
Linking communities and facilities to improve
quality of care for mothers & newborns
Lessons from Uganda & Tanzania
Webinar on 9 November @ noon GMT/3pm EAT
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for Maternal, Newborn and Child Health
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Linking communities and facilities to improve maternal and newborn health: *Lessons from the Expanded Quality Management Using Information Power trial in Uganda and Tanzania*

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Implementation Science

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Effects of the EQUIP quasi-experimental study testing a collaborative quality improvement approach for maternal and newborn health care in Tanzania and Uganda

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(4-years project - funded by a grant from EU FP7)

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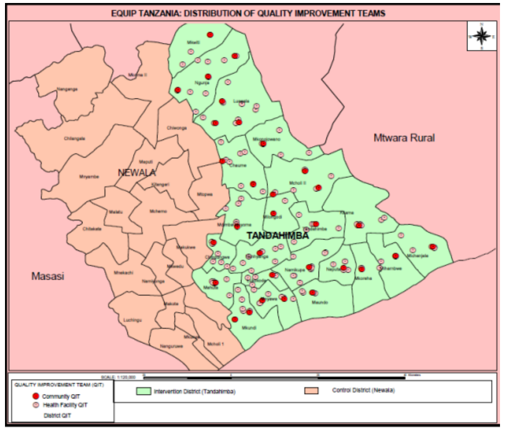
Background

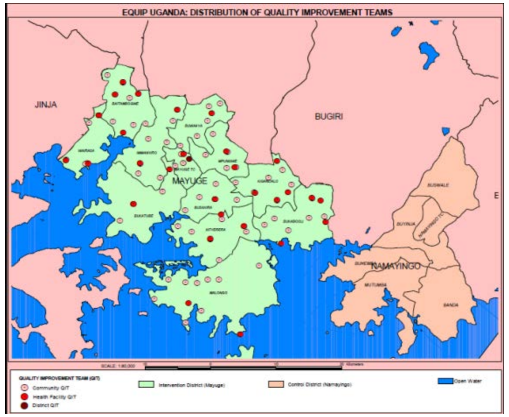
- Quality improvement is a recommended strategy to improve implementation levels for evidence-based essential interventions, but experience of and evidence for its effects in low-resource settings are limited.
- We aimed to test a systemic and collaborative quality improvement approach covering an entire district from district management, to facility and community levels in order to inform scale up

