MAKERERE UNIVERSITY

PTBi-EA Uganda Research Brief No. 4

East Africa Preterm Birth Initiative

UCSF

University of California San Francisco

EAST AFRICA PRETERM BIRTH INITIATIVE STUDY

Sustainability approach in Uganda

Facility level mentors pose with their certificates after a Training of Trainers

Background

Sustainability presents a significant challenge in any quality improvement initiative. When the funding and the infrastructure of an outside agency leaves, few programs continue. The East Africa Preterm Birth Initiative (PTBi EA) is testing the sustainability of its intrapartum and postpartum intervention package to reduce preterm neonatal mortality. The package includes four elements:

1) PRONTO simulation-based training and mentorship
2) A maternity and newborn unit quality improvement collaborative,
3) Strengthening the quality of routine data sources, and
4) Use of a preterm birth-modified version of the WHO Safe Childbirth Checklist (mSCC).

The intervention facilities received all four elements of the package while their pair-matched controls received only data strengthening and use of mSCC. After reaching sample size, the full package is being administered to the control facilities while in the intervention facilities a modified version of the package (the sustainability package) is being tested.

SUSTAINABILITY PACKAGE

A. PRONTO Simulation based training and mentorship

PTBi EA is committed in transitioning the research activities of the project into sustainable programming integrated into maternal and perinatal deaths reviews (MPDR) and continuing medical education (CME) training at each facility. To enable this transition, PTBi EA has:

- Built local capacity
- 5/10 Master trainers are resident in the intervention facilities
- Trained more 15 (2-3 per facility) facility-based trainers to support the ongoing on-job mentorship and facilitate simulations as part of maternity and antenatal ward CMEs
- Provided each facility with a full curriculum of 10 Simulations, 24 Knowledge Reviews, and 10 Teamwork Activities with detailed facilitation and debriefing instructions.
- Provided each facility with a full Simulation Training Kit inclusive of a NeoNatalie, PartoPants, simulated blood, preterm- and term-sized baby dolls, and all the materials needed to run the Simulation scenarios.
- Trained facility-based trainers on evaluating the quality of a Simulation from a quantitative perspective (how many evidence-based practices were performed).

PTBi EA will continue to provide quarterly oversight and replenish supplies until May 2019.

The facility leadership will support by:

- Replenishing supplies for simulation.
- Allow time in the schedules of midwives/nurses/ medical officers for simulation and knowledge review training and integration in Continuous Medical Education (CME) and MPDR sessions
- Provide a training space at the facility.
- Review the data on a quarterly or biannual basis to assess progress and identify content to focus on.

National level trainers/mentors hand over Pronto training kits to resident mentors

B. Quality Improvement Collaborative Component

PTBi QI component involves Quality Improvement Teams (QIT) monitoring process indicators (aimed at impacting on preterm birth outcomes) including gestational age estimation and documentation, antenatal corticosteroid use, use of a partograph to monitor labor, KMC uptake, and active monitoring of preterm and sick newborn babies. The teams meet periodically every after 4-5 months in a Learning session to share progress and facilitate cross learning.

The sustainability plan involves:

- Sustaining the already formed QI teams.
- Encouraging continuation of bimonthly meetings.
- Monthly reviews of data by whole maternity staff.
- Resident mentors to do support supervision with support from facility leadership.

PTBi will continue to provide quarterly oversight and support Quarterly Learning Sessions until May 2019.

The facility leadership will:

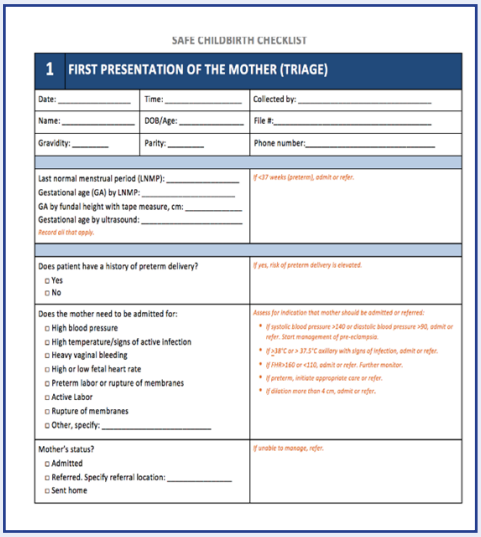
- Support at least 2 Learning Sessions per year for facilities to come together and share data and change ideas (with support from Implementing partners in the region)
- Allow and participate in continued meetings of the QI teams
- Encourage monthly review of data with entire maternity staff
- Replenish office supplies as needed

