health/Office of Population and Reproductive Health, the Bureau for Africa, USAID/Ethiopia and FHI 360 provided the technical and logistical support to the country teams.

This report was prepared by Lungi Okoko (ASH Project) in close collaboration with Ishrat Husain (USAID/AFR) Margaret D'Adamo (USAID/GH) and Kaitlyn Patierno (USAID/AFR), and additional input from the organizing committee and meeting participants.

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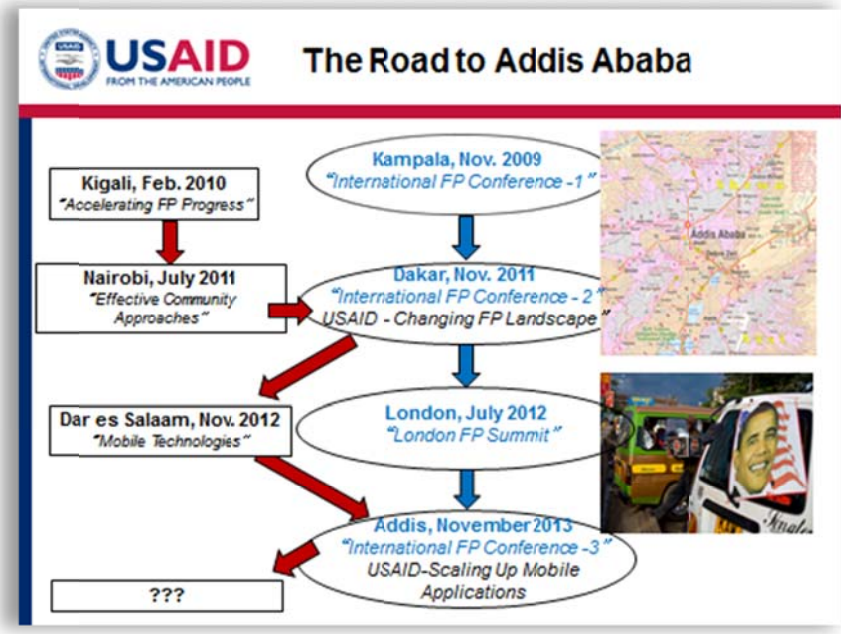
Introduction

This report documents key points presented and discussed at the regional meeting "Scaling Up Mobile Technology Applications for Accelerating Progress on Ending Preventable Maternal and Child Deaths" held November 10, 2013 in Addis Ababa, Ethiopia on the fringes of the third International Conference on Family Planning. The one-day meeting was sponsored by the Bureau for Africa's (AFR) Office of Sustainable Development, the Bureau for Global Health's (GH) Office of Population and Reproductive Health of the United States Agency for International Development (USAID), and USAID/Ethiopia. It brought together more than 155 representatives from governmental and non-governmental organizations, the private sector and civil society from 15 countries and two regional USAID programs. This was the fourth in a series of meetings organized by the country teams to share experiences and ideas for improving family planning programs.

As a follow-up to the November 2012 meeting on "Using Mobile Technology to Improve Family Planning and Health Programs" (attended by 170 representatives) in Dar es Salaam, this November 2013 meeting aimed to provide a forum for country teams to share progress made in implementing their one-year action plans and to discuss future actions.



Participants were welcomed by the Representative of the Federal Ministry of Health of Ethiopia and USAID Deputy Assistant Administrator for Global Health Robert Clay. In her introductory remarks, USAID Director of PRH Ellen Starbird underscored the importance of bringing country teams together to exchange ideas and information and discussed how the Addis meeting builds on previous Family Planning meetings organized by USAID (i.e. the Road from Kigali to Addis). USAID Senior Health Advisor Ishrat Husain noted that by improving efficiency, enhancing quality of services, and empowering people to take charge of their own health, mobile technology presents a unique opportunity for addressing key challenges faced by health systems.

Panel discussions featured speakers from NGOs and the private sector who shared successful business models and innovative financing approaches. Discussants also shared models for

mHealth programs that are already operating at scale. Participants were able to meet separately with experts to explore next steps for particular countries and mHealth applications.

Country Progress and Future Plans

Country teams were asked to present progress made on the implementation of the one-year action plans they formulated in Dar es Salaam as well as future actions. Future actions were particularly oriented toward preventing maternal and child deaths and further strengthening the key role of family planning programs in contributing to these goals. Considerable progress has been achieved by countries in moving towards scaling up the use of mobile technology for health. Table 1 presents a snapshot of country progress on key actions necessary for effective scale up (based on information presented by countries)[1]:

Table 1: Snap Shot of Country Progress since Dar Meeting in November 2012

	Angola	Benin	Burkina Faso	DRC	Ethiopia	Guinea	Kenya	Madagascar	Malawi	Niger	Nigeria	Rwanda	Senegal	Tanzania	Togo	Uganda
1. Establishment/strengthening national mHealth coordination /governance mechanism				✔		✔	✔		✔		✔	✔				
2. Developed e-health strategy/policy or framework				✔	✔				✔		✔	✔		✔		✔
3. Mapping of uses of Mobile Technology and Stakeholders							✔	✔	✔					✔		
4. Agreements/ discussion with the Mobile Operators							✔		✔		✔	✔		✔		
5. Advocacy for scaling up	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
6. Expansion of pilots or programs	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

* East Africa also presented results from a regional study and a pilot.

Table 2 shows the objectives of the one-year action plans countries committed to at the Dar es Salaam meeting in November 2012. Overall, countries who participated in both USAID mHealth regional meetings have achieved significant progress, especially when comparing the progress reported by countries in Table 1 to the one-year action plans in Table 2.[2]

[1] Table 1 only includes information presented by countries. Some countries may have made progress not reflected in this table (as some country teams did not present this information at the meeting).

[2] Burundi and Mozambique participated in the November 2012 mHealth regional meeting in Dar es Salaam but did not attend the November 2013 meeting in Addis.

Niger, Senegal, and Mali participated in the November 2013 meeting in Addis but did not attend the November 2012 mHealth regional meeting in Dar es Salaam.

