Scaling up facility initiated KMC in Malawi

Q Dube

SITUATION FOR NEWBORNS IN MALAWI

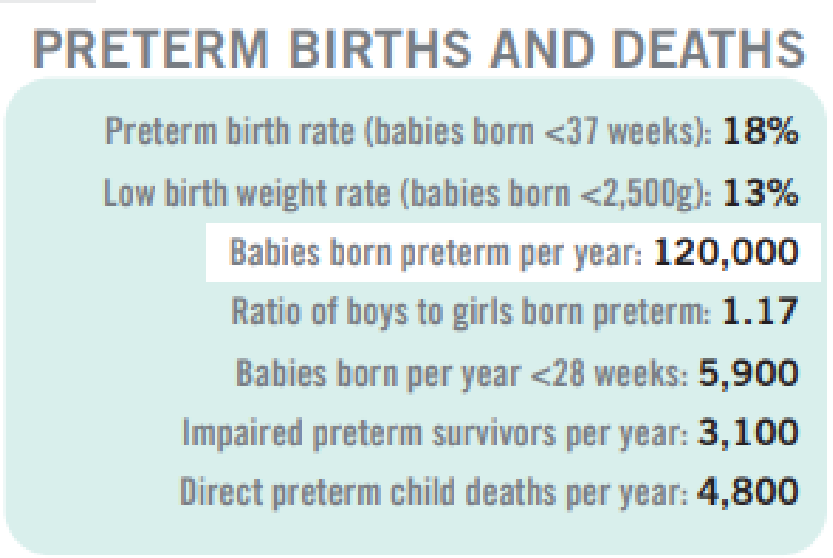
Every day in Malawi, **41 babies** in their first month of life die.

- **23 deaths** per 1,000 live births
- **42% of all under-5 child deaths** taking place in the neonatal period.
- **One-third** of all newborn deaths results from direct complications of prematurity
- **18%** of live births occurring before 37 completed weeks of pregnancy.
- The Malawi Every Newborn Action Plan (ENAP), launched in 2015, sets out an ambitious agenda to end preventable neonatal deaths.
- KMC was introduced in Malawi in 1999 –uptake has been slow.

http://www.childmortality.org/

Country Profile

Total population	17 mil
Number of annual births	665,000
Skilled Birth Attendance	90%
Preterm Birth Rate (<37wks)	18%
Number of babies born preterm/yr (<2500gms)	120,000
Low Birth Weight Rate	12%
Teenage Child Bearing	29%
Neonatal mortality (per 1000 live births)	27
Maternal Mortality (per 100,000 live births)	439



Baby weighed at birth	81%
Skilled Birth Attendance (%)	90%
Early initiation of breastfeeding within 1 hour	80%
PNC within 2 days (Mother)	42%
PNC within 2 days (Newborn)	60%

Source: 2015-16 MDHS

http://www.everypreemie.org/wp-content/uploads/2016/02/Malawi.pdf

HISTORY OF KMC IN MALAWI

- 1999: Introduced at Zomba Central Hospital
- Between 2000-2005
  - Scale up to 6 more hospitals
  - KMC Integrated in Essential Newborn Care (ENC) in Malawi
- 2004: National KMC policy
- 2005: National guidelines for KMC
- 2007: Evaluation of the state of KMC implementation in Malawi
- Between 2008-2011:
  - KMC Integrated in integrated MNH training manual;
  - 56% of facilities practicing KMC (296 of 528); and
  - National expansion of KMC corners and community KMC

- 2012: revision of national KMC guidelines
- 2013: KMC analysis all 3 regions in Malawi
- 2015: ENAP launched and National Newborn Steering committee established
- 2016: KMC indicators in DHIS2; implementation research (wrapper and follow up)
- 2017:
  - Quality of care Network launched
  - Pilot of Family Led Care Model in Balaka
  - KMC included in preservice training
  - Special care nurseries for newborns
  - Rolling out of BCPAP

