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Jhpiego
an affiliate of Johns Hopkins University

Innovative Mobile Technologies to Maximize Health Impact

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Manila, Philippines

Agenda

- Introduction to Jhpiego
- Jhpiego Project Examples
  - Indonesia
  - Tanzania
  - Philippines
  - Other Projects
- mHealth Areas of Interest

Introduction to Jhpiego

- An international, non-profit health organization affiliated with The Johns Hopkins University
- What we do: Empower frontline health workers by designing and implementing effective, low-cost, hands-on solutions to strengthen the delivery of health care services for women and their families.
- Approach:
  - Collaborate with multiple stakeholders from Ministries of Health to communities
  - Develop global program initiatives and technical interventions
  - Field-driven philosophy

Jhpiego's Focus and Expertise

- Focal areas:
  - Maternal and Child Health
  - Family Planning and Reproductive Health
  - Cervical Cancer Prevention and Treatment
  - Infectious Diseases
  - Health Innovations
- Expertise in:
  - Human Capacity Development
  - Service Delivery Policy, Standards, and Guidelines
  - Education, Training, and Curriculum Development
  - Performance and Quality Improvement

Jhpiego mHealth Project Examples

- Indonesia – EMAS and SMSbunda
- Tanzania - MAISHA
- Philippines – MindanaoHealth
  - mHealth strategy is under development
- Other Projects

Indonesia EMAS and SMSbunda Projects

1. Expanding Maternal and Neonatal Survival (EMAS)
   - **Goal: Contribute to the reduction of maternal and newborn deaths by one-quarter**
   - Funded by USAID for 5 years (2011 – 2016)
   - Implementing partners: Budi Kemuliaan, Muhammadiyah, RTI, and Save the Children
2. SMS Information for Maternal and Newborn Health (SMSbunda)
   - **Goal: Increase access to knowledge and timely healthcare services for women and newborns during the antenatal, natal and postnatal periods.**
   - Funded by GE Foundation for 3 years (2013 – 2016)

