



AHA Team Training

Innovative Care: The Value of the Virtual Nurse in a Pediatric Hospital

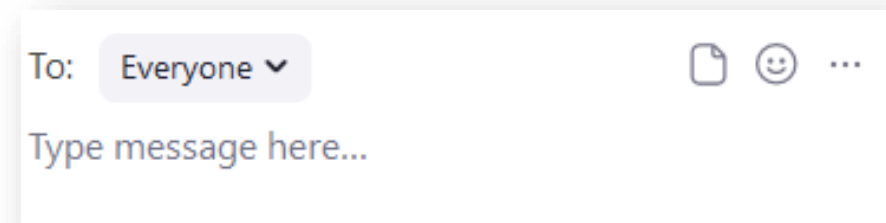
September 11, 2024



AHA CENTER FOR HEALTH
INNOVATION

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- Audio for the webinar can be accessed in two ways: 1) through your computer speakers or 2) dialing in by phone – *listen only mode*
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 - Written questions are encouraged throughout the presentation
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Upcoming Team Training Events

Courses

- [In-person TeamSTEPPS Master Training](#)
 - September 25-26 at Houston Methodist
 - October 21-22 at Northwell
 - December 5-6 at UCLA

Webinars

- [A Clinical and Culinary Guide to Healthy Hospital Food](#), September 19 sponsored by PCRM

Custom TeamSTEPPS Advisory Services at Your Organization

TeamSTEPPS Master Training Course

Using a train-the-trainer model, **we give you the foundational tools** and concepts, and train your staff through this **two-day training** program. You will gain a team of Master Trainers ready to teach others in your organization.

Comprehensive TeamSTEPPS Programs

We help you along the way. After delivery of the two-day Master Training course, we continue to work with your team for **3-6 months**, building the internal capacity to hardwire TeamSTEPPS throughout your organization.

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“Our relationship with the TeamSTEPPS faculty and the on-site trainings were both phenomenal. **They did a great job of meeting us where we were** and customized a program that really helped us gain clarity about the problem we’re trying to solve.”

– **Melissa Riffe-Guyer**
Executive Director,
Culture Cone Health



Virtual Nurse Program

Sophy J. Rodriguez, MSN, RN, CPN
Elizabeth Salerno, MSN, RN, NEA-BC

September 2024

Objectives

- Identify opportunities for virtual nursing models
- Demonstrate knowledge of the process to initiate a virtual nursing program
- Evaluate outcomes for the virtual nursing program

Nemours Children's Hospitals: Among the Nation's Best



Nonprofit organization devoted to children's health, providing care, research, and education



4
States
(DE, FL, NJ, PA)

1.8 million
Annual
patient
encounters

9267
Associate
FTE

872
Physicians
2335
Nurses

1700
Resident
and Fellows

\$66 million
Research
Funding

75.5 million
KidsHealth.
org
visitors

Nemours by the numbers:



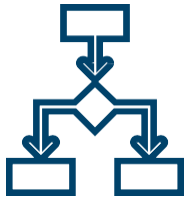


What can Virtual Nursing look like at Nemours?

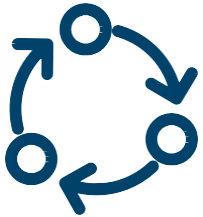
Guiding Principles



Develop a **family-centered** model keeping the *Voice of the Child and Family* top of mind.



Create a **system-wide approach** to align DE and CFL regions, while honoring site-specific variations.



Leverage **continuous improvement principles** to surface problems and develop countermeasures.



Develop a **supportive culture** that promotes collaboration, communication and feedback.

Project Overview

GOAL

Develop a new model of care leveraging a virtual nurse (VRN) role to enhance patient care and complement bedside nursing responsibilities.

OBJECTIVES

Develop a VRN model and plan for scaling across the Nemours Children's system.



