



NAS Initiative

Onboarding Session

April 26, 2019





VON Overview

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Vermont Oxford Network



VON has more than
1200 hospitals
collaborating to
improve neonatal care
around the world with
data-driven quality
improvement and
research



VON Activities



- **Research: since 1989**
- **NICU Databases**
 - **Enrolls 90% of VLBW infants born in the US each year (24 Georgia hospitals reporting)**
- **QI Collaboratives and Education: since 1997**
 - **Guide multi-center collaboratives and teams in QI**
 - **4 Key Habits for Improvement**
 - Habit for Change**
 - Habit for Evidence-Based Practice**
 - Habit for Systems Thinking**
 - Habit for Collaborative Learning**



QI Collaboratives and Education



- **Quality Improvement Collaboratives:**
 - **NICQ: Newborn Improvement Collaborative for Quality (hands-on): 50-60 centers working in groups of 6-8**
 - **iNICQ: internet-based collaborative engaging >100**
- **Online Education:**
 - **VON/IHI Practical Foundations in Improvement Science**
 - **Universal Training for NAS**



Annual Quality Congress

VON Vermont Oxford
NETWORK

October 2-6, 2019
Chicago, IL



October 2-3

Helping Babies Breathe Master Trainer Course

October 3

Jump Starting Quality: Strategies to Launch a Successful QI Project

NICQ Team Homerooms

October 4

QI Collaborative Symposium for NICQ/iNICQ teams

Genomic Medicine: Shaping the Future of Newborn Care

October 5-6

The Color of Health

Moderated by Jeffrey Horbar, MD

Critical Transitions: A New Lens

Moderated by Jeffrey Meyers, MD

Using the NICU Wisely

Moderated by Erika Edwards, PhD, MPH

Uncertainty in the NICU

Moderated by Roger Soll, MD

NICUs Around the World

Moderated by Danielle Ehret, MD, MPH

Improvement Science Expo

Abstracts due by June 3, 2019

Breakout Sessions for In-Depth Learning

Visit us online for information about submitting an abstract, scholarships, program details, and to register your team: www.vtoxford.org/Annual_Quality_Congress



NAS Universal Training Overview

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Universal Training for NAS



- **Based on the VON NAS Internet-Based Quality Improvement Collaborative (iNICQ)**
 - Length of pharmacologic treatment decreased from **16 days to 15 days**
 - Length of stay decreased from **21 days to 19 days**
 - The proportion of infants discharged on medication for NAS decreased from **39.7% to 26.5%**



Purpose



- **Standardize care through rapid-cycle distribution of current evidence-based education and materials**
- **Improve quality and safety**
- **Decrease costs due to unnecessary length of stay and pharmacologic treatment**



Resources



**Micro-Lessons
(CME/CNE)**



Discussion Forums



Toolkits



**Abstracts &
Improvements Stories**



**QI & Family
Centered Care
Resources**



Poster Boards



Key Driver Diagram – Improving Care for Babies and Mothers Impacted by Neonatal Abstinence Syndrome



Version: 0.2
Date: 12/18/18

SMART Aim

We aim to decrease length of stay among newborns diagnosed with NAS in participating GaPQC hospitals from _____ to _____ by 12/31/21

Global Aim

Improve care for babies and mothers impacted by NAS

- ### Primary drivers
- Improve identification of mothers and infants at risk
 - Increase reliability of scoring for symptoms of NAS
 - Increase non-pharmacologic treatment
 - Avoid separation of mother and infant
 - Reduce pharmacologic treatment
 - Reduce variation in treatment of infants with NAS
 - Improve transition to home, engaging parents

Interventions

- Develop standard screening guidelines
- Educate staff on scoring
- Assess inter-rater reliability of scoring
- Use Eat, Sleep, Console
- Increase breastfeeding
- Use non-pharmacologic bundles of care
- Use a standard opioid treatment protocol
- Back-transfer infants stabilized on treatment
- Collaborate with support organizations/agencies

VON Vermont Oxford Network Micro-lessons

- Lesson 1. Improved Family-Centered Care at Lower Cost & Improvement Story: Using Standardization to Create a High Reliability
- Lesson 2. The Prescription Opioid Epidemic and Neonatal Abstinence Syndrome – A Public Health Approach
- Lesson 3. Virtual Video Visit Chapter 1: Linking Attitudes with Outcomes
- Lesson 4. Substance Use 101: Mythbusters
- Lesson 5. Virtual Video Visit Chapter 2: The Face of Trauma
- Lesson 6. Substance Use 101: Frequency and Neonatal Impact by Agent
- Lesson 7. Standardizing Care to Improve Outcomes
- Lesson 8. Screening and Obtaining a Complete Drug History for Substance Use in Pregnancy
- Lesson 9. Presentation and Typical Course
- Lesson 10. Non-Pharmacologic Strategies for Symptom Management
- Lesson 11. Virtual Video Visit Chapter 3: The Birth Story
- Lesson 12. Scoring Redux: Pitfalls and Perils
- Lesson 13. Scoring: Cases, Controversies
- Lesson 14. Withdrawal, Toxidromes, and Confounders
- Lesson 15. Lactation and the Substance-Exposed Mother-Infant Dyad
- Lesson 16. Engaging Families in Feeding and Nutritional Support
- Lesson 17. Developmental Outcomes of Substance-Exposed Infant
- Lesson 18. Virtual Video: Two Stories of Recovery and the Long Road Home



