Improving Access to and Quality of Essential Obstetric and Newborn Care in the Lowest Coverage Districts of Cotopaxi Province, Ecuador

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Mexico City
GLOBAL MATERNAL AND NEWBORN CONFERENCE
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Project overview: Cotopaxi province, Ecuador

### Cotopaxi Province Figures

<table>
<thead>
<tr>
<th>Figure Description</th>
<th>Value</th>
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<tbody>
<tr>
<td>Entire province population</td>
<td>384,499</td>
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<tr>
<td>Skilled Birth rate, province</td>
<td>70-80%</td>
</tr>
<tr>
<td>Early post partum visits</td>
<td>&lt; 5%</td>
</tr>
<tr>
<td>Maternal Mortality</td>
<td>102 x 100,000 LB</td>
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<tr>
<td>Poverty Level in 21 targeted parishes</td>
<td>90.47%</td>
</tr>
<tr>
<td>Rural Population</td>
<td>67%</td>
</tr>
<tr>
<td>Indigenous population, province</td>
<td>28%</td>
</tr>
<tr>
<td>Indigenous population targeted parishes</td>
<td>&gt; 55%</td>
</tr>
<tr>
<td>Newborn mortality, province</td>
<td>7.8 x 1,000 LB</td>
</tr>
<tr>
<td>Newborn mortality, targeted parishes</td>
<td>20-70 x 1,000 LB</td>
</tr>
</tbody>
</table>
Maternal mortality by provinces, Ecuador, 2011.
Source: INEC, 2011

Country MM ratio 105 x 100,000 NV
Use of selected health services by economic quintiles, Ecuador

Compliance with antenatal care standards
Skilled birth attendance
Postpartum care by professional
PAP test in 2 last years

Percentage

- Inferior
- Second
- Intermediate
- Fourth
- Superior
Cotopaxi Provincial Health System: Fragmented; No continuum of care; Inequitable access; Poor quality of care

- Ministry of Health: 4,000 deliveries
- Social Security: 1,500 deliveries
- Private providers
- NGOs

Provincial Hospital
(Surgery & Blood 4 hours/day)

5 County Hospitals
(Basic EONC 4 hours/day)

Ambulatory Health Centers
(Parish Level)

TBAs
(Community Level)
(3,000 deliveries)
Parish micronetwork:
TBAs, health centers and social organizations working together
**Increasing access: main changes**

- TBAs and health centers (MOH and Social Security) working together in parish-based “EONC micro-networks” to identify and reach mothers and newborns
- Link health centers and TBAs with community organizations towards improving referrals from communities
- Link health centers and TBAs with district hospitals to improve referrals of at-risk mothers and newborns
- Ensure 24 hour hospital-based basic and complete EONC
- Improve facility-based birth services capacity to respond to cultural needs/demands of local population
Improving quality of care: main changes

- Early postpartum care and discharge 24-48 hours after birth with standardized procedures – “quality discharge”
- Introduction of Kangaroo mother care
- Introduction of standardized protocols for managing main obstetric/newborn complications at each level of the EONC network
- Training on EONC and HBB to all personnel that attend deliveries at health centers and hospitals
- Continuous improvement based on monitoring of compliance with quality standards and PDSA cycles
- Training TBAs in local language with demonstrations and mannequins
- Monitoring quality of care of TBAs quarterly
MICRONETWORK TEAM AT GUANGAJE PARISH
WORKING WITH TBAs AND COMMUNITY LEADERS TO IDENTIFY PREGNANT WOMEN IN A MAP
IDENTIFYING PREGNANT OR POSTPARTUM WOMEN AND NEWBORNS IN A COMMUNITY MAP
HOME VISITS TO “AT RISK” PREGNANT WOMEN IN THE COMMUNITY
MOBILIZING THE COMMUNITY TO IDENTIFY PREGNANT WOMEN, CONDUCT HOME VISITS AND TRANSPORT EMERGENCIES
## Coverage and Quality of Post-partum Care (PPC) in 7 Cotopaxi Parishes: Baseline vs. Project Year Three End-year Result