Table 2: Key Points in Country Action Plans Dar mHealth Meeting (November 2012)

	Angola	Burundi	DRC	Ethiopia	Guinea	Kenya	Madagascar	Malawi	Mozambique	Nigeria	Rwanda	Tanzania	Uganda
1. National strategy		■			■					■			
2. Guidelines												■	
3. Public-Private Partnerships			■			■	■				■		
4. Assessment (what's out there)								■		■			
5. Evaluation (what works best)		■				■	■					■	
6. Scale up							■					■	
7. Introduce innovation												■	
8. Costing								■			■		
9. Advocacy		■			■	■	■	■		■	■		
10. Task Force					■	■							

A full summary of country progress and future actions is annexed to this report. A few notable highlights of country actions are summarized below:

- Rwanda is scaling up the use of mobile technology to support equity in health care. Each community health worker is equipped with a mobile phone and uses SMS to support provision of quality care in remote areas. The connectivity of the whole health system is being improved. Rwanda has an eHealth strategy and an office of eHealth in the Ministry of Health.

- Kenya is mobilizing domestic resources through mobile banking and strengthening public-private partnerships for scaling up mHealth. mPesa (mobile money system) provided health cards to allow individuals and families to save and spend on health. The Kenyan government has formed a task force on mHealth that includes the private sector, developed an eHealth strategy with a focus on the engagement of the private sector, and established an office on eHealth in the Ministry of Health.

- Malawi is using mobile technology to strengthen essential components of its health system, such as improved supervision and logistics. It completed an eHealth mapping exercise, leading to the development of scale-up strategies for key programs, including the use of SMS for family planning.

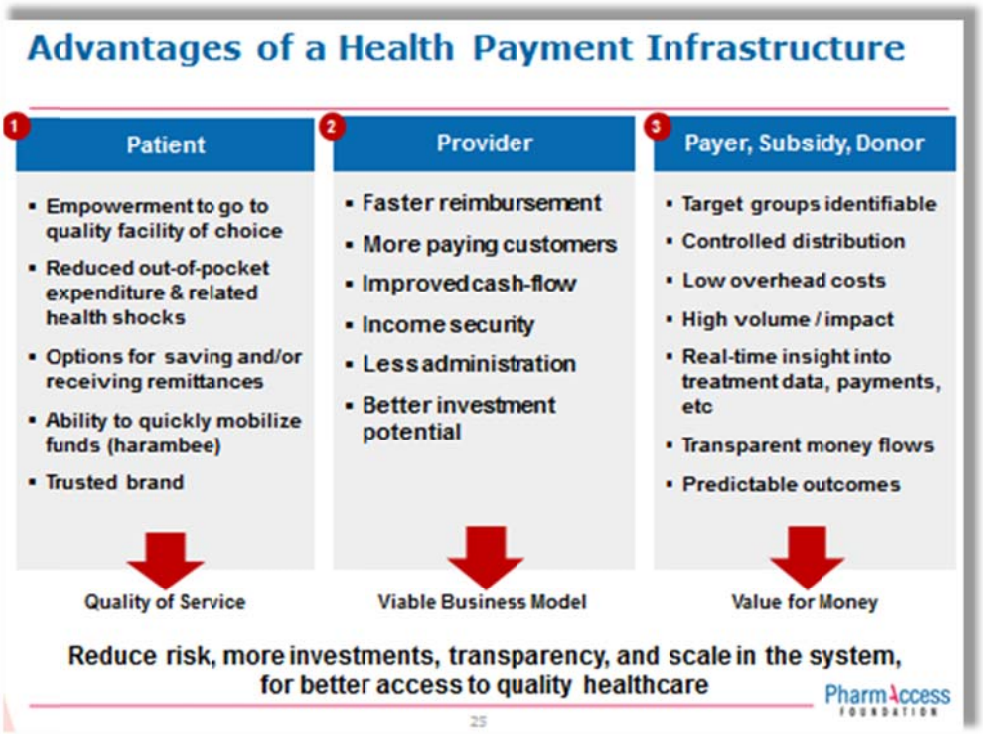
- Madagascar is using GPS to map overlap between service supply points and Airtel (a mobile network operator) coverage to identify sites to install village phones in areas

where network coverage is low. Madagascar is also using a web based dashboard for supply chain tracking. Burkina Faso is strengthening data collection at the district level and below in order to improve the availability of commodities.

- Tanzania is developing standard operating procedures for mHealth solutions. Tanzania has also launched a new mHealth strategy and developed partnerships with the private sector.
- Guinea is creating a multi-stakeholder, national mHealth platform. This platform will be used for scaling up mobile technology application.

Mobilizing Innovative Financing for Scaling up Mobile Technologies

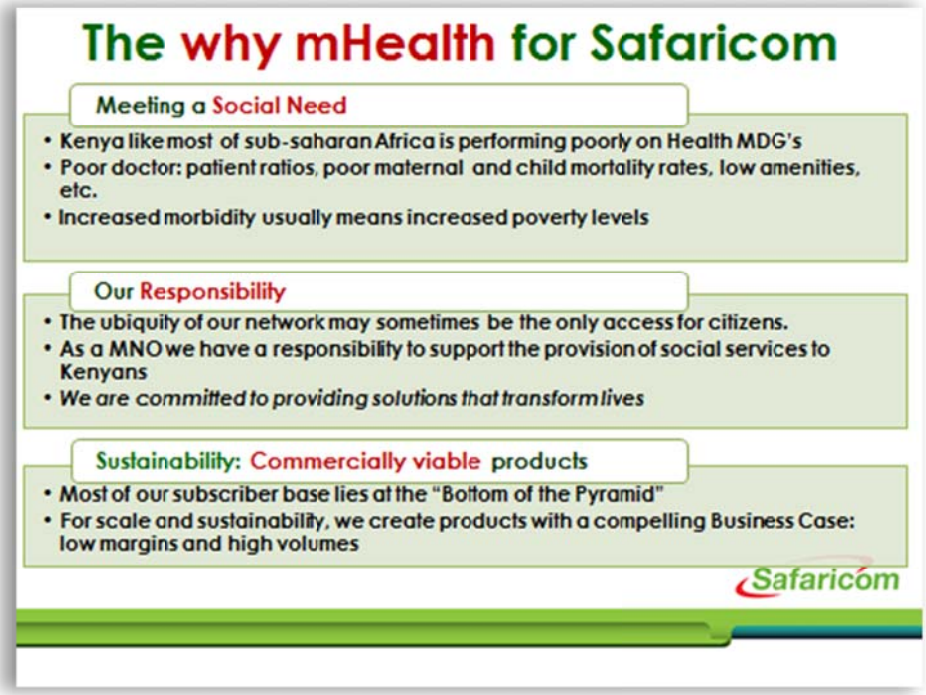
Meeting participants also gained substantive insight into various financing options for mobile technology projects. Presenters from Safaricom and PharmAccess Foundation shared examples of strong partnerships between mobile network operators (MNO) and the private sector in the mobile health arena. Private equity firm Renew Strategies provided an overview of mechanisms for raising private capital as a financing option.