A QI Team meeting at one of the participating facilities (above) and a market place in progress during a Learning Session (below).

C. Use of modified Safe Child Birth Checklist (mSCC)

The mSCC is an adaptation of the WHO Safe Childbirth Checklist used as a reminder of evidence-based practices and as a decision-aid.

PTBi sustainability Plan	Support from Leadership
Condense to most relevant/ used parts of the checklist	Continue to encourage the use in clinical decision making
Turn certain sections into wall charts	Provide patient files with checklist
Continue to include as part of the patient file	Review usage and utility data on a regular basis



SAFE CHILDBIRTH CHECKLIST

1 FIRST PRESENTATION OF THE MOTHER (TRIAGE)

Date: _____	Time: _____	Collected by: _____
Name: _____	DOB/Age: _____	File #: _____
Gravidity: _____	Parity: _____	Phone number: _____

Last normal menstrual period (LNMP): _____ Gestational age (GA) by LNMP: _____ GA by fundal height with tape measure, cm: _____ Gestational age by ultrasound: _____ *Record all that apply.*	*If <37 weeks (preterm), admit or refer.*
Does patient have a history of preterm delivery? □ Yes □ No	*If yes, risk of preterm delivery is elevated.*
Does the mother need to be admitted for: □ High blood pressure □ High temperature/signs of active infection □ Heavy vaginal bleeding □ High or low fetal heart rate □ Preterm labor or rupture of membranes □ Active Labor □ Rupture of membranes □ Other, specify: _____	*Assess for indication that mother should be admitted or referred:* • *If systolic blood pressure >140 or diastolic blood pressure >90, admit or refer. Start management of pre-eclampsia.* • *If ≥38°C or > 37.5°C axillary with signs of infection, admit or refer.* • *If FHR>160 or <110, admit or refer. Further monitor.* • *If preterm, initiate appropriate care or refer.* • *If dilation more than 4 cm, admit or refer.*
Mother's status? □ Admitted □ Referred. Specify referral location: _____ □ Sent home	*If unable to manage, refer.*

Key factors that have enabled successful PTBi implementation and transition to sustainability

- The participatory approach: Stakeholder engagement at various levels within the facilities, district and national level has been instrumental from the design phase, to the implementation, and the transition phase.
- The simplicity and flexibility within the intervention package enabled integration within the routines of the health providers.
- The relevance in addressing the health systems bottlenecks and improving process and outcome indicators has been visible to the implementers, facility leadership and other stakeholders.

Participating Health Facilities

- Jinja Regional Referral Hospital
- Iganga Hospital
- St. Francis Buluba Hospital
- Kamuli General Hospital
- Kamuli Mission Hospital
- Bugiri General Hospital

About PTBi-EA

The East Africa Preterm Birth Initiative (PTBi-EA) is working to reduce the number of preterm births and save the lives of preterm infants and their mothers, by improving quality of care and engaging in discovery research in regions of Uganda, Kenya and Rwanda. In Uganda the study sites include the Jinja Regional Referral Hospital, Iganga Hospital, Kamuli General Hospital, Bugiri Hospital, St Francis Hospital Buluba and Kamuli Mission Hospital.

PTBi-EA is a collaboration among the University of California San Francisco's Institute for Global Health Sciences; Kenya Medical Research Institute; Makerere University School of Public Health; University of Rwanda and the Rwanda Biomedical Center.

Website: https://pretermbirtheastafrica.ucsf.edu/

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