

# Capacity Building for Health Systems Analysis: Focus on Maternal and Newborn Health in Africa

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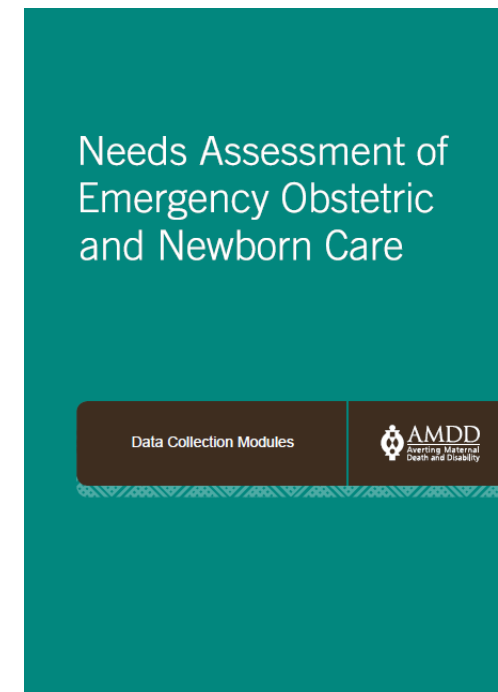
Columbia University,  
New York City

# The Averting Maternal Death and Disability Program - AMDD

- Over 350,000 maternal deaths and 3 million newborn deaths annually, 99% of which occur in developing countries
- AMDD helps to strengthen health systems to provide emergency care for all pregnant women and newborns experiencing life-threatening complications, in collaboration with academic, NGO, and UN partners, as well as ministries of health.

# EmONC Needs Assessment Overview

- EmONC Needs Assessments are cross-sectional, facility-based studies of the capacity of a health system to provide MNH services
  - Accessibility of Services
  - Human Resources
  - Equipment and Supplies
  - Aspects of quality of care
- Assessments permit the calculation of health system performance indicators



# Implementation Science and EmONC Needs Assessments

- Intervention:
  - High quality Needs Assessment
  - Use of data
- Implementation strategy:
  - Capacity-building approach
    - **Greater ownership of process:** can lead to greater use of results, evidence-based implementation
    - **More sustainable:** in-country knowledge for future studies
  - AMDD facilitates, trains, and assures quality

# Capacity building - working definition in NA context

- Building skills and experience of local country professionals to: conduct MNH studies, analyze results, and use results to plan for action.
  - Didactic training
  - Experiential learning
  - Involving end users throughout the research process

# Needs Assessment training sessions

- **Tool modification workshop (1 week)**
  - Participants shape the research questions by modifying generic tools to local context and planning needs
- **Implementation Team Training, ITT (1 week)**
  - IT is team that implements Needs Assessments and advocates/plans for use of results
  - Didactic sessions, role play, field exercise
  - Teach purpose of health system indicators, data collection
- **Data Collectors Training, DCT (1 week)**
  - Facilitated by some participants of ITT – learn by teaching
  - Didactic sessions, role play, field exercise
  - Teach how the data collection tools relate to EmONC and health system strength

# Needs Assessment training sessions

- Data Analysis Workshops (1 week)
- Data Interpretation Workshops (1-2 weeks)
- Action Planning and Dissemination Workshops: national and local (1-2 weeks)
  - Training in data interpretation and evidence-based planning through data interpretation exercises.
- Pre- and post-test for ITT and DCT; participants must pass test before continuing with study.

