

# Maternal and Newborn Health Quality of Care Facility Assessment: An mHealth Mobile Toolkit

# Background

USAID's flagship Maternal and Child Health Integrated Program (MCHIP) is working to contribute to the reduction of frequent, preventable maternal and newborn deaths through increased quality of known life-saving interventions in USAID priority countries facing the highest disease burden.

## **Sampling Frame of Facilities by Country**

- Ethiopia: All facilities with at least five deliveries per day (19)
- Rwanda: All national referral and district hospitals and one health center/ maternity from each district (73)



MCHIP has developed a Maternal and Newborn Health Quality of Care (MNH QoC) Toolkit—consisting of five mobile, electronic data-entry tools for assessing the quality of services provided in hospitals and health facilities. These are primarily checklist tools for observing health worker performance related to services provided for labor and delivery and essential newborn care. The tools are designed to capture health worker responses to spontaneous complications, such as pre-eclampsia/ eclampsia (PE/E) or postpartum hemorrhage (PPH), two of the leading causes of maternal death.

As of November 2010, MCHIP MNH QoC assessments have been conducted in five African countries, providing baseline data for quality improvement activities for maternal and newborn care at facility, regional and national levels.

TZ L&D 🕂 Ϋ 🗏 🗶 21:26 🗙	🏂 Inv TA 🛛 🕌 🏹 🍕 21:25 🗙	🚰 TZ ANC Obs 🛛 🛟 🏹 🍕 🛣 🛣
USAID //CHIF	INOM THE AMERICAN MORE	USAID
TANZANIA & ZANZIBAR	MADAGASCAR	Section 2: ANC Observation Questions
Questionnaire 5: Observation of Routine & Complicated Deliveries	<u>Outil 2.3</u> <u>T &amp; A Inventaire</u>	Record the time that ANC 06:25 pm
Select Facility	■ Nom de l'établissement (Choisir établissement)	started
Facility Type	Numéro Facility	A104: DID THE HEALTH WORKER ASK ABOUT OR THE CLIENT MENTION ANY OF THE FOLLOWING FACTS?
Latitude	Inventaire Type (Tapez l'ecran)	01 Clients Age
(Tap to Update GPS Coordinates)	L&D Numéro Observateur 1	02 Medications the client is taking
(Tap to Undate GPS Coordinates)	TROUVER le directeur ou le chargé	03 Date client's last menstrual period began

