

Measuring strength of implementation and effective coverage of Kangaroo Mother Care intervention in Malawi



Kondwani Chavula

Save the Children International Malawi

SNL Legacy Webinar

October 1, 2020

Background

KMC in Malawi and SNL inputs



1999

KMC introduced on pilot basis

2005

KMC integrated into national policy

2011

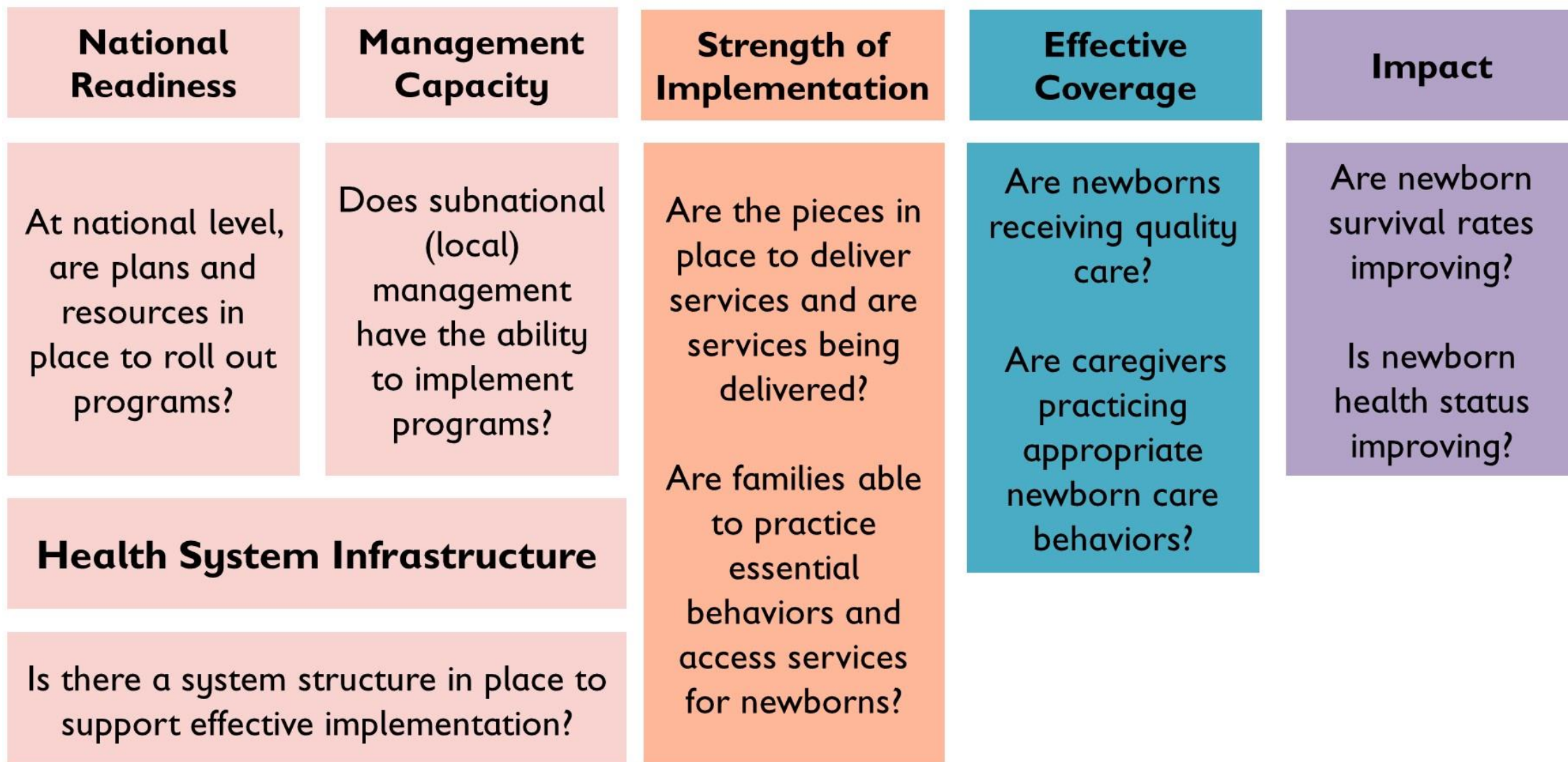
KMC available in all district and Central hospitals (n=32)

