

Welcome to *California*



# CUSP: An HAI Prevention Strategy

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# The CUSP Project Model

- Funded by the Agency for Healthcare Research and Quality (AHRQ) to the American Hospital Association's research foundation, Health Research and Educational Trust (HRET)
- Conceptual model developed and tested at Johns Hopkins University, Dr. Peter Pronovost
- Utilizes a range of safety tools and approaches
- Based on understanding that culture is local and therefore improving culture must be at the unit level
- Rooted in the belief that harm is not an acceptable cost of doing business



# Changing the Culture - Key Concepts

## 1. Culture is local

- Implement change unit-by-unit
- Frontline staff comprise the improvement team

## 2. Not linear process

- Iterative cycles
- Takes time to improve culture

## 3. Couple with clinical focus

- Improving culture alone may/may not improve desired outcome(s)
- Lubricant for clinical change

# Learning the Language of CUSP

<b>CUSP</b>	Comprehensive Unit-based Safety Program
<b>Safety Culture</b>	enduring, shared, learned beliefs and behaviors that reflect a willingness to learn from errors
<b>Adaptive work</b>	implementing behaviors associated with teamwork, culture change, communication
<b>Technical work</b>	increasing adherence to evidence-based practices, clinical improvement
<b>Psychological safety</b>	the degree to which healthcare personnel feel they are supported when asking for help or learning from mistakes

# Summary of CUSP

- Accept that we make mistakes
- Focus on systems rather than blame
- Speak up with concerns, listen when others do
- Create clear goals, ask questions early
- Standardize, create independent checks, and learn from mistakes
- Measure: process, outcome, culture

# Example: CUSP Model Applied to CLABSI

## Adaptive / Cultural Work

1. Educate staff on the science of safety
2. Identify defects
3. Assign executive to adopt unit
4. Learn from 1 defect per quarter
5. Implement teamwork tools

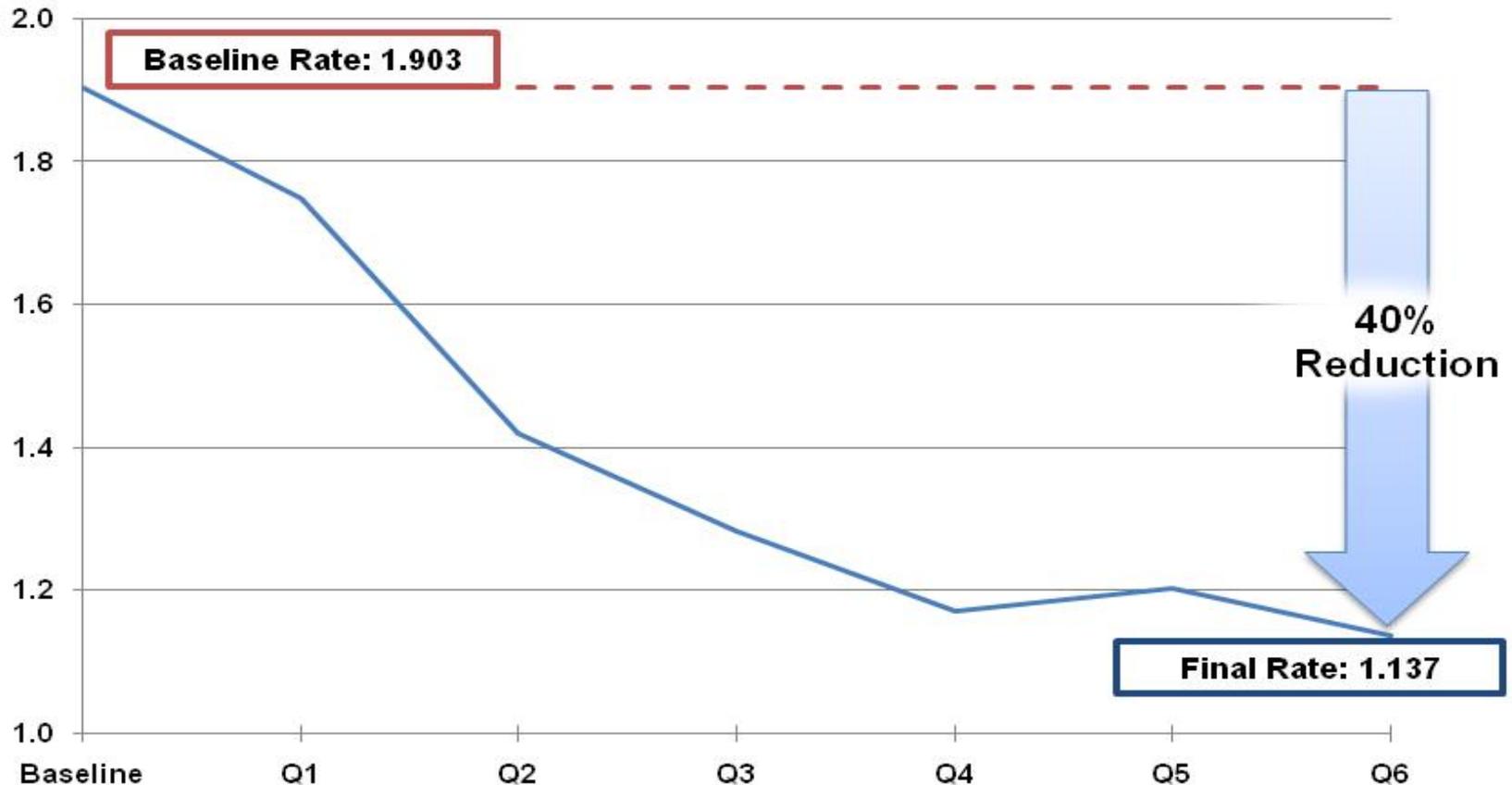
## Technical Work (Bundle & checklist)

