



The All Babies Count Initiative: Improving Quality of Newborn Care to Eliminate Newborn Deaths

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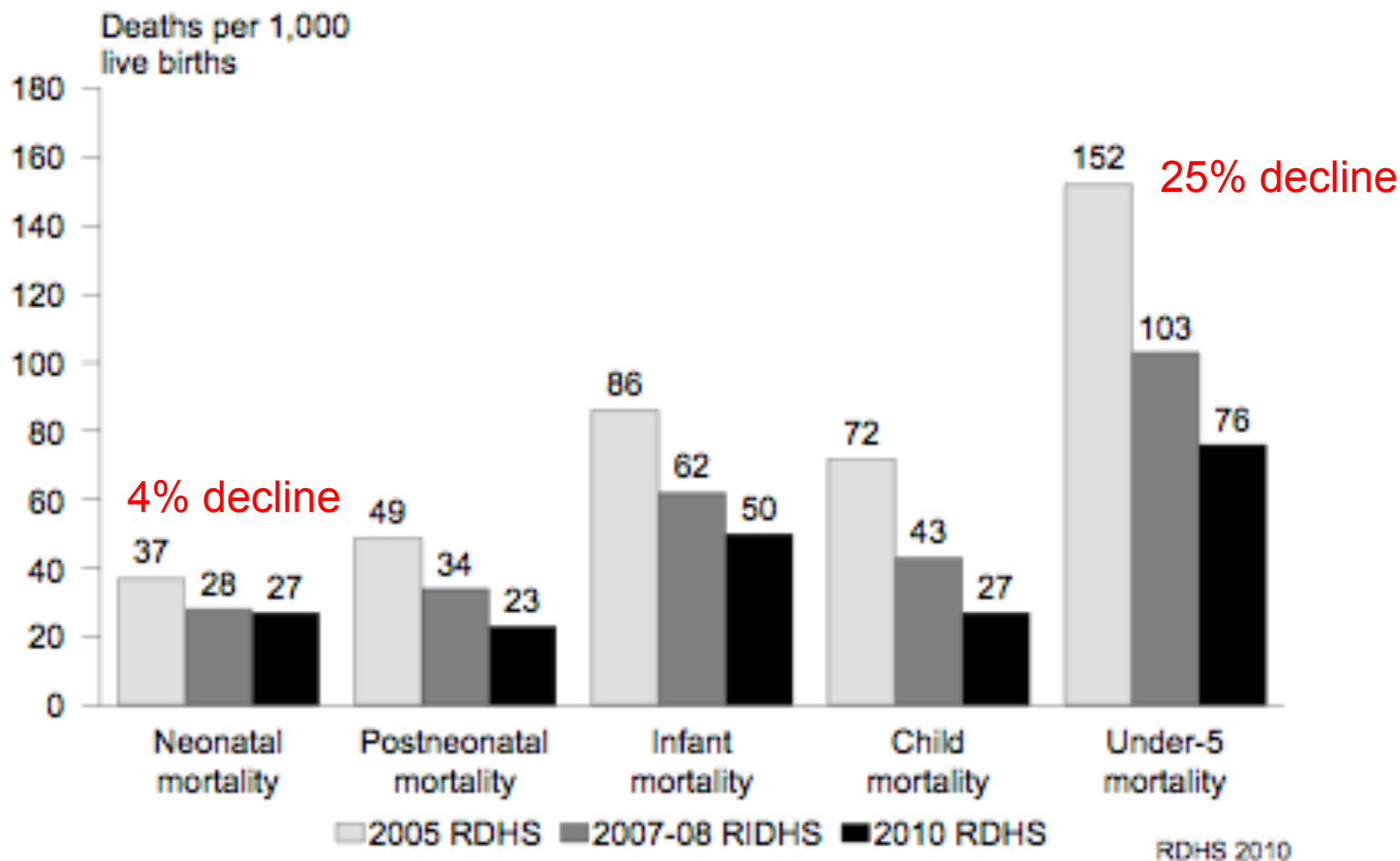