PharmAccess' mHealthLab has facilitated the development of an mHealth application that allows users to save funds for healthcare through an mPesa mobile wallet application on their phones. The application aims to increase health spending and decrease out-of-pocket costs through risk pooling. The benefits of this mobile wallet application include same-day payments and lowering of transaction (overhead) costs for healthcare providers, the creation of a trusted brand for the mobile network operator, and increased access to services for the user. In addition to this value proposition, the mobile health payment infrastructure's great potential for sustainability stems from its multiple financing sources including private contributions (subscriber, [inter]national

remittances, and communal *Harambee* fundraising), donor-funded benefits and government-funded benefits.

The representative from Safaricom and its philanthropic arm—the mPesa Foundation—explained the value of mobile health applications from the perspective of private MNO. For Safaricom, investing in mHealth is more than just about data, voice, SMS, marketing, profit or altruism: the company is genuinely interested in delivering innovative, commercially viable and sustainable solutions that transform the lives of Kenyans by increasing access to services. Globally recognized as the leader in mobile money with its award-winning mPesa platform, Safaricom boasts more than 20 million cellular subscribers and currently supports mobile innovation in six sectors: Health, Energy, Agriculture, Education, Women, and Special Needs populations. The company's mHealth priority interventions include solutions ranging from Dial-a-Doctor tele-triage services and MNCH Tracking and Wellness Messaging to a Micro Health Insurance scheme and Logistics Management Information Systems. In its presentation, Safaricom provided a clear rationale for its investment in mHealth (see the Safaricom slide copied here). In terms of scale, since the same level of human and financial resources is often required for a pilot as for large-scale projects, pilots are not always attractive for mobile network operators. Safaricom stressed the importance of finding simple, creative ways to reach its diverse customer base with solutions that have a clear roadmap for scale.



Renew Strategies shared its experience working with angel and social impact investors in Africa, and discussed the steps governments, donors and implementing partners can take to stimulate potential investment. The private equity firm discussed investments that are most attractive to angel investors—both in terms of financial profit and social impact. Renew focuses on high net worth individuals and groups who make direct investments into local businesses at a critical stage of their growth in developing countries. Through firms such as Renew, investors look for opportunities to capitalize on Africa's rapid economic growth by providing financial capital for viable, start-up companies (not yet publicly traded on a stock exchange) that have the potential to generate significant profit. These companies are often small to medium size enterprises with

innovative ideas, a potential for growth, and an exit strategy for investors to get a considerable return on investment (greater than 20%). The average size of each investment is typically about $500,000. Companies often ask for more, but do not have the management systems to absorb more.

Since equity financing is riskier than debt financing, donors such as USAID can play a key role in mitigating some of the risk by providing investors with partial credit guarantees (through instruments such as USAID's Development Credit Authority), and political risk insurance. USAID and governments can lower the transaction cost by creating an enabling environment that favors private investment and by providing technical assistance to start-up companies to strengthen their management systems so they are ready to scale. USAID can also train key partners on how to identify and operationalize opportunities to engage corporate and financial partners and leverage private capital to magnify the impact of development assistance.[3]

Some private investors (social impact investors) looking for opportunities may be willing to sacrifice all or part of their return to support social good. Entrepreneurs who can clearly demonstrate the impact of their social development innovation can increase the likelihood of attracting such investors.

Making the Business Case to the Private Sector

Country teams began to explore ways to develop and strengthen partnerships with public and private organizations related to the use of mobile technology such as mobile network operators, other technology companies, internet providers, and organizations with interest in scaling up the use of mobile technology in health. Participants received guidance on how to develop a strong business case for private sector investment in mobile technology for health. Lack of sustainable financing models has slowed down the growth of mHealth. Scale is beginning to happen in some countries, but there are still too many small scale pilot programs that rely exclusively on donor funding. Vital Wave Consulting conducted a study commissioned by the mHealth Alliance to identify options and opportunities for mHealth sustainable financing models in low and middle-income countries. One of the most important findings from this study[4] is to understand the value chain (including, and most importantly end-users, but also project implementers, government, network operators, and funders) for each mHealth application. A value chain is the

[3] For more information on USAID's potential role in facilitating greater private investment in Africa, visit: http://www.usaid.gov/news-information/fact-sheets/private-capital-group-africa

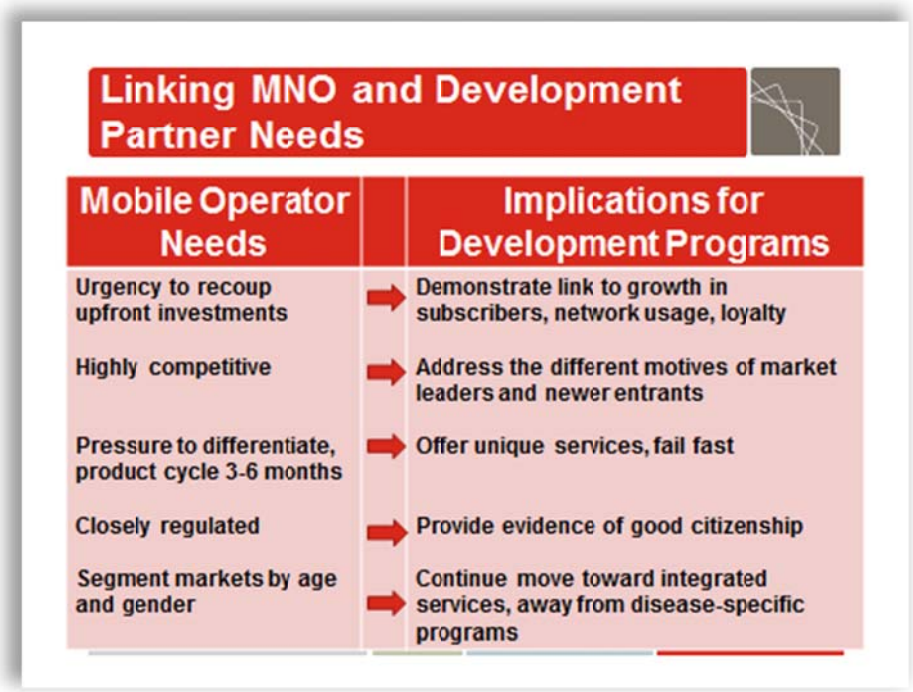
http://egateg.usaid.gov/news/leveraging-private-capital-african-development-may-workshop-southern-africa-build-pilots-east-a