1. Appropriate hand hygiene
2. Chlorhexidine skin prep
3. Full barrier precautions
4. Proper site selection (avoid femoral site)
5. Prompt removal of unnecessary lines



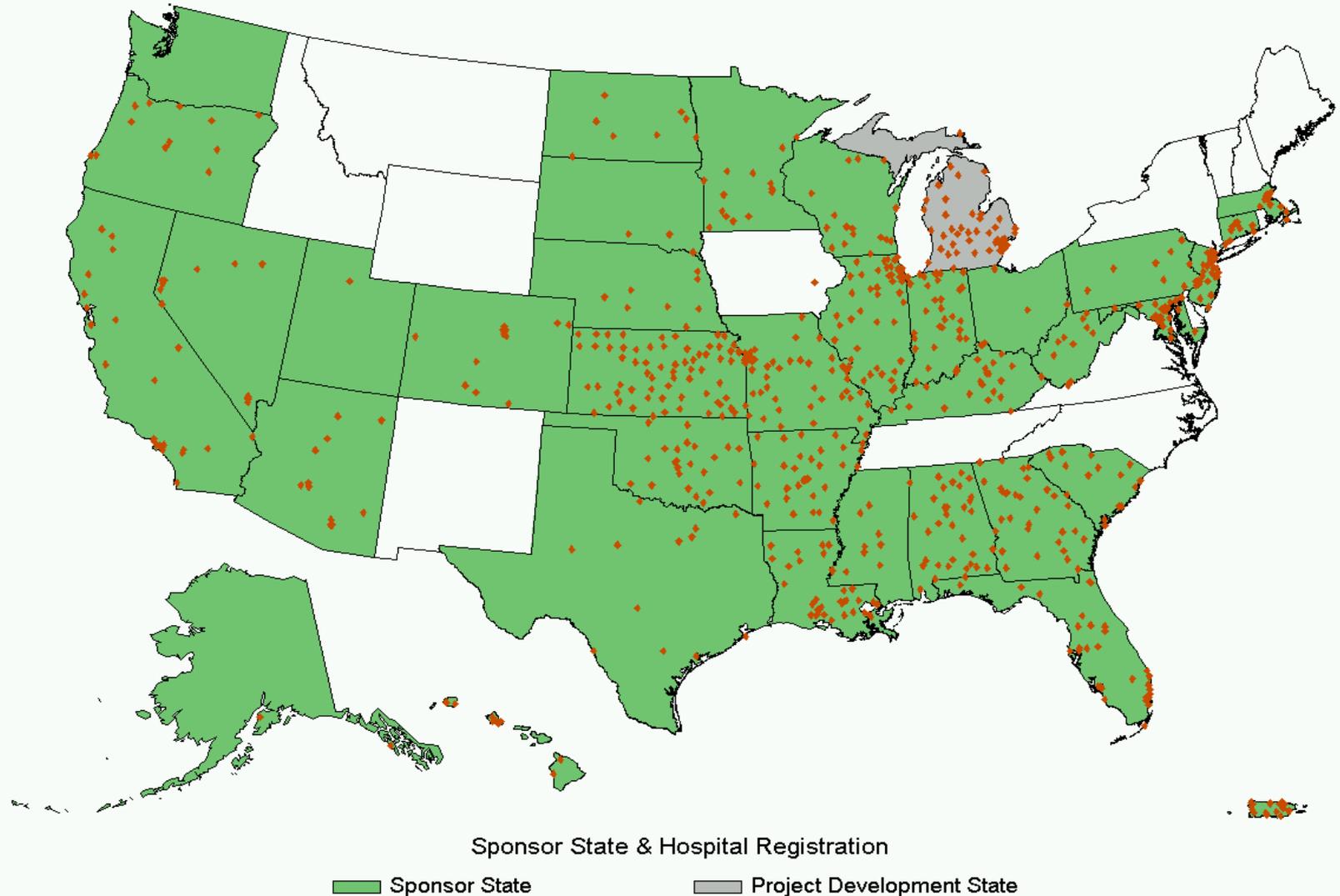
# Adult ICU CLABSI Rates Overtime

## Cohort 1-5

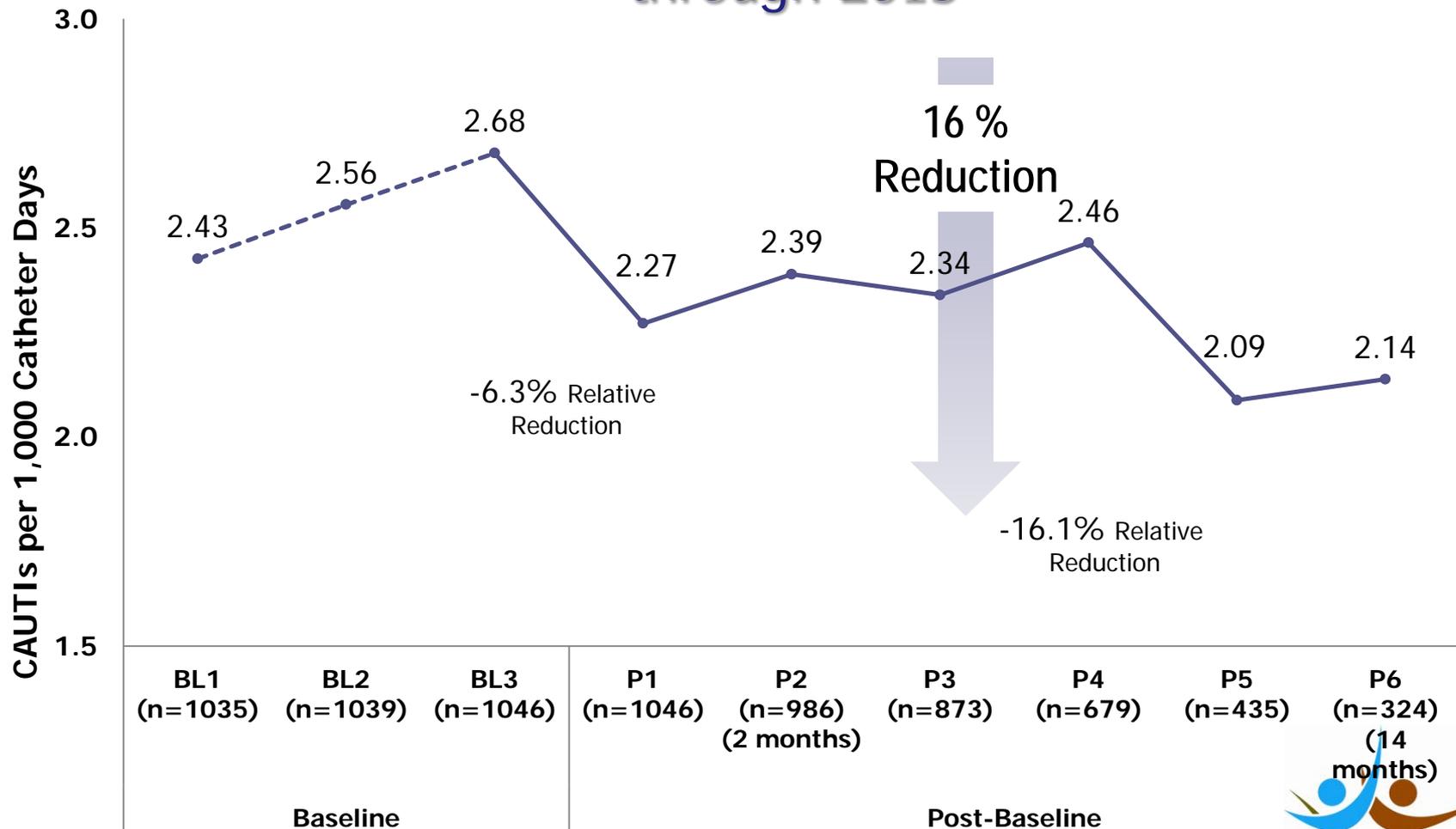


# On the CUSP: Stop CAUTI

2010-2013, 37 states, 861 hospitals, 1366 units

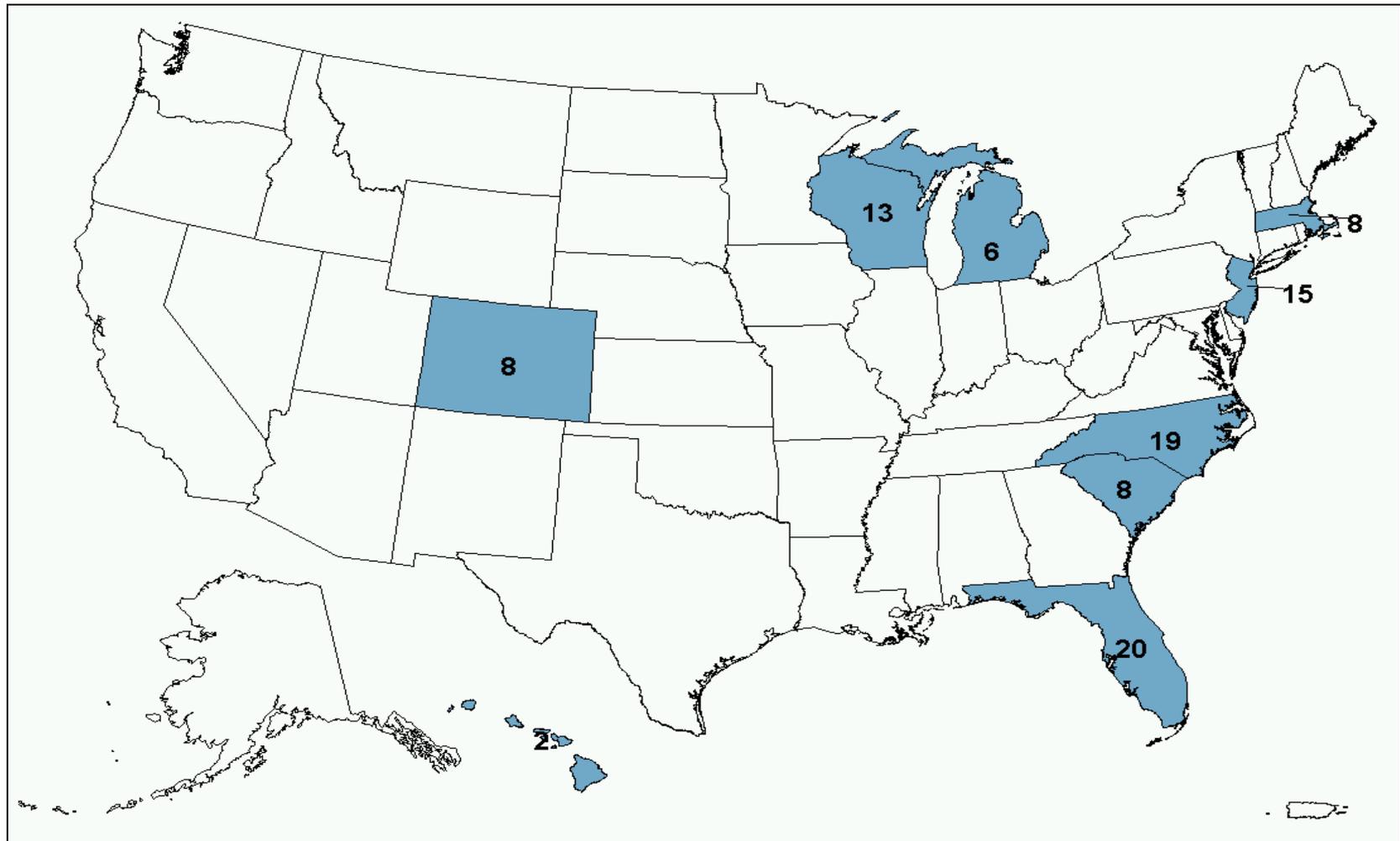