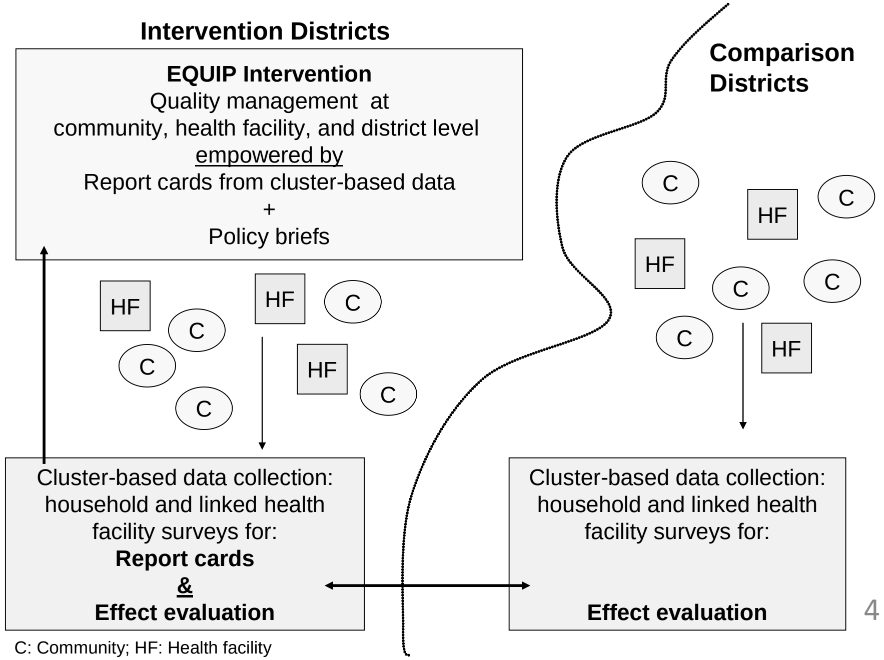
Study setting and design

- Study area: Southern Tanzania and Eastern Uganda

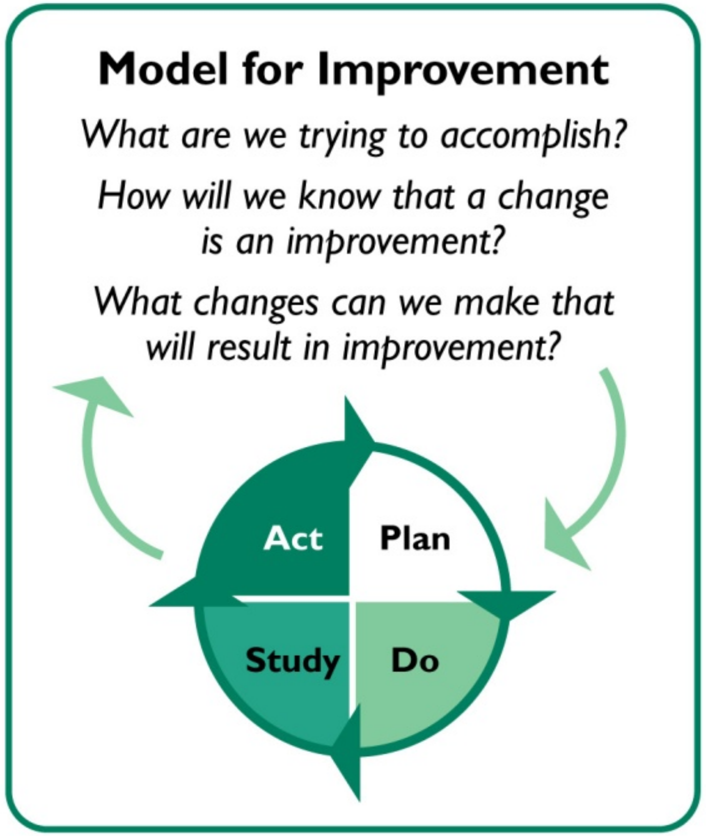
- Design: Plausibility study
  - 1 intervention 1 comparison district
  - Continuous surveys (6 rounds) for evaluation + report cards (feedback mechanism)
  - Process, coverage and practice/quality indicators
  - Interrupted time-series analysis applying a difference-in-differences approach