<table>
<thead>
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<tr>
<td>% of total deliveries (home &amp; facility) benefitting from PPC in the first 48 hours</td>
<td>&lt; 5%</td>
<td>71%</td>
</tr>
<tr>
<td>% TBA compliance with PPC counseling standards (observation of simulated or live session)</td>
<td>3%</td>
<td>69%</td>
</tr>
<tr>
<td>% TBA compliance with PPC newborn exam standards for danger sign recognition (observation of simulated or live exam)</td>
<td>0%</td>
<td>68%</td>
</tr>
<tr>
<td>% of TBAs able to cite at least 2 post-partum danger signs for mother</td>
<td>59%</td>
<td>98%</td>
</tr>
<tr>
<td>% of TBAs able to cite at least 2 newborn post-partum danger signs</td>
<td>61%</td>
<td>94%</td>
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81% at project’s end
Figure 2: Increase in Coverage of Early Post-partum Care, Seven Micro-networks in Pujili County, January 2010-September 2012.
<table>
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<tbody>
<tr>
<td>% of TBAs who report to know how to contact a skilled provider at nearest health center</td>
<td>19%</td>
<td>95%</td>
</tr>
<tr>
<td>% of TBAs who report to have visited a health center in the last 3 months</td>
<td>15%</td>
<td>97%</td>
</tr>
<tr>
<td>% of TBAs who report a “supervision” visit by a parish health center skilled provider in the last 3 months</td>
<td>&lt; 10%</td>
<td>64%</td>
</tr>
<tr>
<td># of newborns referred to a health center or county hospital by a TBA within the past quarter</td>
<td>17</td>
<td>94</td>
</tr>
<tr>
<td># of women post-partum referred to a health center or county hospital by a TBA within the past quarter</td>
<td>15</td>
<td>107</td>
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<tr>
<td>% of deliveries benefitting from active management of the third stage of labor in participating facilities</td>
<td>68%</td>
<td>99%</td>
</tr>
<tr>
<td>% of births demonstrating compliance with partograph use in participating facilities</td>
<td>51%</td>
<td>94%</td>
</tr>
<tr>
<td>% of births documenting compliance with use of corticoids for fetal lung maturity in preterm birth in participating facilities</td>
<td>67%</td>
<td>96%</td>
</tr>
<tr>
<td>% of births documenting compliance with evidence-based case-management standards for premature rupture of membranes</td>
<td>0%</td>
<td>80%</td>
</tr>
<tr>
<td>% of newborns with documented compliance with essential newborn care standards in participating facilities</td>
<td>13%</td>
<td>91%</td>
</tr>
<tr>
<td>% of newborn asphyxia cases with documented compliance with evidence-based neonatal resuscitation standards in participating facilities</td>
<td>10%</td>
<td>94%</td>
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Increasing demand for health services and healthy household behaviors: main changes

- Weekly radio program in 6 radio stations, local language
- Radio jingles
- Introduction of routine counseling at facility-based care and by TBAs
Knowledge, attitudes and practices related to maternal and newborn care at baseline (2011) and end-line (2013) home surveys. Intervention vs. non-intervention populations

- Can name 2 newborn danger signs
- Knows ≥2 labor/delivery danger signs
- Would recommend delivery site to a friend
Reduction in Newborn Mortality in Project Intervention Counties, 2008–2011

* Project activities started in 2010

- **2008**: 11.9 deaths (28 deaths)
- **2009**: 12.5 deaths (29 deaths)
- **2010**: 9.3 deaths (22 deaths)
- **2011**: 10.5 deaths (43 deaths)

- **Project intervention counties**
- **Counties with no project intervention**
Sustainability

• The Ministry of Health of Ecuador implemented the Cotopaxi project closely together with CHS.
• In 2012 the MOH announced its decision to scale-up the project to the entire country.
• In 2013 the Minister issued an official policy document and an operational plan for the scale-up.
• In 2014 the MOH hired a full-time staff to lead the implementation in each one of the 24 provinces.
• At the project close-up, the MOH hired two of our project staff members to work at central MOH.
What did we learn?

• Health Care Improvement is an effective way to address Equity issues - the need for improvement is not equal among populations.
• Access to and quality of care are two dimensions that should be improved together to achieve impact.
• Health Care Improvement involves changes not only at the individual performance at the facility-level processes, but also at the system level of processes: this is where QI and systems’ strengthening meet.
• The “demonstrate how to” strategy: It is possible (and perhaps better) to change health care systems from bottom-up. PDSAs at a system’s dimension.
• The need to document and measure.
• The bottom line (yet unanswered): why would public health care workers want to improve (or not)?
• Who else has important stakes at health care improvement in developing countries?