

# Enabling factors affecting performance of SBAs

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## Study Objectives

- Performance. Develop and test a method for measuring SBA performance, and analyze performance data from 4 countries.
- Enabling factors. Identify and measure likely enabling factors for SBAs, and analyze the enabling factor data from 4 countries.
- Linkages. Analyze the performance and enabling factor data to identify factors that contribute to improved quality of labor, delivery, and postpartum care in health



## A Simple Model

### Essential Elements

-- medicine, supplies, equipment

### Enabling Factors

-- leadership, incentives, supervision, policies, law, organization, clients, etc.

### Provider Attributes

-- competency (skills, knowledge), motivation

### Performance

-- to quality standards

-- yielding better health outcomes

TEAMS



## Countries and Facilities

	Ref Hos	Sm Hos	Clinics	TOTAL
• Benin	2	3	0	5
• Ecuador	2	3	0	5
• Jamaica	2	3	0	4
• Rwanda	1	2	4	7
• TOTAL	7	10	4	21



## Data

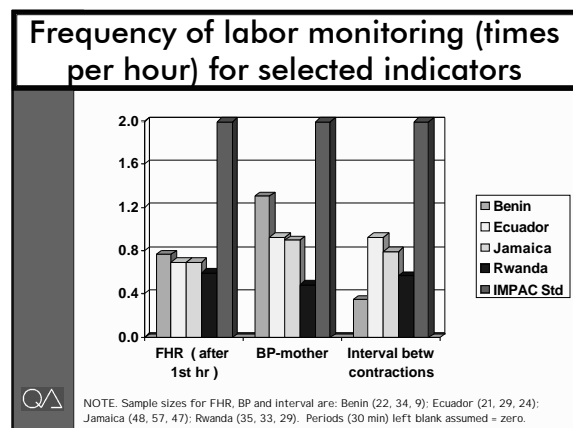
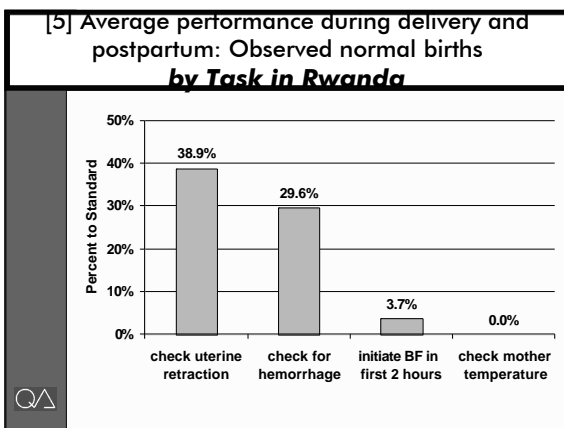
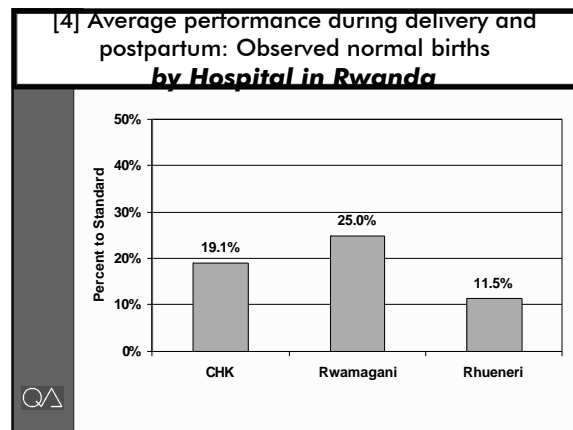
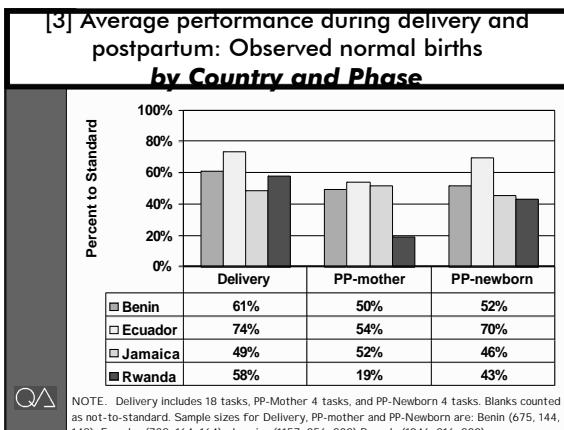
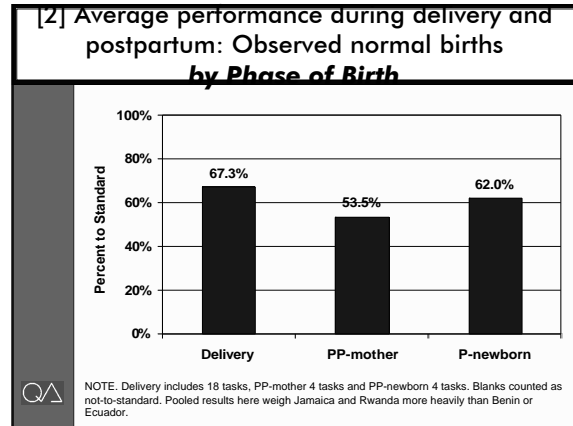
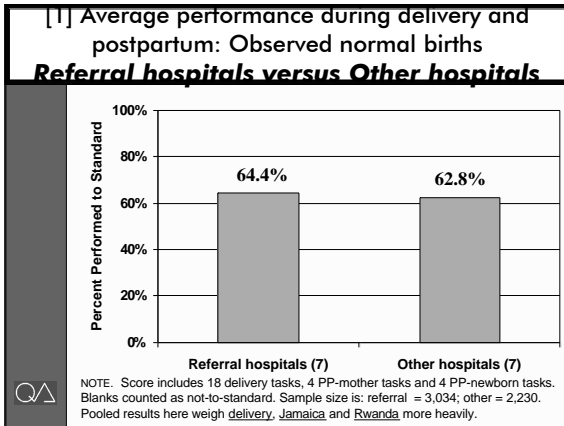
• Facilities surveyed	21
• Providers tested (21 facilities)	165
• Providers surveyed (21 facilities)	164
• Deliveries observed (17 hospitals)	229
• Patient intakes (delay)	856
• Charts reviewed (14 hospitals)	329