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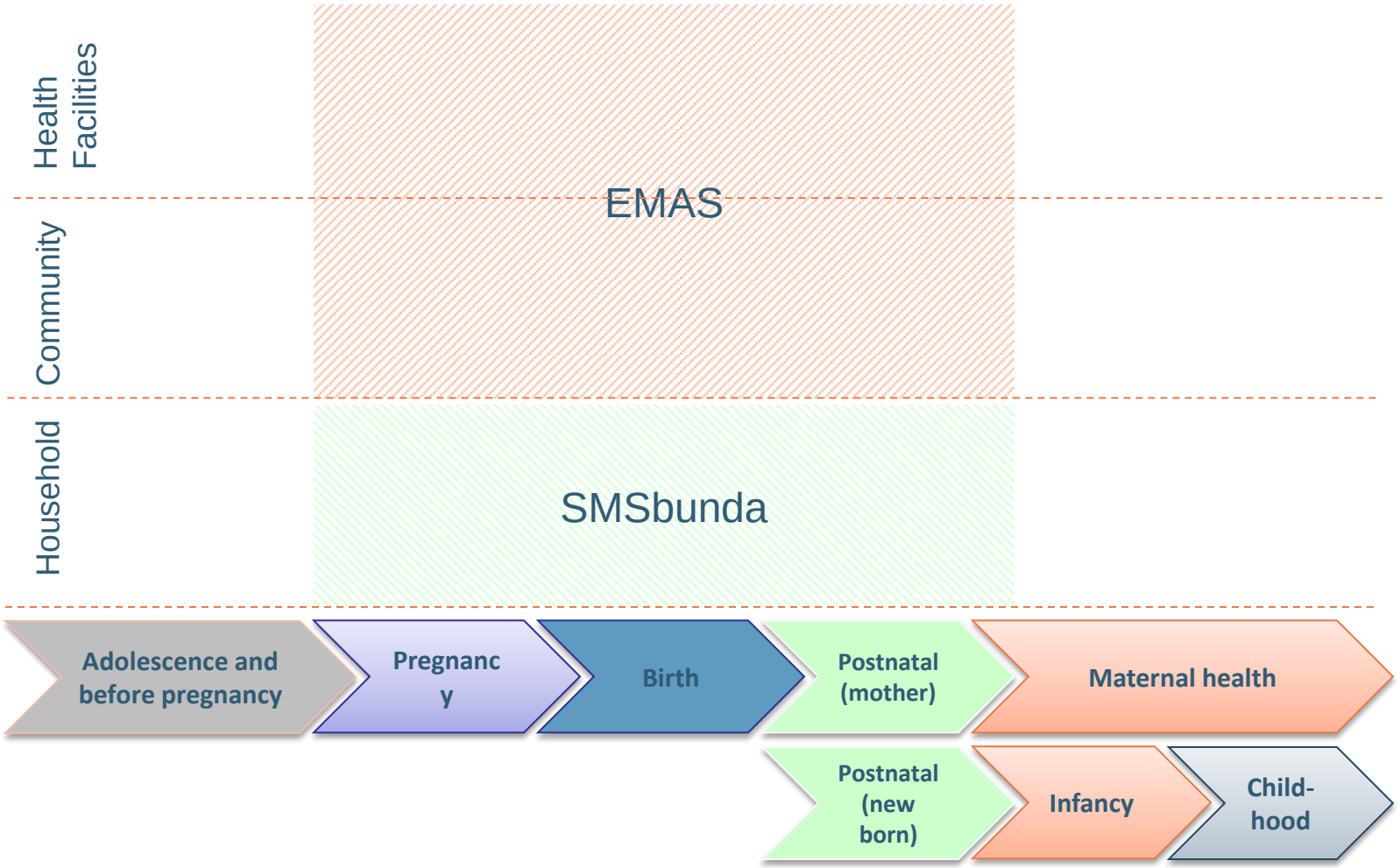
Indonesia Project Areas of Intervention



- ✓ 6 provinces
- ✓ 30 districts and cities
- ✓ 150 hospitals
- ✓ 300 health centers (Puskesmas)

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Indonesia: Working Across the Continuum of Care



Adopted from *Kerber et al. (2007)*

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Indonesia ICT/mHealth Interventions

Name of Intervention	Objective
SIJARIEMAS (Referral Exchange System)	Improve communication among health facilities to stabilize, refer and prepare for emergency referrals
SIGAPKU (Citizen Feedback Mechanism)	Facilitate conversation and engagement between citizens and health facilities
SIPPP (Learning and Performance Reinforcement System)	Improve and maintain midwives' knowledge, skills, and competence
SMSbunda (SMS Information for Maternal and Newborn Health)	Disseminate health information about ANC, pregnancy, and PNC to expectant and new mothers

EMAS Results to Date

- SIJARIEMAS
  - 1979 cases referred.
  - On average, 73 percent of hospitals sent a response within ten minutes of a midwife sending a referral request.
  - Almost all patients (99%) were stabilized prior to being referred.
  - SIJARIEMAS has more impact serving as a communication bridge between lower and higher level health facilities in larger communities than smaller ones, where staff know one another.
- SIPPP
  - 2,887 midwives registered
  - While response rate to quizzes is low - 23%, correct responses is promising - 88%

Tanzania MAISHA Project

- Mothers and Infants Safe, Healthy, and Alive ( ) maisha
  - Objectives:
    - Reduce **maternal mortality** due to major direct causes
    - Reduce **newborn mortality** through timely newborn care
    - Eliminate mother to child transmission
  - Funded by USAID for 5 years (2008 – 2014)
  - Scope: > 250 health facilities nationwide
  - Implementing partners: Save the Children
  - Technology: D-tree International