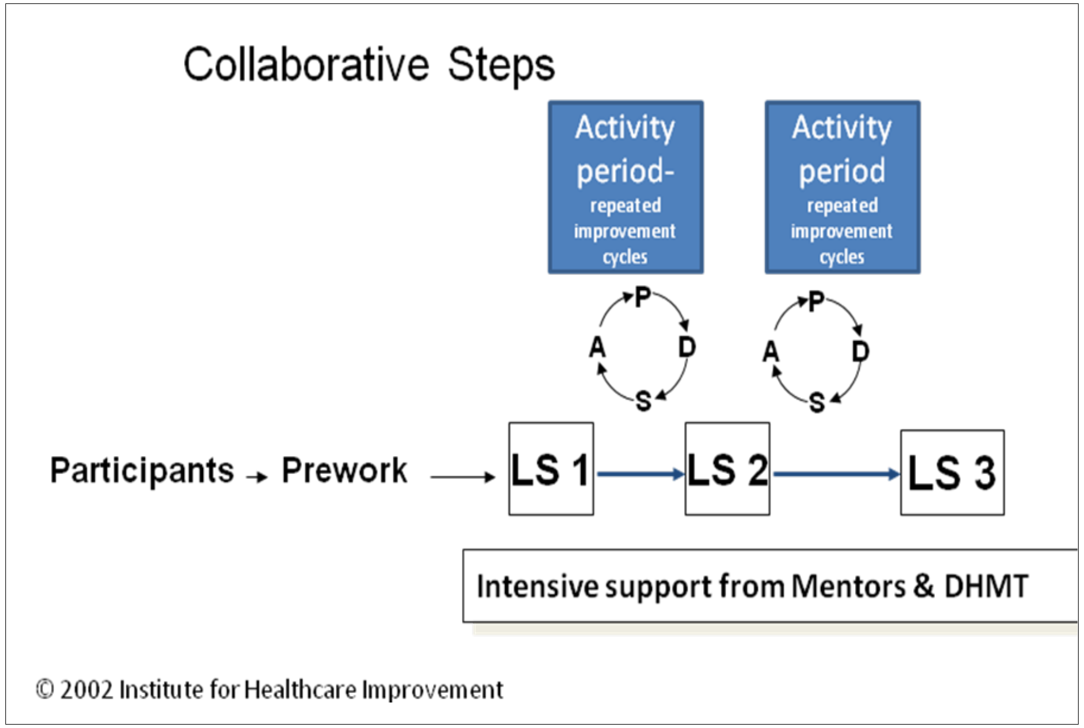






The intervention

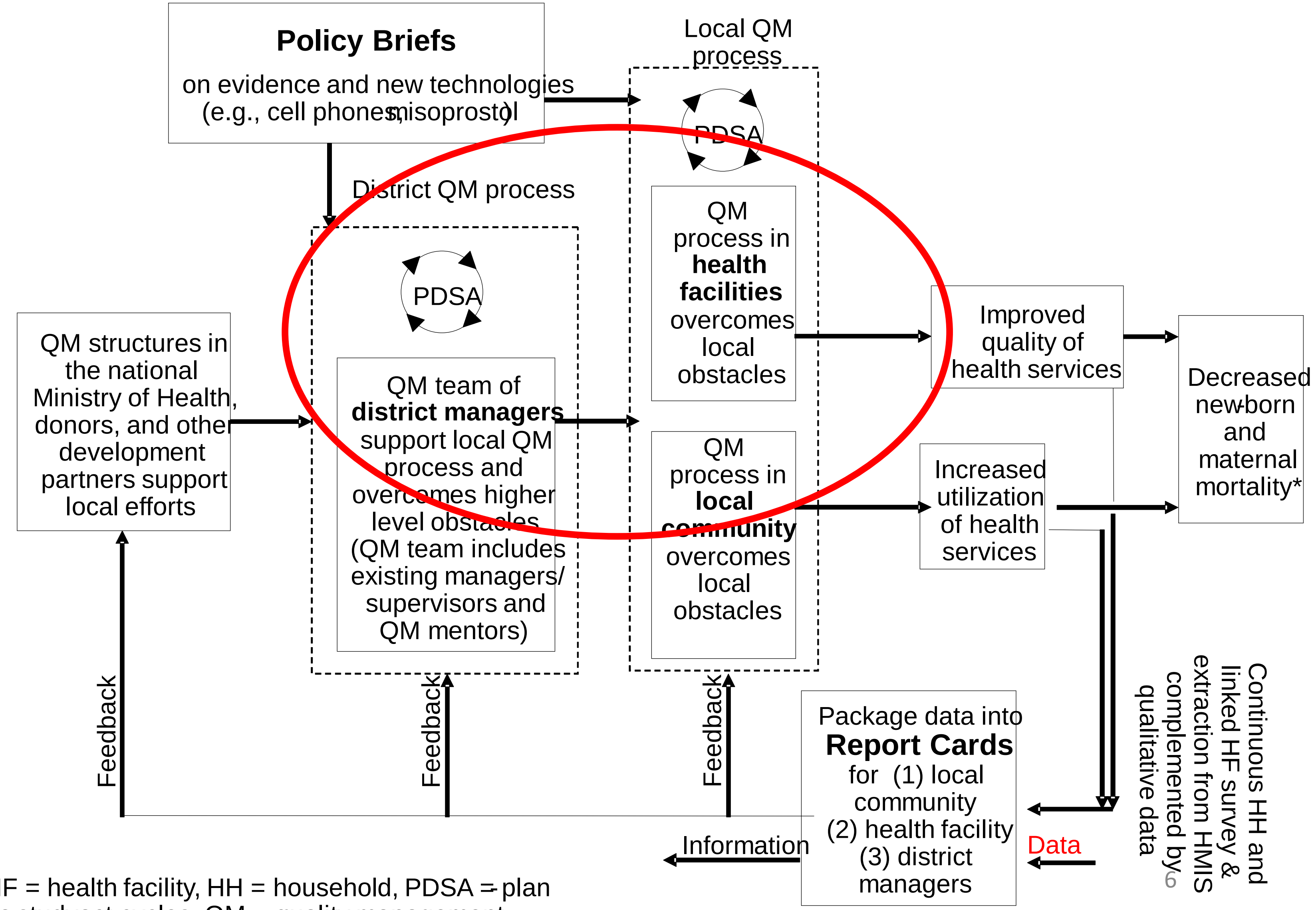




-QI teams formed at 20 / 32 health facilities &

65 /157 CQITs formed (each