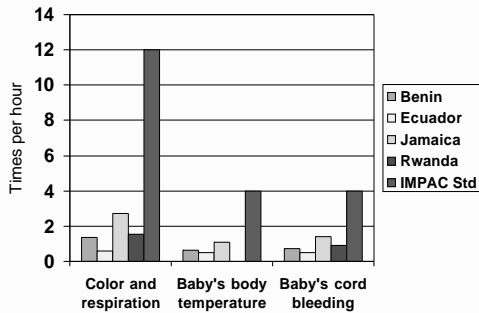
## Performance

- Normal deliveries observed (n=228)
  - labor
  - delivery
  - immediate postpartum mother care
  - immediate postpartum newborn care
- Complications chart reviews (n=328)
  - postpartum hemorrhage
  - eclampsia & pre-eclampsia
  - sepsis, including post-abortion sepsis





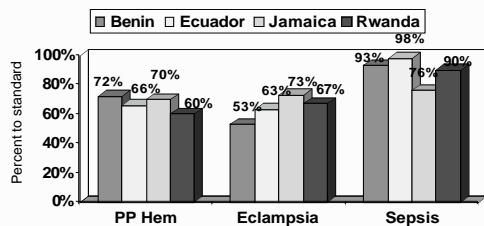
### Newborn monitoring frequency in first 2 hours (times per hour), selected indicators



### Some tasks with **very** low performance (<50%) in delivery and postpartum phases.



### Average performance by OB complication from patient charts

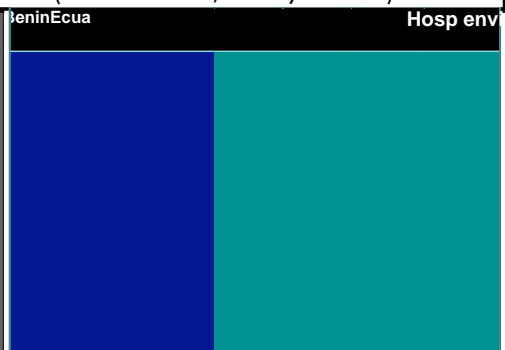


NOTE. PP hemorrhage score is pooled mean of 18 tasks; Eclampsia of 4 task; and Sepsis of 4 tasks. The Jamaica Sepsis sample includes several patients with a questionable sepsis diagnosis being investigated further. Sample sizes for PP hemorrhage, eclampsia and sepsis are: Benin (136, 225, 72), Ecuador (96, 216, 48), Jamaica (176, 342, 102), Rwanda (216, 132, 63).

