



# Project Fives Alive! GHANA

## Rapid Scale Up of High Impact Interventions for Improved Child Survival in Ghana –The story of 202 Public Hospitals

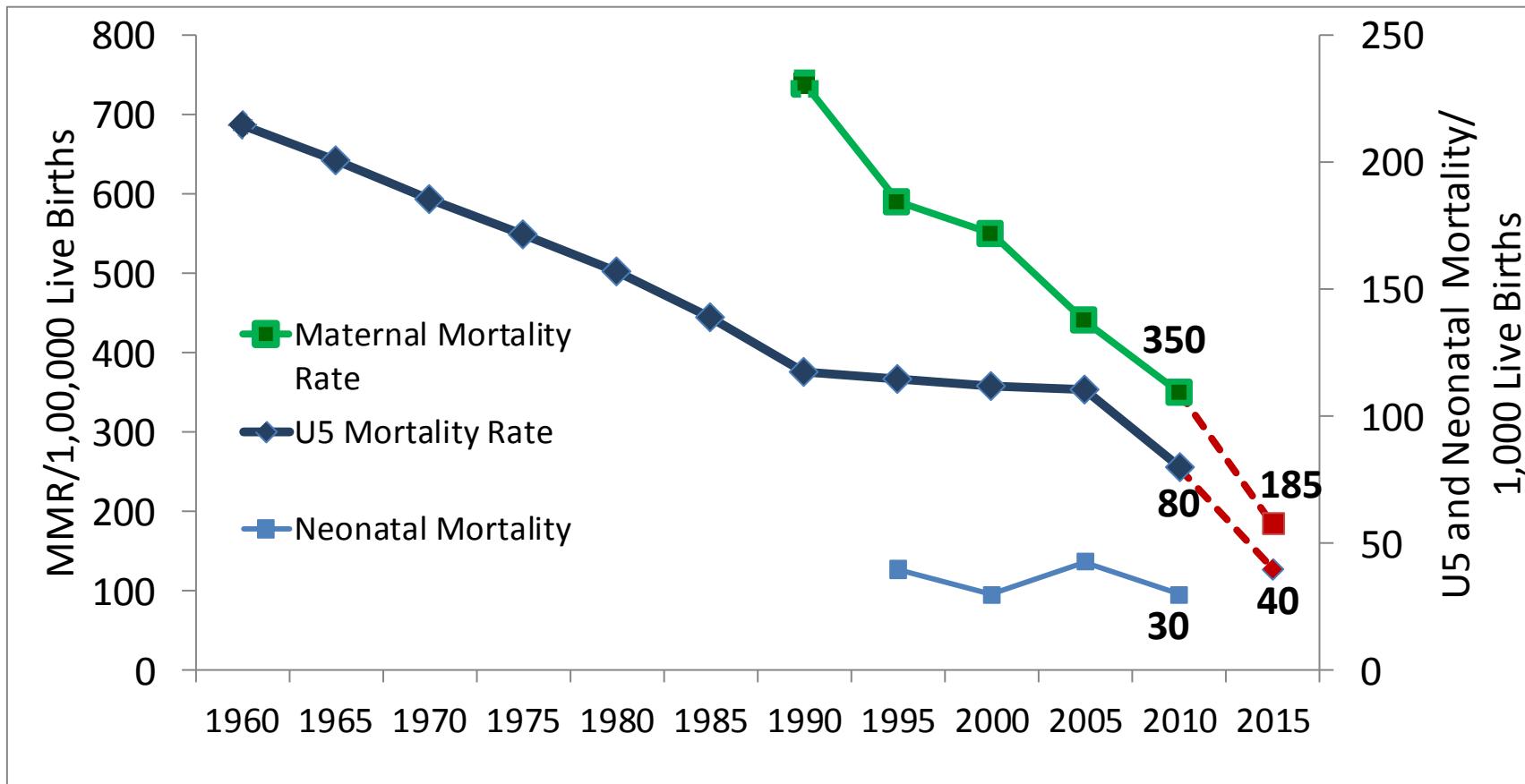
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IOM CONFERENCE, ACCRA  
April 28<sup>th</sup> 2015

# Outline

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- Introduction
- Design
- The 9 Hospital Prototype
- Results – Prototype – Scale
- Sustainability & Conclusion

# Ghana: MCH profile



Source: World Bank <http://data.worldbank.org/indicator/SH.STA.MMRT> (1990 figure is from UNDP <http://www.undp-gha.org/mainpages.php?page=MDG%20Progress>)



# Project Fives Alive!

## AIM:

Assist and accelerate Ghana's efforts to achieve

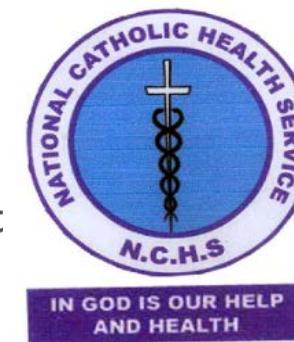
**Millennium Development Goal 4** (66% reduction in Under-5 mortality to 40/1000 live births by 2015)

through the application of **quality improvement methods**

- Ambitious Aims
- Systems View
- Core Metrics with Feedback
- Rapid Cycle Tests of local ideas



