iNICQ 2019

The Ins and Outs of Neonatal Care

Improving Critical Transitions for Every Newborn

Improving the Transition to Home & Community:

Preparing Families for Discharge

September 4, 2019
3PM Eastern

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iNICQ 2019

Webinar Basics

- Listen on your speakerphone or computer audio.
- Use the chat feature, available at the bottom of your screen, to engage and interact with the faculty – chat to "Everyone".
- Identify a designated chatter – someone who will type in questions and comments for the rest of your team.
- Use the "View Options" menu at the top of the screen to turn on "Side-by-side Mode" and adjust the dividing line left or right for the best view on your screen.
- Turn on "Speaker View" in the top-right corner to see just the current speaker. Switch to "Gallery View" to see more faculty during Q&A.

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You may have noticed . . .
Some of today's presentations were pre-recorded

Faculty are live for the Q&A

Chat questions and comments to "Everyone"!

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Session Outline

- Background & Evidence
- Family Stories
- A Success Story! Improving Parental Readiness for Discharge
- Team Discussion & Sharing
- Team Time Activity

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iNICQ 2019 Improving Critical Transitions

Improving the Transition to Home & Community:

Preparing Families for Discharge

Wendy L. Timpson, MEd, MD
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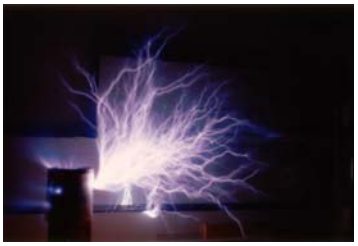
iNICQ 2019 Improving Critical Transitions



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Disclosures

Dr. Timpson does not have any financial arrangements or affiliations with a commercial entity.

Dr. Timpson will not be discussing the unlabeled use of a commercial product during this presentation.

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How can we make The Threshold feel less like a chasm?

- Parents need: communication, role clarity, emotional support, knowledge sources, financial resources[1]
- Discharge education linked to parental readiness[2]
- Structured + individualized discharge planning associated with reduced LOS, readmission rate[3]

1. Berman LB, et al. J Peds. 2019;205:98-104
2. Hamline MY, et al. Pediatrics. 2018;142(5):e20180442
3. Goncalves-Bradley DC, et al. Cochrane Database. 2016(1):CD000313.

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VON Day Audit Results

(-) 35% of centers did not have a formal process to engage families in planning transition to home

(-) 30-40% of centers did not have a formal guideline around medical stability and clinical status

(+) 93% of centers did have a formal process to determine follow up needs

(+) 96% of centers provide information to breastfeeding mothers on outpatient lactation support

(-) across all centers, 27% of notes for NICU infants >7 day address anticipated discharge date

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Discharge of the high risk infant[1]

1. Encourage early and frequent parent involvement
2. Develop an individualized discharge teaching plan with written checklists and skills assessments
3. Assess family and home readiness prior to discharge

1. AAP COFN Statement. Pediatrics. 2008;122(5):1119-26

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So…I just have to create a discharge preparation program?

In preparing for battle, I have always found that plans are useless but planning is indispensable.

-Dwight D. Eisenhower

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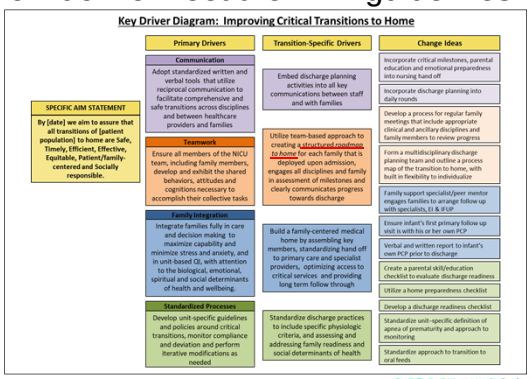
How do we meet the AAP guidelines?