- Majority of national 'readiness' elements achieved during SNL2
- Focus of SNL3 is on strengthening implementation of service delivery & achieving high effective coverage
- Priority gaps identified through analysis using Pathway to High Effective Coverage

SNL's key inputs to reach high effective coverage

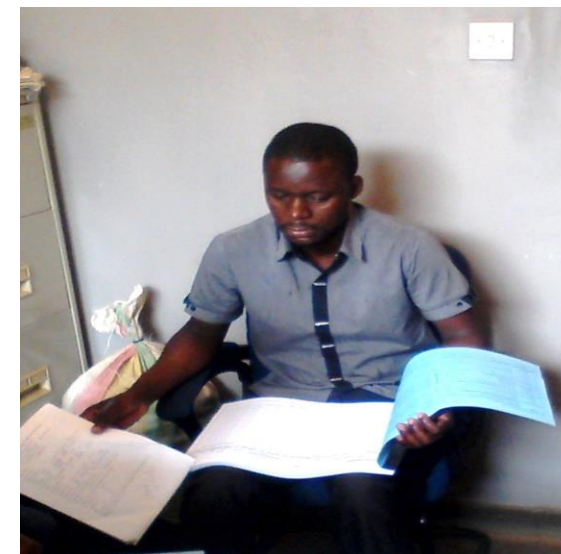
- **Improving quality of KMC**
 - direct support in 5+ districts
 - leveraging partner support in other districts
- **Increasing awareness & demand for KMC**
 - development of campaign to build awareness
 - sharing learning & leveraging support to expand
- **Strengthen data availability, quality & use for KMC**
 - supporting MOH to improve routine data
 - building capacity for data management & use
 - conducting special studies & evaluations