[4] For more information on the mHealth value chain and the value proposition for stakeholders, read the full Vital Wave and mHealth Alliance report "Sustainable Financing for Mobile Health (mHealth): Options and opportunities for mHealth financial models in low and middle-income countries". This full report is available at: http://www.mhealthalliance.org/images/content/sustainable_financing_for_mhealth_report.pdf

whole series of activities that create and build value at every step of development of an mHealth application. Value chain analysis requires an in-depth understanding of the local incentive structures and limitations faced by each of an mHealth application's key stakeholders. This analysis must be continually updated to account for changes in health conditions, market environments and technological improvements. Performing regular analyses of the "gives" and "gets" for each stakeholder helps mHealth implementers adjust their value chain models in order to maintain financial sustainability in the long term. Vital Wave identified five critical success factors for sustainability:

1. Ensuring value proposition for all stakeholders involved (understanding each player's incentives along the value chain)
2. Planning for the long-term economic buyer from the start (anticipating where money is going to come from, early and later);
3. Localizing the business model within each specific environment, players and context;
4. Performing monitoring and evaluation of impact, cost savings, efficiency gains, and return on investment to generate economic buyer support
5. Keeping it (i.e. the value chain model) simple.

The presentation by Abt Associates' USAID Health Finance and Governance (HFG) project focused on how to develop a strong value proposition. mHealth partners in the development community need to build effective partnerships with mobile operators to go beyond philanthropy. Current models rely too heavily on short-term donor grants. While this "aid" model can be advantageous for early stage development and demonstration of use or usefulness, it does not offer a self-sustaining business case. Mobile network operators are typically driven by the need to increase revenue per customer and decrease churn (customers changing networks). By developing a partnership that is a "win" for both sides, development partners can benefit from the mobile network operator's vast reach into mass market through distribution channels, market research, and consumer trust as a transaction partner of choice, as well as its ability to rapidly develop and deploy value-added services, and its incubation platforms that leverage technology for social good. On the other side, by partnering with development partners on mHealth



solutions, mobile operators may be able to keep users on their SIM cards (instead of switching to other companies) by creating incentives for loyal customers (e.g. subsidized health insurance), generating content that attracts and retains users, and tapping into networks of trusted champions such as community health workers.

It is important for USAID and other development partners to learn to speak the language of network operators. These companies are heavily taxed and regulated, and, in most countries, operate in a highly competitive market. Development partners should also carefully weigh the cost and benefits of entering into exclusivity agreements with one mobile operator instead of multiple ones. It may also be worth exploring together with mobile operators opportunities for getting tax waivers for mobile services that provide social/public goods. Discussions on exclusivity and tax waivers should involve national telecommunication regulatory bodies.

The Georgetown Institute for Reproductive Health shared lessons learned from developing a business case for its CycleTel application — an SMS-based version of the Standard Days Method via mobile phone. The presentation stressed the importance of conducting market research, developing a business plan, and approaching mHealth innovations from three lens: 1) Desirability or what do people desire?; 2) Feasibility or what is technically and organizationally feasible?; and 3) Viability or what can be financially viable? Within the value chain, it is important to realize that the mobile market moves quickly. A socially or health focused organization needs to evolve with the market.

Scott Radloff, Senior Scholar and Director of PMA2020 at the Gates Institute for Population and Reproductive Health (and former Director of USAID's Office of Population and Reproductive Health) presented Performance Monitoring and Accountability 2020's approach to mobile-assisted data collection for household level surveys in 10 countries.

Conclusion and Future Directions

mHealth continues to hold great potential to transform the health sector by strengthening the health system at many levels. It can also play a key role in helping USAID achieve its five year

goal of reducing under-five mortality to 39 deaths per 1,000 live births, reducing maternal mortality to 157 deaths per 100,000 live births, and preventing 122 million unintended pregnancies. Discussions held at the meeting underscored the tremendous potential of mobile technology to improve equity in the health care arena and help to reduce poverty. Mobile technology can make important contributions to addressing serious health system constraints such as access in remote areas, communication with health workers and routine reporting. Africa is leap frogging in its use of cell phones and the internet, enabling it to potentially reduce the digital divide in all sectors, including health. Each country team identified specific actions to take to move the mHealth agenda forward. USAID country-level Missions are working with the country teams to scale-up of workable pilot programs with the potential to impact health systems. Partnerships with the private sector, especially providers of airtime, can play a significant role in attaining scale, but determining effective approaches for engaging the private sector remains a major challenge.

In his closing remarks, USAID Deputy Assistant Administrator for Global Health Robert Clay commended countries for progress made since the 2012 Dar meeting and stressed the importance of continuing to exchange experiences and lessons between countries. He also called for increased coordination and nationwide scale up of effective mHealth applications. Dr. Clay pointed to the economic transition of health—with many African countries experiencing significant economic growth—and mobile technology's potential for enabling a more efficient use of the increased national resources available for health. With the flat lining of U.S. Government funding for health, the need to work in partnership with both public and private actors is critical. He announced that USAID is developing an eHealth and mHealth strategy, and that a draft version of this document will likely be shared with meeting participants for comments. Dr. Clay concluded his remarks by encouraging country teams to look beyond program elements (FP/RH, HIV, MCH, Malaria, etc) and towards mHealth platforms that strengthen the broader health system.

Annex 1: Summary of Country Progress and Future Actions (USAID mHealth Meeting in Addis, November 2013)