parish 5-10 villages) 2 VHTs per village in Uganda and Tanzania, respectively

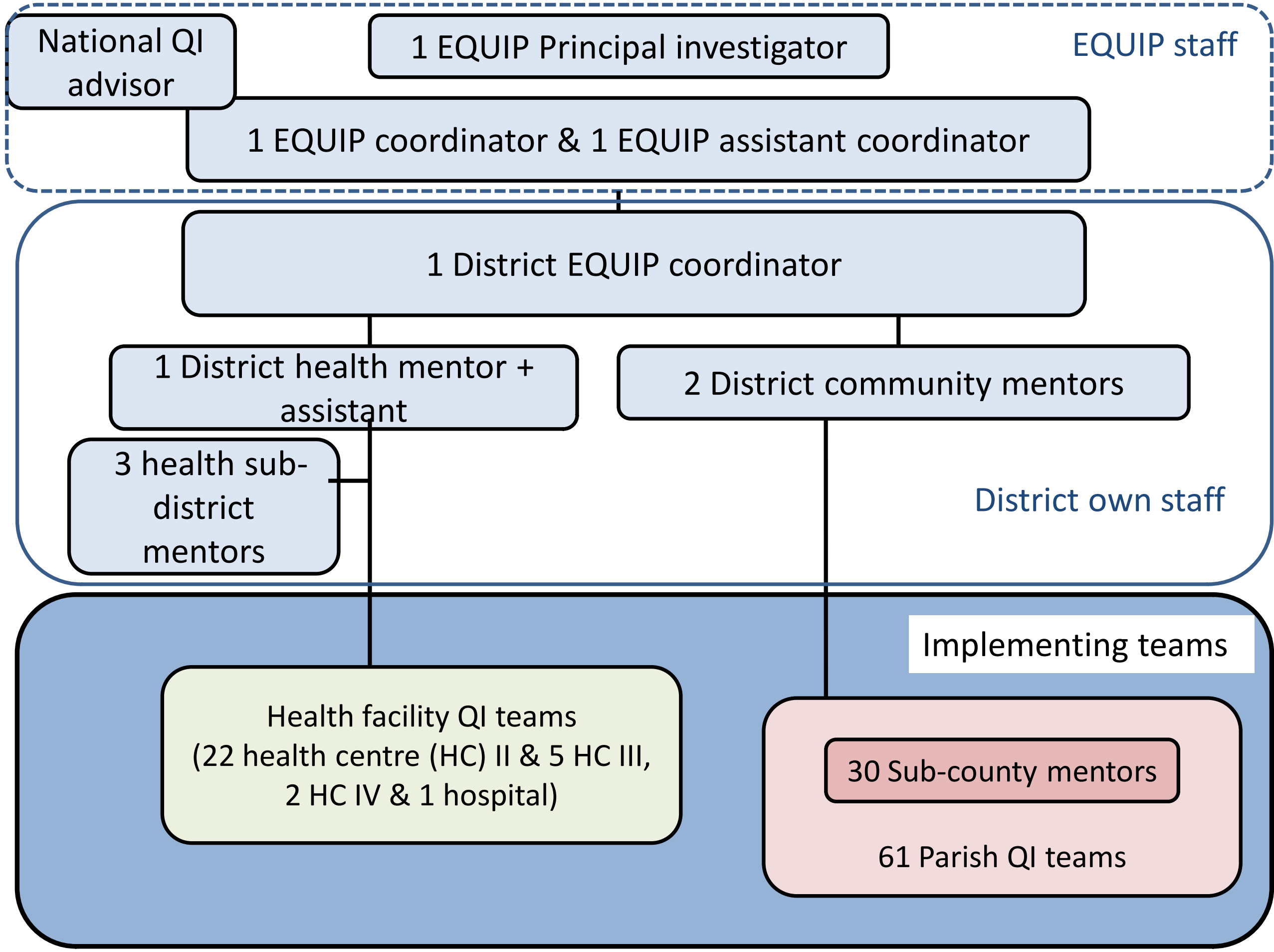
Conceptual Framework: systemic & based on district health systems