Institute for  
Healthcare  
Improvement



IN GOD IS OUR HELP  
AND HEALTH



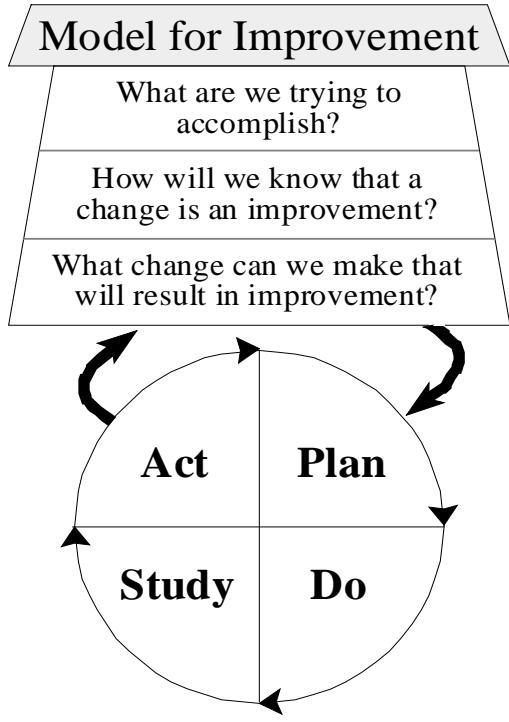
Funded by the Bill & Melinda Gates Foundation

