



**USAID**  
FROM THE AMERICAN PEOPLE

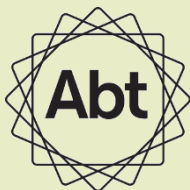


# mHealth Education for Families and Health Workers

A Promise Renewed in the Americas

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September 11, 2013



**SHOPS is funded by the U.S. Agency for International Development.**  
**Abt Associates leads the project in collaboration with**  
Banyan Global  
Jhpiego  
Marie Stopes International  
Monitor Group  
O'Hanlon Health Consulting

# Overview of presentation

- Introduction
- Why mhealth
- Current mhealth evidence
- Mobile inequities
- Way forward

# Introduction SHOPS Project

- Global USAID project
  - Increase access to, use of quality health services through the private sector
  - mHealth = opportunity to engage private sector
- Sample SHOPS mhealth experience
  - Data collection PPP in Caribbean
  - RCT to evaluate impact of FP messages in Kenya
  - SMS reinforcement for providers in Ghana, Uganda
  - Advisor to Bangladesh national mobile health service

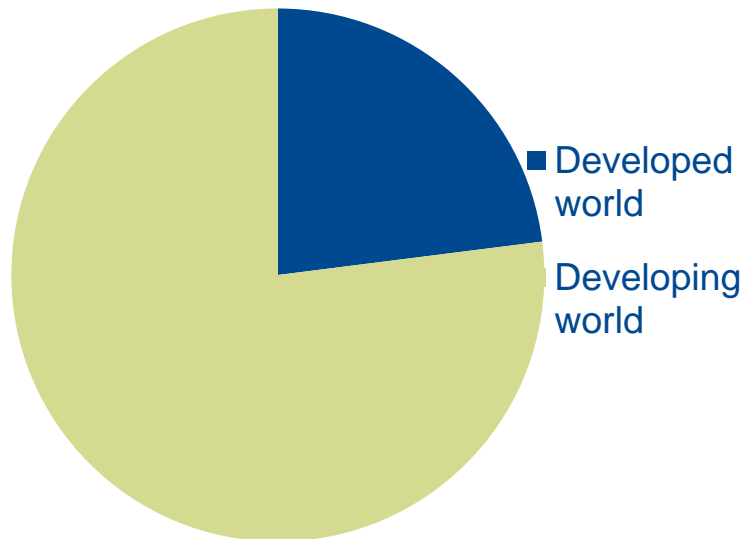
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# Why mhealth?