KMC FACILITIES

GOVT -104 CHAM- 17

Year	# facilities
1999	1
2002	2
2003	1
2004	1
2005	1
2006	1
2007	0
Total	**7**

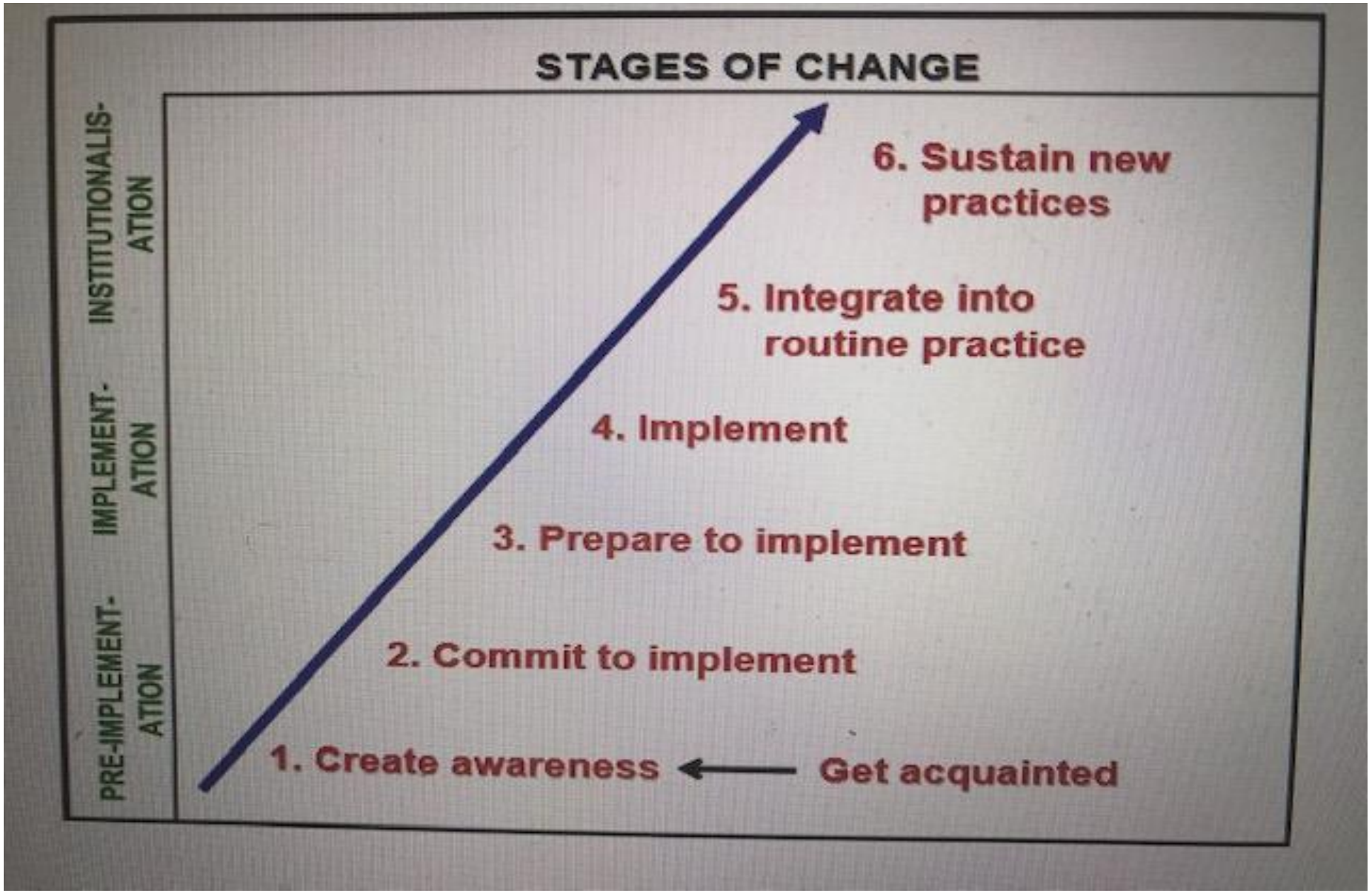
Central teaching hospital

Slow take-up

Country-wide scale-up

Year	# facilities
Pre-2008	7
2008	11
2009	14
2010	54
2011	45
TOTAL	121

KMC evaluation



National Milestones: KMC in Malawi

- Malawi ENAP related milestones:
- 2015-2017: Establishment of sick newborn care units in all the district hospitals

- Malawi ENAP related indicator:
- Eligible Newborn with low birth weight / Prematurity managed With KMC at facility (%)
  - By 2020 at 75%
  - By 2025 at 80%
  - By 2030 at 85%

Improving standards of care for sick newborns in Malawi

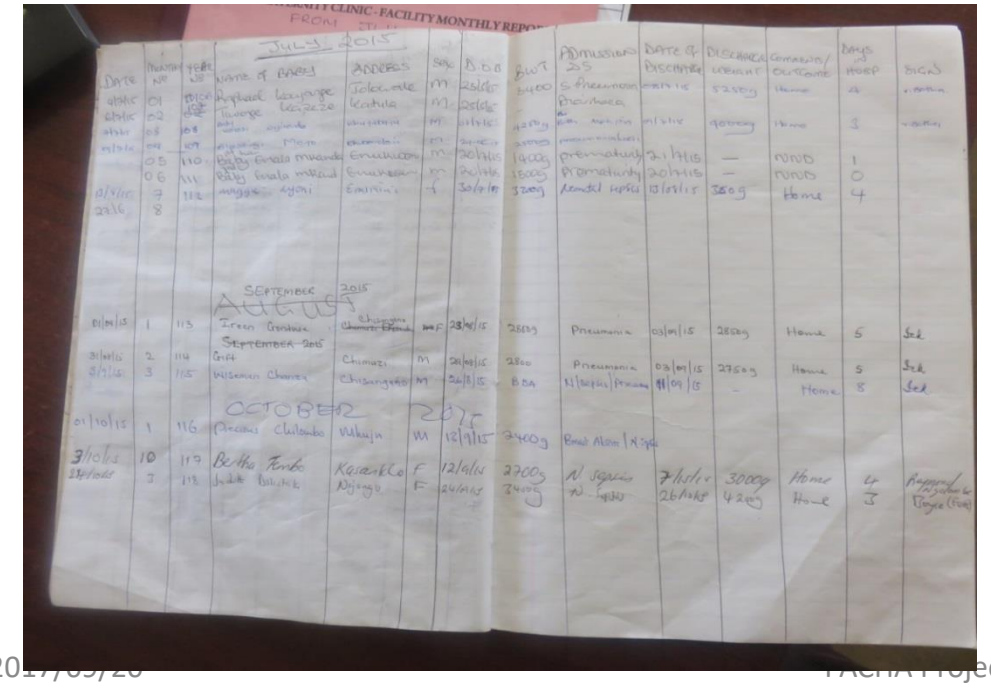
Focus areas:

- Setting up space for care of small and sick newborns in health facilities
- Capacity building for health workers on care of small and sick newborns
  - Development of the 'Care of the Infant and new-born' (COIN) training manual
  - COIN training implemented
- Addressing health information needs to meet the needs of small and sick newborns
  - Improving documentation of newborn data
  - Neonatal Death Audits
- Equipment and supplies for small and sick newborns

Improving documentation of newborn data

At first

- No admission sheets, use of improvised registers



Intervention

- Monitoring tools – developed in collaboration with RHD, other partners
  - Critical Care Pathway forms
  - Death audit, admission forms, registers
    - Harmonised available documents
    - Piloted in facilities prior to rolling out
    - National roll out of newborn register and admission forms in progress

- EVIDENCE GENERATION

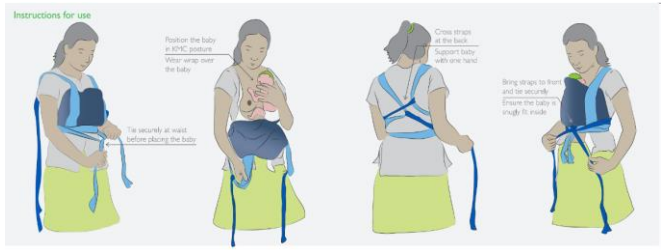
Research studies related to KMC

- Readiness of hospitals to provide Kangaroo Mother Care (KMC) and documentation of KMC service delivery: Analysis of Malawi 2014 Emergency Obstetric and Newborn Care (published Oct,2017)
- EmONC assessment (2014)
- **Early outcomes among newborns discharged from facility based KMC in Malawi (2016/7)**
- **Improving uptake of KMC using a customized wrap (2016/7)**
- Shifting social norms and practices for preterm and low birth weight babies (Improving value for the newborn) –campaign (2016/7)

Early outcomes among newborns discharged from facility based KMC

- In 2016, a hospital-based prospective cohort study was conducted in two hospitals to follow up babies discharged alive from facility-based KMC.
- Preliminary findings:
  - Mortality outcomes have improved: Mortality rate for small babies discharged alive and followed up until 60 days post discharge from facility was at 2.5%.
  - 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.
  - Breastfeeding small babies is feasible and achievable with near universal coverage of breastfeeding Mothers adhere to KMC practice at home: Mothers adhered to KMC in the community, with 99% reporting continuing skin-to-skin practice following discharge.

Improving uptake of KMC using a customized wrap



- In 2016, implementation research was conducted to assess the acceptability and effectiveness of introducing a customized KMC wrap to improve skin-to-skin practices in three hospitals. 301 mothers were enrolled, half used the customized wrap and half used a traditional wrap.
- Preliminary 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.

Challenges

- General challenges around quality of care for newborns especially preterm
  - Poor staff attitude
  - Poor supervision and mentorship
  - Lack of investment
  - Follow up system
  - Monitoring of newborns
  - Comprehensive care of the sick and small/preterm newborn
- Documentation, reporting and data use
  - Poor documentation and data management across all levels
  - Limited support on HMIS functionality at health facilities
- Staff turn-overs due to staff rotations, transfers and promotions
  - Health care providers
  - District management team members
- Limited budgetary support for refurbishment of neonatal units
- Community linkages
  - Linkage between the facilities, the HSAs and other community health workers

Lessons learnt

- Strengthen leadership commitment (RHD and DHMT at national and district levels) and partnerships (Newborn Steering committee at the national level)
- Continue to invest efforts in KMC uptake and quality improvement and mentorship to encourage improved KMC and feeding practices
- Integrate special care with KMC to ensure early initiation of KMC.
- Continue to invest in comfortable and practical newborn unit spaces in facilities to facilitate skin-to-skin practice continuously and in conjunction with special care (oxygen, IV fluids, etc)
- Ensure clear hospital policies are in place regarding discharge weights and follow-up procedures.
- Promote the use of a customized wrapper through district health system planning and produce the customized wrapper locally
- Undertake additional research to better understand the observed gaps in documentation of KMC services
- Identify and invest in community-based approaches to increase support for mothers and their families to practice KMC in the community

20th Anniversary e-Talks 29 Sep–15 Oct

SAVING NEWBORN LIVES (SNL)

THANK YOU