# Training cont'd

Evolving process

Customized to country needs

Multidisciplinary teams (data collection, core team)

MOH, UN, HMIS officers, NGOs, professional associations, practicing clinicians and other stakeholders



# Recent NAs with capacity-building approach

- Haiti (2008)
  - Ethiopia (2009)
  - Malawi (2010-11)
  - In process:
    - Burundi
    - Burkina Faso
    - Guyana
    - Liberia
- Sierra Leone (2008)  
Madagascar (2009)
- Benin  
Ghana  
Laos  
Niger

# Case studies

- Ethiopia, 2008-2009
- Madagascar 2009-2010
- Burundi, 2010
- Data sources:
  - Reflections from country team members, trainers and facilitators during the Needs Assessment Process
  - AMDD team observations and trip reports

# Ethiopia: Background



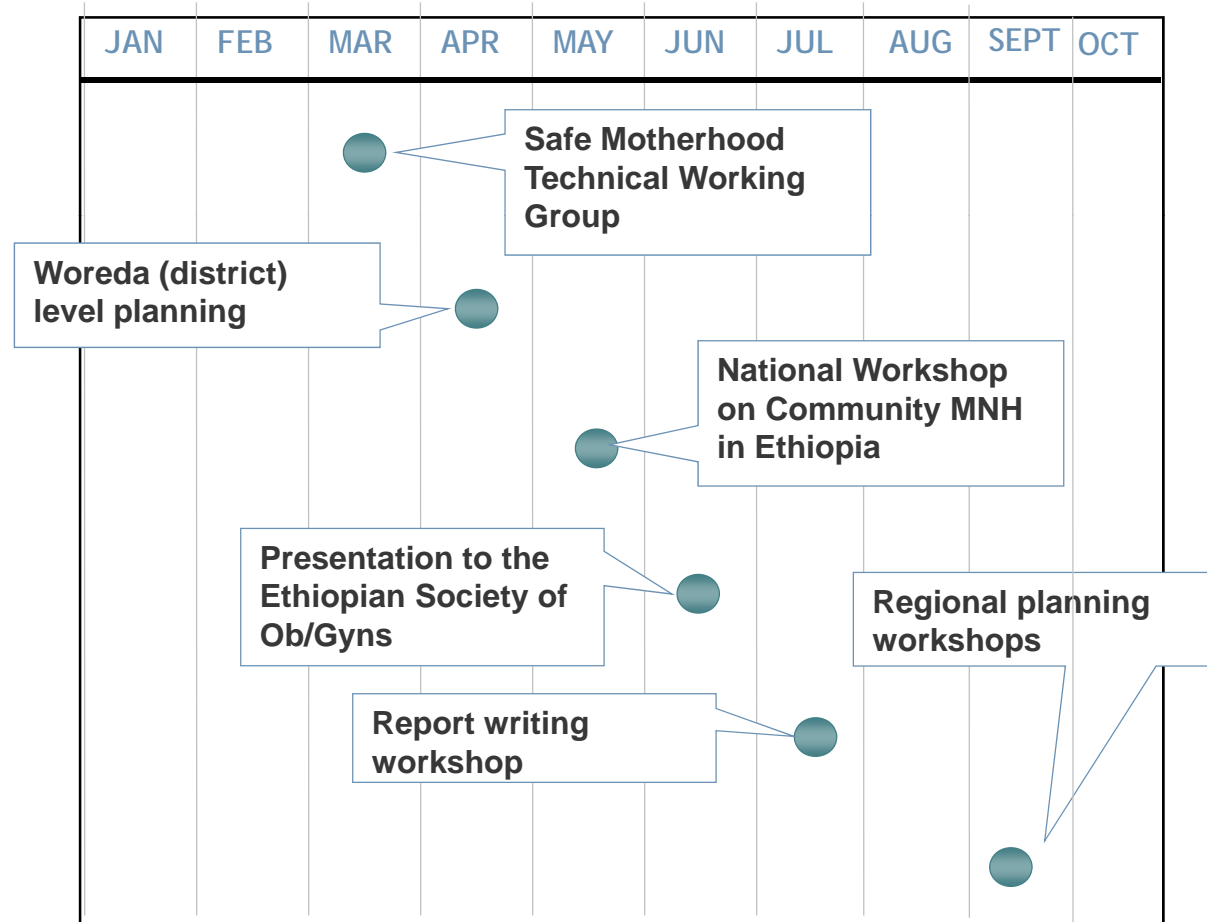
- Maternal Mortality Ratio (MMR) = 470 maternal deaths per 100,000 deliveries in 2008. US = 24
- Demand for Needs Assessment from MOH & partners. Previous lack of baseline data.
- Early stages of planning for HSDP IV
  - MOH expressed concerns that HSDP III had little impact
- National census of health facilities (806 facilities)
- 84 data collectors trained in 3 sessions
- From planning in September 2008 to report writing in December 2009

