

# Training providers to achieve better birth outcomes

### Harshad Sanghvi, M.D.

Vice President and Medical Director, Jhpiego Co-Director, Accelovate/USAID Senior Technical Advisor, Maternal Child survival Program/USAID Senior Associate, Bloomberg School of Public Health, Johns Hopkins University and CBID

Innovative Training of Birth Attendants Woodrow Wilson Center, Washington 30 September 2014

## Ending Preventable Maternal and Child deaths: What will it take

**Unprecedented Targets** Unprecedented commitment New partnerships Innovation **Coverage at scale** Quality at scale Impact at scale



## Quality Improvement: Bridging the Implementation Gap

Scientific understanding

Implementation Gap Training & Clinical Governance

### Time

The reality is straightforward. The power of existing interventions is not matched by the power of health systems to deliver them to those in greatest need, in a comprehensive way, and at an adequate scale." Margaret Chan, Director General WHO

Patient care

## National Eclampsia Registry: India: Measure gaps in performance

	Number of Births	Prevalence
Normotensive	116,437	86.4%
All PIH	18,338	13.6%
Mild PIH	11, 266	8.4%
Severe PEE	4,518	3.4%
Eclampsia	2,554	1.9%
Total	134,775	

#### **Eclampsia Management:**

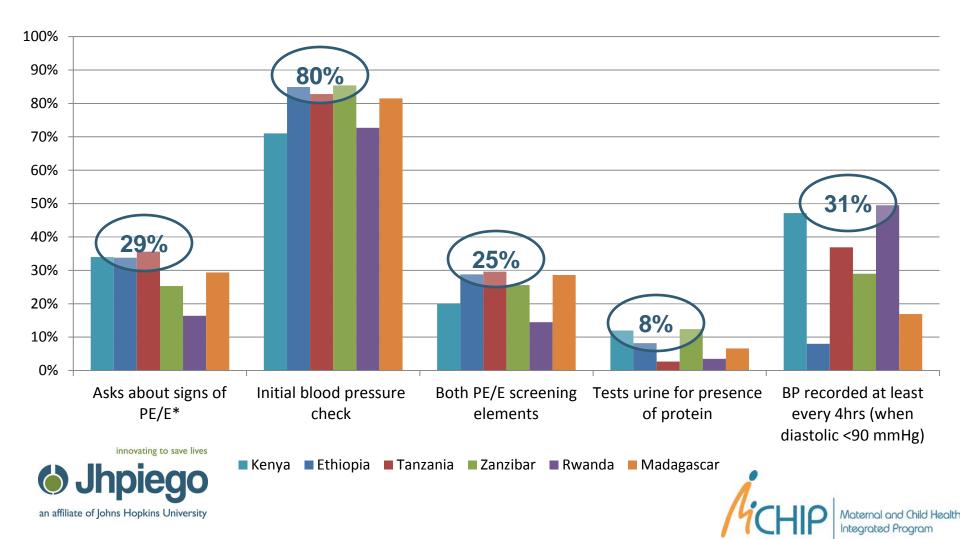
Convulsion admission interval greater than 4 hours : 32% Magnesium Sulphate used in 44% cases

Recurrent convulsion rate in facility: 24%

Case fatality ratio: not available



## Screening for preeclampsia During labor



#### Target Gaps in performance

#### Training and Clinical Governance approach in Detecting, Preventing and Managing Eclampsia: Nepal

Intervention: 1 day on site whole facility orientation by NESOG

- Review of standards, practice of skills
- Baseline assessment, gap analysis, action plan
- Re-assess at 2, 4 months, Frequent contact by cell phone