Country Progress (since the Dar meeting)	Future Plans
NIGERIA	
▪ Constituted of Country Working Group on mHealth ▪ Framework & Implementation Guidelines Development ▪ Continued Advocacy with Mobile Network Operators ▪ Collated and documented existing mHealth Programs	▪ Inaugurate an mHealth Nigeria Country Team as a coordination mechanism ▪ Collaborate with mHealth Alliance on Country-level mHealth Activities in Nigeria. ▪ Secure multi-sectoral partnerships/support with the private sector and donor agencies ▪ Continue advocacy to government on policy regulation and to MNOs on standards
MADAGASCAR	
▪ Madagascar has made progress in a number of areas and is now home to about 10 mHealth projects, including the Village Phone Project (VPP): o VPP conducted mapping simulation overlays supply points GPS coordinates with existing Airtel coverage which revealed: ▪ 460 sites are suitable or VPP 'able' ▪ 186 sites are <15 kilometers from the tower and require on-the-ground testing o VVP trained 35 supply points in 2 districts on credit management and mobile phone technology o Dashboard development (web-based application) for supply chain tracking	▪ Organize a partners meeting early in FY 2014 to assess experience from the 35 supply points and to discuss how to take this innovative partnership forward in FY 2014 and beyond. ▪ Finalize the partnership agreement between PSI and Airtel on VPP implementation
KENYA	
▪ Established a broader mHealth Committee with 3 working groups (research, linking supply and demand, and stakeholder mapping) o Members of the mHealth Committee are from both the private sector and work under leadership and coordination of MOH ▪ Kenya's mHealth Task Force is very active and meets quarterly ▪ eHealth is now a department within the MOH ▪ Conducted a stakeholder mapping to know identify what all partners are doing in mHealth ▪ Ongoing discussion between MOH and the Communication Commission of Kenya (CCK) for affordable tariffs for mHealth applications	▪ Evaluate the one2one—a comprehensive integrated digital HIV and RH hotline platform that includes bulk SMS, website, and chat function, new/social media such as Facebook, Twitter, radio and TV programs as well as print media. ▪ Identify areas of weakness in implementation of e strategy ▪ Strengthen the mHealth Committee
MALAWI	
▪ eHealth mapping exercise successfully conducted leading to scaling up strategies for some initiatives ▪ New initiatives launched and scale up underway through partnerships o *New SMS service launched for family planning*	▪ Finalize eHealth Strategy ▪ Continue with mHealth sub-committee quarterly meetings and annual ICT innovation fairs ▪ Fully engage the mobile regulatory authority and the eGovernment Department

Country Progress (since the Dar meeting)	Future Plans
o *C-stock initiative being scaled up* o *Mobile mentoring with HSAs initiative being scaled up* ▪ Quarterly mHealth Sub-Committee meetings and the ICT Innovation Fair (now an annual event) have become a platform for the establishment of stakeholder working relationships ▪ Advocacy towards removal of interconnectivity charges underway ▪ eHealth Strategy for Malawi under development - Zero draft being finalized ▪ ICT for Development Policy drafted o it seeks to provide an environment where ICT can thrive to enable improved delivery of health care services	▪ Use DRH's position as advantage to promote the need its involvement in mHealth o previously RH was a unit under Department of Clinical Services
BURKINA FASO	
▪ The Dar action plan on mHealth was shared with senior MOH officials ▪ Held a stakeholders meeting on mHealth in 10 districts. The main focus of discussions was on mobile data collection. ▪ Began advocating to government agencies, UNFPA and other donors to push for investment in mobile data collection	▪ Scale up mobile data collection while awaiting funding for server-based SMS platform for reporting maternal and neonatal deaths and RH commodities logistics ▪ Request technical assistance for design of mobile data platform ▪ Continue advocating to government agencies, UNFPA and other donors to push for investment
TOGO	
▪ Agreement from the Ministry of Health to make contact with DataWinners for a pilot project ▪ Contact with DataWinners and the development of a test form for the collection of logistics data ▪ Discussion with donors on the funding for a pilot project in one region of the country	▪ Actively searching for financial and technical partners
UGANDA	
▪ Uganda's MOH has put a moratorium on mHealth project development and implementation until the national eHealth policy, strategy and roadmap are developed. The current status is that the MOH only provisionally has approved for a few mobile systems to move forward ▪ Drafting criteria for approving new mHealth platforms. Criteria include: strategic fits with national agenda, interoperability, timeline, cost, local capacity, and sustainability. ▪ MOH uses WHO eHealth Toolkit to ensure mHealth is implemented through a health systems lens.	▪ Finalize the national eHealth Strategy, Policy, Roadmap and lift moratorium ▪ Determine total cost of ownership of mHealth platforms and seek funding ▪ Develop National mhealth system o Pilot and evaluate this system o Roll-out to districts
TANZANIA	
▪ Forged partnerships with private sector to create reasonable win-win solutions, and move away from expecting cost-free solutions. ▪ Launched eHealth strategy in October 2013 ▪ Began the development of guidance and standard operating procedures (SOP) for mHealth solutions ▪ MOHSW in discussion with MNOs to reduce SMS rates	▪ Work on integrating HMIS with mHealth whenever appropriate ▪ Complete the development of SOPs and guiding principles for initiating and managing mhealth innovations ▪ Continue discussions with MNOs to reduce SMS rates and general mHealth costs

Country Progress (since the Dar meeting)	Future Plans
and general mHealth costs ▪ Mapping of all mHealth initiatives in Tanzania ▪ Hosted the first Hackathon Challenge on Family Planning, combined elements of sustainability (October 2013)	
GUINEA	
▪ Mobile technology is used for clinical referral, coordination, data collection and LMIS ▪ New partners now use SMS for data transmissions in more than 15 districts. These include PMI/USAID partners and Engender Health ▪ Organized a national-level workshop to discuss the harmonization of mHealth solutions ▪ Established a multi-stakeholder mHealth working group, which includes donors, MOH, and MNO Orange ▪ Advocated to the Ministry of Communication and the MNO regulatory agency to help resolve key challenges	▪ Elaborate an mHealth strategic plan ▪ Continue to scale up ▪ Create linkages between the existing mobile data platforms ▪ Equip health facilities with solar panels
DRC	
▪ Fiber optic cable deployed in July 2013 (expected to go-live in November 2013) ▪ Debriefed MOH after the Dar meeting ▪ Constituted a National Health Informatics and Technology Working Group under the MOH leadership ▪ MOH gave approval for large scale Health Information Technology (HIT) project ▪ Developed partnerships with MNOs ▪ HIT policies under early stage of development	▪ Evaluation of mHealth pilots ▪ Development of policy ▪ Develop and adopt standards for information exchange

The following countries did not specify whether progress reported was since the Dar meeting or not:

Country Progress (unspecified timeframe)	Future Plans
RWANDA **(timeframe of progress not specified – based on Dar report, all information reported in Addis existed before Nov 2012)**	
▪ Government of Rwanda works closely with MNO – Technical Working Group for Health include member from MNO companies. MNOs are thus are part of the conversation from beginning of the process. ▪ Before establishing operations in Rwanda, mobile network operators (MNO) have to sign an agreement with the government to ensure they will engage in social development ▪ Rwanda's MOH has been rolling out three different but complementary mHealth technologies: o m4RH: sends interactive, accurate reproductive health information to young people o mUbuzima: used by all CHWs to collect and report MDG indicators at the community level o RapidSMS: used only by Maternal CHWs to track	▪ Scale up Training in all Districts on new Tracking 1000 days indicators ▪ Strengthen implementation through Quality checks and CHW coordination meetings ▪ Ensure regular supervision of CHWs ▪ Provide regular feedback based on data analysis ▪ Deliver response to all "red alerts" sent to the system ▪ Continue to actively pursue public-private partnerships for implementing the 3 mHealth technologies