# QI Team Members at a Meeting at OLGH, Asikuma

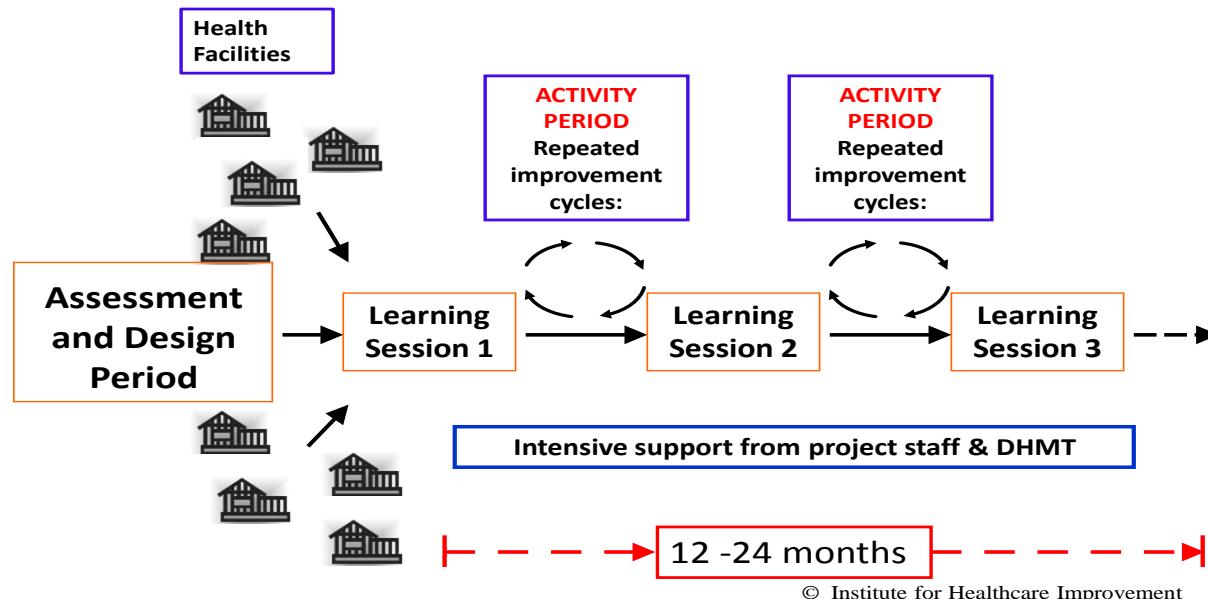
- Multidisciplinary



# Methodology and Strategy



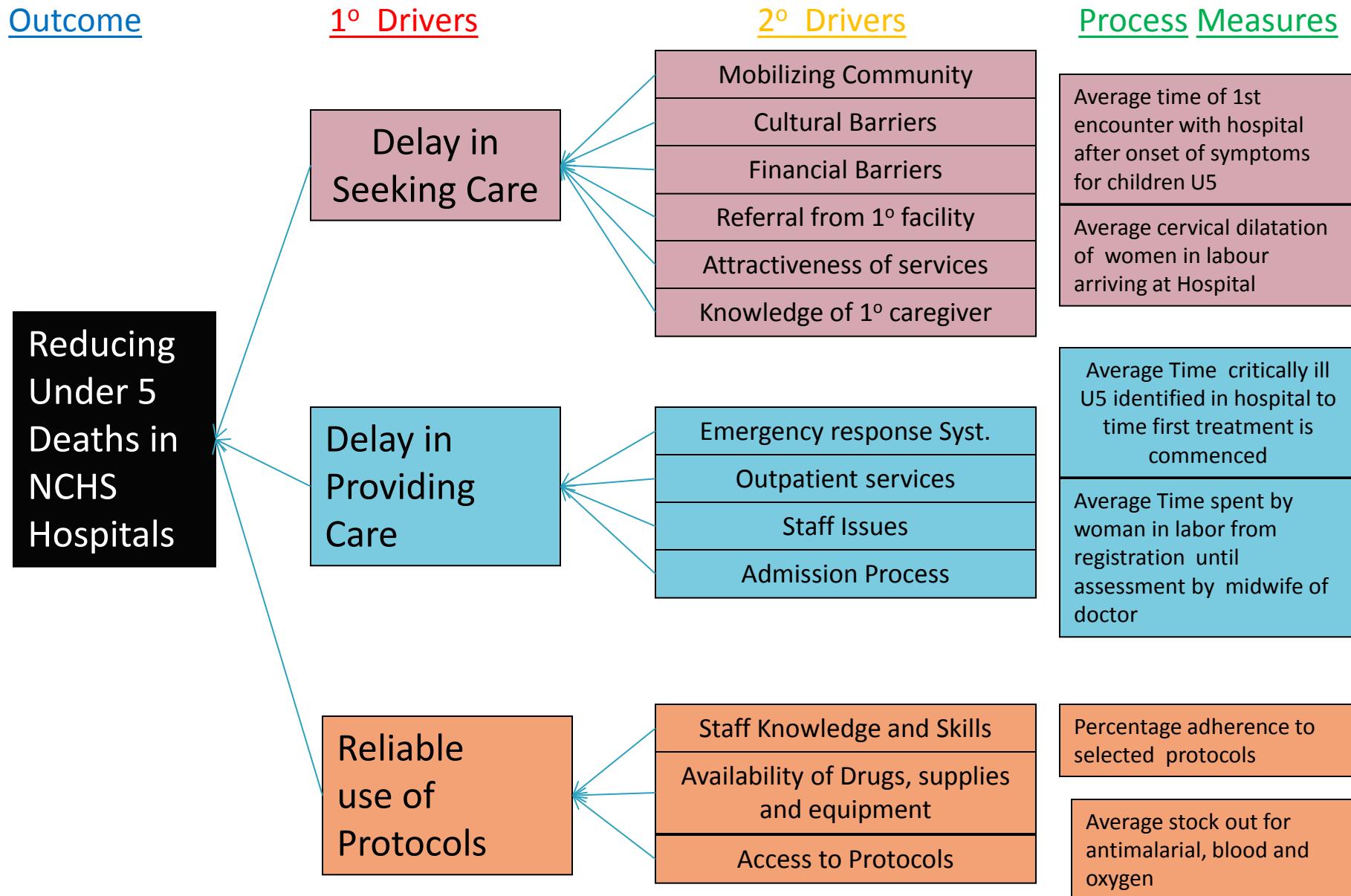
## Improvement Collaborative Network



Change package of process improvements that had been shown to be effective in similar contexts

# We documented our theory of what leads to U5 deaths in hospitals -

## Driver Diagram



# Start Small, Scale up Rapidly with Change Package

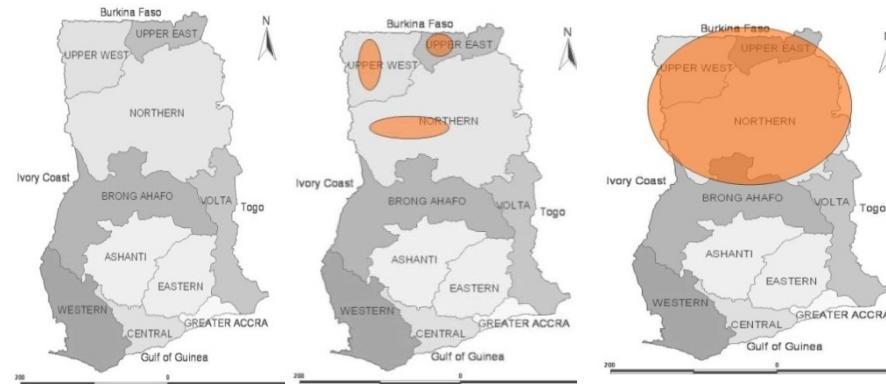
Total Pop'n: 350,000  
Under 5 Pop'n: 60,000

