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Improving Health Care in Low- and Middle-Income Countries

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USAID ASSIST Project: FY15 Activities
Current scale of the ASSIST Project

- **230+ government and implementing partners**
- **2500+ QI teams**
- **4400+ facilities**
- **96+ million people in areas served**
- **900+ communities**

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The scale of our work

- **16 countries**
- **19 countries**
- **26 countries**
- **38 countries**
- **28 countries at present**

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## Contributions to Achieving the MDGs in FY15

<table>
<thead>
<tr>
<th>MDG</th>
<th>Countries where ASSIST and HCI activities contribute in FY14</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Haiti, Kenya, Malawi, Mozambique, Nigeria, Tanzania, Uganda</td>
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<tr>
<td>2</td>
<td>Haiti, Kenya, Malawi, Mozambique, Nigeria, Tanzania, Uganda</td>
</tr>
<tr>
<td>3</td>
<td>Afghanistan, Georgia, Kenya, Malawi, Mali, Mozambique, Nigeria, Tanzania, Uganda</td>
</tr>
<tr>
<td>4</td>
<td>Afghanistan, Burundi, Cote d’Ivoire, Georgia, Haiti, India, Kenya, Madagascar, Malawi, Mali, Mozambique, Nicaragua, Nigeria, South Africa, Swaziland, Tanzania, Uganda</td>
</tr>
<tr>
<td>5</td>
<td>Afghanistan, Botswana, Burundi, Cote d’Ivoire, Ethiopia, Georgia, India, Indonesia, Kenya, Madagascar, Mali, Nicaragua, South Africa, Tanzania, Uganda, Ukraine</td>
</tr>
<tr>
<td>6</td>
<td>Botswana, Burundi, Cote d’Ivoire, Ethiopia, Haiti, India, Kenya, Lesotho, Malawi, Mozambique, Nicaragua, Nigeria, Pakistan, South Africa, Swaziland, Tanzania, Uganda</td>
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## Universal Health Coverage and Safety/Quality Agenda

What good does it do to offer free maternal care and have a high proportion of babies delivered in health facilities if the quality of care is sub-standard or even dangerous?

- Margaret Chan  
  World Health Assembly, May 2012
The issue of quality in health care

MDG Progress: Goal 4 and 5 - reduce child, infant and maternal mortality

Source: World Bank 2015

54.9% of patients receive scientifically indicated care

439 indicators of clinical quality of care
30 acute and chronic conditions, plus prevention
Medical records for 6712 patients

What is the problem: World Bank

“The enormous investments that have been made in global health should have led to what we might have called a science of implementation and execution…

…We have just not focused on the enormous complexity of delivering health care in a way that keeps people healthy ”

- Jim Kim
President
World Bank

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What is the problem?

“The reality is straightforward. The power of existing interventions is not matched by the power of health systems to deliver them to those in greatest need, in a comprehensive way, and at an adequate scale.”

- Margaret Chan
  Director General
  World Health Organization

What results are we seeing?
Niger: AMTSL Compliance and PPH Reduction

AMTSL coverage and post-partum hemorrhage rates in targeted facilities, January 2006 – December 2008

Total births — 2006: 24,785 (28 sites); 2007: 31,073 (33 sites); 2008: 31,085 (33 sites)

Post-partum hemorrhage rate (percent) vs. Percent births covered by AMTSL

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Mali: Preventing post-partum hemorrhage in Kayes Region

Percentage compliance with AMTSL norms and post partum hemorrhage rate. Comparison of wave 1, 2 and 3 sites in 145 health facilities in 5 districts of Mali

Wave 1 sites PPH Wave 2 sites PPH Wave 3 sites PPH Wave 1 sites AMTSL Wave 2 sites AMTSL Wave 3 sites AMTSL

Wave 1 (Oct 2009) ~ 1066 births per month in 41 facilities (2 districts) Wave 2 (Oct 2011) ~267 births per month in 21 facilities Wave 3 (Oct 2012) ~1100 births per month in 83 facilities (3 new districts)

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Nicaragua: Case Fatality for Early Neonatal Sepsis, 4 Hospitals, January 2009 to November 2011

Implemented changes
1. Application of a Laboratory Package:
   - Blood culture,
   - Leukocyte totals
   - Band neutrophils Ratio/Total: > 0.2
   - Platelets under 150,000
   - PCR > 0.1 mg/dL
2. Inclusion of laboratory in changes.
3. Including statistics and application of risk factors for neonatal sepsis

Fatality Rate:
Numerator: Neonatal Early Sepsis cases
Denominator: Born alive x 1000 discharged

Sources: Statistics of MOH hospitals: Jinotega, Matagalpa, Juigalpa and Masaya.
India: Improving routine care for 12,000-15,000 deliveries a month

Uganda: Applying Chronic Care Model to improve coverage, retention, and clinical outcomes

Examples of Changes

- Used SM progress tool and tally sheets to record Pt SM progress
- Introduced a VHT referral form to give to patients when sent to a facility
- Each patient enrolled is introduced to a VHT in their catchment area
- SM groups formed
Overview of the Science of Improvement

(AKA: Implementation, Delivery, Execution, Etc.)

Integrating Content and Organization of Care

To Develop a Change Culture: You have two jobs: to do your job and to improve it

<table>
<thead>
<tr>
<th>Professional knowledge</th>
<th>Improvement knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialist knowledge</td>
<td>System</td>
</tr>
<tr>
<td>Personal skills</td>
<td>Variation</td>
</tr>
<tr>
<td>Values, ethics</td>
<td>Psychology</td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
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</tbody>
</table>

- Improving diagnosis, treatment, care, rehabilitation and follow up
- Improvement in processes and systems in healthcare

Increased value for the patient

Adapted from Batalden and Stoltz (1993)
Improvement Principles & Frameworks

**Fundamental Concept of Improvement:**
“Every system is perfectly designed to achieve exactly the results it achieves”

**Principles of Improvement:**
- Understanding work in terms of processes and systems
- Developing solutions by teams of health care providers and patients
- Focusing on patient needs
- Testing and measuring effects of changes
- Shared learning
How collaborative improvement works

- Learning Session
- QI team representative
- Site-level testing of changes and analysis of results
- Collaborative-level sharing and synthesis of best practices
- Multiple sites simultaneously testing changes, common indicators, peer learning about how to improve that area of care

Percentage of clients whose nutritional status is assessed using mid-upper arm circumference (MUAC)

- Tell everyone to do MUAC
  - A non-sustained change
- Delivery of commodities
- Nutrition Training
- Informed of External visit
- Assign a staff person to do MUAC after registration
  - A sustained change
- Train expert client to do MUAC
Leading Health Care Improvement

Culture

Technique

Strategy

Source: Joseph Juran

IOM Crossing the Quality Chasm: Four Tier Health System Design

Patient and Community Experience

Aims (safe, effective, patient-centered, timely, efficient, equitable)

Micro-system Process

Simple rules/Design Concepts (knowledge-based, customized, cooperative)

Organizational Context Facilitator of Processes

Design Concepts (HR, IT, finance, leadership)

Environmental Context Facilitator of Facilitators

Design Concepts (financing, regulation, accreditation, education)

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Wave Sequence Spread

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Afghanistan: AMTSL Compliance

Ecuador: Percentage of deliveries where AMTSL was implemented in accordance to standards

Improving Health Care in LMICs
Employee Engagement (...or lack thereof)