

A Quality Improvement-Driven Approach to Improve Immediate Skin- to-Skin after Birth: Lessons from Rural Rwanda

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Background

- Approximately 1/3 of neonatal deaths occur in the first 24 hours of life¹
- 75% of neonatal deaths at Rwandan facilities have hypothermia upon admission²
- Immediate skin-to-skin after delivery is known to prevent hypothermia and promote healthy newborn development
- Adherence to this practice is inconsistent

¹Rwanda Demographic and Health Survey, 2010.

²Rwanda Facility Neonatal Death Audit, 2012.

Context: All Babies Count (ABC) Initiative

- 18 month district-wide neonatal mortality reduction initiative led by Rwanda Ministry of Health and Partners In Health
- Goal to create and sustain improvement in key maternal-newborn care practices, including immediate KMC after delivery

ABC Intervention Approach

Select Topic:
Neonatal
Mortality
Reduction



- Literature Review
- Logic Model creation
- Formative Assessment



- Develop Framework
- Stakeholder Meetings
- Modifications



- Training & Equipment

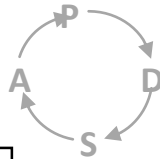
Participants



Prewrite



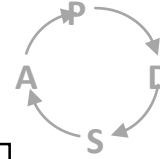
LS 1



AP1



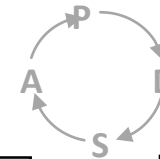
LS 2



AP2



LS 3



AP3



LS 4



- Sustaining Improvement
- Dissemination
- Presentations
- Publications

LS – Learning Session

AP – Action Period

- Supports**
- Monthly Site Visits (ABC MESH Mentors/MCH Supervisor)
 - Phone Calls
 - Assessments

Monthly Team Reports

Adapted from MaiKhanda-Malawi April 2013

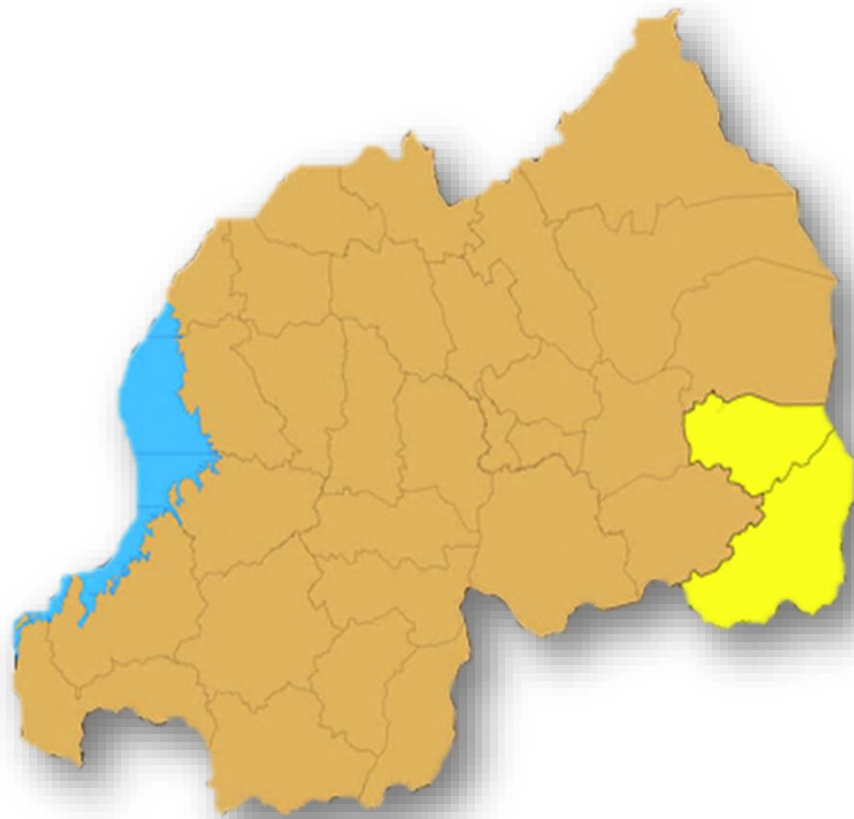
Geographic Overview for ABC Intervention