5 million  
500,000

11 million  
1.7 million

11 million  
1.7 million

22 million  
3.3 million



Nov 2007

Jul 2008

Sept 2009

Oct 2009

Aug 2012

Jan 2013

**Start-up:**

months

1 – 8

**Wave 1:**

months

9 – 22

**Wave 2:**

months

23 – 63

**Wave 3:**

months

24 – 89

**Wave 1R:**

months

58 – 89

**Wave 4:**

months

63 – 89



\*Referral project launch  
41 Referral Teams



No of. QI Teams: 30

258

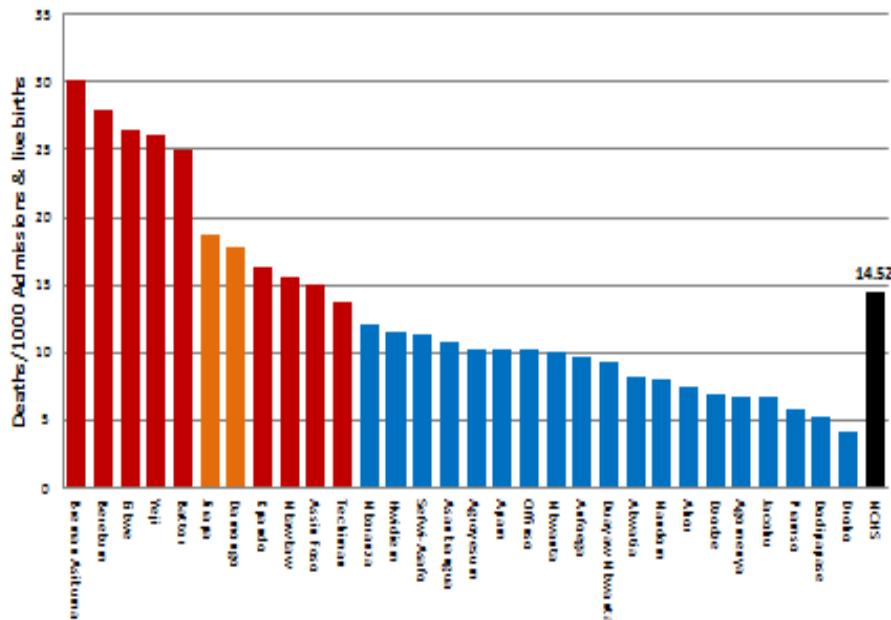
350

369

>1,046

# Selection of 9 Prototype Hospitals

NCHS Hospitals 2008 U5 Mortality Rate



- Pareto Principle

- Roughly 80% of the problems are caused by only 20% of the contributors

# Results

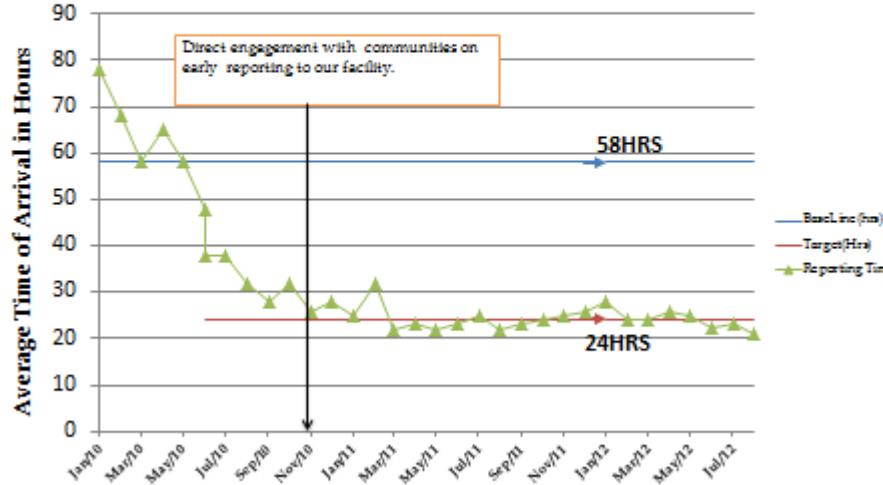
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# Making Care Processes More Reliable -1

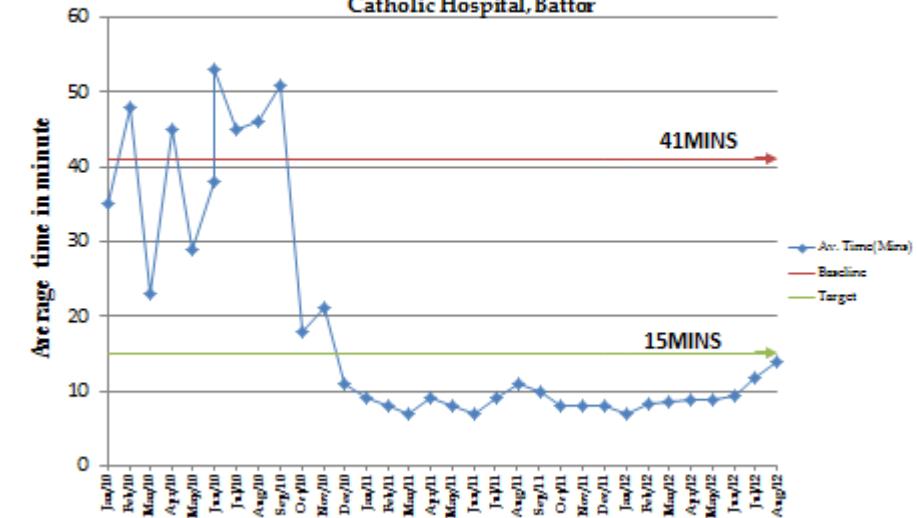
## DELAY IN SEEKING CARE

Average Time of Onset of Illness to Arrival at hospital of Children U5 (Catholic Hospital, Battor)



## DELAY IN PROVIDING CARE

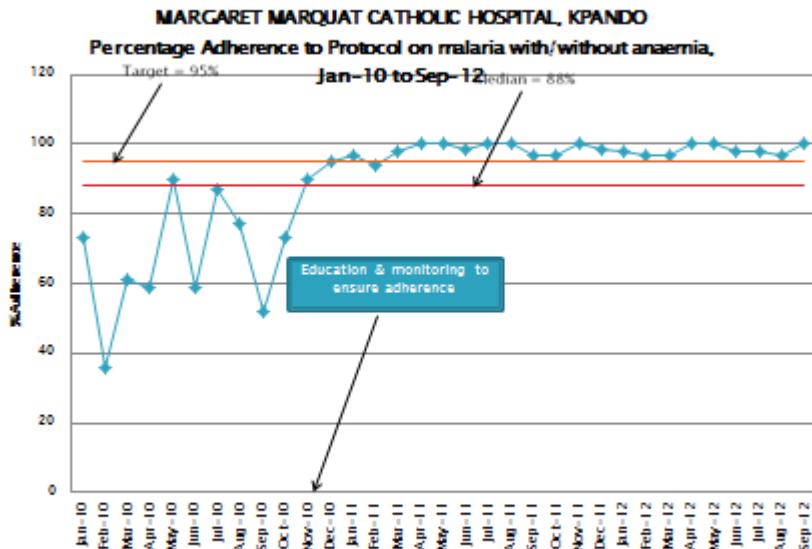
Average Time critically ill U5 is identified to time of first treatment- Catholic Hospital, Battor