Pathway to High Effective Coverage

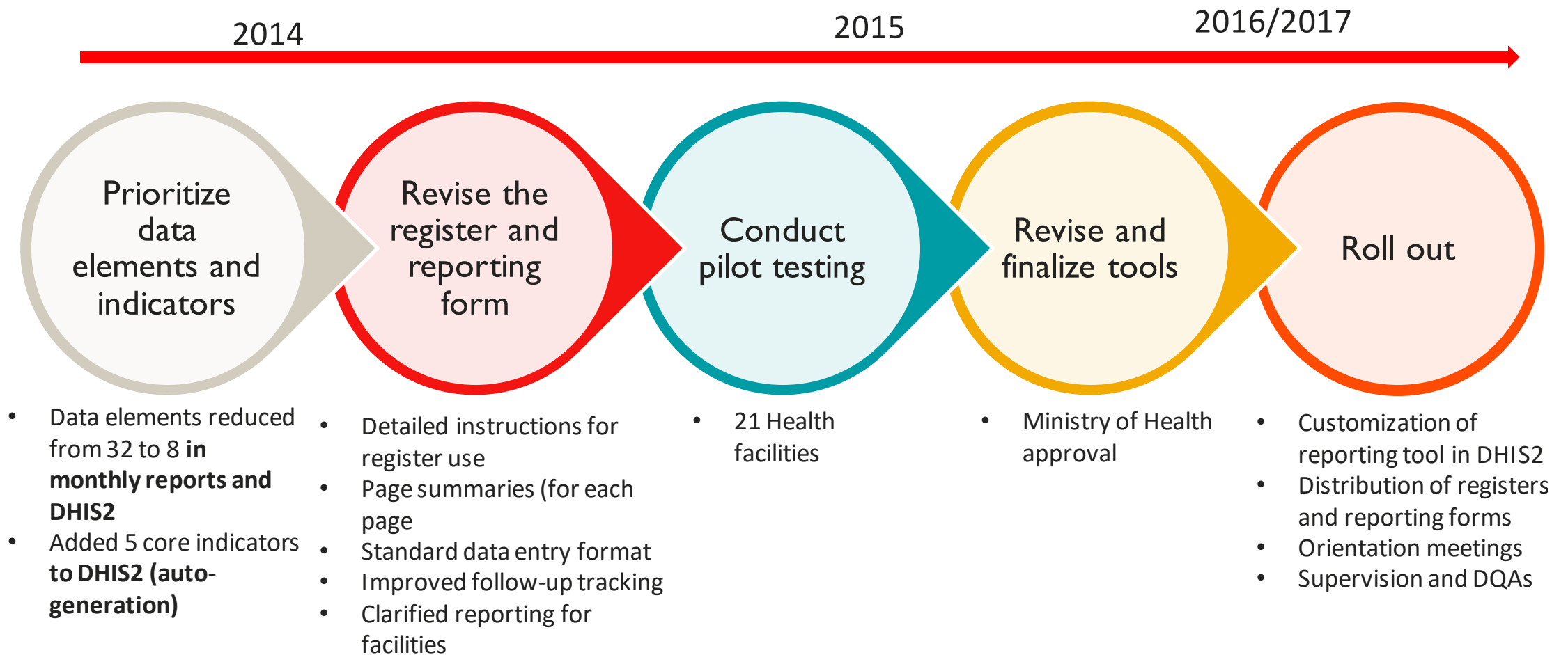


Summary of data sources

Data Sources	Description	Timeline
<i>National data</i>		
HMIS/DHIS2	Availability of KMC, reporting, service initiation, status at discharge	2014 onwards
EmONC	Availability of KMC, Service readiness, KMC initiation	2014 (report in 2015)
<i>Sub-national data</i>		
Program Based Evidence	Quality of care for small and sick newborns in 10 target districts	2015-2017
Special studies (KMC mortality; wrapper)	Post-discharge mortality and follow-up levels; adherence to skin-to-skin practices	2017
SBCC evaluation	Community norms and support for KMC, provider attitudes	2017

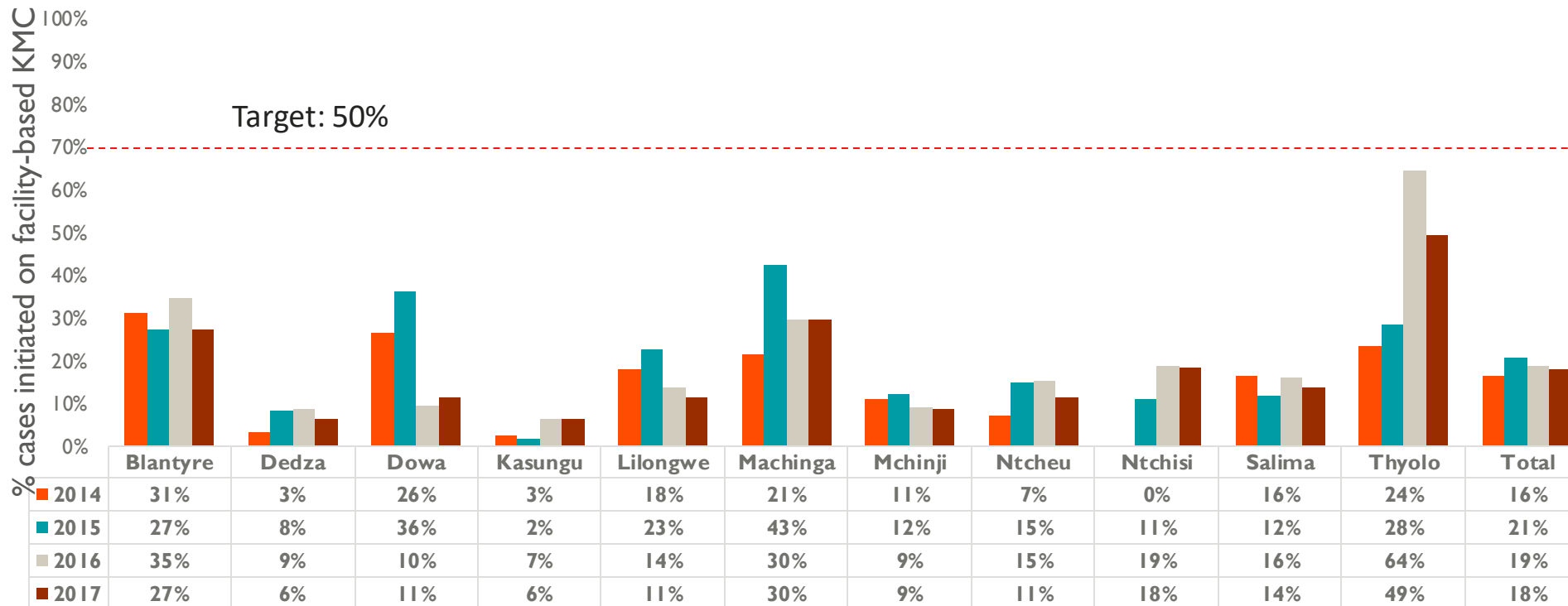


SNL efforts to strengthen data availability, quality and use



Effective Coverage Results: Highlights

Estimated percent of expected cases initiated on any KMC in SNL target districts, 2014-2017