Groundwork in NCHFL

- Literature reviews
- Venn diagram for VRN role & responsibilities



Plan for VRN model

- Pilot units & hours
- Physical workspaces
- State licensures
- Workflows



Pilot go-live

- MedSurg, NCHFL
- 4W, NCHDE



Pilot go-live

- HemOnc, & Short Stay Unit, NCHFL



Future State

- Spread & scale full VRN model
- Expand to additional disciplines
- Implement two-way camera technology

APR

MAY

JUN

JUL

AUG

SEP

OCT

2024



Project Kickoff

- System approach



Equipment

- Testing
- Purchasing
- Configuration, bedside technology

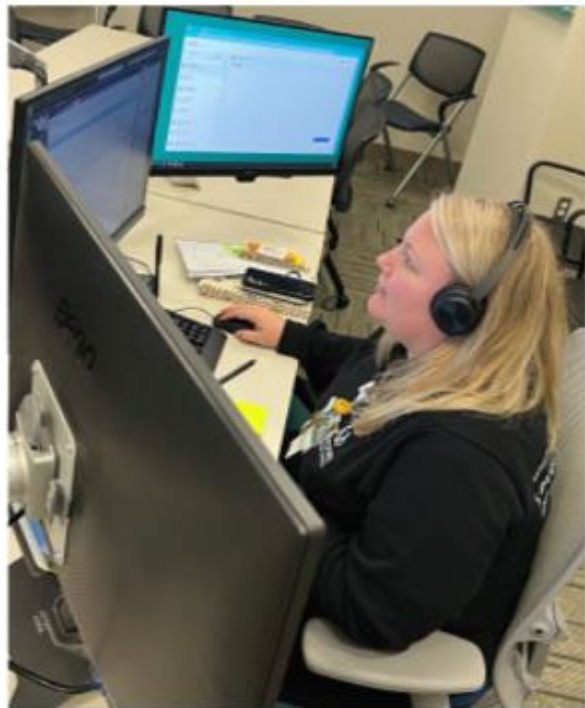
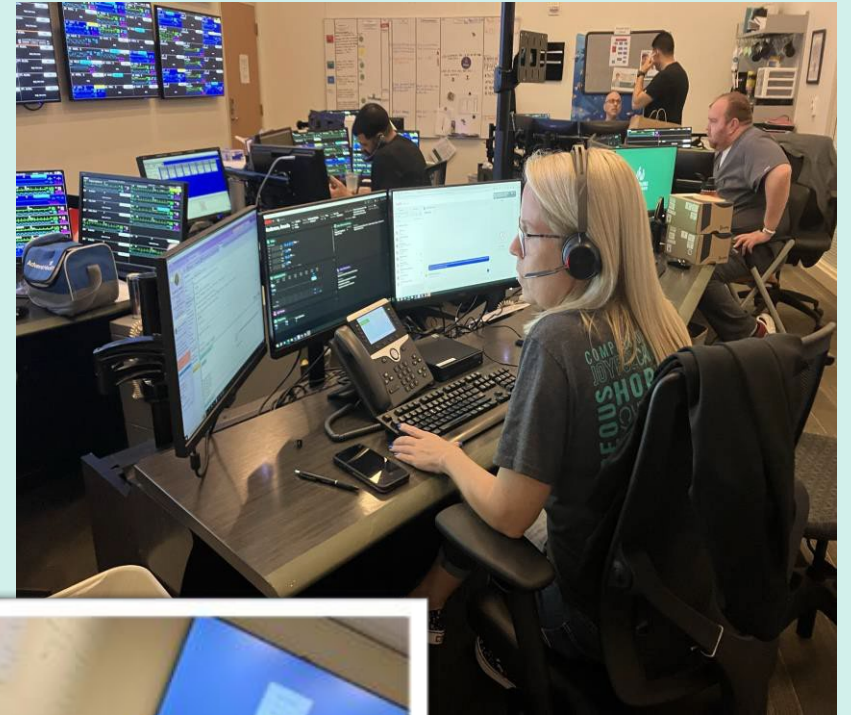
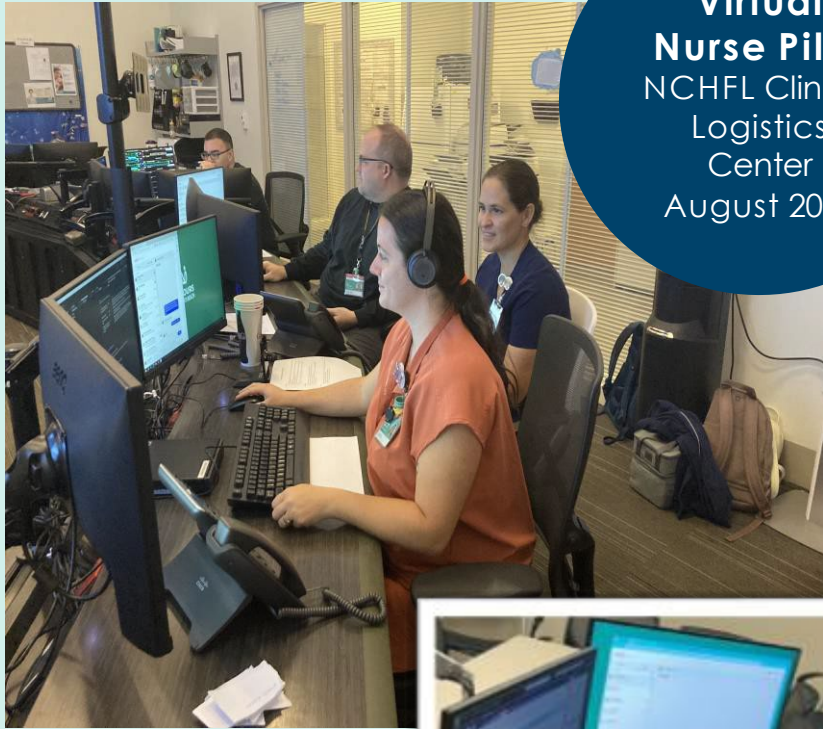