Population: 529,346

Community Health Workers:
2,765

Health Centers: 23

District Hospitals: 2



Quality Improvement Strategy

- Baseline (Sept 2013): Skin-to-skin was not being practiced consistently or documented
- Stakeholder meetings were held
 - Modifications of facility registers
- 50 nurses/doctors trained in neonatal care
 - provided theoretical and practical training in immediate skin-to-skin practices
- Clinical reminder posters were distributed, routine mentorship visits were initiated every 4-6 weeks/facility

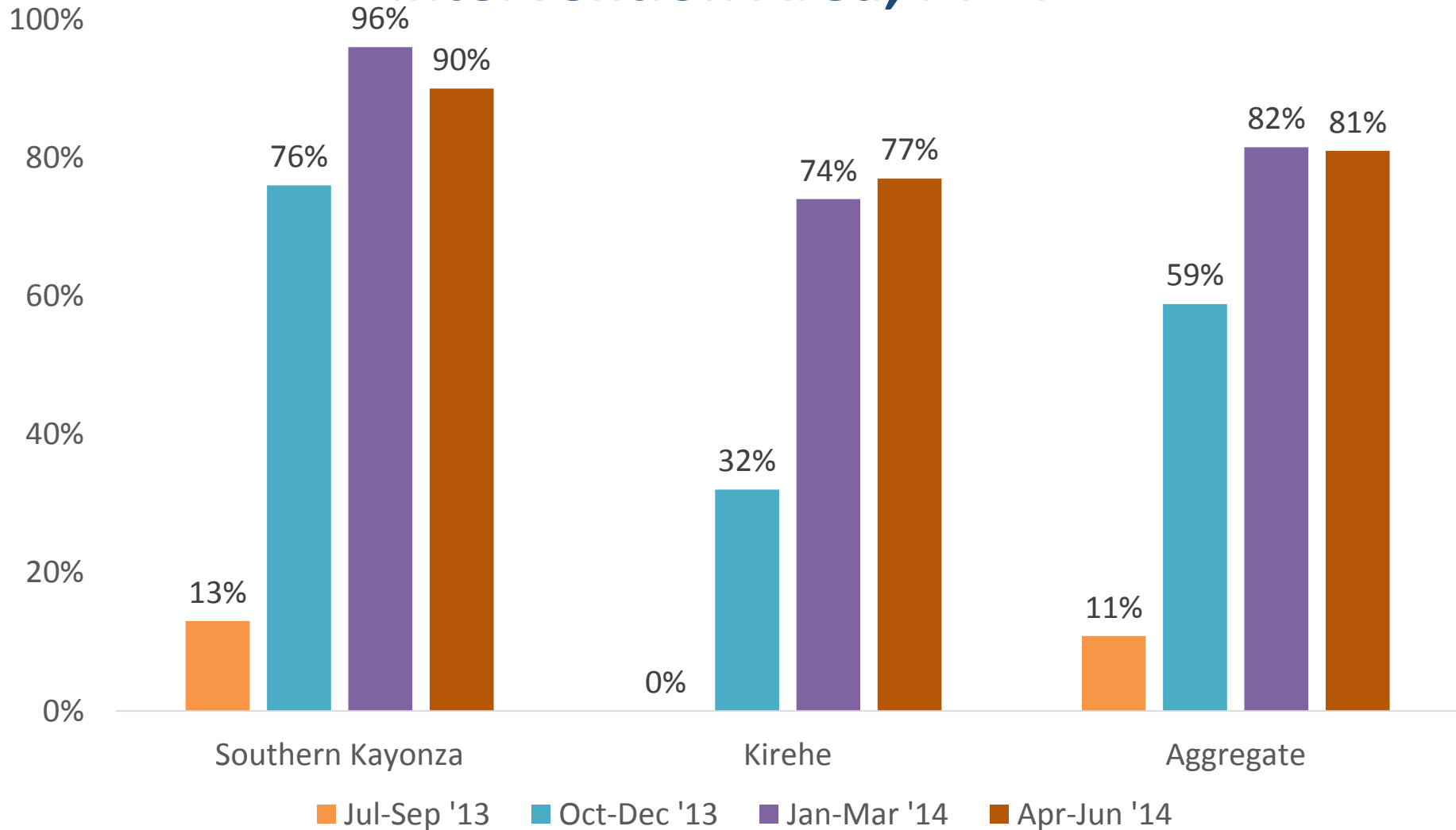


Health Center team works through quality improvement strategy during first learning session, October 2013.