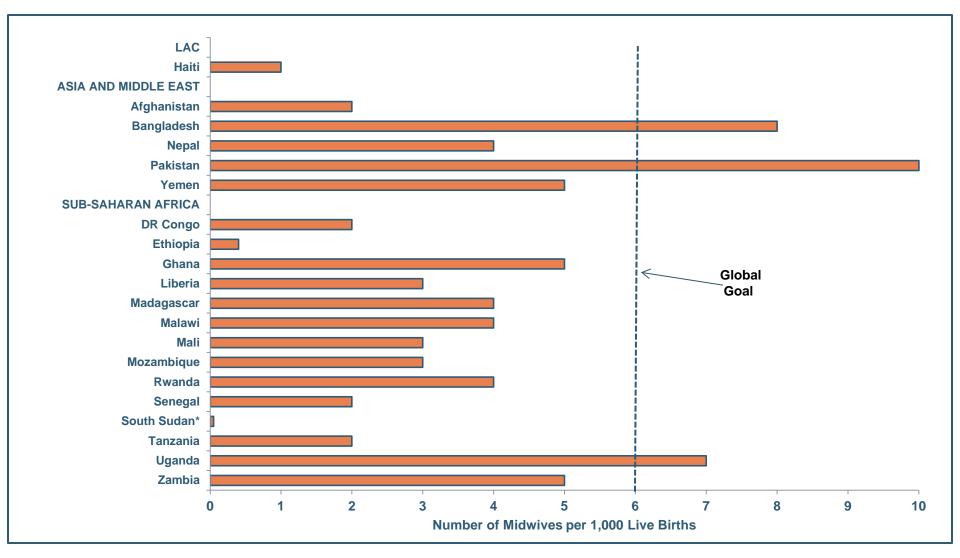
	Base line	2 months	6 months	1 year
% facilities meeting standards	14%	36%	59%	85%
% facilities where no standard met	27%	0%	0%	0%
Average score	26%	60%	63%	85%



facility	Reached standard in 6 months
SBA training sites	87%
Government Hosp	50%
Private hospitals	17%
Med school	38%
PHCC	33%

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## Human resource barriers: *Midwives per 1,000 live births*

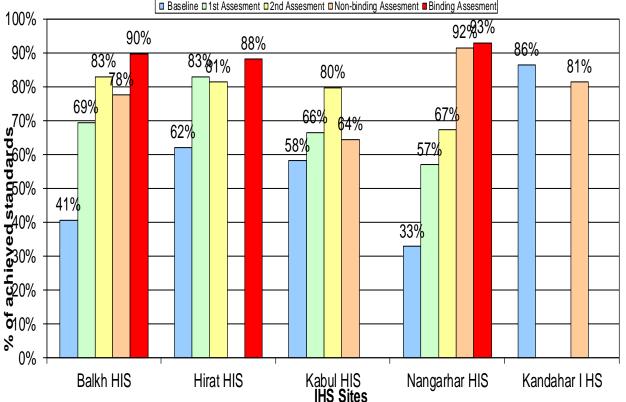


Ref: SOWMY 2011; Michael & Garnett, 2011; US Census Bureau, 2009

## Mídwífery schools ín Afghanístan: A commítment to supporting performance



#### Trend in Percentage of Standards Achieved by Programs 2004 - 2006



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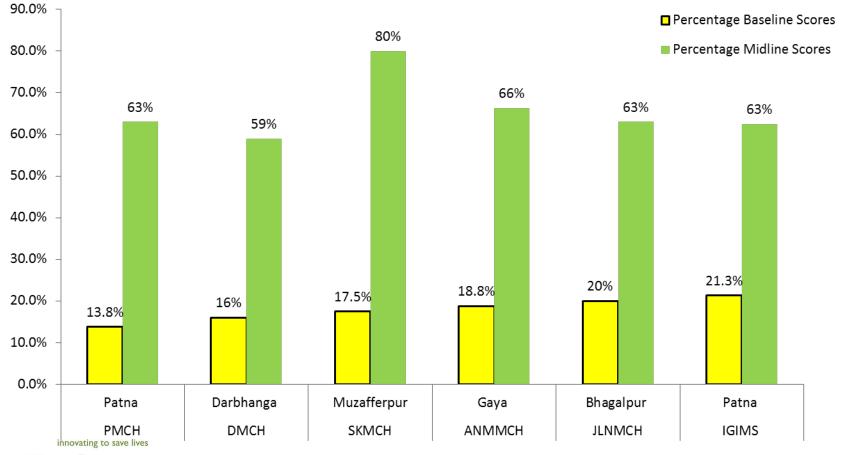
Accreditation Threshold: 85% of standards met