# Ethiopia: Capacity Building

- Capacity building through standard trainings. No ITT, but core team actively participated in DCT, supervised fieldwork.
- Regional planning workshops created regional action plans
  - Pairing action planning and dissemination
  - Participants, especially at district level, often had little public health training, and were introduced to evidence-based planning.
  - Regional plans compiled in National Action Plan / HSDP IV
- Strongest part of the capacity-building process: iterative analysis, interpretation, dissemination, and action planning.

# Dissemination and planning activities

2009



National and regional reports

Factsheets

# Ethiopia: Results

- Needs Assessment revealed many health system gaps
- The Needs Assessment Report became basis for
  - HSDP IV
  - H4 Work plan (UNICEF/UNFPA/WHO/World Bank)
- Spurred action from UN Agencies:
  - UNFPA supplied 25 ambulances
  - UNICEF is providing running water to the 31% of health centers that had no water.
- Widespread local awareness and support of the assessment and results
- Partners have reflected that it was worth the investment

# Madagascar: Background



- MMR = 440 in 2008
- Census of all hospitals, all health centers with at least 240 deliveries/year (total of 294 facilities)
- A committed MOH led the strong core team, contracted with private statistical firm
- Planning started in June 2009, report was completed by December 2009. Implementation efforts ongoing.

# Madagascar: Capacity building

- UNICEF, UNFPA, MOH officials participated in ITT and were trainers for the 100 data collectors
- Data validation, analysis, and interpretation meetings with core team
- Costed local and national EmONC action plans
- Regional dissemination of results and EmONC plan in conjunction with DHS data, subsequent adaptation and/or verification of plans
  - Participants: Regional MOH officials, NGOs, technical partners, donors, private sector

# Madagascar: Results and lessons

- Modified curricula for EmONC health professionals to teach life-saving skills
- HMIS revisions to collect better data on EmONC
- Used a private firm for data management and analysis; this may have contributed to speed of assessment. Leadership was maintained among MOH and partners.

## Burundi: Context

- MMR = 970. Conflict
- 274 facilities: all hospitals, all health centers with at least 360 annual deliveries
- Inception visit Nov 2009
- ITT/DCT in March 2010, data collection immediately following
- Data analysis workshops July and October 2010
- Data analysis still in process; next step is interpretation workshop and action planning.



# Burundi: Results and lessons

- **Availability:** Collaborating with current experts to build capacity for health systems analysis has been challenging, as they have multiple competing commitments.
- **Commitment:** Despite conducting an ITT, funding difficulties have meant varying levels of participation from partners.
- **Country burden:** In cases of human resource shortage, the country may not be able to bear the burden that the capacity building approach to an assessment places on it.
- **Time:** The risk to a capacity building approach: the lengthy process means data are no longer as relevant!

# Conclusion

# Lessons learned: limitations

- Costs in terms of time and resources
  - HR use from country – practitioners' time is precious.
  - Process is slower.
- Staff turnover
- Capacity building has greater impact in environments that are already favorable to implementation, and with some human resource and technical capacity already present.

# Lessons learned: benefits

- Capacity building for health systems analysis can create ownership and political will to use data, and can increase technical skills for doing so.