**Driver 1 – Promoting Early Care Seeking**

**Driver 2 – Providing Prompt Care**

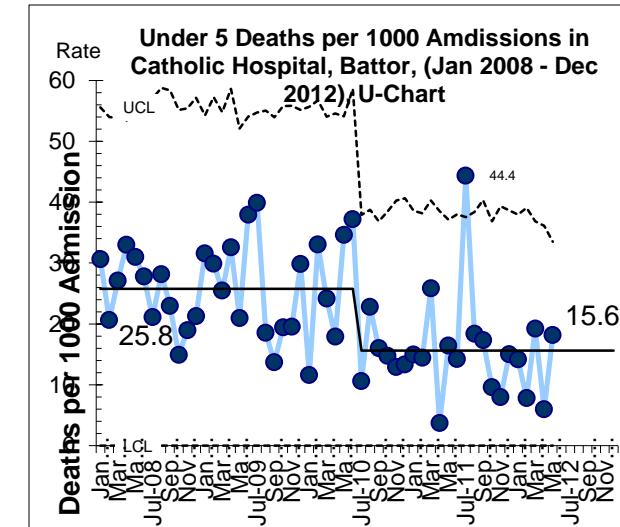
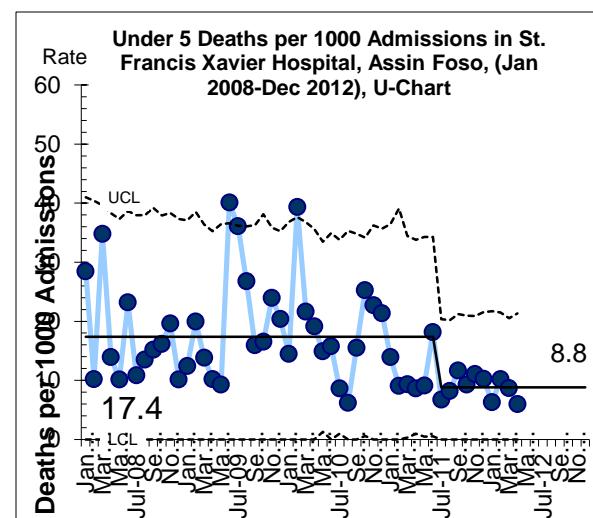
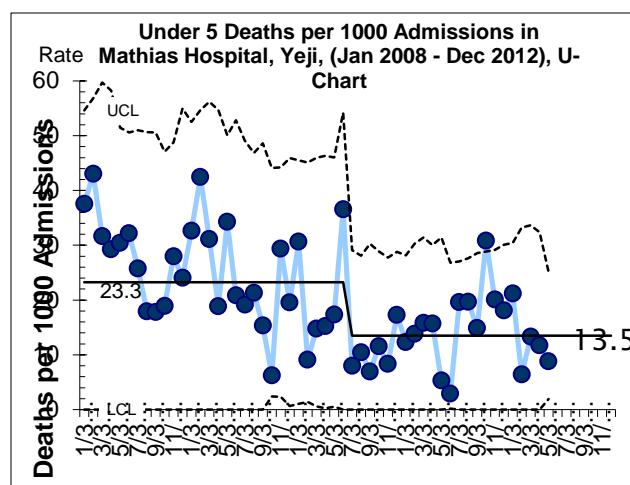
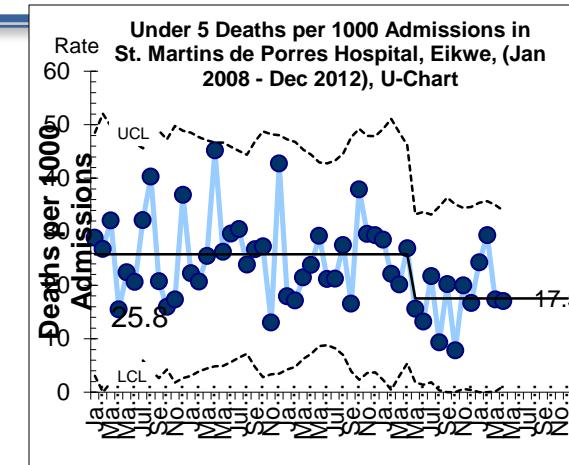
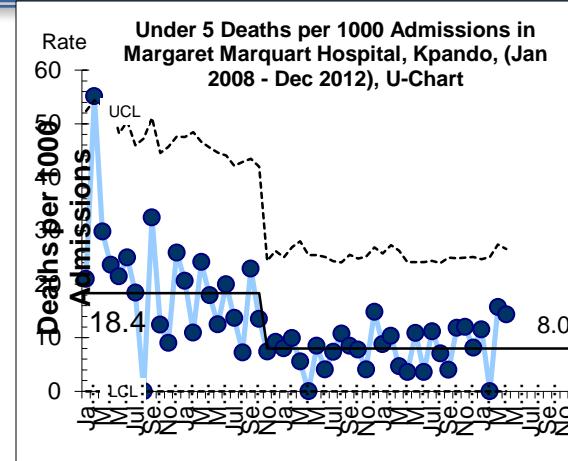
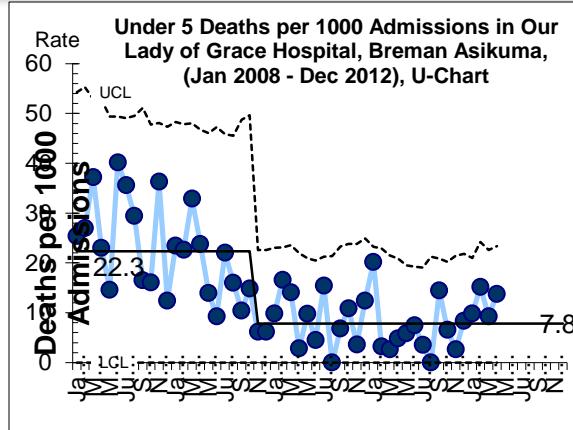
# Making Care Processes More Reliable - 2



Driver 3 – Better Protocol Adherence

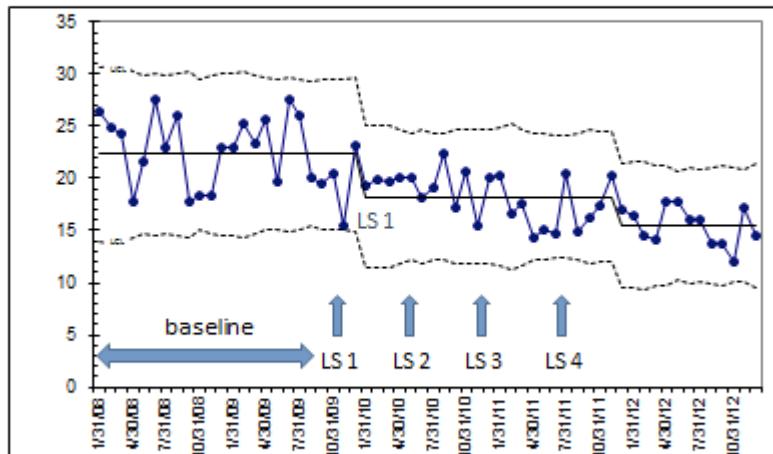
Using Bedside Teaching to Improve Protocol Adherence

# Reduced U5 Deaths in Six Innovation Hospitals



# Reduced Overall Under 5 Deaths

Under 5 Mortality in 9 innovation hospitals  
(deaths/1000 admissions)