Empowering Women, Not just training providers





## PSE Strengthening Performance Standards - Bihar





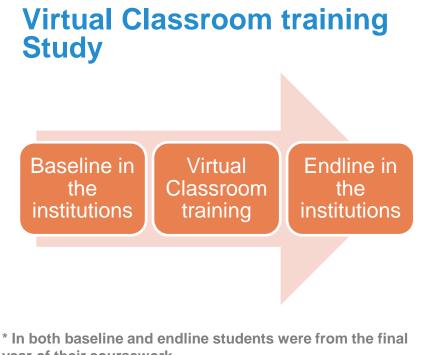
## Virtual Training : Bihar

#### 2 instructor locations, 12 midwifery schools





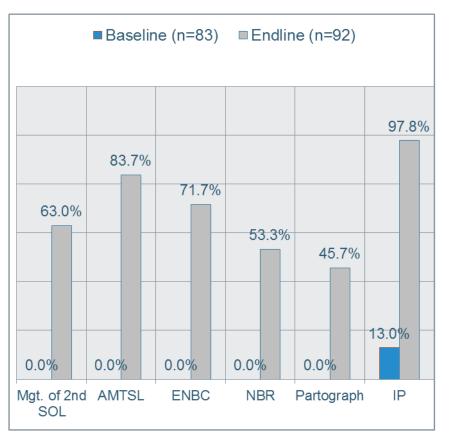
### **Effectiveness of virtual classroom training**



year of their coursework



#### Knowledge and Skill assessment using **OSCE (Student)**



Source: Virtual Classroom training study data of 2 GNM Schools of Bihar

## Virtual midwifery training student evaluation (381 students, Bihar 2014)

Evaluation	Good	Acceptable	Poor
Overall satisfaction with virtual training	85.7	13.3	1.0
Rate todays virtual class with routine training	91.0	7.6	2.4
Level of interactivity, demonstrations and return demonstrations	83.6	13.1	3.3



## Emergency Simulation and Drills

### **Emergency Drills**

Emergency Trolley

MATERNA

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USAID

### Improve Emergency Response

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## **Delivery Room Dashboard**

Standard set								
Dimension				J	anuar	y 201	4	<b>Comment &amp; action</b>
				Wk 1	<b>Wk 2</b>	Wk 3	Wk 4	plan
Activity								
Normal delivery	70	>70-<85	≥85		70	78		
C-section	30	>30-<40	≥40	30	32	30	35	
Referred patient		>35-<45	≥45	34	35	38	43	
Work force								
Midwife.patient	1:2	1:3	1:>3	1:2	1:2	1:3		
Doctor:patient	1:5	1:6	1:>6	1:5	1:5	1:6		
CI : student	1:3	1:4	1:>4	1:3	1:3	1:4	1:3	
Indicator								
Response time for	100%	90%-	<90%	100	100	98	95	
decision-to-knife is 30'		<100%						
Skin to skin contact			<90%	100	98	100	100	
Family companion	100%	80%-	<80%	100	100	100	100	
during vaginal		<100%						
delivery								
All preterm labor	100%	90%-	<90%	100	97	100	100	
Manago		<del>&lt;100%</del>						

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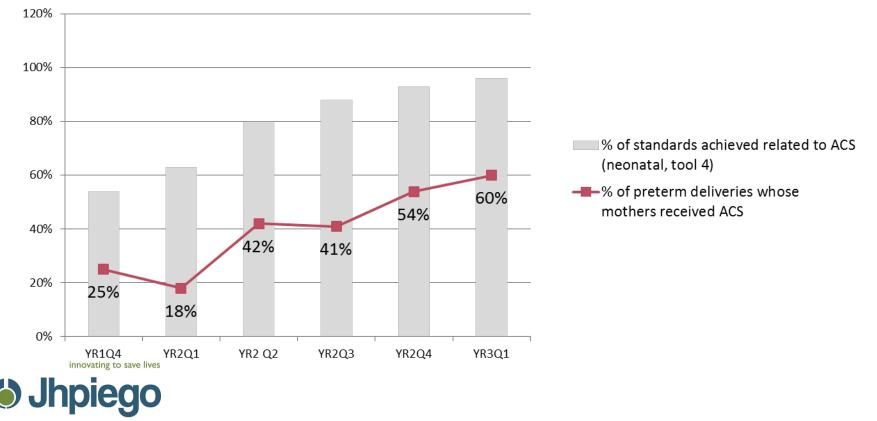
### Measuring inputs and outcomes EMAS Program, Indonesia