# CAUTI Rate Over Time through 2013

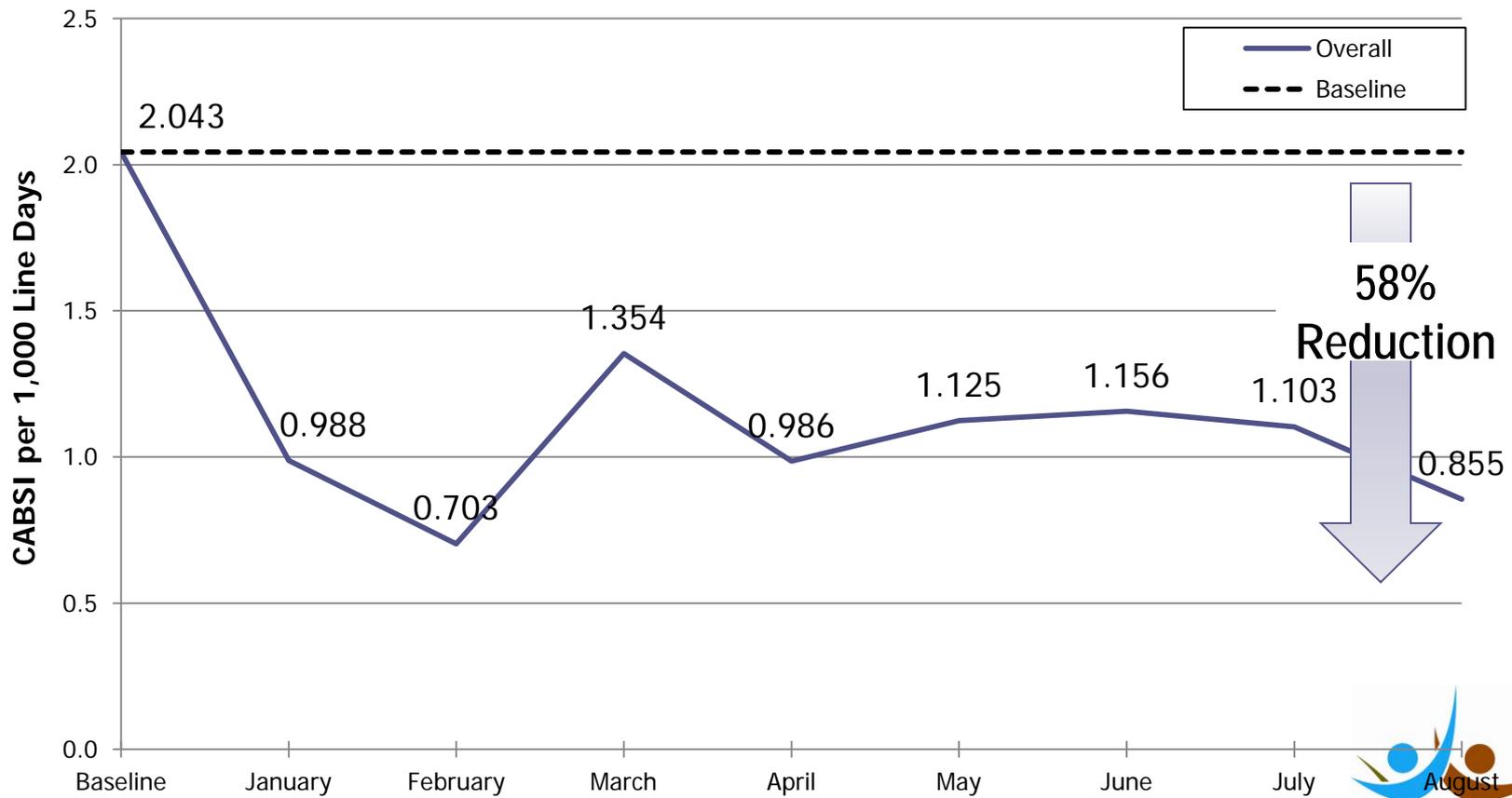


# On the CUSP: Stop Neonatal Catheter-Associated BSI (NCABSI)

9 States, 100 NICUs



# NCABSI Rates Over 1 Year



# CUSP in the Published Literature

- 15 papers in peer-reviewed journals demonstrating successful CUSP interventions to reduce HAI

*Of note:*

<b>CLABSI</b>		
	Rate per 1000 central line days	