HF = health facility, HH = household, PDSA = plan-do-study-act cycles, QM = quality management

3 levels

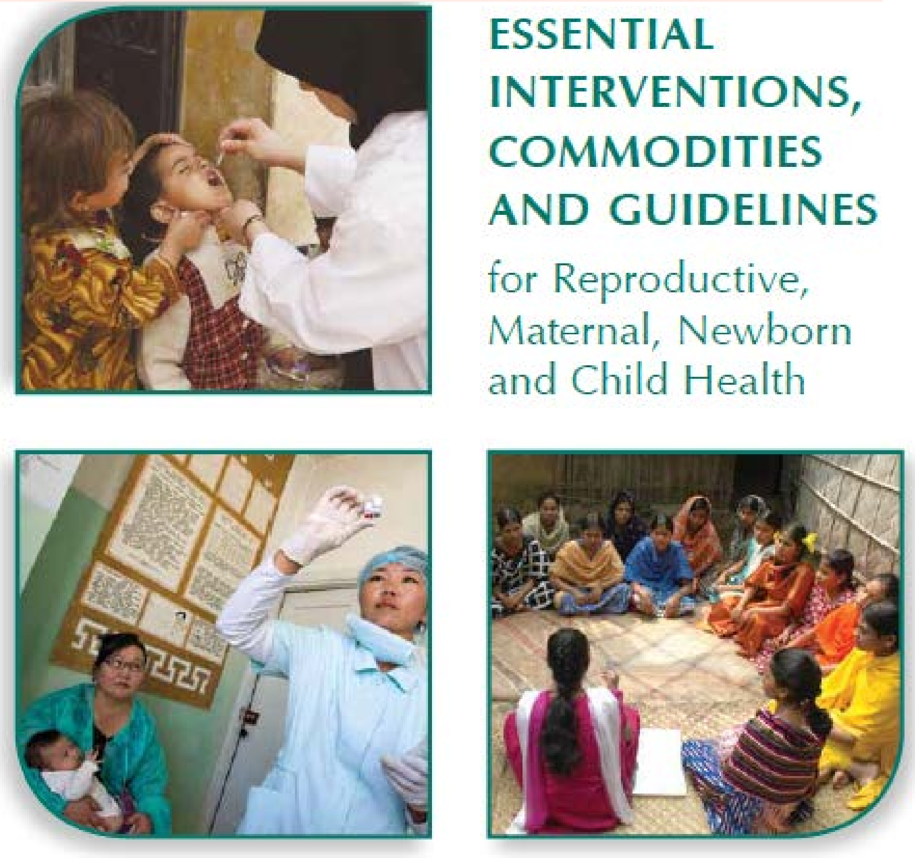
- Quality improvement at community, health facility and district managers level
- Quality improvement teams (QIT) were working on defined problems to strengthen demand & supply of maternal and newborn health care



The starting point

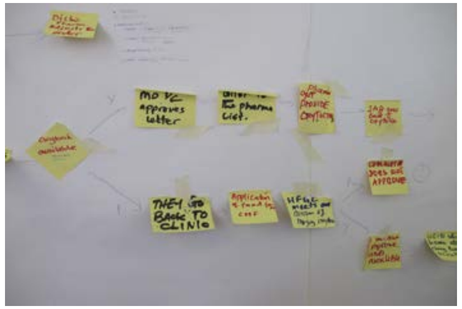
- To support the implementation of essential intervention

Improvement topics in health facilities	Tanzania	Uganda
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	√	
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	√	√



WHO, et al. (2011). Essential Interventions, commodities and guidelines. A global review of key interventions related to reproductive, maternal, newborn and child health (RMNCH). Geneva.

