

## SNL Malawi Panel Presentation at the KMC Conference

### **Title: What does it take to scale up KMC: Lessons from Malawi**

With the highest rate of preterm birth in the world, the Government of Malawi has prioritized the implementation of Kangaroo Mother Care (KMC) as part of its effort to increase access to quality health services for mothers and children. Complications from preterm birth is the leading cause of under-5 mortality and morbidity globally and KMC is one intervention proven to prevent related deaths and disability. Despite Malawi's success as an early adopter of KMC, uptake has been slow. This panel will showcase the Ministry of Health's efforts supported by Save the Children to scale up KMC including;

- A study to understand health outcomes among babies discharged from Kangaroo Mother Care (KMC) to inform practices;
- A study exploring uptake of KMC using a customized wrap; and
- Efforts to strengthen routine monitoring of KMC.
- A district led quality improvement initiative aimed at strengthening quality of newborn care services and establishing functional newborn care units;
- A social and behavior change communication campaign to address social norms and behaviours around the value of newborn lives, especially small babies

### **Panel speakers:**

<b>Speaker</b>	<b>Topic</b>	<b>Time</b>
MOH rep	Overview of KMC in Malawi	10 min
Gedesi Banda	Overview of SNL efforts Community and follow up efforts: KMC follow up study; SBCC campaign	10 min
Kondwani Chavula	Strengthen routine monitoring of KMC	10 min
Queen Dube	Quality improvement efforts for improving KMC: case study and KMC wrapper study	10 min
	KMC wrapper study: Show video	5 min
Q&A		15 min

## **TITLE: EARLY OUTCOMES AMONG NEWBORNS DISCHARGED FROM KMC IN MALAWI**

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### **Background**

Malawi has prioritized Kangaroo Mother Care (KMC) to improve outcomes for small babies. However, little is known about early mortality outcomes and adherence to recommended KMC practices and follow-up care after discharge from facility KMC. In partnership with the Ministry of Health and the Malawi College of Medicine, Save the Children conducted a study at two facilities in 2016 to describe early mortality outcomes, adherence to KMC practices and levels of follow-up care among young infants discharged from facility-based KMC, and factors contributing to them.

### **Methods**

This was a hospital-based prospective cohort study to follow-up babies up to 60 days post-discharge from facility-based KMC in two tertiary hospitals. Between May 2016 and March 2017, we collected data on eligible babies through record reviews and semi-structured interviews with mothers at 30 days and 60 days post-discharge. We used t-tests and chi-square tests in Stata v.12 to assess the differences between facilities. The study received appropriate ethical approvals.

### **Results**

The study included 300 mother-baby dyads (150 per study site). The mortality rate for small babies discharged alive was 2.5% at 60 days post-discharge. Preterm babies remained vulnerable after discharge with most deaths occurring more than 10 days after hospital discharge. Nearly all mothers adhered to KMC practices in the community following discharge. Follow-up visits were high (89%) but varied by site. Distance from the facility was the main reason cited by mothers for not completing follow-up. At facility discharge, 95% of mothers were exclusively breastfeeding and using a cup and spoon to assist with feeding. At 60-day follow up visit, 91% of mothers were exclusively breastfeeding.

### **Conclusions**

We see positive early survival outcomes among small babies discharged from KMC and evidence that mothers adhere to recommended KMC practices following discharge.

**Keywords:** kangaroo mother care, mortality, follow-up

# **TITLE: IMPROVING AVAILABILITY, QUALITY AND USE OF ROUTINE DATA FOR NEWBORNS: MALAWI'S EXPERIENCE WITH KANGAROO MOTHER CARE**

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## **Background**

Malawi has scaled up Kangaroo Mother Care (KMC) to all districts. However, the absence of a national system of standardized indicators, registers and reporting forms resulted in limited, poor quality, routine data for monitoring the uptake and coverage of KMC. Starting in 2014, Save the Children supported the Malawi Ministry of Health (MOH) to strengthen data availability, quality and use to improve KMC services.

## **Methods**

To improve availability, we developed a simplified, user-friendly KMC register and reporting form and retrospectively entered data for 2015 and 2016 to fill data gaps. To improve quality, we conducted data quality assurance (DQAs) of maternal and newborn data; provided supportive supervision to underperforming districts; and engaged in regular meetings with MOH to improve data entry and management. To improve use, we provided district-level trainings on DHIS2 data analysis and use; and convened technical meetings with partners to discuss data issues and development of a dashboard.

## **Results**

In October 2015, MOH customized the reporting form into the Malawi District Information Software 2 (DHIS2) for routine reporting. Data show improved reporting with 87% of hospitals annually submitting KMC reports in 2016 compared to 51% in 2014. Data reported on initiation of low-birth weight (LBW) babies on KMC increased from 2014 (14%) and 2016 (21%), of expected cases. In 2016, DHIS2 reported 15,316 initiated KMC cases (8,231 facility-based and 7,085 ambulatory), which is less than expected. We observed data quality issues and inconsistencies between registers and monthly reports. Despite efforts to strengthen data use capacity, constraints remained tied to different data sources and insufficient human resources.

## **Conclusion**

Developing user-friendly data tools with prioritized indicators help to improve data capture and reporting. Additional investments of time for monitoring and analysis, along with building and retaining human resource capacity to do both, are needed to produce useable, quality data to inform decision-making.

