



A Tale of Two Projects: Golden Hour and NAS in Tennessee

ILPQC Annual Meeting
Naperville, IL
November 10, 2014



Overview

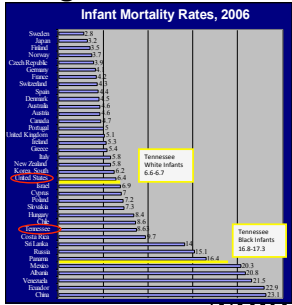
- Brief history of TIPQC
- Golden Hour Project
- Neonatal Abstinence Syndrome Project
- Challenges and Opportunities with Concurrent Statewide Projects




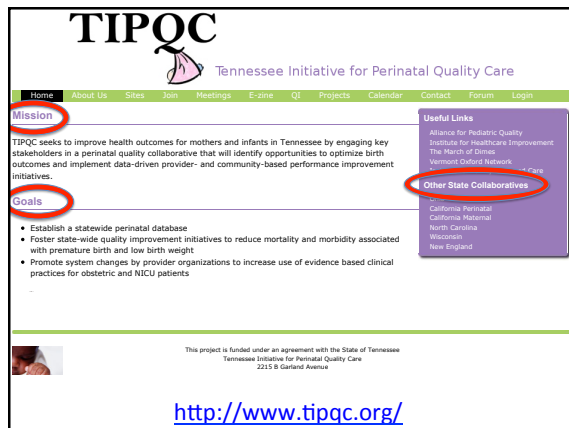
The Challenge 2008

- Infant Mortality 48th
- Preterm Birth 47th
- 34-36 wk EGA Birth 46th
- <32 week EGA Birth 44th
- <2500 gm Birth 42nd
- Births without PNC n/a

- March of Dimes Data Book, 2008



This is our system, and these are our results...


<http://www.tipqc.org/>

Engaged Stakeholders & Active Participants

Families
Oversight Committee
Project Development
Project Participants

Bedside Decision Makers
Nurses/Nurse Managers
Nurse Practitioners & Midwives
Physicians/Medical Directors
Hospital Pharmacists
Lactation Consultants
.....

Hospitals
THA
CHAT
TCPS
CMO Society
Local Hospital Leadership



Payers
TernCare
MCOs
Commercial Payers

VON & others...
Other State Collaboratives
TNAAP
ACOG
TMA
MOD

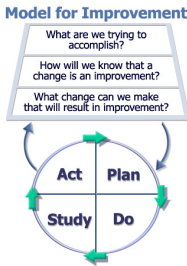
Government
GOCCC
DOH Family Health*
Vital Statistics
HAI Reduction

How do we improve?

3 Key Questions then PDSA

- Aim
- Measures
- Hypothesis/Expertise
- Toolkit of proven evidence based potentially better practices

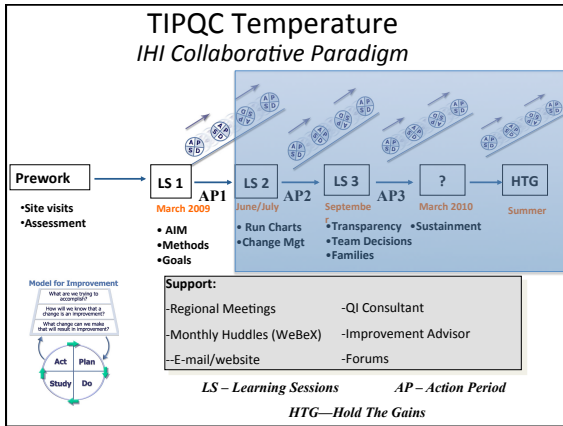
Model for Improvement



What are we trying to accomplish?
How will we know that a change is an improvement?
What change can we make that will result in improvement?