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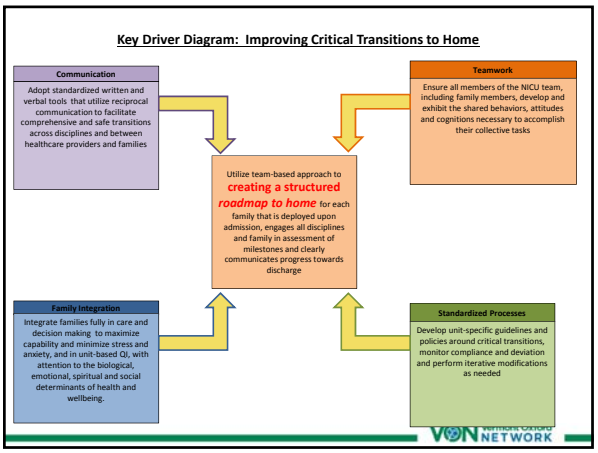

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Parent Perspectives

Teesha Miller
Mother of Xavier,
former 35 weeker,
8 lbs.

Havey Manion
Mother of Layne,
former 28 weeker,
1 lb. 11 oz.

Molly Fraust Wylie
Mother of Max,
former 32 weeker,
3 lbs., 2 oz.

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Let's hear from the source…

1. Listen
2. Identify themes
3. Add your themes to a Poll Everywhere word cloud as single words or short phrases. For short phrases, separate the words with "-" or "_".

Respond at **PollEv.com/vtoxford**
OR
Text **VTOXFORD** to **22333** once to join the poll,
then text your themes to the same number.

PLEASE NOTE:
The nature of this collaboration includes sometimes sensitive topics that can be triggering for family members within the team.

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Themes from Family Videos

Word Cloud Results

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iNICQ 2019 Improving Critical Transitions

Preparing families for the transition to home from the NICU

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Department of Pediatrics
Boston Medical Center
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Conflict of interest disclosure

I don't have any relationships with commercial entities relevant to the content I am planning, developing, or presenting for this activity. I will not be discussing any off label usage.

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Preparing for Discharge From the Neonatal Intensive Care Unit

Munish Gupta, MD, MMSc, DeWayne M. Pursley, MD, MPH, Vincent C. Smith, MD, MPH

BACKGROUND: Discharge readiness is a key determinant of outcomes for families in the NICU. Since 2003, using a broad set of outcome and process measures, we have conducted an ongoing quality improvement initiative to improve the discharge preparation process in our NICU and readiness of families being discharged from the NICU.

METHODS: Iterative improvements to the discharge preparation process were made by a multidisciplinary committee. Discharge readiness was measured by using a parental and nurse survey for all families discharged from our NICU. Primary outcome measures included parental self-assessment of discharge readiness and nurse assessment of the family's emotional and technical discharge readiness. Secondary outcome measures included assessment of specific technical skills and emotional factors. Process measures included nursing familiarity with family at discharge. Improvement

Department of Neonatology, Beth Israel Deaconess Medical Center, Boston, Massachusetts, and Harvard Medical School, Boston, Massachusetts

Gupta M, Pursley DM, Smith VC. Preparing for Discharge From the Neonatal Intensive Care Unit. Pediatrics. 2019;143(6): e20182915

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Setting

- Beth Israel Deaconess Medical Center (BIDMC)
- BIDMC hospital has ~5000 deliveries per year
- NICU is a level III unit, as defined by the AAP, that provides full medical services to term and preterm infants; infants with acute surgical needs are transferred to a local level IV facility
  - 48 intermediate and intensive care beds
  - an average daily census of between 40 to 45
  - 900 to 1000 admissions per year

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SMART Aim Statement

- The NICU Discharge Planning Committee will review the systems surrounding discharge planning in the NICU and improve upon these systems to ensure discharge teaching and transition planning occur in a timely, efficient, effective, equitable, and consistent manner, thereby improving family and staff satisfaction as well as patient care
- We want to increase the percent of families that are prepared for NICU discharge by 10%

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Definitions

- NICU **discharge readiness** is the attainment of technical skills and knowledge, emotional comfort, and confidence with infant care by the primary caregivers at the time of discharge
- NICU **discharge preparation** is the process of facilitating discharge readiness to successfully make the transition from the NICU to home
- Discharge readiness is the desired outcome, and discharge preparation is the process

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Drivers of Change

- Teamwork
  - Families
  - Nursing staff
  - Multidisciplinary discharge planning committee
  - NICU leadership
- Communication
  - Reciprocal communication between providers and families
- Standardized processes
  - Local resources
  - Literature review
  - Gravens conference

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Interventions

- Creation of discharge readiness metrics
- Launch of discharge planning committee
- Nursing discharge preparation checklist
- Family discharge preparation checklist
- Hospitalization timelines for families
- Nurse-driven formal discharge planning meeting
- Standardized discharge information packets
- Standardization of medication information
- Standardized discharge information available on the portal

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Nursing discharge preparation checklist

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Newborn Intensive Care Unit

NURSING DISCHARGE QUICK REFERENCE

- Use to ensure all discharge tasks are completed.
- This is not intended to be included in medical record.