- Signs of progress in number of cases initiating KMC, both nationally & some target districts
- Wide district variation
- Data quality issues

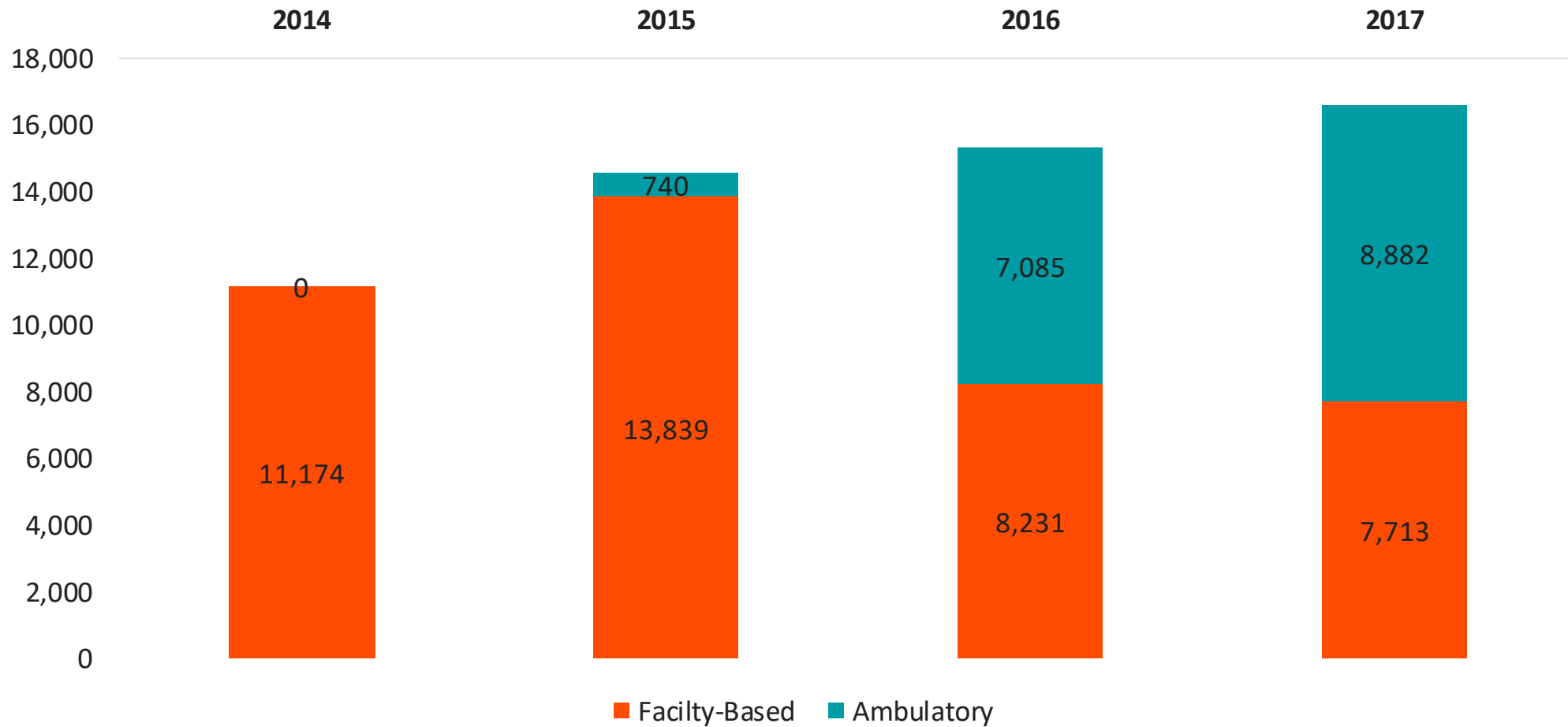
Malawi total:

~16,000 cases initiated on KMC nationally

22% of expected cases in 2017 up from 16% in 2014

Coverage results: Highlights

Improved Categorization of KMC Type by Birth Weight



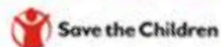
How DHIS2 Data can be Used

District	KMC reporting (hospitals)				LBW identified per 100 HF births (target 10)				KMC initiation per 100 HF births (target 10)				Status at discharge (% died)			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Blantyre	● 33%	● 33%	● 67%	● 100%	● 12.3	● 10.5	● 7.2	● 14.6	● 7.8	● 3.3	● 4.3	● 3.9	10%	1%	2%	1%
Dedza	● 50%	● 100%	● 100%	● 100%	● 6.3	● 6.1	● 5.5	● 40.0	● 0.5	● 1.1	● 1.2	● 1.7	11%	4%	2%	2%
Dowa	● 100%	● 100%	● 100%	● 100%	● 8.3	● 7.9	● 8.6	● 9.0	● 4.9	● 7.2	● 1.9	● 3.0	5%	6%	6%	4%
Kasungu	● 33%	● 100%	● 100%	● 50%	● 6.4	● 6.5	● 7.5	● 6.6	● 0.5	● 0.3	● 1.2	● 1.2	8%	10%	10%	4%
Lilongwe	● 25%	● 75%	● 90%	● 100%	● 7.4	● 8.5	● 8.1	● 18.1	● 3.0	● 3.6	● 2.2	● 2.8	1%	4%	5%	3%
Machinga	● 100%	● 100%	● 100%	● 100%	● 5.6	● 6.2	● 5.3	● 7.4	● 2.1	● 4.3	● 3.1	● 3.6	1%	5%	6%	4%
Mchinji	● 100%	● 100%	● 100%	● 100%	● 7.1	● 5.6	● 6.6	● 7.2	● 1.5	● 1.8	● 1.4	● 1.8	7%	11%	10%	7%
Ntcheu	● 100%	● 100%	● 50%	● 100%	● 6.9	● 8.4	● 7.2	● 7.1	● 0.8	● 1.9	● 2.0	● 2.5	4%	5%	1%	1%
Ntchisi	● 0%	● 100%	● 100%	● 100%	● 5.4	● 6.9	● 7.0	● 8.1	● 0.0	● 1.6	● 2.7	● 3.1	na	15%	8%	4%
Salima	● 100%	● 100%	● 100%	● 100%	● 5.3	● 6.0	● 5.7	● 6.4	● 2.0	● 1.5	● 2.1	● 1.4	4%	3%	7%	1%
Thyolo	● 100%	● 100%	● 100%	● 100%	● 6.0	● 8.5	● 10.0	● 12.4	● 3.6	● 4.4	● 10.2	● 7.5	7%	18%	12%	2%
TOTAL	● 59%	● 82%	● 82%	● 82%	● 7.1	● 7.8	● 7.3	● 14.3	● 2.5	● 3.0	● 2.9	● 2.9	3%	6%	6%	3%

- Improvement in reporting of KMC in most districts
- Gaps remain in data completeness and timeliness
- Some changes in identification of LBW and KMC initiation, but not uniform and still below expected levels

Thresholds: *KMC reporting:* 0-49% red; 50-79% yellow; 80+% green; *LBW identification:* 0-4.9 red; 5.0-7.9 yellow; 8+ green; *KMC initiation:* 0-2.9 red; 3.0-4.9 yellow; 5.0+ green; *Death before discharge:* >10% red

Strength of implementation: Supplementary studies



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

Situation

Malawi has the highest rate of preterm births worldwide, with 18% of live births occurring before 37 completed weeks of pregnancy.¹ One-third of all newborn deaths results from direct complications of prematurity in Malawi.² The Government of Malawi has prioritized Kangaroo Mother Care (KMC) as part of their effort to increase access to quality health services for mothers and children.³

Despite Malawi's success as an early adopter of KMC, uptake has been slow.⁴ Women have identified that using the traditional wrapper – *chitenje* – to keep the baby skin-to-skin is difficult. In an effort to improve KMC, Laerdal Global Health (LGH) developed the CarePlus wrap, an ergonomic baby carrier with the potential to be produced locally at low cost.