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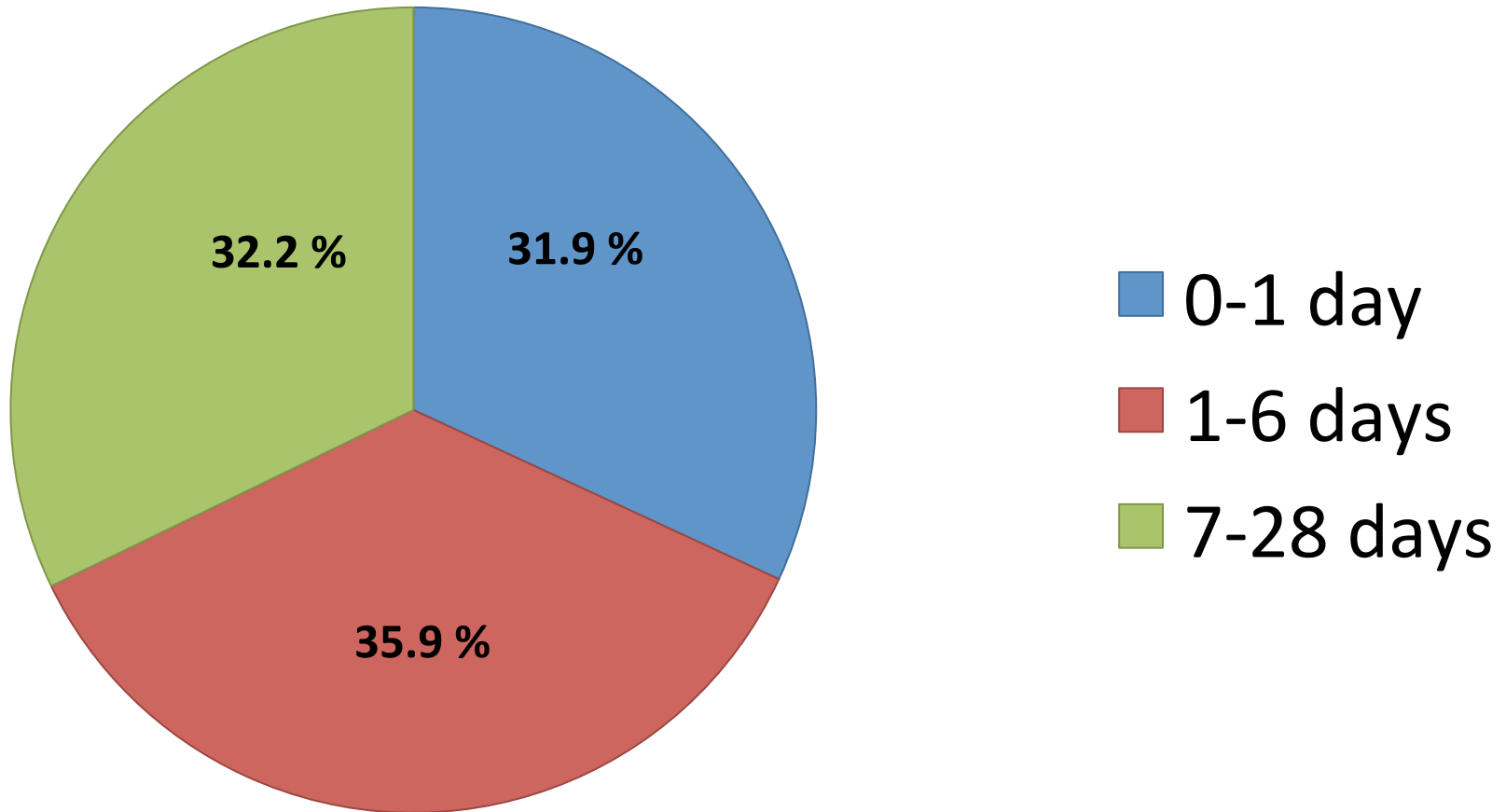
Boston Children's Hospital
Until every child is well™