### Possible Influences: Average "team" size for normal births - observed

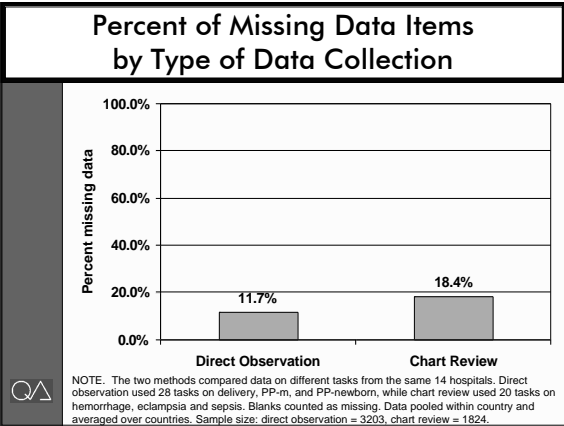


### How motivated are hospital staff? (1=not satisfied, 5=very satisfied)



### Methodological issues

- **Missing data: charts vs observed**
- **Team vs. individual performance**
  - Relation of individual competence to team performance.
- **Ethical consideration**
  - Observers stepped in when care was substandard.
- **National vs. international standards**
  - National standards in addition to (not in place of) international standards based on IMPAC guidelines.
- **Factors vary by facility, provider and case**
- **Errors of commission**
  - Performance to standard focuses on errors of omission, and tends to ignore errors of commission.



### Conclusions

- Performance of delivery and postpartum care is very low. Most hospitals meet standard less than 50% the time, with no difference by hospital type.
- Certain delivery and postpartum tasks are rarely performed to standard in most hospitals.
- Monitoring during labor and of newborns is erratic and far below recommended frequency.
- Management of complications (measured by chart reviews) is high for sepsis (>90%), and well above 50% for postpartum hemorrhage and eclampsia.
- Missing data patterns were erratic across hospitals with somewhat more missing data in charts than in direct observation, but less than we expected.
- Difficulty in measuring team competence and motivation complicates the analysis.

### Key staff

- **Bart Burkhalter**
- **Wendy Edson**
- **Steve Harvey**
- **Cathy Antonakas**
- **Maina Boucar**
- **Sabou Djbrina**
- **Jorge Hermida**
- **Stephane Legros**
- **Dave Nicholas**
- **Patricio Ayabaca**, Ecua Coord
- **Maurice Bucagu**, Rwand Coord
- **Sourou Gbangbadé**, Benin Coord
- **Affette McCaw-Binns**, Jam Coord
- **Erica Hedmann**, Community midwives study in Jamaica
- **Technical Advisors**, Colleen Conroy, Marge Koblinsky, Jeanne McDermott, Allisyn Moran, Elizabeth Ransom, Cindy Stanton, Mary Ellen Stanton, Patricia Stephenson
- **Expert Observers and Advisors at Country Level**

### *International standards for delivery and postpartum phases*

<p><b>DELIVERY CARE standards</b></p> <ul style="list-style-type: none"> <li>• HW washes hands first</li> <li>• Perineum cleaned</li> <li>• New or re-sterilized gloves</li> <li>• Sterile drapes and clothing</li> <li>• Protect perineum</li> <li>• Suction newborn</li> <li>• One hand each side baby's head</li> <li>• Clamp &amp; cut umbilical cord</li> <li>• Use sterile instru. to cut cord</li> <li>• Baby in skin contact with mother</li> <li>• Dry and cover newborn</li> <li>• Give mother oxytocin</li> <li>• Observe/manage delivery of placenta</li> <li>• Confirm uterus is well-contracted</li> <li>• Examine vulval-perineal region</li> <li>• Examine birth canal</li> </ul>	<ul style="list-style-type: none"> <li>• Examine placenta</li> <li>• Record number of blood vessels in cord</li> </ul> <p><b>PP MATERNAL CARE stds</b></p> <ul style="list-style-type: none"> <li>• Check uterine retraction</li> <li>• Check external genitalia for hemorrhage</li> <li>• Initiate BF within 2 hrs of birth</li> <li>• Check mother's temperature</li> <li>• Monitor maternal BP and pulse</li> </ul> <p><b>PP NEWBORN CARE stds</b></p> <ul style="list-style-type: none"> <li>• Apple antimicrob. drop/ointment</li> <li>• Allow baby to BF on demand</li> <li>• Baby under constant supervision</li> <li>• Clean blood/meconium from skin</li> <li>• Monitor baby's color and respiration, body temperature, and bleeding from cord</li> </ul>
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