PDCA

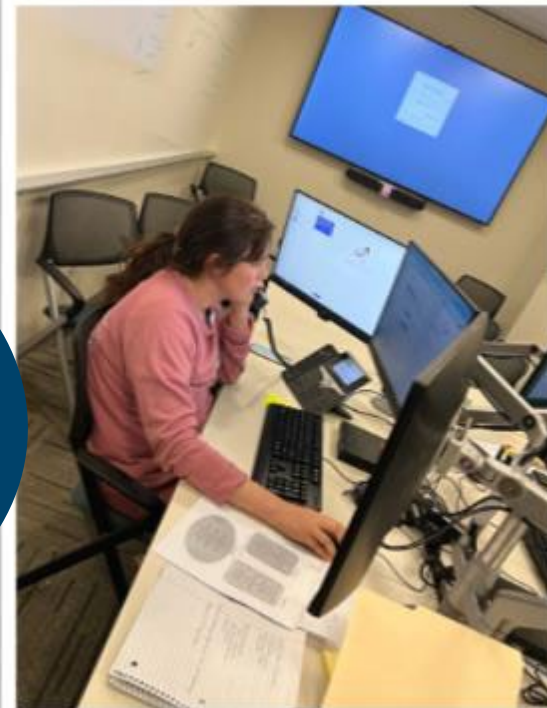
- Monitoring/controlling
- Data collection & analysis
- DMS