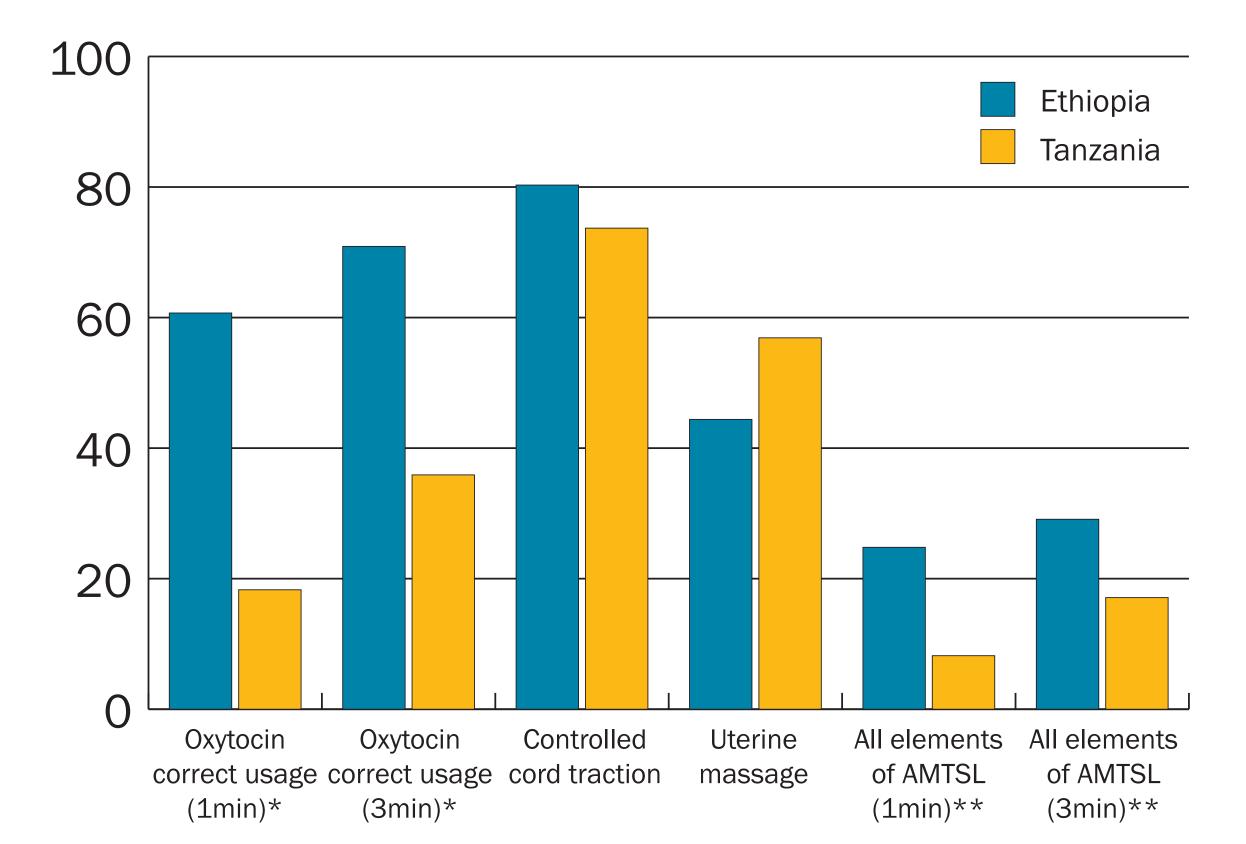
- Tanzania: 11 regional hospitals and 42 health centers/dispensaries in these regions
- Kenya: 400+ facilities with delivery services
- Madagascar: 36 facilities with 2+ deliveries per day



### Results

- Specific needs for effective interventions for screening, prevention and treatment of obstetric and newborn complications are being identified as results come in from the MNH QoC assessments.
- Mobile phones have improved the quality of data and expedited the timeliness of results reporting. The two bar charts on this poster present some of the early findings from Ethiopia and Tanzania on Essential Newborn Care and AMTSL (Active Management of the Third Stage of Labor).

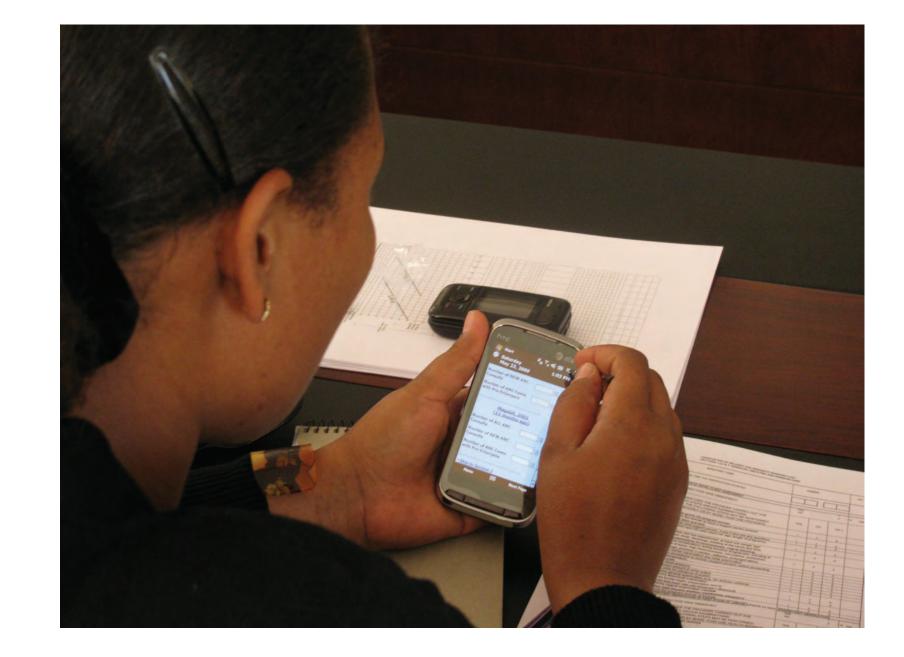
# Proportion of Women Receiving Active Management of the Third Stage of Labor (Ethiopia n=117, Tanzania n=415)