Act Plan
Study Do

1 IPOC
Modified from API Lloyd, Provost et al.
Modified from Deming & Shewart



Projects Matrix 2014

*State Level Stakeholders Collaborating on Project

Project	Team Meeting	Aim & Charter	Measures	Compiling Toolkit	IRB reviews	Data Agreement	Pilot	State Kickoff	Huddle #	Sustainment
Temperature									11	+
CLABSI									18	5
HM4NICU									21	2
39 weeks (EED)*						10			18	4
NICUFUN						3			12	
UCCHD*									5	1

TIPQC

Projects Matrix 2014

*State Level Stakeholders Collaborating on Project

Project	Team Meeting	Aim & Charter	Measures	Compile toolkit	IRB reviews	Data Agreement	Pilot	State Kickoff	Huddle #	Sustainment
Family Involvement									20	
TN:BFP Hospital*							3		18	
Golden Hour							3		13	
NAS*							7		12	
ANS*									3	
HAI 2.0*									3	
Safe Sleep*										
NICU Nutrition										
PP Hemorrhage*										
TN:BFP Clinic										

TIPQC

A Tale of Two Projects

Golden Hour

- Vote in 2010
- Kickoff in 2012
- Patient level data
- 25 Data Fields
- 4 (+3) PBPs
- 9 starting centers
- 8 sustaining centers

NAS

- Vote in 2010
- Kickoff in 2012
- Patient level data
- 23 Data Fields (+31 monthly)
- 8 PBPs
- 10 starting centers
- 9? sustaining centers

TIPQC

Golden Hour

- **Aim:** to improve outcomes of infants requiring resuscitation and stabilization by systematically implementing evidence based practices in the critical first hours of life.
- As early outcome measures are difficult to obtain and controversial to interpret, we will **focus on high reliability (>90%) implementation** of specific practices focused on:
 - team communication,
 - thermal regulation,
 - surfactant administration,
 - oxygen dosing by pulse oximetry monitoring.

TIPQC

Pre-resuscitation checklist and briefing

- *Data slide to be inserted*

TIPQC

Surfactant by Protocol

- *Data slide to be inserted*

TIPOC 

Oxygen Titration to SaO2 Targets

- *Data slide to be inserted*

TIPOC 

Time to medication administration

- *Data slide to be inserted*

TIPOC 

Neonatal Abstinence Syndrome

- **Aim:** optimize our management (of NAS) by attaining high reliability (>90%) implementation of processes for
 - NAS scoring,
 - NAS treatment initiation and weaning,
 - Post-NAS discharge preparation by December 2013.

TIPOC 

NAS PBP

- Review, assess and revise unit NAS policy
- Uniform detection and screening
- Implement high reliability scoring
- Management
 - Non-pharmacological
 - Pharmacological
- Transition to outpatient follow up
- Engage upstream and downstream stakeholders
- Monitor families, caregivers & environment

TIPOC 


Monthly Mean Length of Stay

- *Data slide to be inserted*

TIPOC 


NAS Scoring Reliability

- *Data slide to be inserted*




A Tale of Two Projects

<p>Golden Hour</p> <ul style="list-style-type: none"> • Consensus on evidence based PBPs • No PHI, no HIPPA/HITECH • Clear focus on data driven implementation of PBPs within NICU span of control • Discrete clinical period for intervention • No legislative agenda 	<p>NAS</p> <ul style="list-style-type: none"> • Limited evidence, many uncertainties on PBPs • Commitment to PHI • Commitment to upstream and downstream engagement & advocacy • Protracted clinical period for intervention • Impact of NAS legislation?
--	---



Level 1 & 2 Nursery Engagement

- Participating level 3 or 4 centers did not take an active roll in recruiting their referral networks
- Few level 2 NICUs participated (group vs. unit)
- Level 1 centers initially interested, dropped out
- Level 1 interest remains
 - Little QI capacity, resources or experience
 - Even thin data sets can be exceed capacity/resources
- Compliance interpretations are a barrier to participation at all levels



A Tale of Two Projects

<p>Golden Hour</p> <ul style="list-style-type: none"> • Achieved Aims on most targets • Western NICUs <ul style="list-style-type: none"> – Enthusiasm for second Golden Hour QI project – Discussing new nutrition project • Eastern NICUs interested in Golden Hour, but no bandwidth to participate 	<p>NAS</p> <ul style="list-style-type: none"> • Challenged by compliance hurdles • Enthusiasm for upstream & downstream advocacy • Eastern NICUs see ongoing effort for years, exploring spread to referral units • Western NICUs see little value in joining effort until NAS population is larger
--	--

Impact of NAS and split in collaborative focus is still evolving.