Statewide SMART AIM



We aim to decrease length of stay among newborns diagnosed with NAS in participating GaPQC hospitals by 1 day by 12/31/21



Micro-Lessons



- **CME/CNE credit available**
- **18 lessons**
- **We encourage you to schedule “team time” and review the micro-lesson assigned each month**





VON Day Audits

David H Levine, MD, FAAP, FACP
Director, Newborn Services
Director, Regional Perinatal Center
Clinical Associate Professor of Pediatrics
Mercer University School of Medicine



Purpose



- **Quick and efficient tool to help you understand where you are in relation to others**
- **Provide evidence-based feedback to further process improvement**



VON Day Audit Schedule



- **There will be three audits:**
 - **Beginning (July 8-12, 2019)**
 - **Mid-Point (2020)**
 - **End (2021)**



Data



- **Unit Level Data**
 - Ex: Policies and guidelines, scoring tools
- **Patient Level Data**
 - Ex: Birth weight, gestational age, pharmacologic agents used, toxicological screening performed
- **Outcome Data**
 - Length of NICU stay
 - Length of hospital stay
 - Total duration of pharmacologic treatment

Sample Report



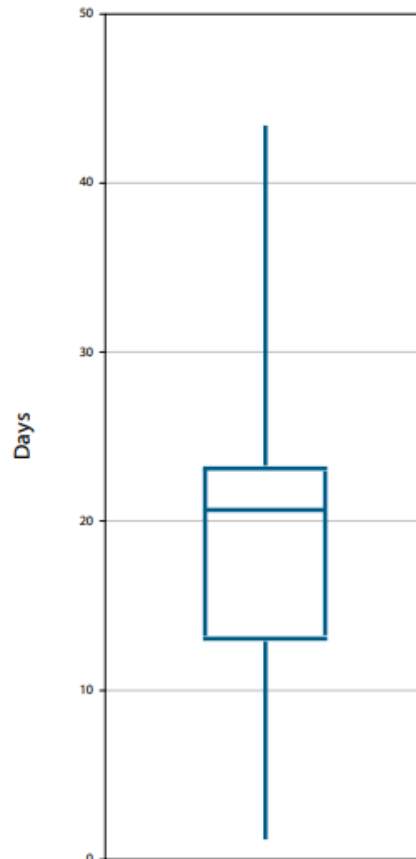
VON Day Quality Audit - Neonatal Abstinence Syndrome Duration of Treatment and Hospitalization XX NICUs Audited xx Infants Sample Report (October 2016)

	MPSC		
	Median	(Q1, Q3)	(Min, Max)
Total duration of pharmacologic treatment for NAS	x	(x, xx)	(x, xx)
Interval between receiving the last dose of a pharmacologic agent for NAS and discharge.	x	(x, x)	(x, xx)
Total length of NICU stay	x	(x, xx)	(x, xx)
Total length of hospital stay	x	(xx, xx)	(x, xx)

Sample Report



VON Day Quality Audit - Neonatal Abstinence Syndrome
Total Duration of Pharmacologic Treatment for NAS
XX NICUs Audited xx Infants
Sample Report (October 2016)



Data Champion



- **The Data Champion is the key liaison to VON for the VON Day Audit**
 - All communications from VON will be directed to this person
- **Collect the data (“paper and pencil”) and submit online**



Time Expectations



- **Submit data on patient discharges for the specific ICD-10 code for the designated 3 month period**
 - 2-4 hours for patient finding and screening for eligibility
 - 20 to 30 minutes per patient to complete the audit
 - Audit is capped at 30 patients
- **Reports given about a week after the audit period closes**





GaPQC Logistics

David H Levine, MD, FAAP, FACP



Monthly Webinars



- **Second Tuesday of every month from 2-3pm**
- **We encourage you to participate as a QI Team**
- **Topic will correspond to a VON micro-lesson**



Monthly Webinars Standard Agenda



- **Review NAS Driver diagram**
- **Didactic presentation on monthly topic**
- **QI Discussion**
- **Group Discussion: challenges, successes, ah-hahs, sharing your improvement stories**



Action Steps



- ✓ Assemble/meet with your teams
- ✓ Develop plan for watching micro-lessons and participating in monthly webinars
- ✓ Complete these by May 15th, 2019
 - Participation agreement (non-member hospitals only)
 - Data sharing agreement (member hospitals only)
 - VON LMS Enrollment Spreadsheet
 - IRB Approval (do not need to turn in)