Rwandan Trends: Neonatal Mortality

Figure 8.1 Trend in Childhood Mortality Rates



Neonatal Deaths According to Age



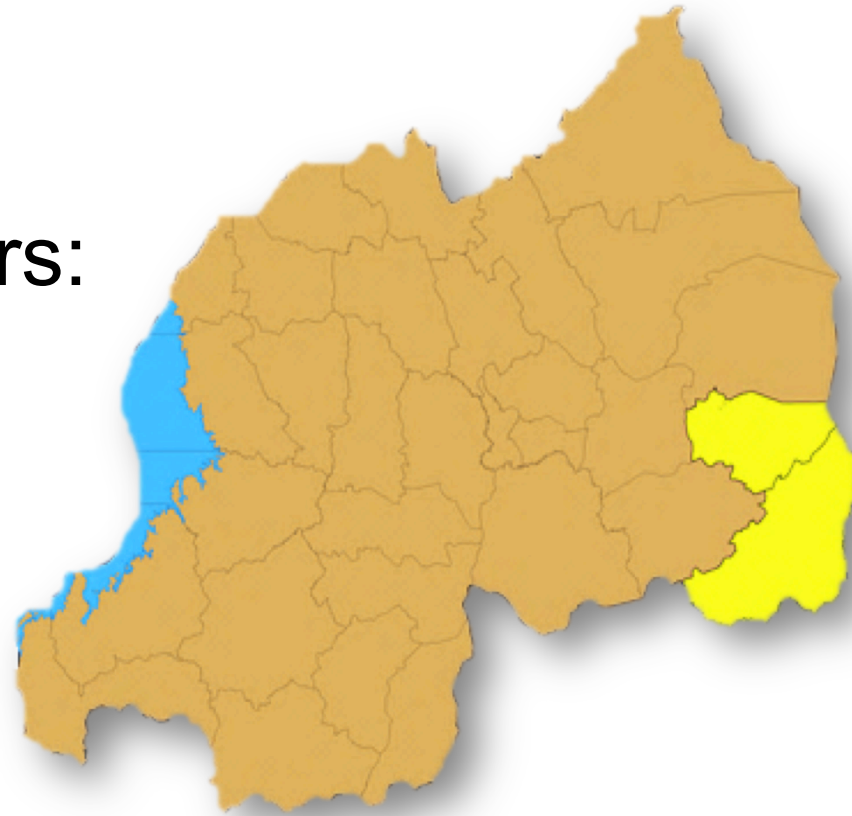
District Overview for ABC Implementation

Population: 529,346

Community Health Workers:
2,765

Health Centers: 23

District Hospitals: 2



All Babies Count (ABC) Initiative

Key Processes and Indicators in Neonatal Care

- **Antenatal Care**
 - 4 visit ANC
- **Delivery Management**
 - % skilled delivery
 - % antenatal corticosteroid
 - % PPRM antibiotics
 - Time to c-section (hospital)
- **Postnatal Care**
 - Immediate skin-to-skin
 - Postnatal care within 24 hours
 - Number with asphyxia



A mother with her baby and Kangaroo Mother Care with a neonatal nurse at Rwinkwavu District Hospital, July 2013. Permission for educational use granted.

Strengthening Care for Preterm and Low Birth Weight Infants

- District hospital neonatal units
- National Neonatal Protocol development
- CPAP at district hospitals
- National TOT in updated Neonatal Care Package



Butaro District Hospital neonatal unit.



Rwinkwavu District Hospital Neonatal unit



Newborn assessment



Triplets before...