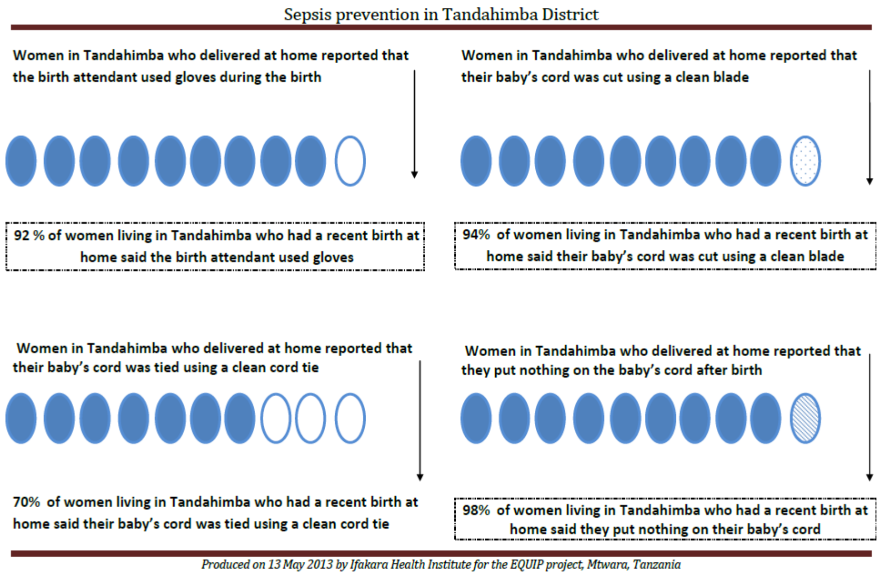
- Selection of topics was informed by international and national guidelines and reports
- We took a systemic approach by involving different levels of care including health managers



Improvement topics worked on within EQUIPI

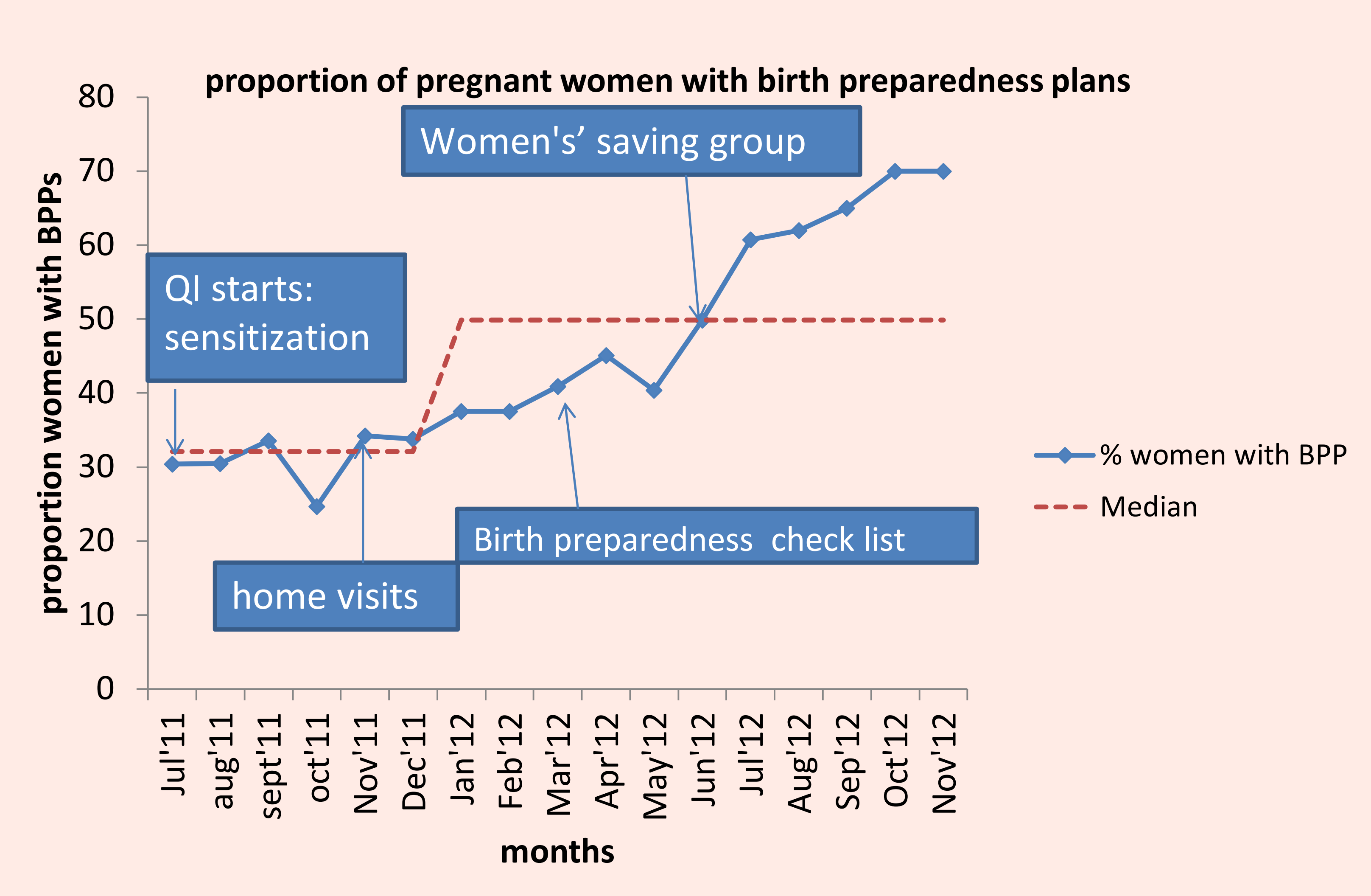
Data driven / data feedback: Report cards