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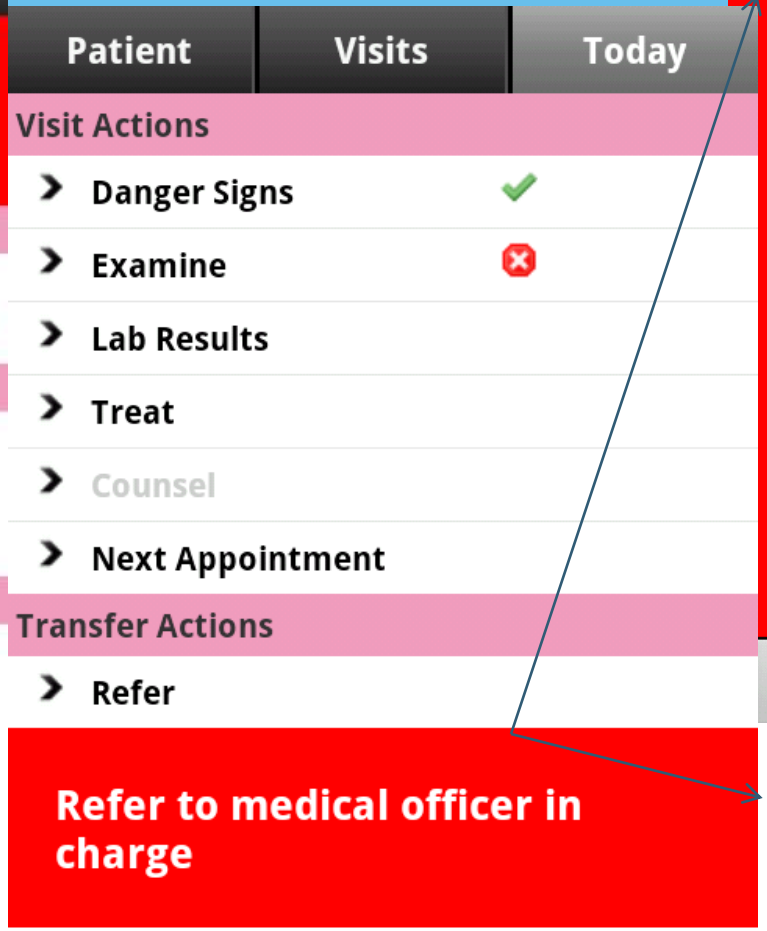
MAISHA mHealth Application for Antenatal and Postnatal Care

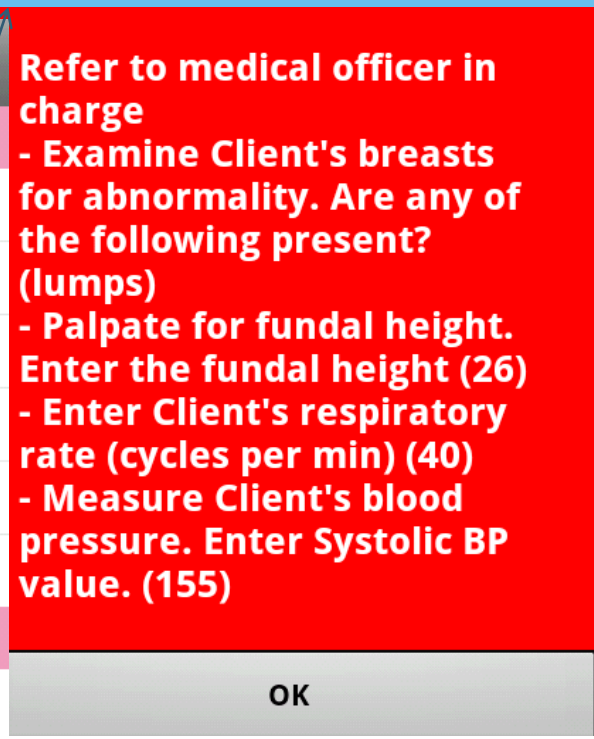
Goal: Ensure delivery of high-quality care to pregnant mothers following MOH guidelines in a format that is easy to understand and use.