Before the day of discharge, make sure all of the following has been done:

- Ensure that Interpreter Services have been booked for non-English speaking families
- Recent State Screen (check with team to determine if a more recent one is needed)
- Hearing Screen
- Hep B Vaccine (and any other vaccines needed, i.e. Synagis)
- VNA referral
- EIP referral
- Any other referrals needed (Infant Follow-Up Clinic, Neonatal Neurology etc.)
- Pediatrician appointment made
- All other appointments made, or information needed to make them (i.e. names, phone numbers, when appointment needed, etc.) documented in the D/C instructions
- All discharge teaching on the D/C checklist is completed
- Car Seat or Car Bed screen, if needed
- Discharge weight, length and HC
- Newborn Summary Completed: D/C Section, Neonatal Course Section (may be completed with "See D/C Summary") and F/U section on the bottom of the sheet
- Pack a bag of infant's belongings and any supplies from the bedside
- Parents have all of the necessary supplies at home- bottles, formula, meds
- WIC Forms filled out and given to parents

On the day of discharge make sure all the following are done:

- Round with the team to confirm discharge
- D/C order is in POE
- The parents review the discharge summary DRAFT, make any corrections and return the DRAFT to the nurse
- All discharge teaching is reviewed with the parents and all questions are answered
- The car seat screening and all car seat information are reviewed with the parents and all questions answered
- The parents and the nurse sign the car seat/bed form
- The parents and the nurse fill out the D/C Readiness Questionnaires
- 3 Copies of the D/C instructions are printed. The parents and the nurse sign 2 copies:
  - 1 signed copy for parents
  - 1 signed copy for medical record
  - 1 unsigned copy for the follow-up phone call
- The parents secure the infant in the car seat/bed

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Family discharge preparation checklist

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Going Home from the NICU

Baby's Name in hospital: _____ Baby's Name after discharge: _____

	Please check off items as they occur.	Additional Information	Parent Initials
In NICU	Discharge planning meeting		
	Pediatrician chosen Dr. _____ # _____		
	Baby added to insurance policy		
	CPR class complete		
	Handouts received and/or discussed with nurse ☐ Safe Travels (car seat safety) ☐ Safe Sleep Practices ☐ Shaken Baby Syndrome ☐ Carbon Monoxide and Smoke Detectors ☐ Protecting Babies from Infection	☐ Temperature taking ☐ When to Call the Pediatrician ☐ Flu/Pertussis Vaccines for Families/Caregivers ☐ Suction Bulb Use ☐ Bathing Techniques ☐ Tummy Time & Activities for 1st Year	
Preparing for Home	Car seat brought to NICU and base installed in car		
	Supplies at home:		
	• Crib/bassinet (safety approved)		
	• Diapers, wipes, ointments		
	• Thermometer, suction bulb		
	• Feeding supplies	☐ Breast pump (if needed) ☐ Nipple/Bottles ☐ Formula (if needed)	
	• Circumcision care education	☐ N/A	
	Hearing screen results received *	* If referral needed, add to specialists.	
	Written home feeding plan received		
	Recipe for breast milk/formula received		
	Car seat screen result received *	* If not passed, arrange for car bed.	
Going Home	Pediatrician visit date: __/__/__ Time: __:__	Visiting nurse date: __/__/__	
	Early intervention arranged with _____		
	Specialists: Name: _____ Date: __/__ Time: __:__ Name: _____ Date: __/__ Time: __:__		
	Med: _____ Dose/Frequency: _____ Med: _____ Dose/Frequency: _____ Med: _____ Dose/Frequency: _____	☐ Medications/Syringes obtained ☐ Medication teaching complete	
	Received immunization booklet (blue book)		
	Parents Completed Discharge Readiness Questionnaire		

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Hospitalization timelines for families