% of deliveries with PPH compared to % of women who received uterotonic in the 3rd stage of labor (EMAS supported hospitals, n=23) 2013

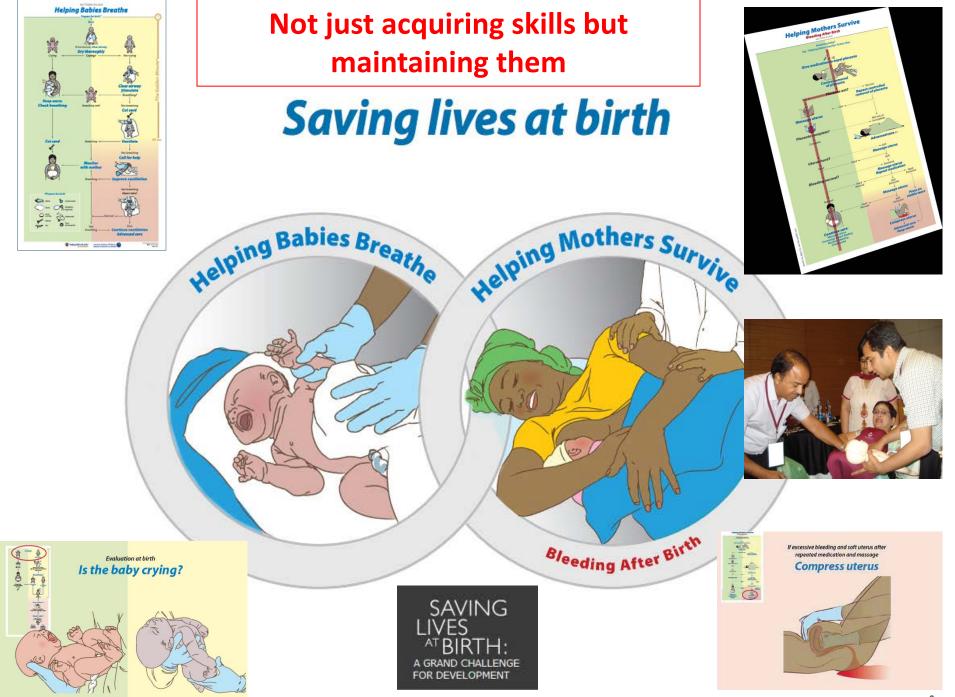


## **Coverage: Dexamethasone**

Percentage of preterm deliveries provided dexamethasone in comparison to facility achievement on related performance standard (neonatal, tool 4) (EMAS supported hospitals, n=23), October 2012 – December 2013



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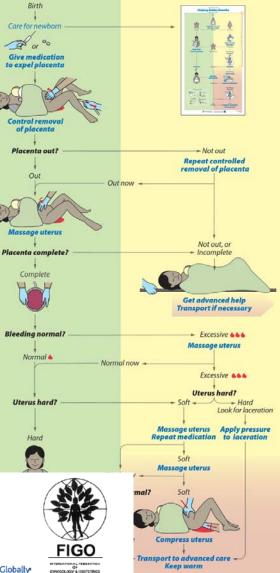