**Keywords:** Kangaroo Mother care, preterm, low birth weight, routine data

## **TITLE: IMPROVING QUALITY OF NEWBORN CARE WITH A STRUCTURED MENTORSHIP APPROACH AT A DISTRICT HOSPITAL IN MALAWI**

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### **Background**

The Government of Malawi prioritized the establishment and improvement of sick newborn care units in all district facilities due to the country's high burden of preterm births. With support from Save the Children, Ministry of Health implemented a district-led quality improvement and mentorship approach in Thyolo district with the aim to improve hospital-based quality of care provided for newborns.

### **Methods**

From February 2014 to July 2017, we undertook steps to determine if a structured mentorship program can improve both processes of care and health outcomes for newborns. The steps included: 1) planning and stakeholder buy-in, 2) initiation activities (i.e. designated staff), 3) iterative activities (i.e. onsite/offsite clinical attachments), and 4) monitoring (i.e. monthly quality of care audits by district staff), evaluation and scale up. We applied a cascading mentorship model, implemented minor facility refurbishments (i.e. demarcation of Kangaroo Mother Care unit).

### **Results**

Two clinicians and four nurses from Thyolo district hospital engaged in a two-week clinical attachment and on-site mentorship. Minor refurbishment efforts increased equipment and supplies for advanced newborn care and expanded the number of beds in the newborn care unit from three to 40. A focus on improving documentation for admissions, interventions and outcomes enabled staff to better track and treat newborn conditions. Monthly audits resulted in better capture, analysis and use of data. Stakeholder buy-in and partnerships between implementing partners strengthened the intervention. The hospital reported a reduction in neonatal death rate from 15.5% in 2015 to 9.5% in 2016. The improvements to quality of care also led to changes in provider attitudes around care for neonates.

### **Conclusion**

This structured mentorship program, along with other quality improvement efforts, enabled the transfer of knowledge and skills, resulting in improvements of inputs, processes and health outcomes for newborns.

**Keywords:** *quality improvement, clinical mentoring, newborn care units and Kangaroo mother care*

## **TITLE: KANGAROO MOTHER CARE IN MALAWI: IMPROVING UPTAKE USING A CUSTOMIZED WRAP**

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### **Background**

One-third of all newborn deaths (37%) in Malawi result from direct complications of prematurity. Despite Malawi's success as an early adopter of Kangaroo Mother Care (KMC), uptake has been slow. Women have expressed challenges in using the traditional wrapper – *chitenje* – to practice KMC. In 2016, Save the Children in partnership with the Ministry of Health conducted a study to evaluate the acceptability and effectiveness of a customized KMC wrap in improving adherence to KMC practices among mothers within three selected hospitals.

### **Methods**

Mother-baby dyads (301) were randomized to receive either a customized CarePlus wrap developed by Laerdal Global Health or a traditional *chitenje*. Using mixed methods, enrolled mother-baby dyads were assessed in the facility KMC ward at 2-3 days after admission, then at 7-10 days post-discharge. Topics covered included skin-to-skin practices, breastfeeding, perceptions of the wrap, and family/community support. T-tests were used to assess statistical significance between wrap type and study facilities. The College of Medicine Research and Ethics Committee and the Save the Children US Ethics Research Committee approved the study.

### **Findings**

This study found that a customized KMC wrap is highly acceptable to women and preferred over the *chitenje* (90%). The customized wrap improved skin-to-skin practices in facility KMC: 44% of mothers using a customized wrap reported 20 or more hours per day compared to 33% of mothers using the traditional *chitenje*. Regardless of the wrap used, women reported satisfaction with their baby's progress on KMC (94%) and would recommend KMC to others (99%). The customized wrap did not reduce other essential newborn practices, such as breastfeeding.

### **Conclusions**

This study provides evidence that a customized KMC wrap is highly acceptable to mothers and can contribute to better skin-to-skin practices.

**Keywords:** preterm and low birth weight baby, wrap, skin to skin practice, kangaroo mother care

# KHANDA NDI MPHATSO: APPLYING SOCIAL AND BEHAVIOUR CHANGE COMMUNICATION TO NEWBORN HEALTH IN MALAWI

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## Background

Preterm babies in Malawi are not receiving adequate care, and social norms that undervalue small newborns are an important barrier to improved outcomes. In 2015-2016 the Ministry of Health and Save the Children piloted a campaign, *Khanda ndi Mphatso, Lipatseni Mwayi* (A Baby is a Gift, Give it a Chance) in two districts. The campaign targeted pregnant women and mothers of preterm babies as well as their male partners and their influencers.

## Methods

The image phase used a “branded” campaign to shift individual attitudes and community norms to increase the value of newborn lives. The tactical phase used community engagement and social mobilisation component to promote specific health behaviours and encourage family and community support. We carried out a mixed-methods evaluation 13 months after implementation began to understand campaign effects. Using a quasi-experimental design, the evaluation compared basic implementation sites, which included campaign materials, mass media, and facility-based approaches, to comprehensive implementation sites, which added community-based activities. Data analysed included 247 quantitative interviews with pregnant women and mothers of preterm babies and 15 focus group discussions. We developed a measure of campaign dosage to explore dose-response, based on reported participation in campaign activities and recall of campaign materials.

## Results

The intervention provided direction on future facility and community level strategies that are effective in addressing behavioural and social norms that negatively affect care and survival of preterm and low-birth-weight babies. The evaluation showed that the campaign contributed to changes in injunctive norms around the care of newborns, increasing value for LBW and preterm babies, and encouraging social support.

## Conclusion

Adaptation of the *Khanda ndi Mphatso* campaign in other districts has the potential to shift social norms around care for newborns in Malawi.

**Keywords:** *preterm babies, behavioural and social norms, community engagement*