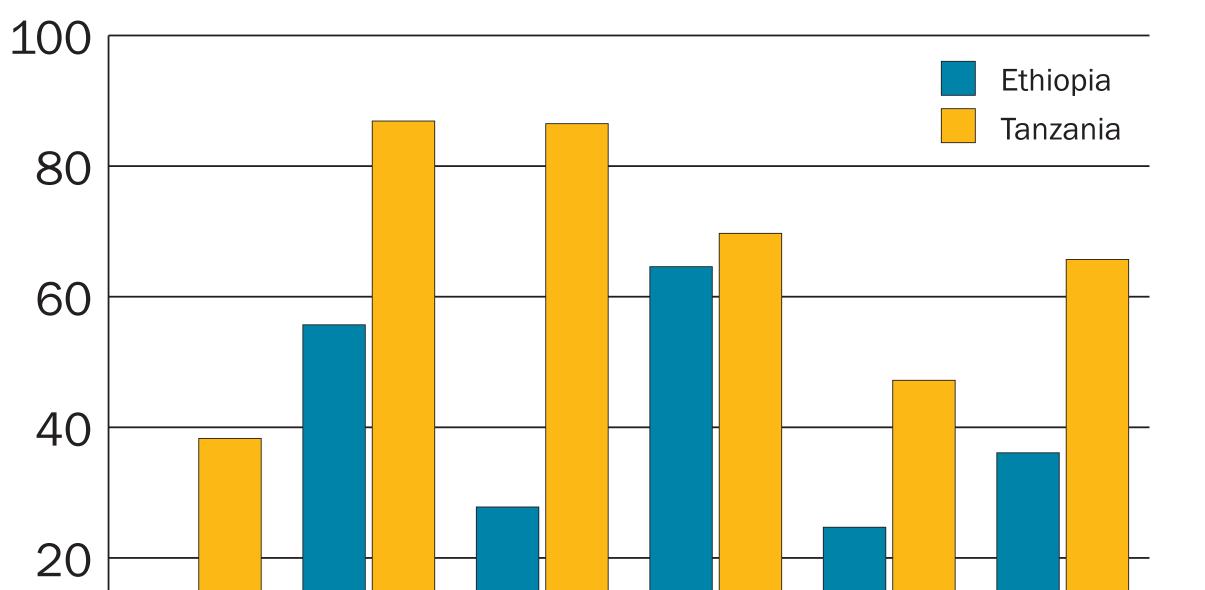
### **MNH QoC Mobile Toolkit**

- Obstetricians and nurse-midwives trained to use mobile phones for capturing observational health worker performance data at hospitals and health facilities
- Data entered on Windows Smart Phone forms with Range, Logic, Skip and other data quality controls
- Clinical observation checklists on labor and delivery services, antenatal care, facility inventories, health worker maternal and neonatal knowledge tests, register, maternity chart and partograph reviews
- Quantitative and qualitative data captured via interviews, simulations and observation checklists including audio notes and pictures of partograph
- Data backed up to internal SD card and then transmitted via GPRS to incountry servers
- Results uploaded to the Web in predefined table, graph and map templates



Improving the quality of facility-based care to prevent and treat frequent maternal and newborn complications is important to reducing maternal and newborn deaths globally and for assisting countries in meeting their targets for MDGs 4 and 5.

# Proportion of Newborns Receiving Essential Newborn Care (Ethiopia n=158, Tanzania n= 436)



\* Oxytocin correct usage = 10 IU IM, administered within 1 minute or 3 minutes of birth \*\* All elements of AMTSL = oxytocin correct usage plus controlled cord traction plus uterine massage



# O Places Immediately Covers with Cuts cord, Help initiate Mean percent

skin-to-skin dries dry towel ties/clamps\* breastfeeding score

\* In Ethiopia: cuts and ties/clamps cord, protecting newborn from blade; in Tanzania: cuts cord with clean blade

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