Enables:

- Identification of risk factors
- Screening for danger signs and complications
- Monitoring lab results to ensure all tests are done (BP, Hb, protein in urine, etc.)
- Encouragement for facility delivery
- Comprehensive counseling including individual birth planning, nutrition and family planning.
- Follow-up for appropriate visits
- Referral linkage between community and facility


Patient
Visits
Today
Recommend Hospital ANC and Hospital Delivery
- Client's Date of Birth
One Tom (245)
Pregnancy Number 1
Age 16 years
Current Pregnancy
Gestation Age 24 weeks
EDD 22 Feb 2013
Danger Signs no
Immunizations
IPT 0
TT 0
Mebendazole no


Patient
Visits
Today
Visit Actions
Danger Signs
Examine
Lab Results
Treat
Counsel
Next Appointment
Transfer Actions
Refer
Refer to medical officer in charge


Refer to medical officer in charge
- Examine Client's breasts for abnormality. Are any of the following present? (lumps)
- Palpate for fundal height. Enter the fundal height (26)
- Enter Client's respiratory rate (cycles per min) (40)
- Measure Client's blood pressure. Enter Systolic BP value. (155)
OK

MAISHA Roll-out

- 28 health facility workers from 5 facilities trained in mobile application (from July 2012)
  - 3,429 women registered from July 2012 to present
- 12 community health workers trained in mobile application (from February 2013)
  - 436 women registered and visited by CHWs in Mafiga and Gairo catchment areas from February 2013 to present

Early MAISHA Data: Promising PNC Results

Indicators for Post Natal Care	Pre-mHealth (January –July 2012)	With mHealth (January – July 2013)
% of women attended for PNC within 48 hours	51%	63%
% of women that delivered outside a health facility	35%	26%
% of mothers coming for revisits	42%	48%
% of children checked for HIV using PCR	1.9%	2.3%
% of children give CTX	0.74%	3.4%
% of children delivered by skilled personnel	44.4%	51.5%

Philippines MindanaoHealth Project

- Integrated Maternal, Neonatal, Child Health, Nutrition, Family Planning Regional Project in Mindanao
- Created through DOH-USAID bilateral agreement and implemented by Jhpiego
- In its 2nd year of a 5-year project life
- Works with DOH to scale-up high-impact services for MNCHN and reduce unmet need for family planning throughout Mindanao region.

MindanaoHealth Geographic Coverage

- Project will cover 19 provinces, 2 cities, 366 municipalities/component cities, and 8,246 barangays
- Including conflict-affected areas of Mindanao:
  - Basilan (North/South), Lanao del Sur, Sulu, Zamboanga City and Cotabato City
- Area offices in Davao, Cotabato City, Zamboanga, and Cagayan de Oro

MindanaoHealth Key Components

- 1) Improve access to and quality of integrated supply of MNCHN/FP services at facility level and through outreach
- 2) Improve demand generation through increased and improved messaging for MNCHN/FP services
- 3) Removal of local policy and health systems barriers common to MNCHN/FP Program Implementation
- 4) Strengthen CHDs' capability in TA provision for local MNCHN/FP operations in the context of KP

Other Jhpiego Projects

- **ePartogram** – tablet-based decision support tool to monitor labor, based on WHO's paper partogram
- **HemoGlobe** - Developed by Jhpiego and JHU CBID – a low-cost peripheral attachment that transforms a basic cell phone into an anemia screening and reporting tool.
- **Mobile Safe Childbirth Checklist** Prototype

mHealth and ICT4D Areas of Interest

- Key Role of ICTs in Education and Training
  - eLearning and Multimedia Content
  - Mobile Coaching and Mentoring
  - Mobile Clinical Decision Support Tools
- Technical Excellence across Health and ICTs
- Partnerships and Collaborations
  - Intel, D-tree, Dimagi, Text To Change
  - mHealth Working Group
  - WHO Partnership for Maternal Newborn Child Health (PMNCH) – ICT/mHealth Workbook

Salamat! Thank you!



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