Triplets after



Rwinkwavu District Hospital Nurses placing a baby on bubble CPAP

Program Monitoring Results

- Data extraction: chart review, routine data, and programmatic records
- Quarterly indicators across district facilities
 - Baseline: July 2013-Sept 2013
 - 18 mo endpoint: April 2015-June 2015



Quality Improvement Initiative

Process Monitoring

	Q1 Jul-Sep 13	Q2 Oct-Dec 13	Q3 Jan- Mar 14	Q4 Apr-Jun 14	Q5 Jul-Sep 14	Q6 Oct-Dec 14	Q7 Jan- March 15	Q8 April- June 15
% of HCs with at least 2 nurses trained in newborn training package*	0%[§]	91%	91%	83%	100%	100%	92%	100%
Number of nurses per health center	9.1	10.0	10.5	10.7	10.2	10.4	9.9	9.2
Average number of mentoring visits received/facility/mo	0.5	0.9	1.0	0.6	0.9	0.9	1.0	0.7
Number of active QI projects	N/A	23	29	37	47	43	47	60

*Helping Babies Breathe, Essential Newborn Care, Kangaroo Mother Care

[§]Since HBB trainings occurred during reporting quarter, this value reports baseline (prior to trainings)

Sample QI projects

- ANC Early Registration and Coverage
- Postnatal Care (Skin-to-Skin and Danger Sign Assessment)
- Facility Delivery coverage
- Time to C-Section/Birth Asphyxia
- Preterm labor detection



Health center nurse with ANC QI project data monitoring tool.



Health center nurses practicing neonatal resuscitation with an MOH MCH clinical mentor.