In partnership with the Ministry of Health, Save the Children implemented a study to determine whether the customized CarePlus wrap improves KMC practice and whether its uptake is feasible across Malawi.



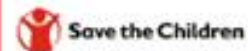
KEY MESSAGES

Background

Kangaroo Mother Care (KMC) is a priority intervention for Malawi, but uptake has been slow. In 2016, implementation research was conducted to assess the acceptability and effectiveness of introducing a customized KMC wrap to improve skin-to-skin practices.

Main findings

- **Women accept KMC:** Women reported high levels of acceptability of KMC regardless of the wrap used.
- **Longer KMC practice results in more weight gain:** Babies held in skin-to-skin for 20 hours or more per day gain more weight regardless of the type of wrap used.
- **Women preferred a customized wrap:** Women using the customized wrap were more satisfied with KMC and practiced skin-to-skin for more hours every day.
- **Care for preterm babies requires quality improvement and mentorship:** Implementation of KMC with a customized wrap needs to be part of a comprehensive package.
- **Follow up care requires more attention:** Only half of mothers returned to the health facility for follow-up within 7-15 days of discharge and critical gaps in counselling on skin-to-skin and feeding practices were noted.
- **Undertake additional research:** Conduct further investigation to better understand the observed gaps in documentation of KMC services and low levels of facility follow-up and home visits by community health workers.



FROM INVISIBILITY TO VALUE: IMPROVING QUALITY OF CARE FOR SMALL AND SICK NEWBORNS

Situation

Malawi has made great strides to address newborn health, reducing mortality by over half since 1990. The Malawi Every Newborn Action Plan (ENAP), launched in 2015, sets out an ambitious agenda to end preventable neonatal deaths and improve the quality of life of the survivors (Box 1).¹ Newborn deaths account for 42 percent of all under-5 child deaths in Malawi and have been reducing at a slower rate than under-5 mortality, thus, improving newborn health and survival is a major concern.² Malawi has the highest rate of preterm birth worldwide, with an estimated 18 percent of live births occurring before 37 completed weeks of pregnancy.³ A myriad of factors contribute to the high levels of preterm births and related deaths from complications including biological, structural, behavioral and cultural.

In order to reduce neonatal mortality and preterm births, the Government of Malawi and its partners are strengthening and investing in improving quality of care for women and children, particularly during the critical time of labour, delivery, first day and week of life.



New mother Mary Mkhulwi learns proper Kangaroo Mother Care techniques aimed to promote continuous skin-to-skin contact with her premature baby.



Box 1: Malawi Every Newborn Action Plan

Goal: Achieve equitable and high-level coverage of quality essential interventions and commodities for maternal and newborn health and ultimately halving the NMR to 15 per 1,000 live births by 2035.

Milestone for 2017: Establishment of sick newborn care units in all the district hospitals

Strategies

- Strengthen and invest in care during labour, delivery, first day and week of life.
- Ensure that every newborn is counted, measurement, programme tracking and accountability.
- Strengthening advocacy, commission and social mobilisation, and other community-based interventions.
- Reach every woman and every newborn to achieve equity and quality universal coverage.


 Save the Children 

BRIEF: EARLY OUTCOMES AMONG NEWBORNS DISCHARGED FROM KMC IN MALAWI

Background

Kangaroo mother care (KMC) is an evidence-based approach recommended by the World Health Organization (WHO) to reduce mortality and morbidity in low-birthweight (LBW) and preterm newborns.¹ The Government of Malawi has prioritized KMC as part of its effort to improve quality care for mothers and children and to reduce neonatal deaths from direct preterm birth complications. Although KMC is implemented widely in Malawi, information is limited on the outcomes of babies discharged from KMC and the extent to which families adhere to recommended KMC practices at home and follow-up care.²

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 current early mortality outcomes and associated factors among young infants discharged from facility-based KMC, adherence to KMC practices and levels of follow-up care. This brief summarizes the results of this study and key recommendations and compares the results to a similar study conducted in 2004.³



KEY MESSAGES

Background
Malawi has prioritized KMC to improve outcomes for small babies, but little is known about early mortality outcomes and adherence to recommended KMC practices and follow-up care after discharge from facility KMC. In 2016, a hospital-based prospective cohort study was conducted to follow up babies discharged alive from facility-based KMC.