## Explosive growth

> 6 billion subscribers, most in developing countries

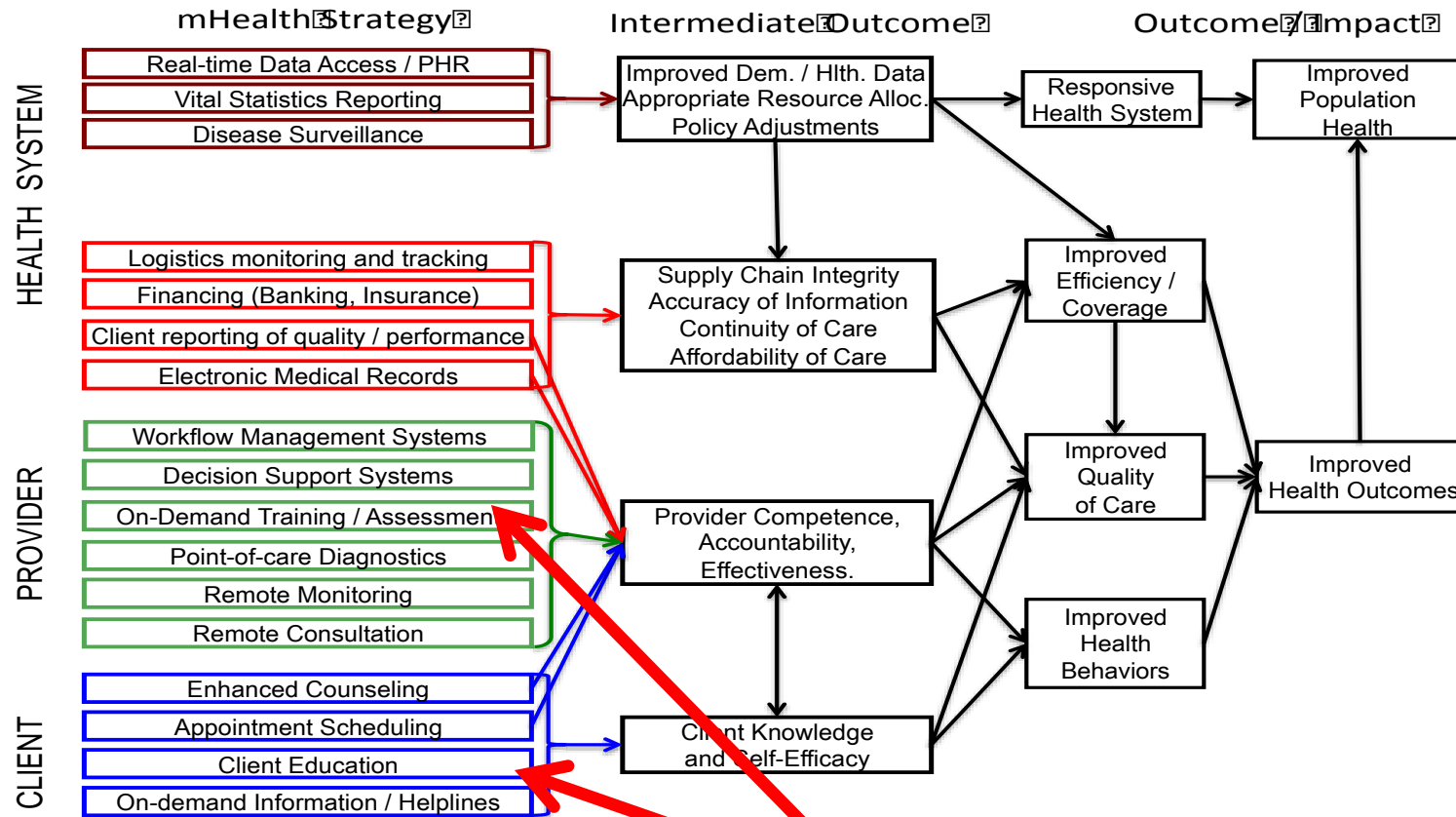


## Hundreds of mhealth pilots

- Client benefits
  - Private, personalized information
  - Provides knowledge, self-efficacy
- CHW benefits
  - Decision support
  - Case management
  - Reduce isolation, empower

**Mobile applications allow families and health workers to be more integral to health services and systems**

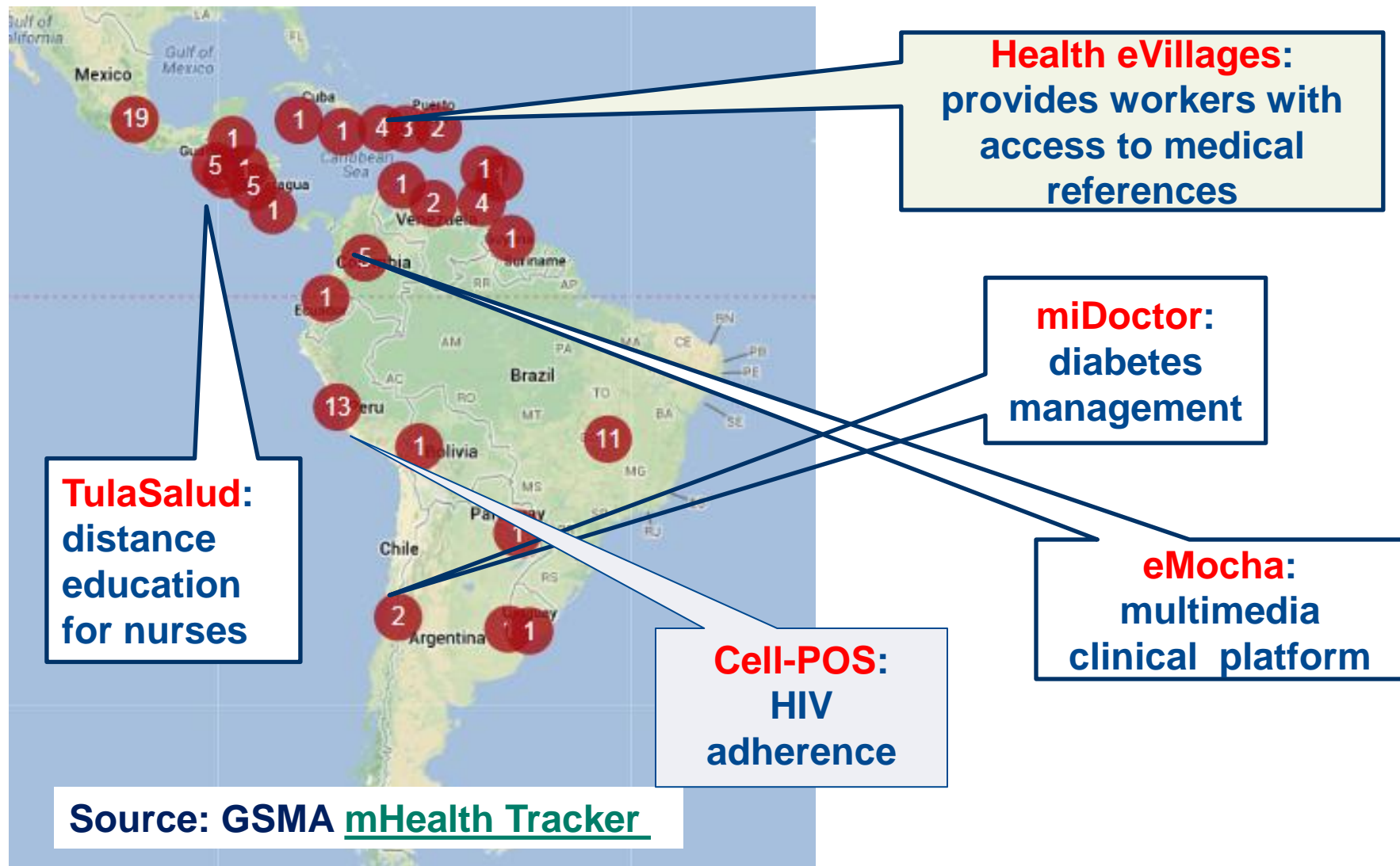
# mHealth logic framework\* portrays breadth and depth of mhealth applications