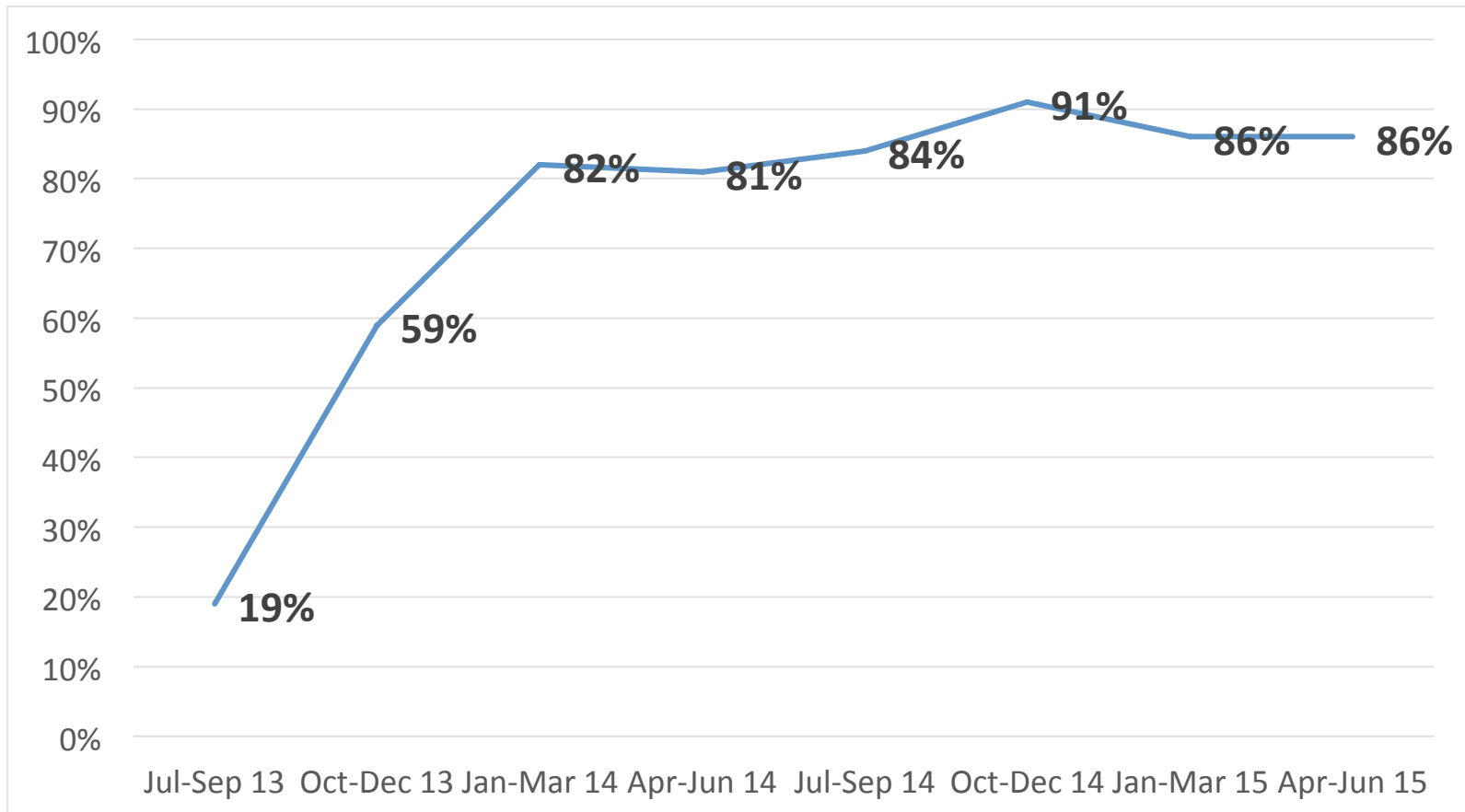
Baseline and 18 Month Comparison

Indicator	BL (n)	18 mo(n)	p-value
Deliveries	2762	3673	
4-visit ANC	23% (807)	37% (1,278)	<0.001
Early ANC registration	23% (986)	34% (1,445)	<0.001
Percent of women with pPROM treated with antibiotics	24% (5)	36% (8)	0.37
Percent of women with preterm labor who are treated with antenatal corticosteroids	26% (5)	74% (17)	0.026
Facility Delivery	87% (2745)	94% (3,664)	<0.001
¥Time to C-section in minutes (median, [IQR])	99 [50-195]	72 [59-77]	0.0053
Immediate skin-to-skin care after delivery	19% (100)*	86% (2,838)	<0.001
Newborns checked for danger signs within 24 hours of birth	47% (1640)	98% (3,581)	<0.001
DH neonatal case fatality	16% (30)	10% (15)	0.11
District neonatal mortality (per 1000 live births)	28.6 (109)	19.2 (75)	0.017