Topic were often introduced using report cards



Facility and community volunteers discussing report cards

What did we learn: Data makes the difference



What did learn: Results

	Tanzania	Uganda
	Difference in difference % between implementation and comparison district (95% CI)	
Facility delivery	7 (-7 to 21)	-3 (-15 to 9)
Uterotonic <1min birth	26 (25 to 28)	8 (6 to 9)
Immediate breastfeeding	-7 (-21 to 7)	-6 (-17 to-5)
Knowledge of danger signs	4 (-11 to 18)	-2 (-14 to11)
Clean Birth kits	31 (2 to 60)	10 (-6 to 23)
Post-partum care <7 days	17 (-8 to 40)	-3 (-8 to 2)
Wrapping pf babies after birth	7 (-21 to 36)	Not prioritized
Supervision to health facilities (past 6 months)	14 (0 to 28)	Not prioritized

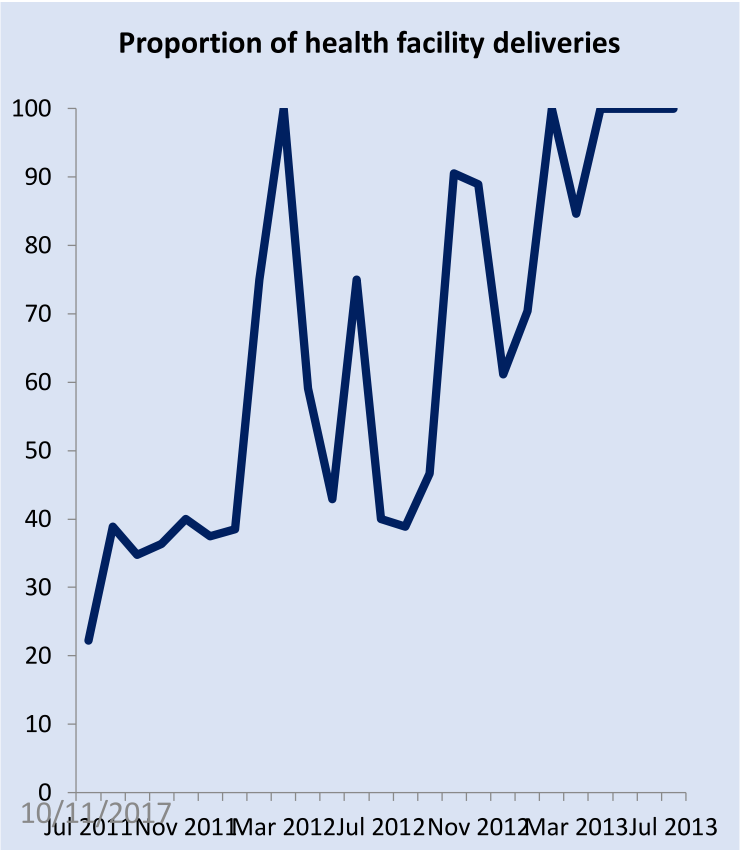
What did we learn: Data makes the difference