*Focus today on  
mhealth education for MNCH*

\*Source: Labrique, 2013  
doi: 10.9745/GHSP-D-13-00031\_

# LAC mHealth deployments to advance health knowledge are proliferating



# Example mhealth education to improve beneficiary knowledge and behaviors

## WaWaRed\* Peru

- Stage-based SMS & voice messages
- Linked to electronic medical records
- Appointment reminders



Infórmate **GRATIS** sobre tu embarazo

Llama gratis \*121 desde tu celular\* al

Estas son las opciones que puedes marcar:

- 1 Si tienes pérdida de líquido o sangrado por la vagina.
- 2 Si tienes dolor de cabeza, hinchazón de pies o manos, zumbido de oído o visión borrosa.
- 3 Si tienes molestias al orinar, fiebre o escalofríos.
- 4 Si eres víctima de violencia.
- 5 Si deseas información importante para tu embarazo.
- 6 Para saber cómo prepararte para dar a luz.

\* Valido desde tu celular. Móvilstar.

wawared.org.pe

Logos: UNICEF, BID, Gobierno Regional de Cuzco, Telefonía

## Motivational and informational content across the continuum of care



### Pregnancy

- Family planning
- Nutrition
- ANC and birth plan



### Birth and newborn care

- Danger signs
- Exclusive breastfeeding
- Immunization



### Early childhood

- Complementary feeding
- Diarrhea management
- Hygiene



# Example mhealth education for health workers

## Child Survival Project\*, Nicaragua

- Phone-based counseling support for male health promoters
- Objective to engage with fathers to support wives' care-seeking



## Adapted CommCare decision-support tool

### Case management

- Client registration
- Data collection
- Reporting



### Behavior change guidance

- Identify appropriate target behaviors to decrease prenatal and neonatal risks
- Provide negotiation tips

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# Recent Evidence Summit results for mhealth (preliminary)

Few studies met inclusion criteria: LMIC, outcome data, comparison group

## INTERVENTIONS FOR HEALTH WORKERS

SMS to improve treatment adherence **mixed results** on health outcomes (HIV, malaria)

## INTERVENTIONS FOR BENEFICIARIES

SMS **mixed results** on adherence to medication

SMS (one study) **increased** skilled delivery attendance

- Significant impact for **urban**, no impact for **rural** women

SMS appointment reminders **strongest evidence**: shown to increase clinic attendance

# Implications of current mhealth evidence to enhance key child survival interventions

No mhealth impact evidence currently exists for

- Healthy timing and spacing of births
- Neonatal care
- Nutrition, breastfeeding
- Hand-washing
- Diarrhea & pneumonia prevention
- Malaria prevention
- PTMTC

But evidence on efficacy of SMS appointment reminders, treatment protocols, and service uptake suggest promising outcomes

# More evidence needed on the mechanism of change

## HEALTH WORKERS

Results SHOPS/Ghana RCT\* to increase prescription of zinc/ORS:



*“SMS increased desired reported behavior but not actual behavior”*

\*Study in pre-publication

## BENEFICIARIES

S Africa study\* found **motivational SMS** increased service uptake but **not informational SMS**

*“Results demonstrate need to determine appropriate content threshold”*



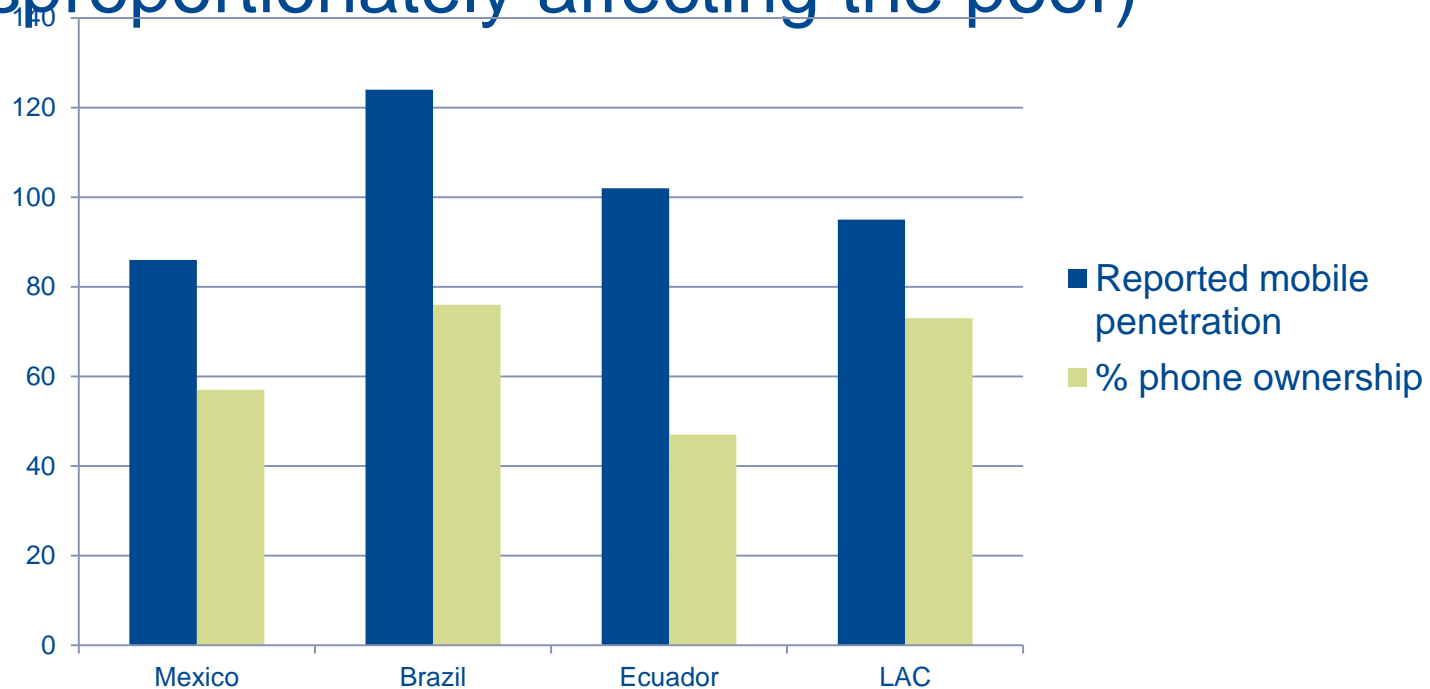
\*de Tolly, 2012 *Telemed J E Health*, 18(1), 18-23

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# Access to phones is still a challenge for the most marginalized

- LAC mobile penetration (population divided by subscriptions) is 95%
- But phone ownership is much lower (disproportionately affecting the poor)



# Additional equity challenges

## PHONE LITERACY

- Globally, only 37% women at BOP have ever sent a text, regardless of literacy
- In one study, 22% of women who did not own a phone said “I would not know how to use it”

## OTHER

- Signal coverage
- Power sources
- Basic literacy
- Local languages





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# Conclusion: achieving the promise of mhealth education in child survival

## WHAT WILL IT TAKE TO OPERATIONALIZE?

- **Time:** new area, long-term impact evidence will take years
- **Patience:** to innovate, collaborate, fail, improve
- **Champions:** long-term commitment, vision
- **Care:** to ensure the poorest, most isolated benefit
- **Coordination:** to build partnerships for sustainable scale

Thank you

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