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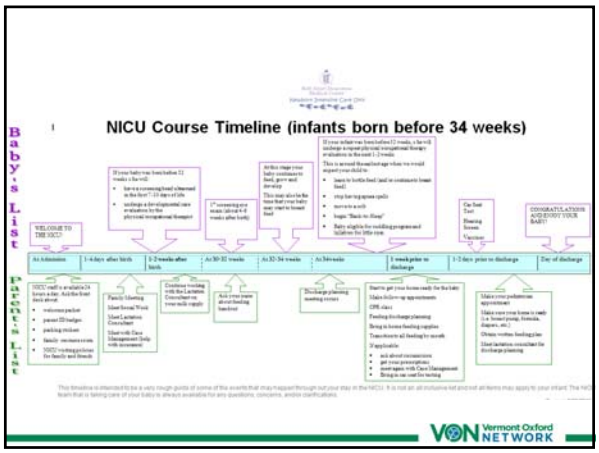

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Standardized discharge information packets

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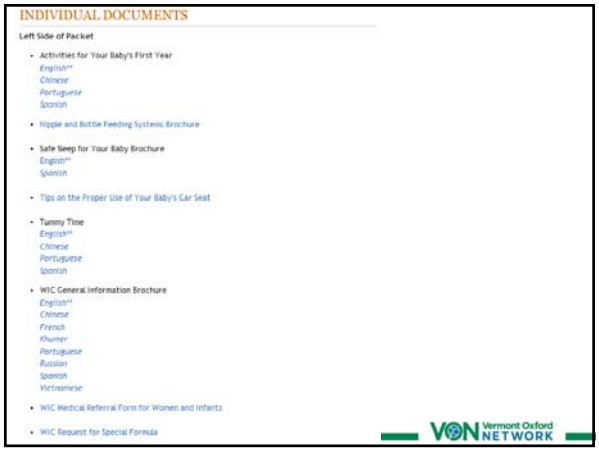

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Standardization of medication information

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Standardized discharge information available on the portal

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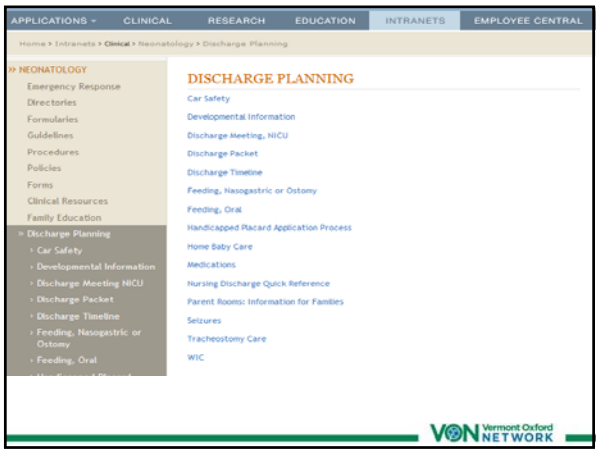

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Changes

Timeline of Discharge Planning Process Improvements

Date	Improvement	Label*
October 2003	Launch of discharge readiness assessment through family and nurse surveys	A
October 2003	Addition of discharge readiness metrics to NICU quality dashboard	B
May 2008	Follow-up phone calls to families after discharge by using structured scripts	C
January 2010	Launch of NICU discharge planning committee	D
October 2010	Creation of a nursing discharge preparation checklist	E
October 2010	Creation of hospitalization timelines for families	F
November 2010	Initiation of nurse-led formal discharge planning meetings	G
January 2011	Creation of standardized discharge information packets	H
September 2011	Standardization of discharge medication information	I
April 2012	Addition of former NICU parents to discharge planning committee	J
January 2013	Regular publicizing of comments on discharge process from families obtained during follow-up phone calls	K
September 2013	Discharge material made available electronically on internal Web site	L

* Labels are used to indicate the timing of interventions in Figs 1–4.

