



# **MARYLAND PATIENT SAFETY CENTER PERINATAL COLLABORATIVE AND LEARNING NETWORK**

Secretary's Advisory Committee on Infant Mortality  
March 9, 2012

Raymond L. Cox, MD,MBA

Creating perinatal  
units that deliver  
care safely and  
reliably with  
zero preventable  
adverse outcomes

## Financial Disclosures

- None

Creating perinatal  
units that deliver  
care safely and  
reliably with  
zero preventable  
adverse outcomes

# What Do We Want to Accomplish?

The aim of the Perinatal Collaborative is to reduce infant and maternal harm through the implementation and integration of systems improvements and team behaviors into maternal-fetal care.

The Collaborative is an initiative to test, adopt, and implement evidenced-based improvement strategies in the labor and delivery units of hospitals in Maryland and the District of Columbia.



## Change Package: Tools of Change

- Use of common language (NICHD) in Electronic Fetal Monitoring
- Training in team coordination, team communication and teamwork behaviors
- Improvement in staff performance during high-risk events (simulation)
- Revision and application of recommended practice guidelines
- Augmentation and Elective Induction Bundle (Institute for Healthcare Improvement) compliance
- Establish didactic on vacuum extraction

Creating perinatal  
units that deliver  
care safely and  
reliably with  
zero preventable  
adverse outcomes

## How Are We Measuring Success?

- Adverse Outcome Index
- AHRQ Hospital Survey on Patient Safety Culture
- Process measures related to hospital-specific interventions
- Improvement stories

Creating perinatal  
units that deliver  
care safely and  
reliably with  
zero preventable  
adverse outcomes

## Improvements- So Far

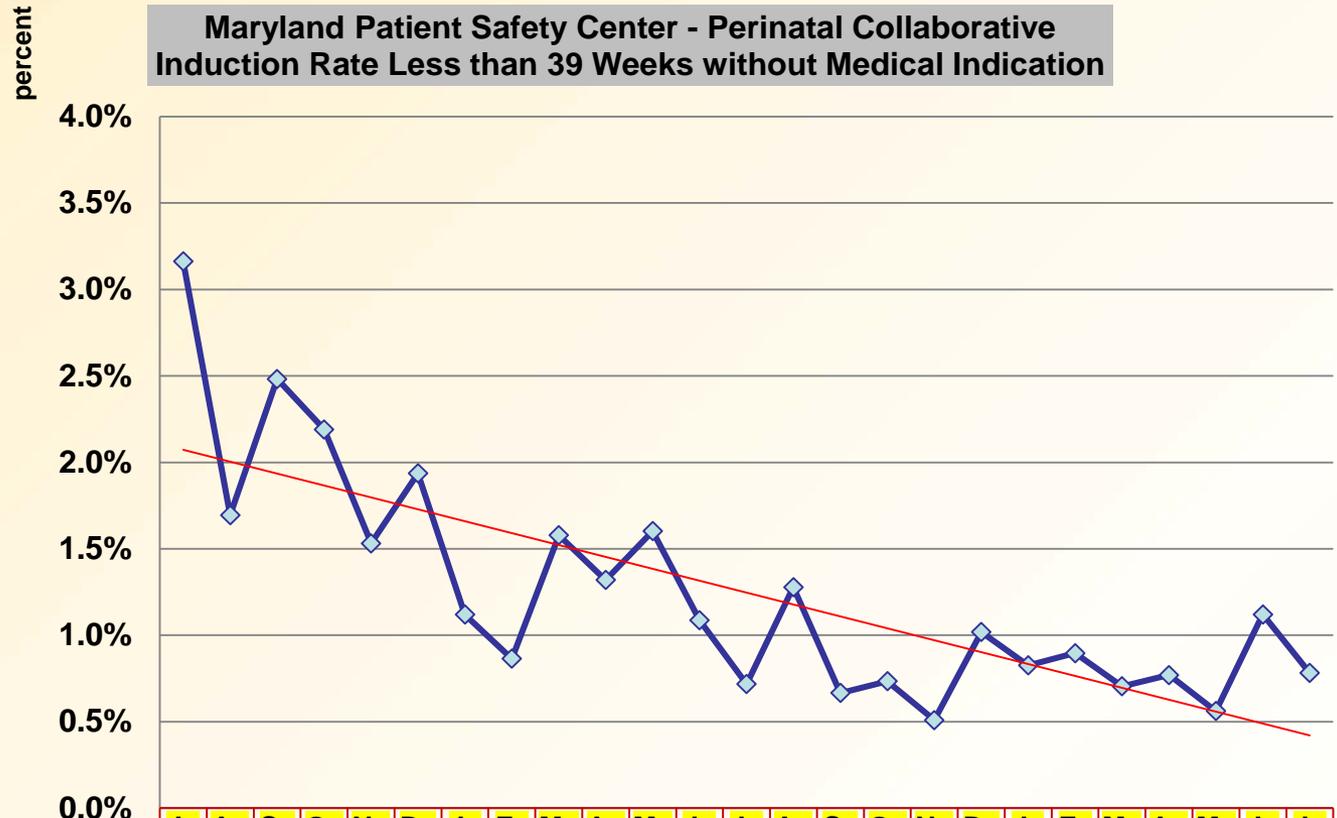
- AOI- 36% of the original hospital group improved on all three indices
- AOI- 73% improved on at least one score
- SI- 60% Level 1&2 hospitals and 50% Level 3 hospital improved on the Severity Index
- Level 3- 25.6% decrease in NICU admissions >2500 g term babies
- AHRQ Culture Survey- improvement in 9 of 12 dimensions
- Since January 2009, elective inductions less than 39 weeks without a medical indication have decreased by 70%