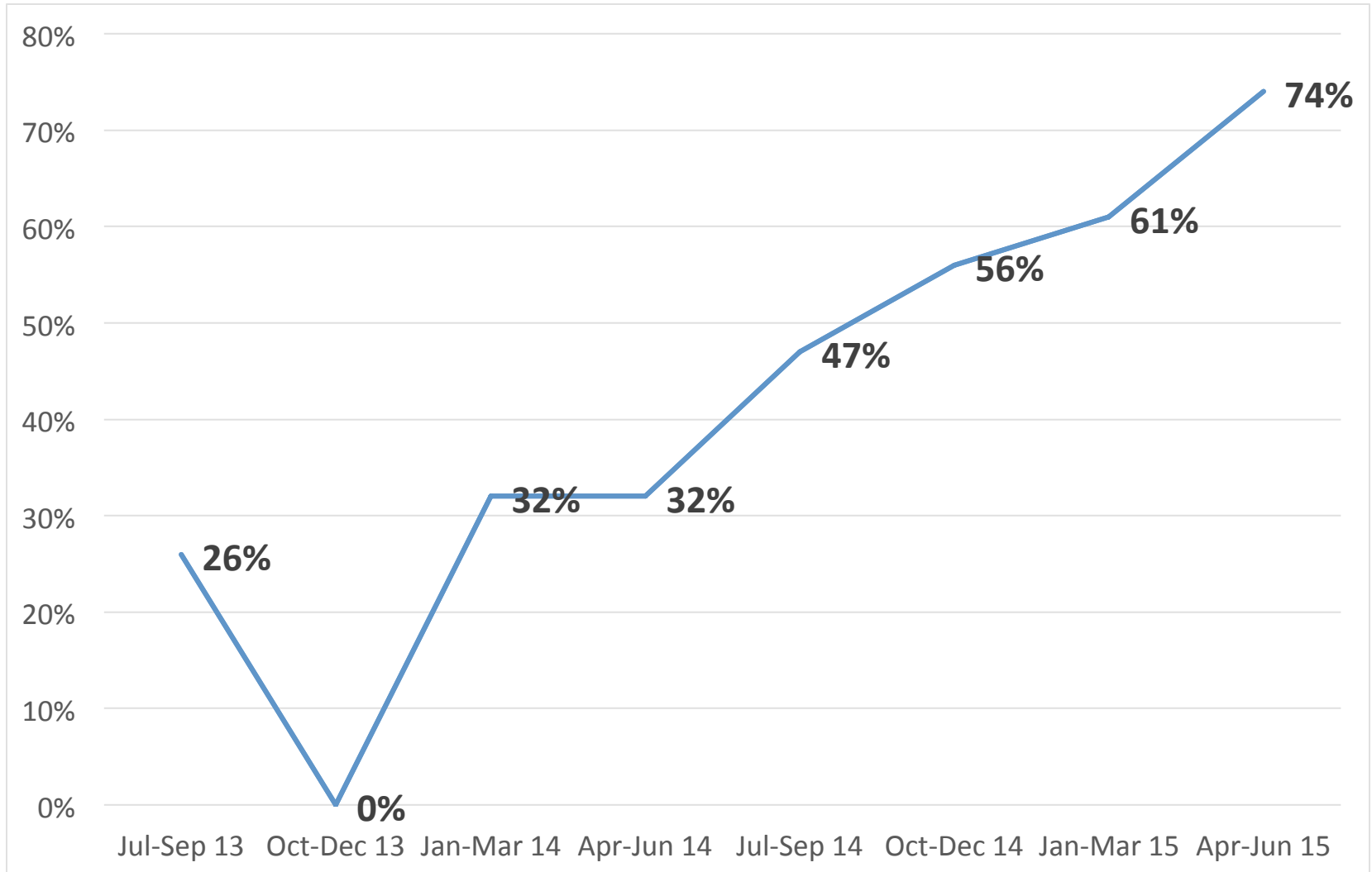
¥Southern Kayonza only: BL (n=35), 18mo (n=18). Due to later initiation of tracking, baseline is September-October 2013.

*Denominator for baseline is 523.