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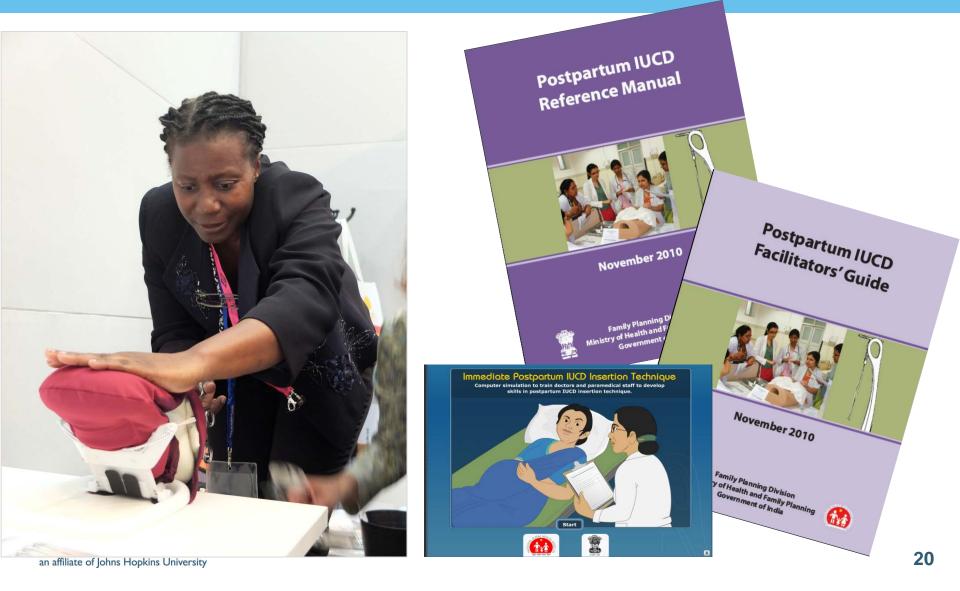
## **Helping Mothers Survive**



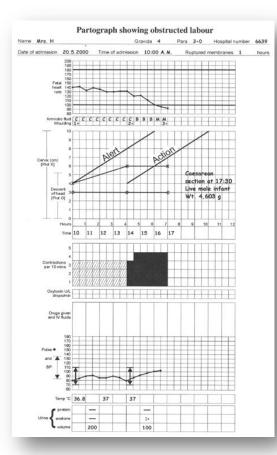
#### **Bleeding After Birth**



## Immediate post placental contraception



# Improving Labor management with low cost technology: the E-Partogram





- Stores multiple patient data in one device
- Reminds and prompts providers to take critical measurements
- Automatic graphing
- Provides alerts and alarms for decision-making support if complications are predicted or occur
- Transmits all observations to central level remote supervisor for guidance and support (telemedicine supervision module)

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Rajasvini Bha Assigned to Lily Obuy			ATTENT	ION!	
Acetone detected in Issue number two co		e width of th	is box		
Overdu by 20m		5cm Cervix	5/10min Contractions	>	
Savitri Misra Assigned to Judy Odi	NURMAL				
Reported lower back	discomfort				
Overdu by 10m		5cm Cervix	5/10min Contractions	>	
Savitri Misra Assigned to Judy Odi	nga <i>(me)</i>		NOR	MAL	
(L)in 10	m <b>160</b>	5cm Cervix	5/10min Contractions	>	
Nthanda Chau Assigned to Judy Odi			NORMAL		
(L)in 20	m <b>160</b>	5cm Cervix	5/10min Contractions	>	
Seema Chandrashakar Assigned to Judy Odinga (me)			NOR	MAL	
	<sub>m</sub> 160	5cm	5/10min		



## Unfinished agenda

- Ensure graduates of midwifery leave fully skilled
- Focus on Respectful Care
- Fix largely unaddressed gaps in clinical skills (better decision making in labor, assisted vaginal delivery, family planning, PMTCT)
- Clinical governance
- Ensure the rights of providers



## What have we learnt

- Didactic training has low to no impact
- Simulation practice is highly effective
- Practice and feedback 'dosage' matters
- Virtual feedback works
- Make courses shorter, more often
- Workplace-setting better for skills
- Combine training with clinical governance



**Effective In-Service Training Techniques, Timing, Setting and Media:** Evidence from an Integrative Review of the Literature