Creating perinatal  
units that deliver  
care safely and  
reliably with  
zero preventable  
adverse outcomes

# The Maryland Patient Safety Center Perinatal Collaborative



**Maryland Patient Safety Center - Perinatal Collaborative  
Induction Rate Less than 39 Weeks without Medical Indication**



	Ju l- 09	Au g- 09	Se p- 09	Oc t- 09	No v- 09	De c- 09	Ja n- 10	Fe b- 10	Ma r- 10	Ap r- 10	Ma y- 10	Ju n- 10	Ju l- 10	Au g- 10	Se p- 10	Oc t- 10	No v- 10	De c- 10	Ja n- 11	Fe b- 11	Ma r- 11	Ap r- 11	Ma y 11	Ju n 11	Ju ly 11
◆ %G/C	3.2	1.7	2.5	2.2	1.5	1.9	1.1	0.9	1.6	1.3	1.6	1.1	0.7	1.3	0.7	0.7	0.5	1.0	0.8	0.9	0.7	0.8	0.6	1.1	0.8
■ # Facilities	27	25	26	26	26	27	25	25	23	27	27	27	27	29	29	29	29	27	29	29	29	27	29	28	29

Creating perinatal  
units that deliver  
care safely and  
reliably with  
zero preventable  
adverse outcomes