Country Progress (unspecified timeframe)	Future Plans
each pregnant woman's first 1000 days from pregnancy (ANC) to delivery and post-partum	
ETHIOPIA **(Based on timeline provided, only bullet #1 seems to have been initiated since Dar, but it's clear that the country is very active)**	
▪ In 2013, MOH aligned with partners to deploy mHealth in more districts ▪ In 2012, MOH started proof of concept pilot implementation of an initial platform in 4 districts ▪ After a national mHealth strategy in 2010 and developing sets of interoperability standards in 2011, Ethiopia now has 10 mHealth projects ▪ Ethiopia's MOH now plans to empower each Health Extension Worker with mobile technology for: o Data exchange for health events o Referrals to facilities o Consultations with physicians and nurses o Supply chain management o Training and education	▪ Endorse the National eHealth Strategy to the successful implementation, monitoring and evaluation of eHealth systems and services ▪ Adopt widely accepted eHealth Standards to facilitate data exchange across the health sector ▪ Adopt legislation and Standards that ensure the confidentiality, security and integrity of eHealth system (data and networks) ▪ Strengthen the national multispectral steering committee engagement ▪ Increase coordination mechanisms of mHealth applications, apparatus, finances and resources
ANGOLA **(information presented did not specify what actions took place since Dar)**	
▪ Discussions on policy and systems for mobile technology and health programming are ongoing ▪ mHealth projects include: o The national level *SMS Mulher (SMS Woman)* initiative—a system sending maternal and child health information to women via SMS o The National Malaria Control Program mobile data collection initiative	▪ Request TA to scale up mHealth pilot into sustainable programs ▪ Develop strategy for strengthening the very weak HIS and increase access and demand for RH services ▪ Use the opportunity of the new Angolan National Health strategy being costed ▪ Use the Angola USAID Mission CDS for PPP initiatives on Mobile technology/health

The following countries did not participate in the Dar meeting:

Progress (for countries not in Dar)	Future Plans
BENIN	
▪ mHealth piloted during the past three years by 3 community-based projects: o BASICS iCCM Project (MSH) in five districts in 2011-12: Malaria and IMCI o CARE/Benin in 2011 – present: maternal health, EONC and referrals o URC/CHS (PRISE-C) Child Survival Project, 2011 – present: FP and MCH ▪ Benin's MOH has demonstrated a high level of commitment toward mHealth	▪ Expand mHealth coverage through public-private collaboration between MOH, civil society and phone service providers. ▪ Aim for national coverage to include all health units and CHWs. ▪ Develop mHealth national policy as part of the national strategy for community health. ▪ Intensify use of mHealth for MCH, FP and Malaria. ▪ Add training modules for the use of mHealth to current modules for data reporting, disease consultations and mentoring. ▪ Advocate for better development infrastructure: increase rural electrification, improved mobile phone coverage across the country.

Progress (for countries not in Dar)	Future Plans
	▪
NIGER	
▪ Niger's HMIS is paper-based from District to Region, and web-based from Region to National level. ▪ Niger MOH is experiencing delays in FP data transmission ▪ A project is piloting the integration of a mobile platform with health information system DHIS ▪ Another project is piloting the use of mobile technology sending RH information and alerts to women	▪ Integrate into DHIS a mobile data collection application to track stock levels for RH commodities ▪ Advocate for funding to finance the integration of a mobile platform with DHIS
SENEGAL	
▪ A few pilot mHealth projects are underway, including one by IntraHealth which uses open-source, interoperable technology to provide: o voice-based capacity building to health care providers o mobile LMIS	▪ Develop partnerships with multiple MNOs to reduce cost and increase coverage ▪ Explore new sources of renewable energy for charging mobile devices

Annex 2: List of Participants
(USAID mHealth Meeting in Addis, November 2013)

Country Team	Name	Organization	Email
Angola	Dra. Maria Ines Leopoldo Castela das Neves	MINSA	isildaneves28@yahoo.es
Angola	Patrick Gaparayi	SIAPS/MSH	PGaparayi@msh.org
Angola	Dr. Valentim Altino da Chantel Matias	SIAPS/MSH	
Angola	Akko Eleveld	PSI	akko@psiangola.org
Angola	Gisele Guiamares	USAID	gguimaraes@usaid.gov
Benin	Milton Amayun	USAID	mamayun@usaid.gov
Benin	Dr. Olga Agbouhoui	MOH	
Benin	Mr. Jean Affo	JSI	
Benin	Dr. Margaret Behanzin	PSI	
DRC	Fidel Mbadu	MOH	mbadu_m@hotmail.com
DRC	Dr. Bernard Ngoyi	IMA	bernardngoy@imaworldhealth.org
DRC	Mano Ntayingi	IMA	ManoNtayingi@imaworldhealth.org
DRC	Thibaut Mukaba	USAID	tmukaba@usaid.com
DRC	Arsene Binanga	Tulane	abinanga@gmail.com
DRC	Jane Bertrand	Tulane	bertrand@tulane.edu
DRC	Mashant, Emilio	IRC	Emilio.Mashant@rescue.org
Guinea	Madina Rachid	MPHJ	mdinakebe@gmail.com
Guinea	Dr KOUROUMA Mamady	MPHJ	mamadykourouma@yahoo.fr
Guinea	Marietou Satin	USAID	masatin@usaid.gov
Guinea	Diakhaby Fatoumata	MOH	fatdiakhaby@gmail.com
Kenya	Jerusha Karuthiru	USAID	Jkaruthiru@usaid.gov
Kenya	Mutuku, Mwende Rachel	PSI	RMutuku@psikenya.org
Kenya	Lucy Maikweki	PSI	LMaikweki@psikenya.org
Kenya	Dr. Marsden Solomon	FHI 360	msolomon@fhi360.org
Kenya	Alice Olawo	FHI 360	aolawo@fhi360.org
Kenya	Dr. MAINA, Jonah	DRH	jonahmwangi@yahoo.com
Kenya	Dr. Gladys Someren	DRH	gsomeren_drh@dfh.or.ke
Kenya	George Kichamu	NCPD	gkichamu@ncpd-ke.org
Kenya	Lucy Kimondo	NCPD	lkimondo@ncpd-ke.org
Kenya	Sheila Macharia	USAID	smacharia@usaid.gov
Madagascar	Robert Kolesar	USAID	Rkolesar@usaid.gov
Madagascar	Lalaina Razafinirinasoa	SIFPO/MSI	lalaina.razafinirinasoa@mariestopes.mg
Madagascar	Julien Raharison	SIFPO/MSI	julien.raharison@mariestopes.mg
Madagascar	Andry Rabemanantsoa	JSI/MAHEFA	andryr@mahefa.mg
Madagascar	Antoni Homsi	JSI/MAHEFA	homsifran@yahoo.fr
Madagascar	Patricia Norolalao	PSI	patrician@psi.mg
Madagascar	Jaona Rakotoarisoa	PSI	jaonar@psi.mg
Madagascar	John Yanulis	PHC Project	jyanulis@msh.org
Madagascar	Dr Benala Rakotoarisoa Hajamamy	PHC Project	hrakotoarisoa@msh.org
Malawi	Elias Mwalabu	JSI	emwalabu@jsimw.com
Malawi	Veronica Chirwa	USAID	vchirwa@usaid.gov
Malawi	Lilly Banda	USAID	lmbanda@usaid.gov
Malawi	Edith Tsilizani	Airtel	edith.tsilizani@mw.airtel.com
Malawi	Carol Bakasa	PSI	cbakasa@psimalawi.org
Malawi	Lolade Oseni	JHPIEGO	Lolade.Oseni@jhpiego.org
Malawi	Premila Bartlett	JHPIEGO	pbartlett@savechildren.org
Malawi	Fanny Kachale	Directorate of RH	fankachale@yahoo.co.uk
Mali	Sidibe Garangue Souko	GOM	soutoura.souko@gmail.com