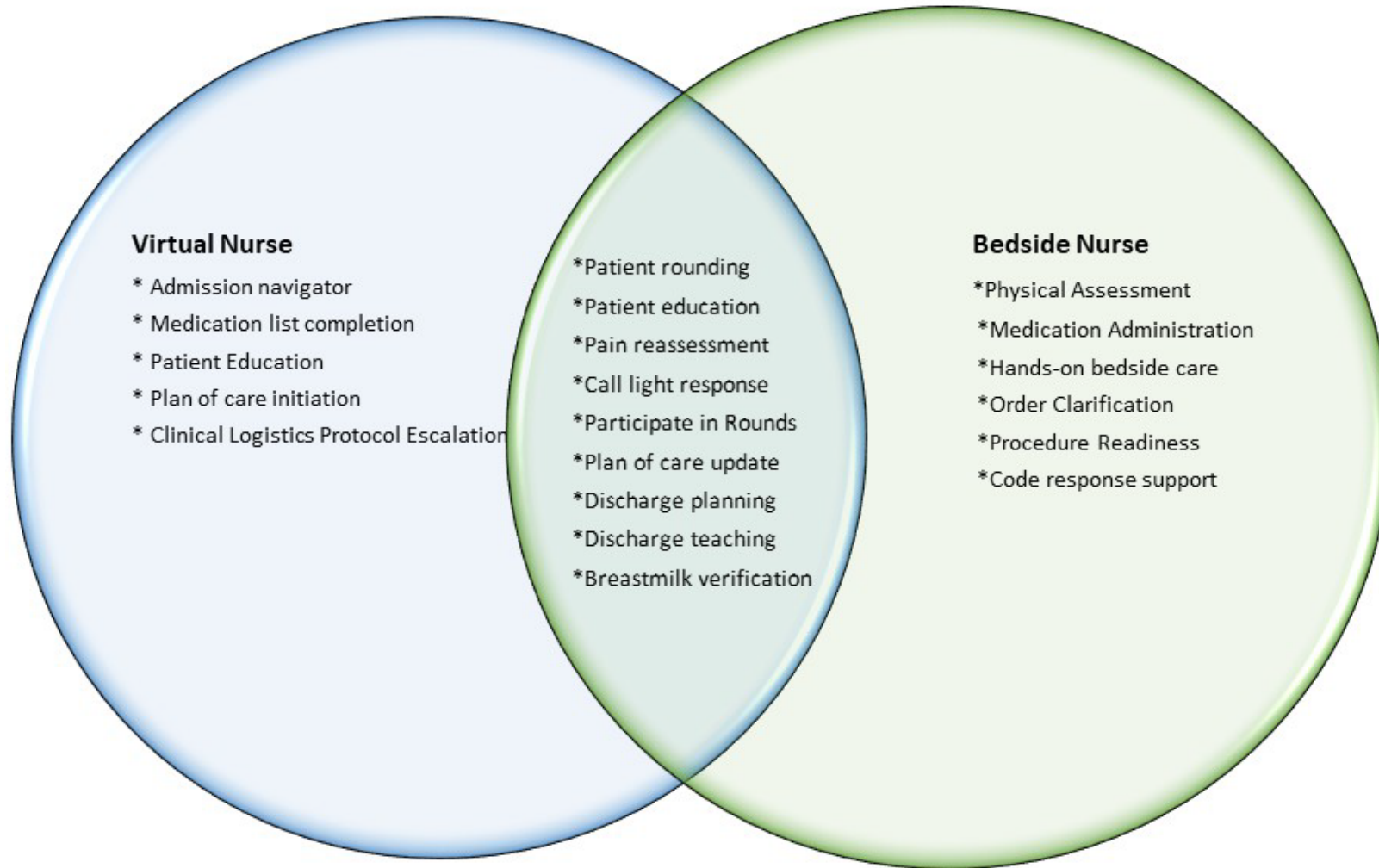
**Virtual
Nurse Pilot**
NCHFL Clinical
Logistics
Center
August 2023



**Expansion
of VRN**
NCHDE
Jan 2024



Virtual Nursing Pilot at Nemours



Key Project Measures



VRN Activity

Tracked total count of VRN activities

NRC Survey

Patient experience measuring impact by use of the VRN

Bedside RN Survey

Qualitative feedback collected from bedside nurses among pilot units post-interactions with VRN

VRN Epic Dashboard

Dashboard within Epic to capture various measures related to the VRN activities

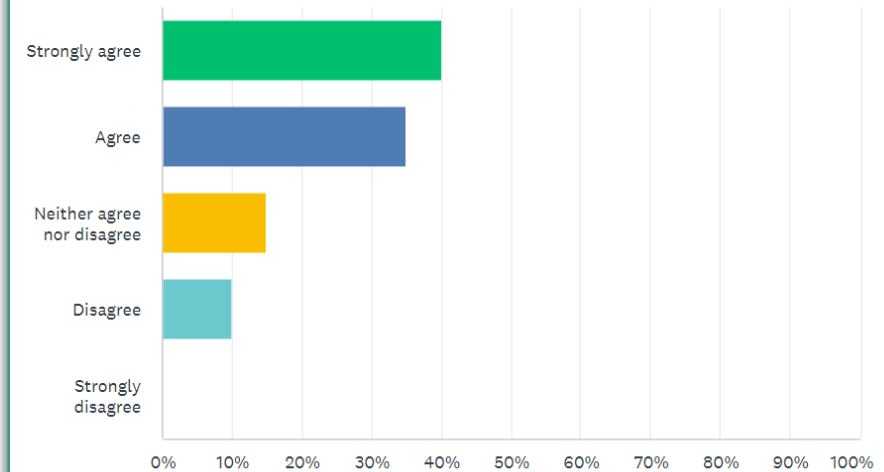
Results | Bedside RN Survey

Feedback collected among bedside nurses among pilot units:

- 9 question-survey to assess VRN role's helpfulness & efficiency
- Provided to bedside RN's for pilot units at 30-90-day post-go-live
- 75% of all responses strongly agreed/agreed that VRN enhanced the bedside RN role

The Virtual Nurse is an added resource, giving me the tools, I need to do my job.