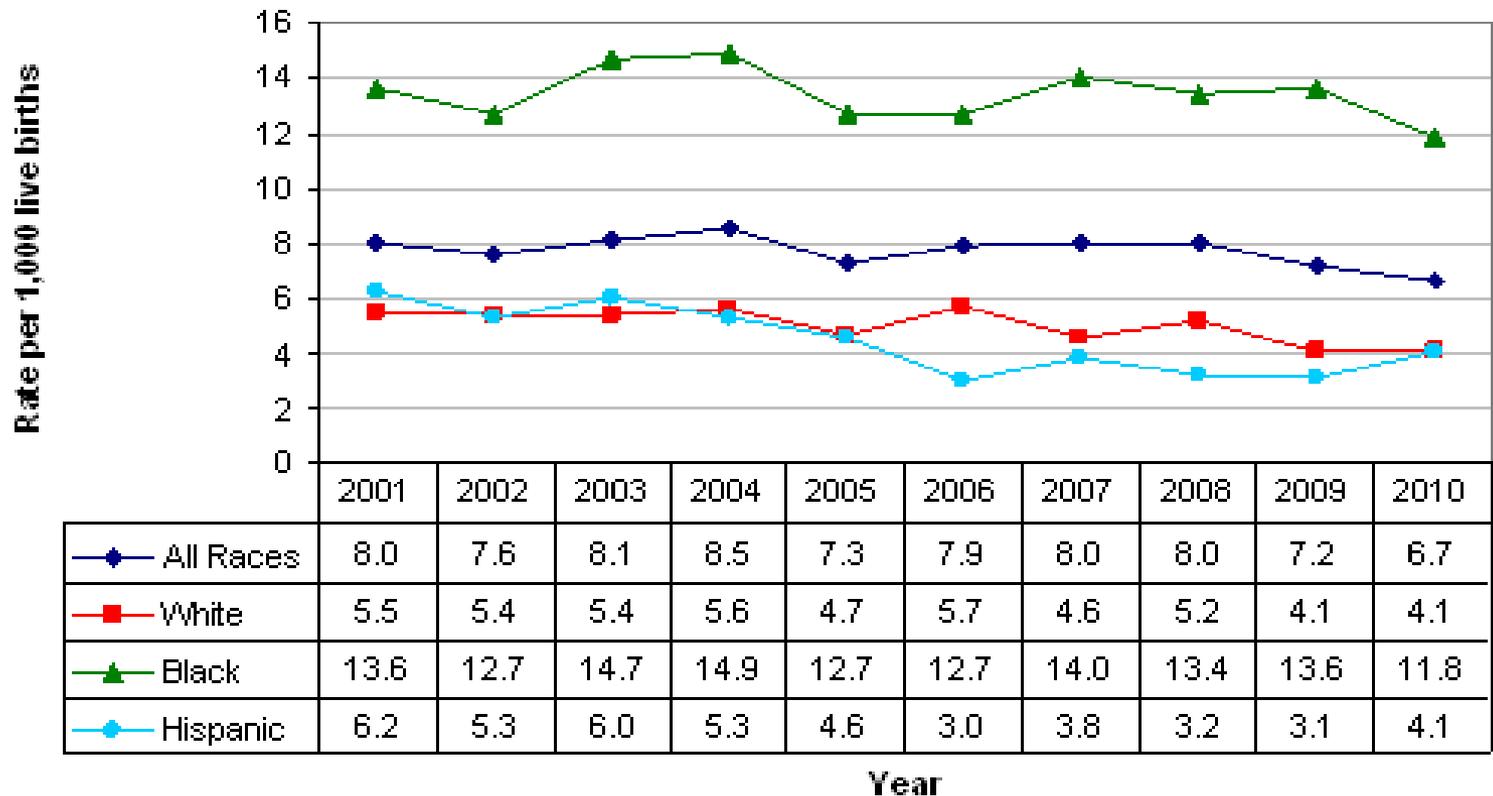
## Are We Saving Money Yet?

- 152 fewer term babies to NICU
- Estimated average savings/patient = \$991-\$2,105
- Total estimated savings = \$150,632-\$319,960

Creating perinatal  
units that deliver  
care safely and  
reliably with  
zero preventable  
adverse outcomes



### Infant Mortality Rates, Maryland, 2001-2010



Data Source: MD DHMH, Vital Statistics Administration

Creating perinatal  
units that deliver  
care safely and  
reliably with  
zero preventable  
adverse outcomes



## Neonatal Learning Network Neonatal/Perinatal Learning Network

- Golden Hour/ Resuscitation and Stabilization
- Teamwork and Communication/ Follow up to Referral Physician
- CLABSI/HAI
- Activated discharge planning for mom, baby

Creating perinatal  
units that deliver  
care safely and  
reliably with  
zero preventable  
adverse outcomes

The Maryland Patient Safety Center  
Perinatal Collaborative



Creating perinatal  
units that deliver  
care safely and  
reliably with  
zero preventable  
adverse outcomes

## Successful Change Strategy

- Create Burning Platform
- Engage Leadership
- Borrow Shamelessly
- Establish Non-Negotiable Mutual Respect
- Practice Relentless Persistence
- Create Ongoing Opportunity for Discussion
- Constantly Measure and Adjust

Creating perinatal  
units that deliver  
care safely and  
reliably with  
zero preventable  
adverse outcomes