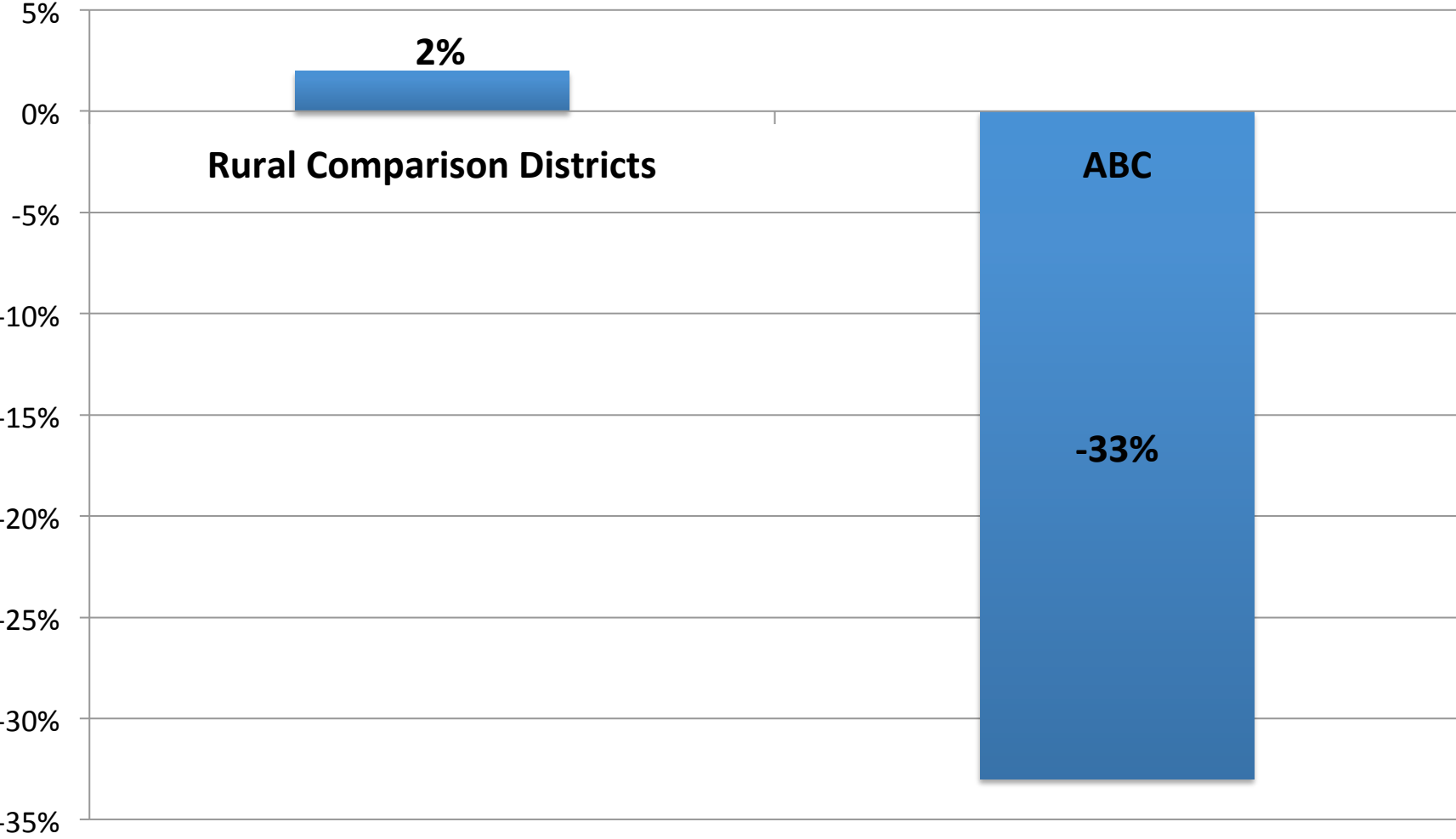
% of Newborns with Vaginal Deliveries Provided Immediate Skin-to-Skin after Birth