Main findings

- **Mortality outcomes have improved:** The mortality rate for small babies discharged alive was 2.5% after 60 days post-discharge. This rate represents an improvement over the 2004 study, possibly in response to facility policy changes around discharge weights and follow-up procedures and improved quality of care.
- **Preterm babies remain vulnerable after discharge:** Most deaths occurred more than 10 days after hospital discharge, highlighting the continued threats small babies face as they mature.
- **Families are more likely to adhere to follow-up care closer to home:** 89% of mothers and babies followed up at health facilities within 30 days. Follow-up rates were higher at the facility where families were able to visit peripheral health centers closer to home rather than the discharge hospital.
- **Breastfeeding small babies is feasible and achievable:** Near universal coverage of breastfeeding at both facility and community with small babies was achieved, though support, such as cup and spoon, was still needed for selected babies.
- **Mothers adhere to KMC practices at home:** Mothers adhered to KMC in the community, with 99% reporting continuing skin-to-skin practice following discharge. The timing and duration were influenced by facility resources (e.g. space), and patterns established in facility continued post-discharge.

 Save the Children 

“KHANDA NDI MPHATSO” (A BABY IS A GIFT) EVALUATION OF A PILOT SBCC CAMPAIGN TO SHIFT SOCIAL NORMS & CARE PRACTICES FOR PRETERM AND LOW BIRTHWEIGHT BABIES

Overview

Across Malawi, small and sick babies have historically been undervalued and many preterm babies have gone untreated and died from preventable conditions. To address this social norm, Save the Children developed and implemented a brief Social and Behavior Change Communication (SBCC) campaign in Thyolo and Machingo Districts in 2013-2016. The campaign, called *Khanda ndi Mphatso* (A Baby is a Gift, Give it a Chance), set out to improve newborn health by shifting norms around the value of newborns and promoting Kangaroo Mother Care (KMC) for preterm and low birth weight babies.

Community Action Groups (CAG) helped to address negative social norms as part of a multi-channel intervention including community shows, SMS messaging, a radio jingle and bill boards. Trained campaign champions were provided with messenger toolkits and detailed flip charts. CAG members, religious leaders and KMC veteran mothers and organized community activities including drama sessions and community discussions to further engage community members in supporting families. The campaign achieved its intended results of improving social norms around care of the newborn, increasing value for low birthweight and preterm babies and increasing some of the promoted behaviours. Community-based activities were critical in generating meaningful debate, discussion, and supportive action among communities and families. Lessons learned in the process of developing, implementing, and evaluating the campaign have been formulated to help taking this approach forward in other districts.



CAG group member showcases the campaign flip chart at a community event in Thyolo District. Photo: Lawrence Kumchenga/Save the Children

Lessons learned	Action taken/ongoing
<ul style="list-style-type: none"> ➤ Partner support & other district-specific factors important for performance 	<ul style="list-style-type: none"> ✓ Working with MOH and partners to coordinate and harmonize efforts for care of small & sick babies (including KMC)
<ul style="list-style-type: none"> ➤ Gaps in knowledge around quality & what happens to babies post-discharge including adherence to KMC practices 	<ul style="list-style-type: none"> ✓ Conducted special studies/analysis to fill knowledge gaps (KMC mortality & follow-up; quality of care studies) ✓ Publication of manuscripts for wider sharing
<ul style="list-style-type: none"> ➤ Major gaps in KMC data completeness and timeliness 	<ul style="list-style-type: none"> ✓ Supporting CMED and districts hospitals to maintain data entry around KMC ✓ Continuous monitoring of DHIS2 data reporting rates
<ul style="list-style-type: none"> ➤ Data quality and use, particularly at lower levels, need investment 	<ul style="list-style-type: none"> ✓ Supported CMED to conduct data quality assessments and build capacity of district & facility level staff in data use ✓ Developed brief on routine monitoring and data use for KMC ✓ Dashboards now on mobile app (MOH) ✓ Supported data analysis training for HMIS Officers

THANK YOU



Save the Children