Country Team	Name	Organization	Email
Mali	Symbara Fatalmoudou Toure	GOM	
Mali	Madina Sangare	USAID	msanagare@usaid.gov
Mali	Bore Saran Diakite, Mrs	GOM	sarandiakite66@yahoo.com
Mali	Keita Oumou Keita	GOM	keitaoumou05@yahoo.fr
Nigeria	Kayode Morenikeji	USAID	kmorenikeji@usaid.gov
Nigeria	Mr. Temple Jagha	SFH/ESMPINProject	
Nigeria	Mrs. Foluke Shobowale		
Nigeria	Mrs. Nkem Oteka		
Nigeria	Mr. Steve Ubuh	NPHCDA	steve.uduh@nphcda.gov.ng
Nigeria	Mr. Tonte Ibraye	White Ribbon Alliance	tonteibraye@msn.com
Nigeria	Sikiru Buyuwa		
Rwanda	Judy Chang	USAID	jchang@usaid.gov
Rwanda	Vestine Mutarabayire		
Rwanda	Suzanne Mukakabanda	RFHP	smukakabanda@rwandafhp.org
Rwanda	J Berchmans Niyibizi	RFHP	jniyibizi@rwandafhp.org
Rwanda	Dr. Anicet Nzabonimpa	MOH	anicetnzab@yahoo.com
Rwanda	Dr. James Senfuka	UNFPA	ssenfuka@unfpa.org
Rwanda	Daphy Nyirasafali	UNFPA	nyirasafari@unfpa.org
Rwanda	Dr. Anastase Nzeyiman	ROADS/FHI 360	anzeyiman@fhi360.org
Rwanda	George Gahenda		
Senegal	Dr Fatou Ndiaye	USAID	fndiaye@usaid.gov
Senegal	Abdoulaye Diedhiou	IntraHealth	adiedhiou@intrahealth.org
Senegal	Sébastiana Diatta	ChildFund	sdiatta@senegal.childfund.org
Senegal	Maïmouna Sow	ChildFund	msow@senegal.childfund.org
Senegal	Mamadou Bocar Daff	MOH	bmdaff@gmail.com
Senegal	Chimere Diaw	MOH	chimerediaw@yahoo.fr
Senegal	Siga Diop, FHI 360	FHI 360	sdiop@fhi360.org
Senegal	Mohamed Diadhiou	CEFOREP	diadhioumohamed@yahoo.fr
South Sudan	Dr. Taban Kenyi	Jhiego	Taban.Kenyi@jhpiego.org
Speaker	Scott Radloff	JHSPH	sradloff@jhsph.edu
Speaker	Pieter Walhof	PharmAccess	p.walhof@Pharmaccess.org
Speaker	Sanda Ojiambo	Safaricom	SOjiambo@Safaricom.co.ke
Speaker	Kees van Lede	PharmAccess	
Speaker	Brendan Smith	VitalWave Consulting	brendan.smith@vitalwave.com
Speaker	Pamela Riley	Abt. Associates	Pamela_Riley@abtassoc.com
Speaker	Abayruesh Mekonnen	VitalWave Consulting	
Speaker	Matt Davis	RENEW Strategies	Mdavis@renewstrategies.com
Speaker	Alexis Ettinger	Georgetown University	abe25@georgetown.edu
Tanzania	Maurice Hiza	MOH	Maurice.hiza@gmail.com
Tanzania	Lucy Silas	D-Tree	lfulgence@d-tree.org
Tanzania	Elizabeth Ndakidemi	FHI 360	eNdakidemi@fhi360.org
Tanzania	Christine Lasway	FHI 360	clasway@fhi360.org
Tanzania	Kisoka, Esteria	PSI	Ekisoka@psi.or.tz
Tanzania	Victoria Marijani	PSI	vmarijani@psi.or.tz
Tanzania	Prudence Matern Masako	PSI	pmasako@psi.or.tz
Tanzania	Gayo Mhila	D-Tree	gmhila@d-tree.org
Tanzania	Feddy Mwanga	Engender	fmwanga@engenderhealth.org
Tanzania	Nassor Kikumbih	Engender	nkikumbih@engenderhealth.org
Uganda	James Duworko	USAID	jduworko@usaid.gov
Uganda	Dr. Espilidon Tumukurate	UHMG	etumukurate@uhmg.org
Uganda	Amy Rwakihembo	MSI	amy.rwakihembo@mariestopes.org
Uganda	Mildred Latigo	MSH/STRIDE	mlahigo@msh.org