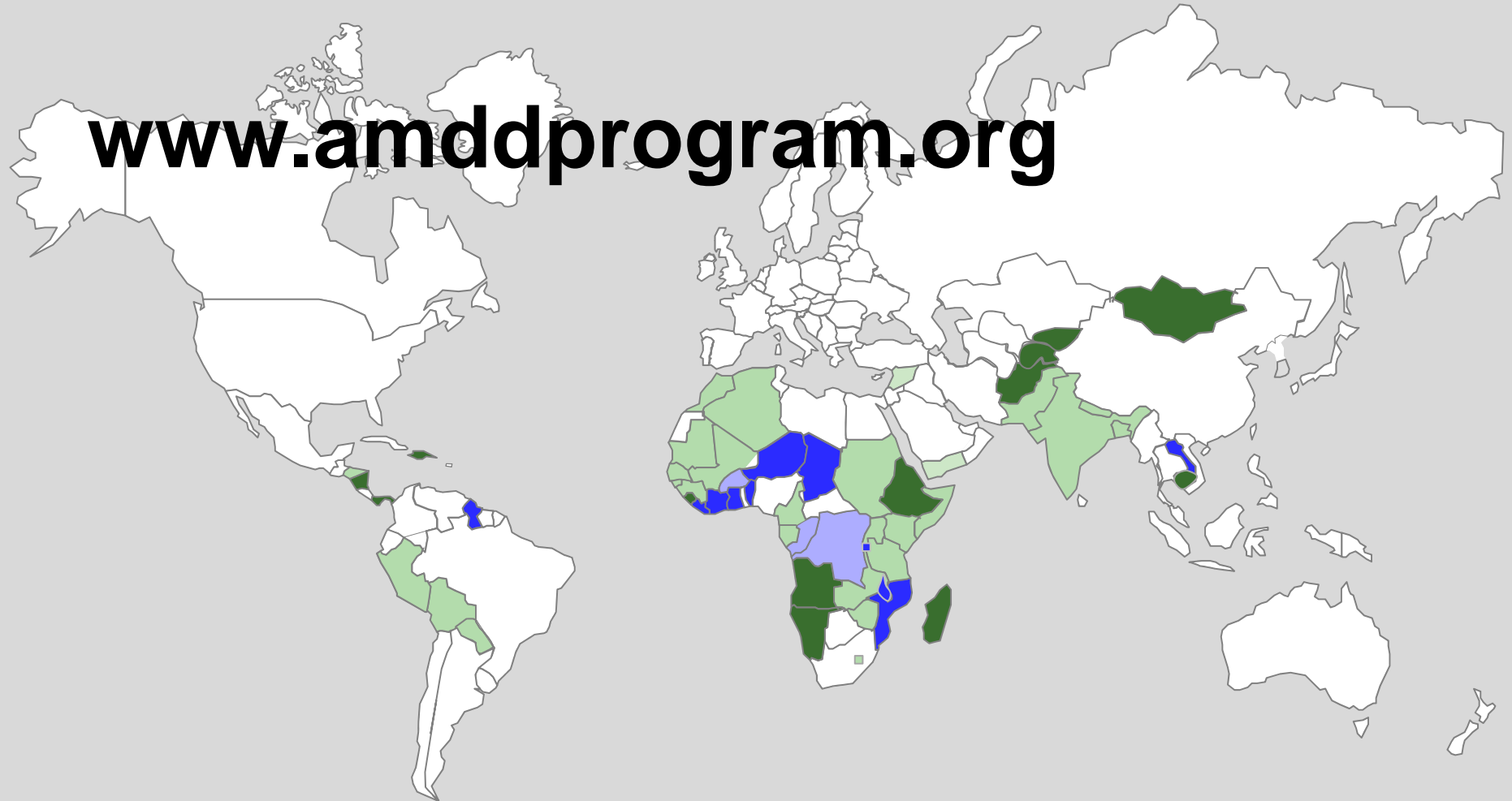
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  - H4 initiative
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# Many thanks!

- Completed – pre-2005 and/or sub-national
- Completed – post-2005 and national
- Ongoing
- Planned

[www.amddprogram.org](http://www.amddprogram.org)



EmONC Needs Assessments by status

Current as of March 2011