Answered: 20 Skipped: 0



"The Virtual Nurse elevates the role beyond what I could have imagined."

Results | NRC Survey Responses

	Baseline*	September	October	November	December	January	February	March	April	May	June	July
Comfort talking with nurses	82.4 (n=785)	77.5 (n=138)	89.1 (n=64)	85.0 (n=160)	83.1 (n=154)	90.9 (n=154)	81.9 (n=160)	87.0 (n=146)	82.3 (n=158)	82.6 (n=184)	83.6 (n=159)	90.7 (n=162)
Nurses courtesy/respect	85.4 (n=773)	79.6 (n=137)	90.5 (n=63)	88.5 (n=157)	90.2 (n=153)	92.0 (n=150)	84.7 (n=157)	91.0 (n=144)	81.4 (n=156)	85.2 (n=182)	84.8 (n=158)	91.3 (n=161)
Nurses explained things	82.6 (n=775)	78.1 (n=137)	85.7 (n=63)	87.3 (n=157)	83.9 (n=155)	90.7 (n=151)	84.2 (n=158)	86.9 (n=145)	84.1 (n=157)	83.6 (n=183)	80.5 (n=159)	88.8 (n=161)
Nurses listened carefully	80.1 (n=782)	73.9 (n=138)	85.9 (n=64)	80.5 (n=159)	81.8 (n=154)	89.0 (n=154)	82.4 (n=159)	86.3 (n=146)	80.3 (n=157)	83.7 (n=184)	75.5 (n=159)	88.8 (n=161)

- Scores **significantly above** baseline on all four measures
- Improvements ranging from 6-9 points
- Patients and families are reflecting a higher level of comfort talking to nurses and nurses are explaining things and listening carefully more often

Results | Health Equity

Language

- Over 80% of both Spanish and English-speaking families report positive impacts of virtual nursing
- Scores for both Spanish and English-speaking families were the highest for "Nurses courtesy/respect"
- Spanish speaking families showed the highest score overall for "Nurses listened carefully".

Social Determinants of Health

- Leveraging VRN role to complete SDoH screener
- VRN initiating referrals for positive screens