- Locally **data are available** but quality issues
- Data availability in itself is not a means to an end. **Data use need training and facilitation**
- Team work is critical for data to be used productively
- Participation of district managers important for the system to be sustained
- Use of data can be a basis for health system improvement for maternal and newborn health (QI, advocacy, engagement)
- Need to focus on a few relevant and simple indicators

I like [collecting data] because it guides me to do what I am supposed to do. However, it is not easy to calculate the percentages and plot the graphs, even if we can read and write." (In-depth interview, Ugandan community-level QI volunteer)

What did we learn: community and facility complement each other

- Increase in demand created by the community component must be positively countered by an improvement in the quality of services provided at community level



"They have helped because now all pregnant women attend the health facility. They also tell traditional midwives not to help pregnant women to deliver at home, but to take them to the hospital for delivery." (In-depth interview, Tanzanian health facility staff, female)

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

What did we learn: mentoring and coaching drive QI but needs continuous availability of resources

- Regular focused mentorship has the potential to improve skills and practice
- For effective mentorship, there should be adequate resources in terms of funds, time, human resource
- Major challenge was competing activities (from the mentees), heavy work load at the health facilities
- For sustainability, districts need to be empowered (and need the funds) to take charge and include mentorship in their work plans

What did we learn: The PDSA cycle is not so easy to understand

- Health workers and community volunteers found it challenging to understand the PDSA cycle

"At first it was very difficult to understand and use the cycles because we are slow learners, but due to monthly mentoring sessions, we continued using the cycles and finally grasped it." (In-depth interview, Ugandan community-level QI volunteer)

Health worker makes PDSA during a learning session

What did we learn: the costs

	Tanzania		Uganda	
	Total	Per capita	Total	Per capita
Community QI	40,399	0.18	235,275	0.57
Facility QI	50,348	0.33	54,559	0.13
District QI	5,604	0.03	17,306	0.04

- The main costs drivers were the mentoring and coaching activities to facilities and communities

What did we learn

- This suggests that a systemic approach to QI, concurrently addressing bottlenecks in uptake of care, availability of drugs and health worker practice might yield better results.
- QI at the district level and supports the need to combine district improvement work with national health system strengthening.
- Reasons for the lack of effects included limited implementation strength as well a relatively short follow-up period in combination with a 1 year recall period for population-based estimates and a limited power of the study to detect changes smaller than 10 percentage point.

What did we learn: Strong district management and resource availability critical for QI

- A systemic approach to QI – i.e concurrently addressing bottlenecks in uptake of care, availability of drugs and health worker practice might yield better results.
- Reasons for the lack of effects at population level included limited implementation strength (short period) in combination with a 1 year recall period for population-based estimates and a limited power of the study to detect changes smaller than 10 percentage point.

Conclusion

- **EQUIP was able to overcome selected low implementation levels for essential maternal and newborn health interventions**
- QI is a complex intervention with a potential to strengthen quality of care, but it takes time
- QI is feasible to implement at community and primary facility levels if a strong management and support system – but costs
- EQUIP demonstrated potential for concurrent improvement in both demand and supply side indicators
- Effects were most pronounced in Tanzania probably because district-own funds were available to support improvement work
- Health workers and communities appreciated EQUIP

  "They don't abandon us, these people"

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- EQUIP study group:

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