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Interventions / Tests of Change

The discharge planning committee would review feedback from the families and nursing staff monthly

- Modify the program as necessary
- Address gaps identified
- Reported finding to NICU leadership quarterly

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Outcome measures

Primary outcome measures

- Family reported readiness for discharge
- Nurse reported technical readiness for discharge of the family
- Nurse reported emotional readiness for discharge of the family

Readiness: 8 or 9 on 9-point Likert scale

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Outcome measures

Secondary outcome measures

- Technical items: bottle feeding, breast feeding, baby care skills, what to expect for urine/stool output, medicines/vitamins, selecting a PMD, EI enrollment, preparing crib, arranging for help
- Emotional items: confidence that heart and breathing are safe, confidence that infant is healthy and mature, ready to take infant home

Readiness: 3 or 4 on 4-point Likert scale

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Process measures

Discharging nurse familiar with family
Discharging nurse member of primary team

Others added later in process:

- Discharge planning meeting
- CPR training

Others not collected:

- Family self-assessment/discharge checklist

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Discharge readiness assessment tools

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Analysis

- Measures analyzed over time
- Control charts: p-chart
- Data were analyzed quarterly to allow for adequate sample sizes per period
- Special causes identified using standard rules

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Results

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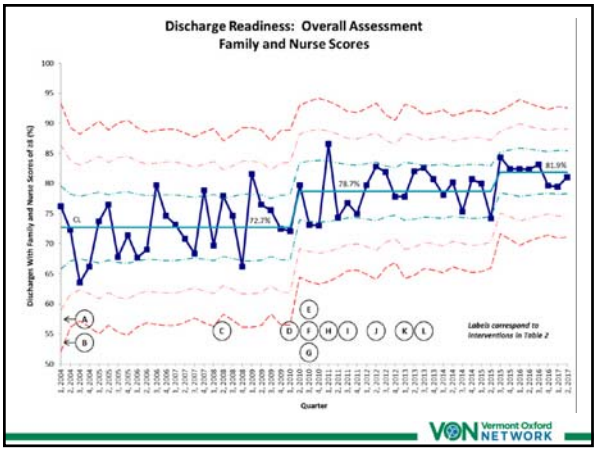

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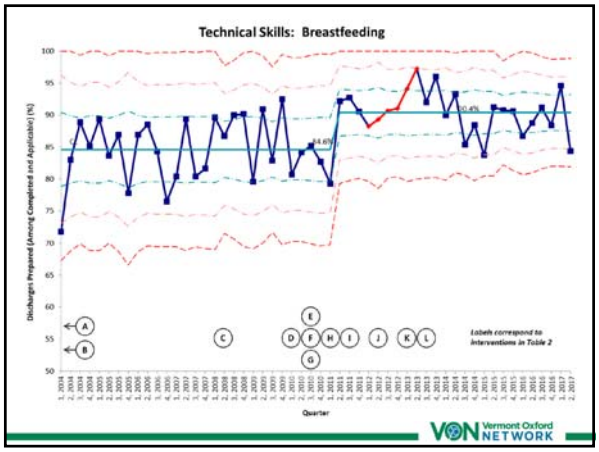

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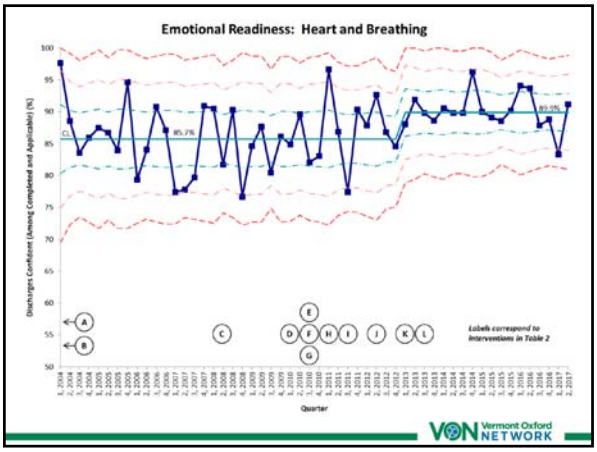

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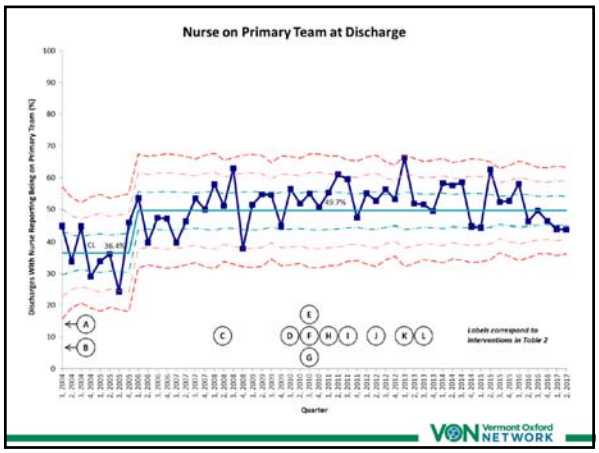