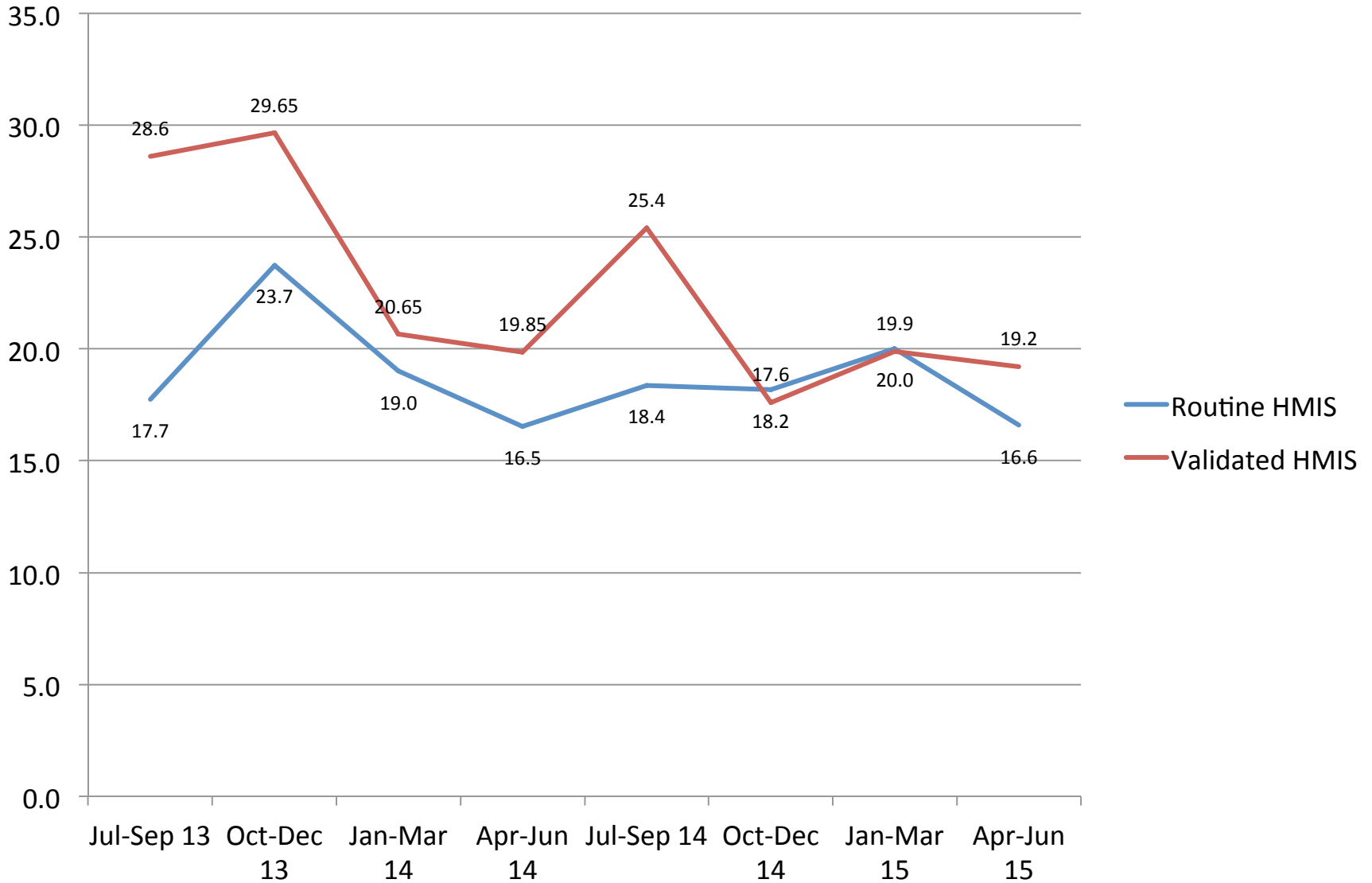
% of Women with Preterm Labor Treated with Antenatal Corticosteroids



Relative change in death per 1,000 live birth compared to rest of rural Rwanda



Improved Data Quality



Strategies for Maintaining Change

- Strong national and district involvement and leadership
- Capacity building of local change agents
- Culture of data collection and utilization, and peer learning to accelerate change



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

Next Steps

Transition from intensive to maintenance phase

Formal evaluation at endpoint and 6-9 month sustainability analysis

Creation of change package for replication

National scale-up planning



Conclusions: Lessons From the Field

- Able to create impact through a comprehensive, integrated health system improvement approach
- Addition of a district-wide learning collaborative to mentoring accelerates change
- Create culture of improvement and data utilization to drive and track change



Acknowledgments

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- World Bank
- MOH central and district level leadership
- Facility nurses, doctors, data officers, CHWs and more