# Excellence in Obstetrics

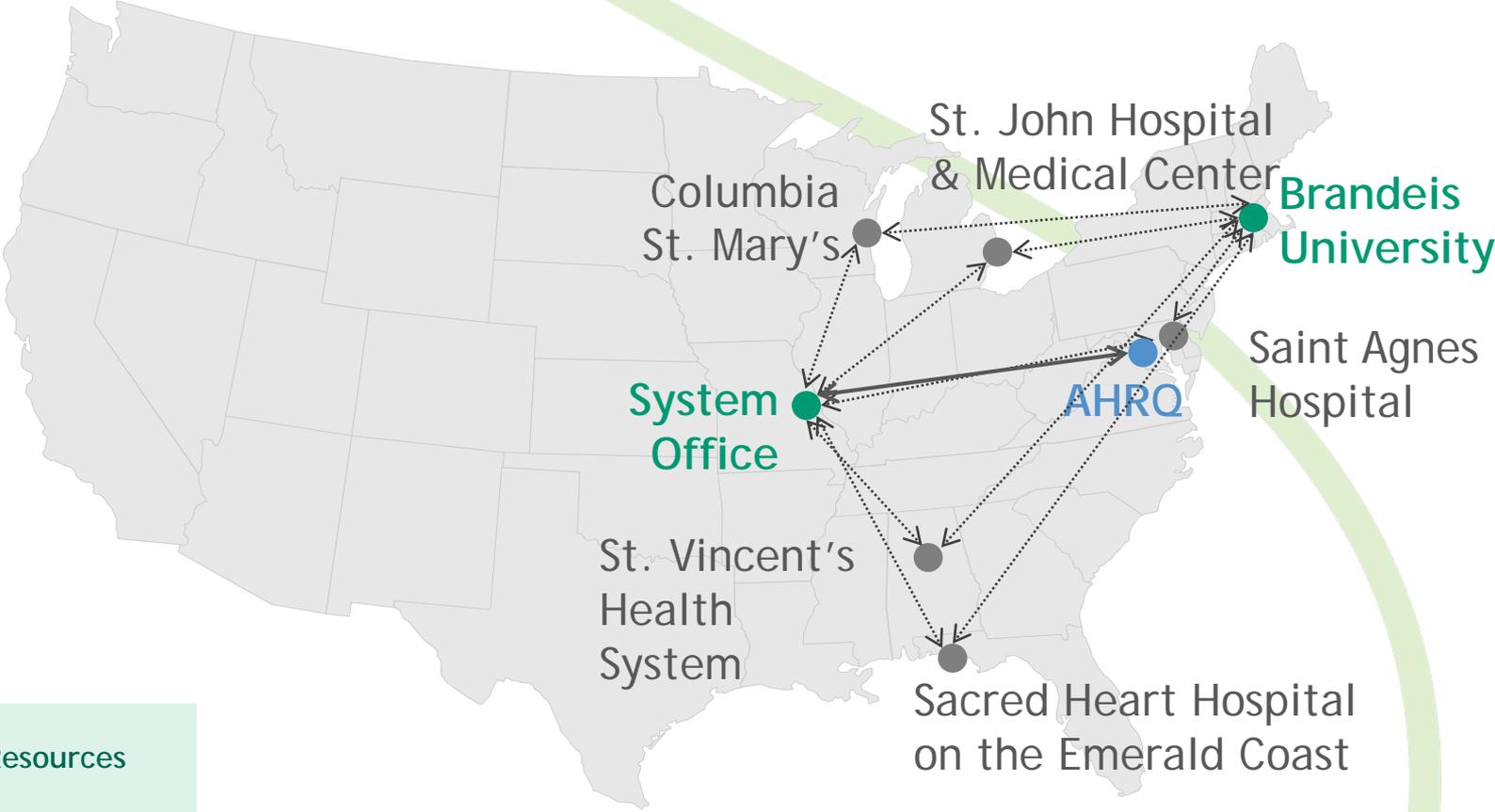
A MULTI-SITE AHRQ DEMONSTRATION PROJECT



James Bell Associates  
Site Visit  
July 6 & 7, 2011



# Collaborators



● Resources

<i>Why</i>	Healing without Harm: A Multi-Site Demonstration Project to Develop New Models for Medical Liability and Improve Patient Safety				
Hypothesis	1	2	3	4	5
<i>What</i>	Decrease in shoulder dystocia injury rates and infant harm when the "bundle" is introduced	Change in delays of treatment when fetal distress occurs and an increase in cesarean section effectiveness (necessity and timeliness) when the protocol guidelines are followed	Reduction in the frequency and severity (settlement amount) of claims when full disclosure is implemented	Increase in reporting of Serious Safety Events when 5 elements of High Reliability have been adopted	Decrease in all birth trauma events and rates

# Healing without Harm - Year One Major Milestones

- **593** nurses/physicians trained on multiple interventions
- **4280+** mothers consented between January-July 2011
- **Average consent enrollment rate at five sites– 88%**
- **Race/ethnicity breakdown of consented mothers**
  - **59% white**
  - **20% black**
  - **9% Hispanic**
  - **2% Asian/Pacific**
  - **2% Other**
  - **7% Unknown**

# Healing without Harm - Year One Interventions for Clinical & Cultural Change

## Training Rates - Aggregate