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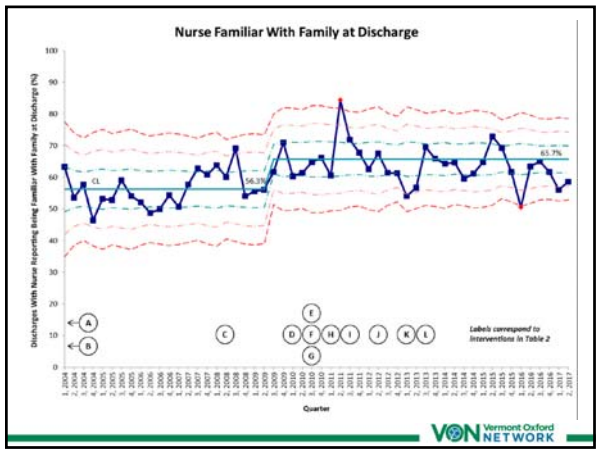

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Results

Significant improvement was seen in all primary outcome measures

- Family self-assessment of discharge readiness increased from 85.1% to 89.1%
- Nurse assessment of the family's
  - emotional discharge readiness increased from 81.2% to 90.5%
  - technical discharge readiness increased from 81.4% to 87.7%
- Several secondary outcome measures revealed significant improvement, whereas most remained stable
- Nurse familiarity with the family at discharge increased over time

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Discussion/Next Steps

- Quality improvement methodology can be used to measure and improve discharge readiness of families with an infant in the NICU
- Discharge readiness is measurable
- A standardized approach to discharge planning can improve discharge readiness
- This model can provide the necessary framework for a structured approach to systematically evaluating and improving the discharge preparation process in a NICU

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Stay tuned…

Proposal for Development of Interdisciplinary Guidelines and Recommendations for the
NICU Discharge Preparation and Transition Planning

Project Leads: Vincent C. Smith, MD, MPH, FAAP

National Perinatal Association
Educate. Advocate. Integrate.

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Acknowledgements

- The BIDMC NICU Discharge Planning Committee
- Heidi Gates
- Munish Gupta
- DeWayne M. Pursley
- Kathy Tolland
- Susan Young
- All of the babies, parents, and colleagues at the Beth Israel Deaconess Medical Center

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Thank you

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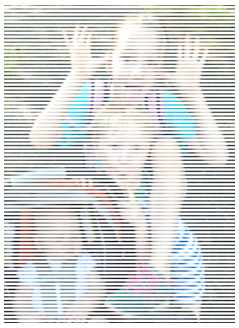
Questions? Comments? Feedback?



Chat in and share your ideas!

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Poll Everywhere Question

Our Discharge Preparation Program…

A. Doesn't exist- we're pre-contemplative
B. Is but a twinkle in our eye
C. PDSA testing is underway
D. Is going live as we speak
E. Is in full force

Respond at **PollEv.com/vtoxford**
OR
Text **VTOXFORD** to **22333** once to join the poll, then send **A**, **B**, **C**, **D**, or **E** to the same number.

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Team Discussion: Current State

1. Who does the majority of discharge teaching/preparation? What specifically do they do?
2. How does your unit integrate families into the transition to home?
3. How does your unit identify and address social determinants of health around discharge?

Instructions:
- Choose a question
- Take 2-3 minutes to discuss
- Chat in your responses and examples as you go

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Summary, Closing, Next Steps

Upcoming Events and Deadlines:
- Posters (and EBCD videos) due by 9/16/19
- Upcoming Webinars:
  - October 23, 2019: Improving Critical Transition to Home and Community: Creating a Family-Centered Medical Home for Infants with Medical and Social Complexity
  - November 13: EBCD Lessons from Early Innovators
  - December 11, 2019: Progress and Next Horizons (Lessons from Leading Centers)
- Annual Quality Conference October 4-6 in Chicago
- iNICQ symposium agenda and preparations
  - Friday, October 4th iNICQ "Homeroom" with small group sharing and learning from team posters.

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Recorded Webinars Available to Share
New VON Online Learning Site
on OPENedX
vtoxford.org/learning

Evaluate today's session at the link below:

https://www.surveymonkey.com/r/QZJ3XY9

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