- Weak management support
- Poor team dynamics
- High Attrition of core QI team members
- Challenged reporting of process measures

## Overall Under 5 Deaths

## Inhibiting factors

# Hospital Change Package

Driver	Area of Clinical/Community Care	Change Concept	Package #	Description of Successful Change Ideas
Delay in Seeking Care	Care-seeking behaviour	Targeted health education	1A	<ul style="list-style-type: none"> <li><i>Targeted health education on early care-seeking using interactive platforms</i></li> </ul>
			1B	<ul style="list-style-type: none"> <li><i>Community engagement and education via durbar or place of worship</i></li> </ul>
	Referral	Engaging primary providers	1C	<ul style="list-style-type: none"> <li><i>Engagement with health providers (both traditional and allopathic)</i></li> </ul>
Delay in Providing Care	Prompt Diagnosis and Treatment	Triage	2A	<ul style="list-style-type: none"> <li><i>Triage system for screening and emergency treatment of critically ill children</i></li> </ul>
		Fast Track		<ul style="list-style-type: none"> <li><i>Separate U5 OPD services from adult OPD service</i></li> <li><i>Prioritize U5 outpatient care</i></li> <li><i>Prioritize U5 inpatient care</i></li> </ul>
Non-Adherence to Protocols	Adherence to Protocols	Training/Coaching/Mentoring	3A	<ul style="list-style-type: none"> <li><i>Training staff on protocols followed by regular coaching and mentoring which include ad hoc testing on site with immediate feedback.</i></li> </ul>
			3B	<ul style="list-style-type: none"> <li><i>Training postpartum women and other care givers on hygienic cord care through demonstration, practice and immediate feedback. Midwives and nurses teach,</i></li> </ul>
		Task-shifting	3C	<ul style="list-style-type: none"> <li><i>Mother-to-mother support group on food choices and frequency of feeding while on admission under mentoring of nurses.</i></li> </ul>
			3D	<ul style="list-style-type: none"> <li><i>Empowering nurses to start acting on standard treatment protocols before doctor arrives</i></li> </ul>



# Scale Up of Hospital Change Package

202H

68H

32H

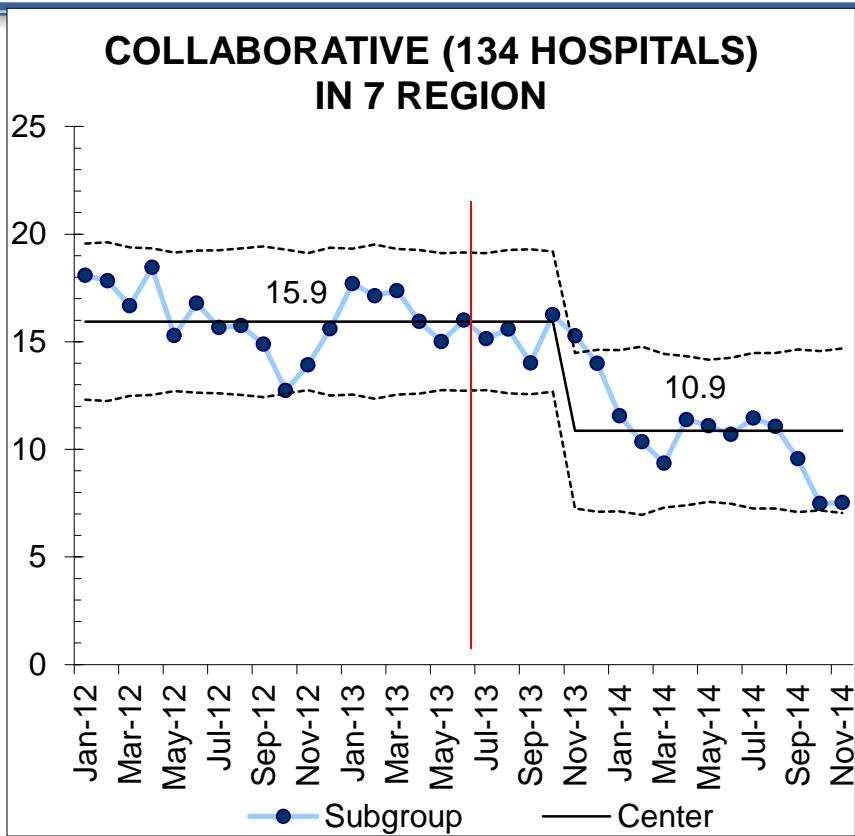
9H

## Hospital Change Package Adoption as at Oct. 2014

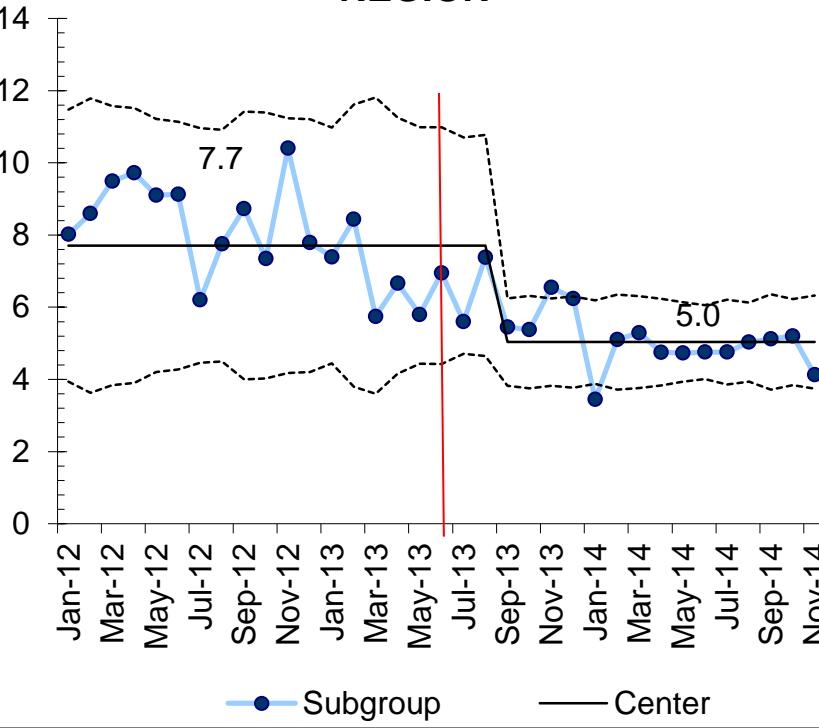
Drivers of Hospital Based Deaths	% of QI Teams Adopting at least one Change Idea (N=134)		Comments						
Early Care Seeking	84.3		Three Change Ideas (H-1A, 1B, 1C)						
Prompt Provision of Care	69.4		A Change bundle (H-2A)						
Adherence to treatment protocols	69.4		Four Change Ideas (H-3A to 3D)						
Change Idea	H -1A	H- 1B	H- 1C	H- 2A	H- 3A	H- 3B	H- 3C	H- 3D	
Proportion of teams testing this change Idea	58.2	23.1	3.0	69.4	43.3	1.5	2.2	22.4	