Analysis

- Assessed the association between July-Dec 2013 and January-June 2014 and the proportion of documented skin-skin at facilities.
- Data were stratified by district to assess variability
- Differences in documented skin-skin over time between districts was tested using the Mantel-Haenszel test of homogeneity

Results: Proportion of neonates provided skin-skin by mother following birth in ABC intervention Area, FY14

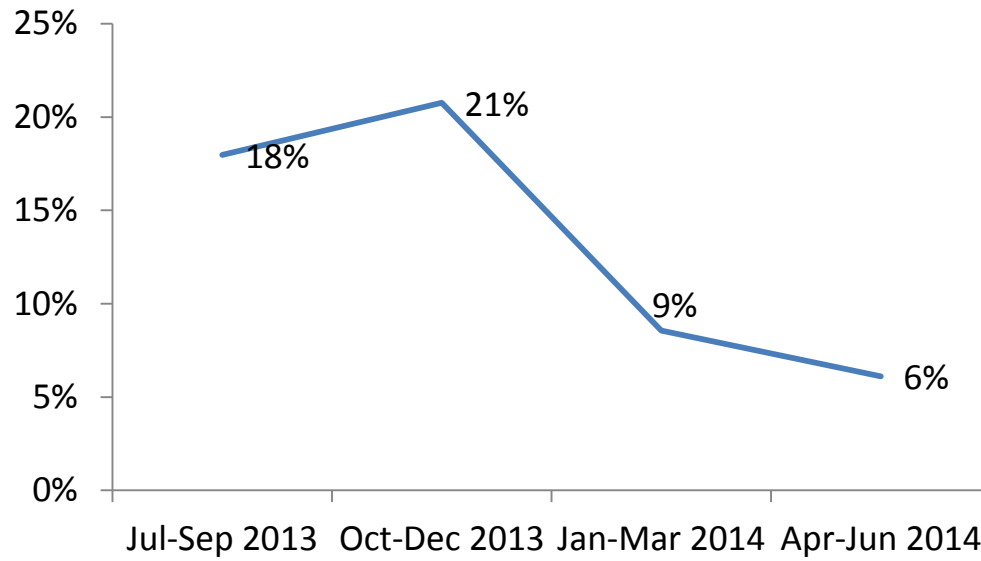


Results

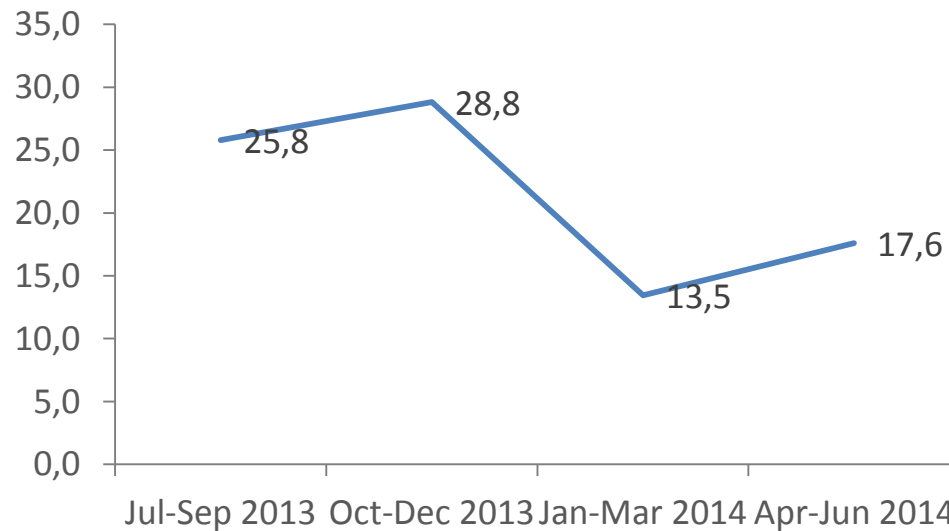
District	OR (% skin-skin for time 2 v. time 1)	95% CI
Southern Kayonza	8.52	(7.01-10.35)
Kirehe	5.94	(5.02-7.03)
Intervention area¹	7.0	(6.18-7.92)

¹ Adjusted for district using Mantel-Haenszel test of homogeneity

District Hospital Neonatal Mortality



District Neonatal Mortality (per 1000 live births)



Conclusion

- Practice and documentation of immediate skin-skin after delivery improved significantly over time in both districts
- A combination of clinical mentorship and systems-focused QI can lead to improvements in key neonatal practices and outcomes