Connecticut ICUs	1.8 → 1.1	Hong AL, J Healthcare Qual, 2013
Hawaii (HI) Statewide	1.57 → 0.29	Lin DM, TJC J Qual Patient Safe, 2013
HI - Adult ICU	1.49 → 0.25	
HI -PICU/NICU	2.05 → 0.53	
<b>SSI</b>		
	Rate per 100 procedures	
Johns Hopkins Hospital, Colorectal Service	27.3 → 18.2	Wick EC, J Am Coll Surg, 2012

# CUSP in California

- Supported by designated State lead for CUSP

<b>CAUTI</b>		Rate per 1000 urinary catheter days
LTAC and small/rural hospitals	Nov 11 - May 13	2.17 → 2.10
Acute care hospitals	May 12 – Nov 13	4.40 → 2.17
Emergency departments	Nov 13 – May 15	Pending
<b>CLABSI</b>		
NICUs in 69 hospitals, with DHS/CCS	Jan 13 - current	Pending

# Overall Impressions and Observations

- **On the CUSP: Stop HAI** is a structured national initiative aimed to reduce patient harm
- Demonstrated success in reducing HAI rates
- Model uses both technical and adaptive methods that can be applied to other healthcare issues
- Website is resource rich with information, tools, and presentations by experts in the field

[www.onthecuspstophai.org](http://www.onthecuspstophai.org)



*Acknowledgment and thanks for sharing slides:  
Barbara S. Edson, RN, MBA, MHA  
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