Country Team	Name	Organization	Email
Uganda	Deepla Mahla	MSI	deepmala.mahla@mariestopes.or.ug
Uganda	Kenneth Mugumya	FP Consortium	kennethmugumya@gmail.com
Uganda	Zainab Akol, Dr	MOH	zainabakol@gmail.com
Uganda	Angela Akol, Dr	FHI 360	aakol@fhi360.org
USA	Okoko Lungi	MSH/ASH	lokoko@as4h.org
USA	David McAffee	HNI	dmcafee@hni.org
USA	Baker Maggwa	FHI 360	bmaggwa@fhi360.org
USA	Rose De Buysscher	FHI 360	rdebuysscher@fhi360.org
USA	Kelly L'Engle	FHI 360	klengle@fhi360.org
USA	Jeremy Wacksman	Dimagi	jwacksman@dimagi.com
USA	Heather Vahdat	FHI360	HVahdat@fhi360.org
USA	Sono Aibe	PathFinder International	saibe@pathfinder.org
USA	Dr. Defa Wande	EngenderHealth	dwane@engenderhealth.org
USAID/W	Robert Clay	USAID	rclay@usaid.gov
USAID/W	Ellen Starbird	USAID	Estarbird@usaid.gov
USAID/W	Ishrat Husain	USAID	Ihusain@usaid.gov
USAID/W	Kaitlyn Patierno	USAID	kpatierno@usaid.gov
USAID/W	Monica Bautista	USAID	mbautista@usaid.gov
USAID/W	Alex Todd	USAID	atoddlippock@usaid.gov
West Africa	SERME, Ladiama	DELIVER	aadiama8@yahoo.fr
West Africa	Maggie Murphy	DELIVER	maggie_murphy@jsi.com
West Africa	Mr. Cletus Adohinzin	WAHO	cadohinzin@wahooas.org
West Africa	Dr. Johanna Austin-Benjamin	WAHO	jaustin@wahooas.org
West Africa	Dr. Adama Kemou	FMOH/Niger	Kemou_adama@yahoo.fr
West Africa	Dr. Kassouta Ntapi	Togo	ntapi22@yahoo.fr
West Africa	Dr Bicaba Isabelle	Burkina Faso	bicabaisabelle@yahoo.fr
West Africa	Daniele Nyrandutiye	USAID	dnyrandutiye@usaid.gov
East Africa	Julia Henn	USAID	jhenn@usaid.gov
East Africa	Dr. Getachew Tefera	RCQHC	gtefera@rcqhc.org
East Africa	Louis MURANGO	EAC	
East Africa	Dorothy MUROKI	FHI360	dmuroki@fhi360.org
East Africa	Dr. Odongo Odiyo	ECSA	odongo@ecsa.or.tz
East Africa	Dr. Rogers Ayiko	ECSA	
East Africa	Dr. Doreen Othero	Lake Victoria Basin Commission	
Ethiopia	Elizabeth Haytmanek	USAID	ehaytmanek@usaid.gov
Ethiopia	Yigeremu Abebe	CHAI	yasemere@clintonhealthaccess.org
Ethiopia	Dr.Serekeberehan Deres	CHAI	SDeres@clintonhealthaccess.org
Ethiopia	Daniel Yigezu	CHAI	dyigezu@clintonhealthaccess.org
Ethiopia	Dr.Mebratu Bejiga	CHAI	mbejiga@clintonhealthaccess.org
Ethiopia	Wosenyelesh Teka		wessuyet@gmail.com
Ethiopia	Dr. Mengistu H/Mariam		agamkega@yahoo.com
Ethiopia	Mekonnen Engda	PHID	mekonen_engda@yahoo.com
Ethiopia	Yemeserach Kefelew	PHID	ykefelew@yahoo.com
Ethiopia	Biruk Alemayehw	PHID	birukalex77@gmail.com
Ethiopia	Tekalene Moges	DPC	teklaz@yahoo.com
Ethiopia	Dr. Samrawit Tasew	HRD	samritass@gmail.com
Ethiopia	Hentsa Haddush	FMOH	hentsa5@gmail.com
Ethiopia	Melaku Yilma	HEP	melaku.yilma@yahoo.com
Ethiopia	Dr. Abiyot Bayou	MCIT	abiyot.bayou@mcit.gov.et
Ethiopia	Dr. Mengistu Kifle	MOH	kiflemengistu@yahoo.com
Ethiopia	Gemechu Kuffa	MOH	gemechukuffa@yahoo.com
Ethiopia	Mebratu Mahtsetu	FMOH	mmahtsentu@yahoo.com

Country Team	Name	Organization	Email
Ethiopia	Francis Okello	FHI 360	fokello@fhi360.org
Ethiopia	Bethelhem Fekade kersssie	FHI 360	BFekade@fhi360.org
Ethiopia	Tum Burkly	Telemed Medical Services	tim@theafricagroup.com
Ethiopia	Dr. Yohans Woaje	Telemed Medical Services	yohans.hellodoctor@gmail.com
Ethiopia	Yared Getachew Mekuria	FHI 360	YGetachew@fhi360.org
Ethiopia	Admasu Terefe Wolteji	FHI 360	ATerefe@fhi360.org
Ethiopia	Abner Tewoldeberhan Mamuye	FHI 360	ATewoldeberhan@fhi360.org

Annex 3: Meeting Agenda

Scaling Up Mobile Technology Applications for Accelerating Progress on Ending Preventable Maternal and Child Deaths	
Lalibela Ball Room, Sheraton Hotel, Addis, Ethiopia Sunday, November 10, 2013	
8:00 – 8:20	Registration and Coffee
8:20-8:45	Opening Session *Welcome by the Representative of the Federal Government of Ethiopia* *Ellen Starbird, Director, Office of Population and Reproductive Health, USAID* *Ishrat Husain, Senior Health Advisor, Africa Bureau, USAID*
8:45-9:00	Highlights of Rwanda's Achievements in eHealth/mHealth and Future Plans *Dr. Anicet Nzabonimpa, Ministry of Health, Government of Rwanda*
9:00-10:15	Progress on mHealth: Country Experiences by Country Teams
10:15 – 10:30	Coffee/Tea Break
10:30 – 12:00	Progress on mHealth: Country Experiences by Country Teams (continued)
12:00-1:00	Lunch
1:00-2:30	Mobilizing Innovative Financing for Scaling up Mobile Technologies *Pieter Walhof, PharmAccess Foundation* *Sanda Ojiambo, Safaricom and & mPesa Foundation* *Matt Davis, RENEW Strategies*
2:30-2:45	Coffee/Tea Break
2:45-4:15	Making the Business Case to the Private Sector *Brendan Smith, Vital Wave Consulting* *Pam Riley, Health Finance and Governance Project, Abt. Associates* *Alexis Ettinger, Georgetown Institute for Reproductive Health*
4:15-4:30	Performance Monitoring and Accountability 2020's new approach to mobile-assisted data collection *Scott Radloff, Senior Scholar and Director, PMA2020, Gates Institute for Population and Reproductive Health*
4:30-5:00	Closing session *Robert Clay, Deputy Assistant Administrator, Bureau for Global Health, USAID*
5:00-6:00	Optional networking/roundtables with panelists