6: Health Facility Quality Improvement for Maternal and Newborn Health

Background: Why did we work at the health facilities?

Many essential maternal and newborn health interventions, known to be highly cost-effective and recommended by WHO, are not implemented in some countries, including Tanzania and Uganda. Reasons for low implementation include providers not following examination standards or available treatment guidelines, drug stock outs, and a lack of laboratory tests. Using the collaborative approach (**see briefs 3**), EQUIP aimed to assist health workers in overcoming local obstacles so that they could provide maternal and newborn health services according to national standards.

Improvement topics in health facilities	Tanzania	Uganda
Antenatal care attendance		√
Health facility delivery/birth preparedness	√	
Syphilis screening	√	√
Recognition and correct management of pregnancy induced hypertension		√
Intermittent preventive treatment of malaria in pregnancy in antenatal care	√	
Monitoring of labour using a partograph	√	√
Active management of the third stage of labour	√	√
Infection prevention for caesarean sections	√	√
Improved asphyxia management/helping babies breathe	√	√
Kangaroo mother care for preterm and low birth weight babies		√
Postnatal care within the first week of birth	√	√

Box 1: Improvement topics implemented by the teams

Methods: What did we do?

During learning sessions we introduced several improvement topics (Box 1). Using plan-do-study-act cycles, we encouraged facility quality improvement teams to brainstorm "change ideas" to overcome local obstacles to implementation. We also decided on indicators to best monitor progress. Between learning sessions, during the "action period", the teams implemented their change ideas and were supported through on-site mentoring and coaching by quality improvement mentors, with a focus on use of the plan-do-study-act cycles to enhance their work.

In **Mayuge district in Uganda**, a total of 10 trained district mentors, selected from the District Health Team and higher level health facilities, supported 30 facility-level quality improvement teams monthly in problem identification, setting goals, designing and implementing change ideas, and analysing performance using data collected by the team.

In Tandahimba district in Tanzania, three trained members of the district health team together with two EQUIP staff provided mentoring and coaching at facilities roughly every six weeks to review progress and encourage further testing of change ideas.

Results: What was done by the teams?

Change ideas were developed for improvement topics (Box 2). The learning sessions were a platform for quality improvement teams to share experiences and learn from each other. This peer-to-peer learning enhanced rapid spread of solutions and motivated teams to improve their work. The facility quality improvement teams monitored the progress of change ideas over time.

Change ideas to improve early uptake of postnatal care in Uganda

- Giving mothers appointments before discharge
- Village Health Teams members to refer all newly delivered women in the community for postnatal care
- Immunize baby at birth and retain the Child Health Card until the mother comes back for postnatal care
- Re-design clinic days so that postnatal care days are held separately from antenatal care days
- Identify women who have delivered within seven days at the 'Young Child Clinics'

Box 1. Change ideas implemented to improve early uptake of postnatal care (PNC) in Uganda

Conclusion: What did we learn?

On site mentoring and coaching in combination with learning sessions and peer-to-peer learning was successful in improving the quality of maternal and newborn care at the facility level. This improvement was achieved despite key challenges such as drug stock outs and insufficient human resources for health.

Working on birth preparedness in

Karolinska Institutet · IFAKARA HEALTH INSTITUTE research | training | services · SEVENTH FRAMEWORK PROGRAMME

health facilities in Uganda

"Following the introduction of EQUIP, a change idea used at many health facilities was to employ 'goal-oriented antenatal care', whereby what was supposed to happen on individual antenatal care visits was shared with the mothers, and dates for future appointments were fixed. Because of this change idea, an increase in regular antenatal care attendance was observed. There are now special health education sessions during antenatal care, during which the birth preparedness of women is checked. Volunteers also check these preparations in the community.

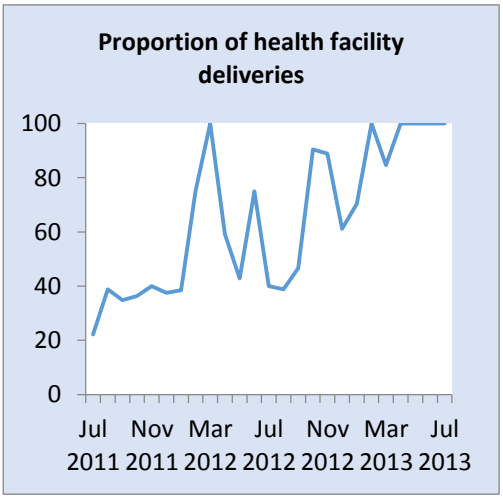
Due to the success of this change idea, women are now more actively preparing for birth."
(Rogers Mandu, EQUIP Uganda)

Photo 1. Midwife taking a mother's blood pressure during an antenatal care visit

Working on increasing health facility delivery in Tanzania

"Health facility delivery was an improvement topic implemented by all health facility quality improvement teams. A common change idea was to encourage male involvement, particularly in birth preparedness planning. This was talked about during antenatal care visits and also in the community during volunteers' visits. In areas where traditional birth attendants were influential, facility quality improvement teams cooperated with local authorities to educate [them] about the importance of delivering in a health facility. The response to this change idea was positive in most of the areas. Most facilities also made use of community volunteers to educate women on the importance of facility delivery at the community level; this was particularly important because the volunteers were trusted by the community.

The synergistic effect of the above change ideas brought tremendous results in the health facility delivery in rural Tanzania."
(Petro Arafumin, EQUIP Tanzania)



Graph 1. Run-chart of proportion of health facility deliveries in a health centre

Reducing wound infections after caesarean sections in the district hospital

"In Tandahimba district hospital in 2011, wound infections were a big problem, with nearly three quarters of all mothers developing an infection after caesarean sections. Several measures had been taken by the hospital, including relocating the operating theatre to the new maternity wing, replacing worn-out mattresses and disposing of gauze suspected to be contaminated with fungi. But it was not until the implementation of EQUIP, through the systematic testing of change ideas and the measurement of follow up effects that a true impact was made. Prophylactic antibiotics and cleaning of the abdomen and genital area before surgery were introduced to all mothers, reducing the wound infection rate to around 10 percent.

Photo 3. Quality improvement team meeting at the district hospital

We were conducting operations [caesarean sections] and later on we used to find almost three quarters of them had wound infections and some had septicaemia and others lost life. So after they [EQUIP] came here, we sat and talked to them, they gave us ways to fight against this problem and we have been practicing that and we continue to practice until now." **(Assistant Medical Officer, Tandahimba district hospital)**

For further information contact: Monica Okuga (mokuga@musph.ac.ug) and Peter Waiswa (pwaiswa@musph.ac.ug) in Uganda and Arafumin Petro (luckyfreeman84@gmail.com) and Fatuma Manzi (fmanzi@ihi.or.tz) in Tanzania