What is collaborative improvement?

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Reducing post-partum hemorrhage in Niger

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)

- Births covered by AMTSL
- Post-partum hemorrhage rate (percent)

Percent births covered by AMTSL
How collaborative improvement works

**Multiple sites simultaneously testing changes, common indicators, peer learning about how to improve that area of care**

**Collaborative-level sharing and synthesis of best practices**

**Site-level testing of changes and analysis of results**
Sustaining gains for AMTSL in 20 sites in Niger

Start of collaborative
End of collaborative

Percentage

Observation: % adherence to AMTSL norms
Simulation: % adherence to AMTSL norms
Record review: % adherence to AMTSL norms
Record review: % deliveries with 3 key AMTSL components
Record review: % facility deliveries with Post Partum Hemorrhage

Percentage of Post Partum Hemorrhages detected

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Cost-effectiveness evaluation

• Broughton et al. 2012
  Cost-effectiveness analysis of a EONC Collaborative in Niger


  – Average cost per birth decreased from $35 to $28
  – ICER: $147 per DALY averted
Spread of PPH reduction from Niger to Mali


![Graph](image)

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

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)
Improving postpartum care for mothers and newborns in Niger and Mali

Uganda: Applying Chronic Care Model to improve HIV care

Uganda: Coverage, retention, and clinical outcome gap analysis showing improvement at five sites implementing the Chronic Care Model in Buikwe District (October 2010–April 2014)

- **Coverage gap**: 44%
- **Retention gap**: 49%
- **Wellness gap**: 53%

End of the intervention

- Eligible
- Ever Enrolled
- Expected
- Active
- With Good Clinical Outcome

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Georgia: Improved compliance with NCD best practices

Georgia: Average compliance with all percentage process indicators per clinical focus area, Imereti (April 2012–May 2014), average 210 charts reviewed monthly

- Ambulatory management of respiratory tract infection in children
- Hospital management of respiratory tract infection in children
- Acute coronary syndrome management
- Primary and secondary prevention of cardiovascular disease
- Ambulatory management of asthma and COPD
- Hospital management of asthma and COPD

<table>
<thead>
<tr>
<th>Date</th>
<th>Ambulatory management of respiratory tract infection in children</th>
<th>Hospital management of respiratory tract infection in children</th>
<th>Acute coronary syndrome management</th>
<th>Primary and secondary prevention of cardiovascular disease</th>
<th>Ambulatory management of asthma and COPD</th>
<th>Hospital management of asthma and COPD</th>
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<tbody>
<tr>
<td>Apr-12</td>
<td>45%</td>
<td>41%</td>
<td>27%</td>
<td>20%</td>
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<td>Jan-13</td>
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<td>Indicator</td>
<td>Attributable difference</td>
<td>p value</td>
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<td>% of COPD patients given evidence-based medications for management on discharge</td>
<td>40%</td>
<td>&lt;0.001</td>
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<td>% of coronary artery disease patient put on secondary prevention (Aspirin, beta-blocker, ACE-I/ARB, Statin) with all 4 medications</td>
<td>56%</td>
<td>&lt;0.001</td>
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<td>% of acute coronary syndrome patients with initial treatment (morphine, oxygen, nitrate, aspirin) recorded</td>
<td>44%</td>
<td>&lt;0.001</td>
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<td>% of COPD patients where all risk factors recorded (smoking, BMI, physical activity)</td>
<td>91%</td>
<td>&lt;0.001</td>
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<td>% of charts of patients with COPD where all risk factors recorded anywhere in the chart (smoking, BMI, physical activity) record</td>
<td>60%</td>
<td>&lt;0.001</td>
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<td>% of pneumonia patients assessed for respiratory status severity</td>
<td>43%</td>
<td>&lt;0.001</td>
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Weaknesses of collaborative improvement

- Requires combination of expertise
  - Improvement (implementation) science
  - Technical knowledge of subject matter area
  - Group process expertise
  - Contextual expertise

- Improvement (implementation) action at multiple levels:
  - Frontline teams and patients
  - Managers/leadership levels
  - Policy/regulatory levels

- In-person meetings
  - Interrupts care delivery
  - Cost
Strengths of collaborative improvement

• Addresses key gap in global health: “know-do gap”
• Solutions adapted to local context
• Builds ownership and transformational leadership
• Cost-effective
• Ongoing, iterative learning and scale-up
• Builds capacity in collection and use of data
• Robust results in low and middle income settings across technical areas and different contexts