# Results at National Scale 1



Collaborative (135 HOSPITALS IN 7 REGION)



Reduced Overall U5 Mortality Rate  
~ 31%

Reduced Malaria CFR ~ 35%

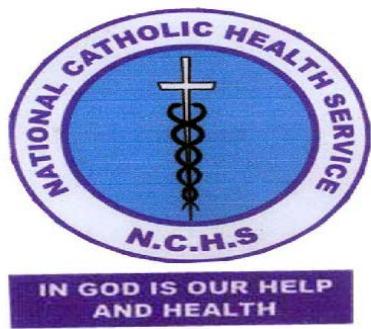
# ~ 350 Improvement Coaches Trained in Health System

10 Regional  
Quality  
Advisors

~ 3000 Site  
Visits

~ 4000  
frontline  
workers  
trained in LSs





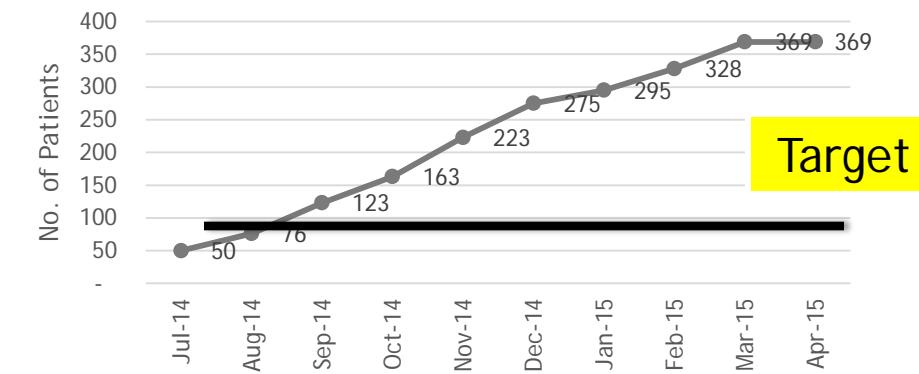
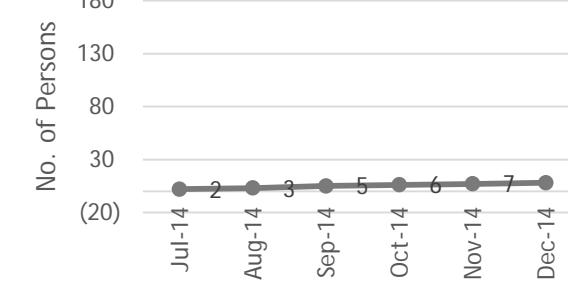
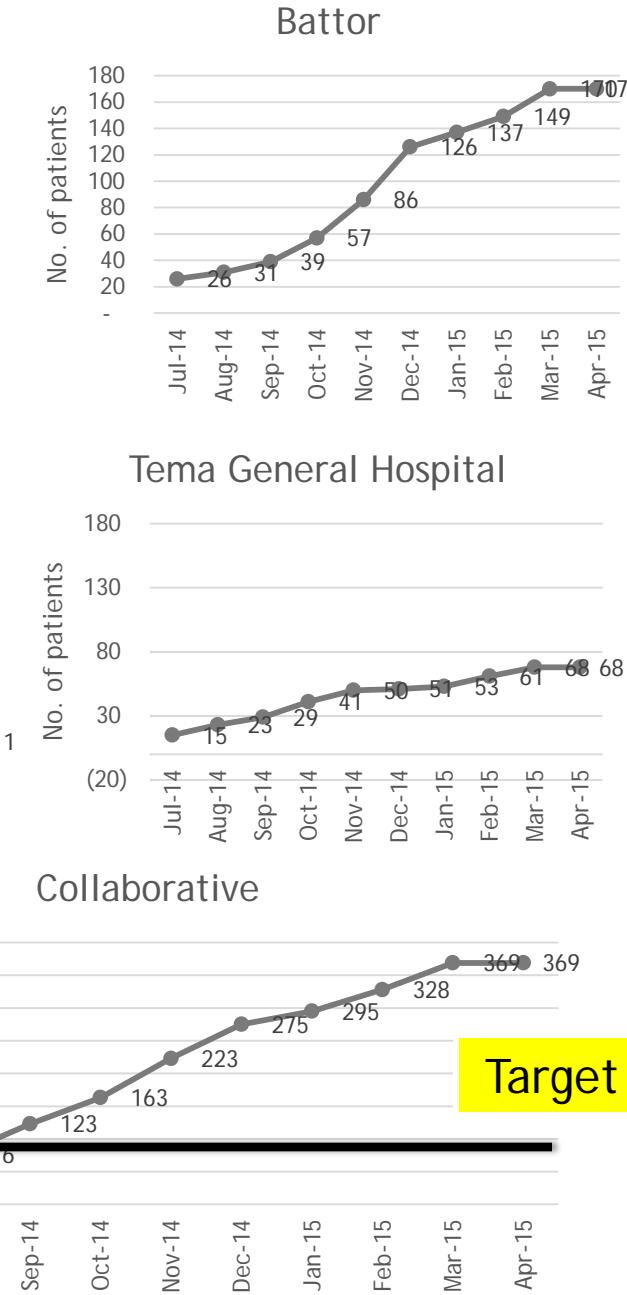
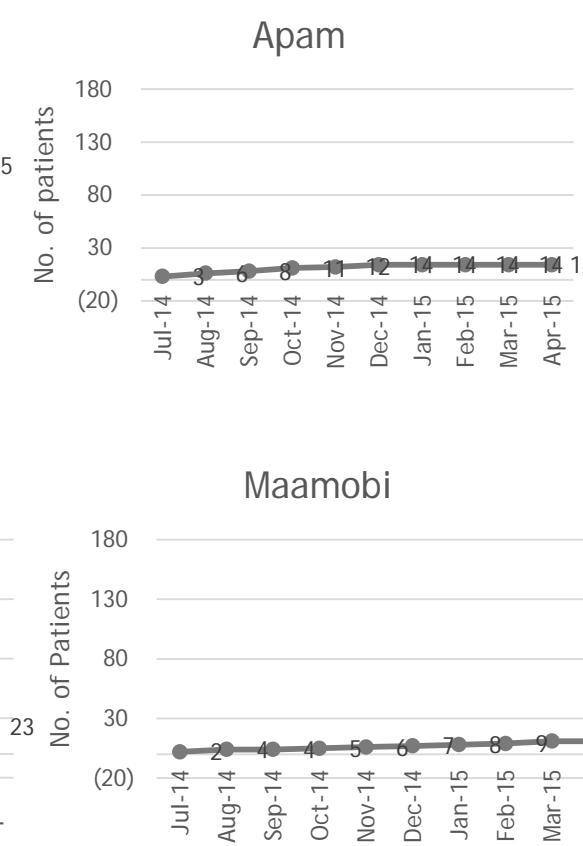
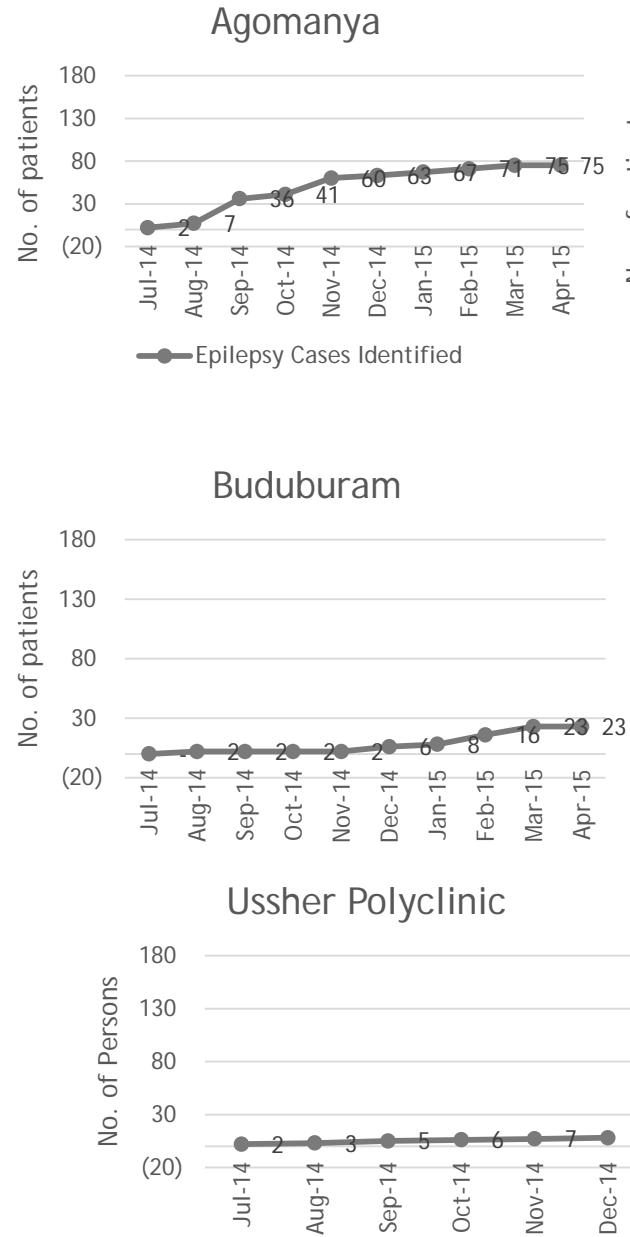
# MENTAL HEALTH PROJECT COLLABORATIVE LEARNING SESSION 3

AFRICANA CONFERENCE CENTER, NORTH-  
LEGON

15<sup>TH</sup> - 16<sup>TH</sup> APRIL, 2015



# 7 INNOVATION TEAMS - EPILEPSY - CASES IDENTIFIED



# OPPORTUNITIES FOR SCALE UP

- INTEGRATION OF MH INTO PRIMARY CARE
  - ✓ Availability of drugs beyond 3 psychiatric hospitals
  - ✓ Stock out of essential medicines
  - ✓ Integrating screening for MD into ANC - involve conversation with reproductive health
  - ✓ Standardization of treatment guidelines
  - ✓ Addressing data quality gaps

# In Summary

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- Rapid tests of change help to determine what works quickly in a cost-effective manner
- Empowered teams adapting contextually-relevant changes can achieve rapid impact at scale
- It takes strategic alignment with health system structures/ priorities and synergy between management and frontline workers to achieve impact at scale

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Thank you

Discussion