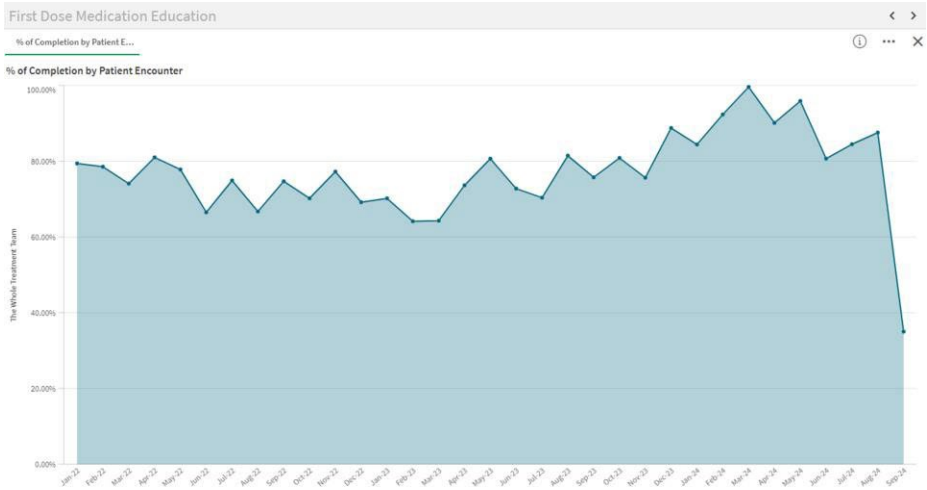
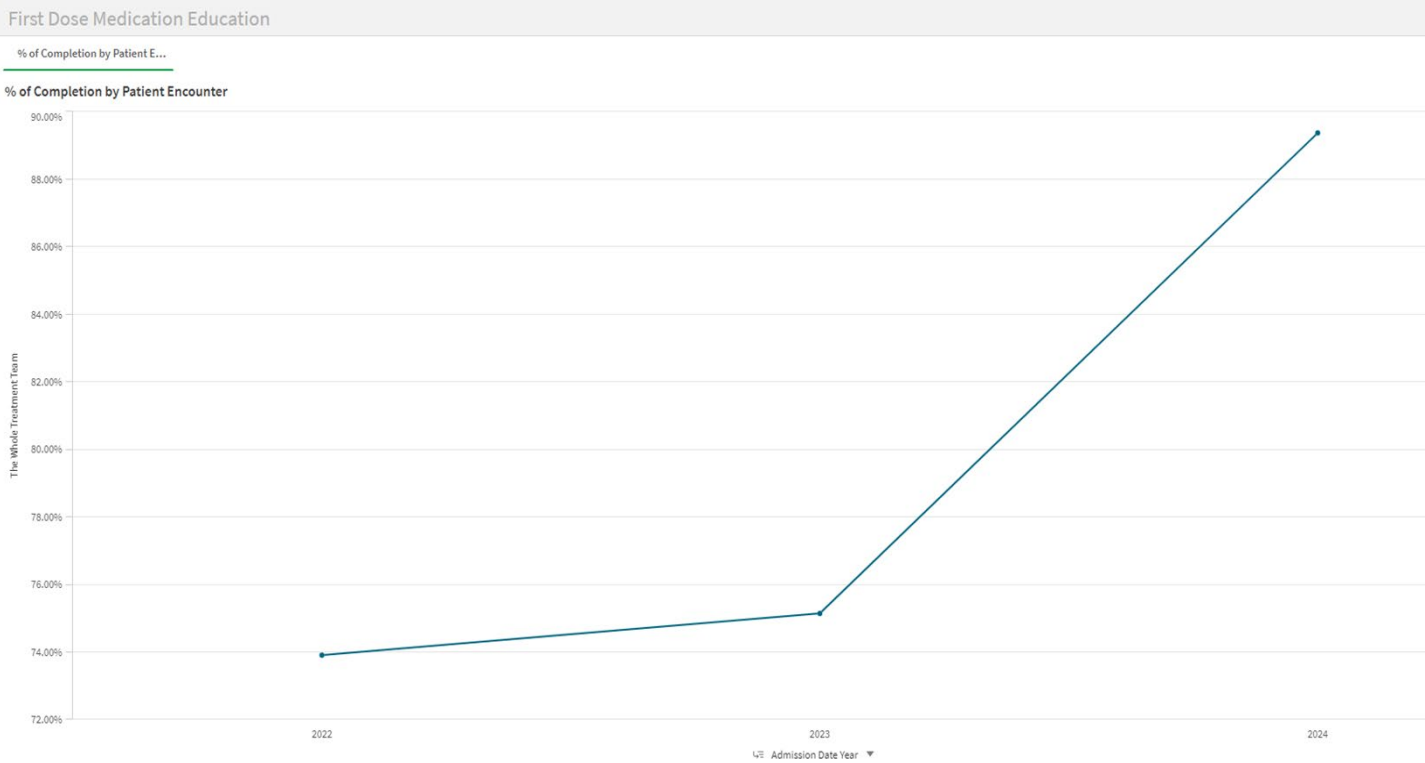
Results | Epic Dashboard



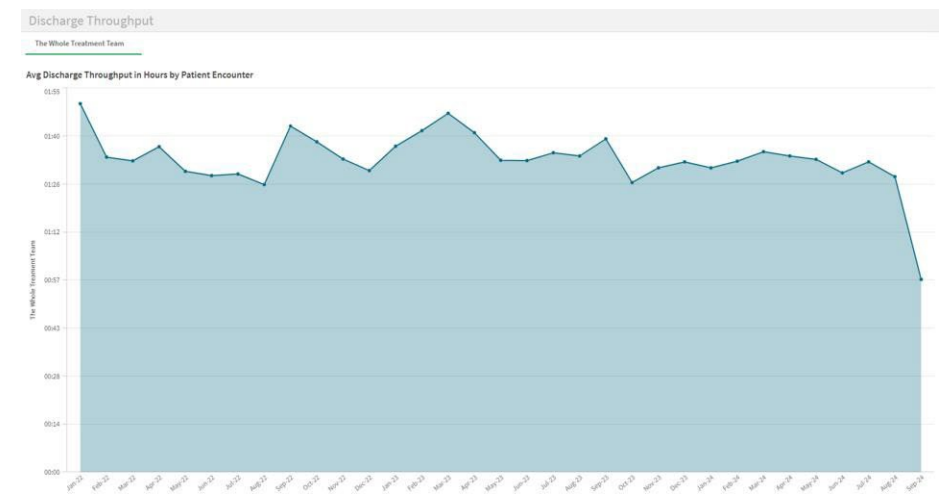
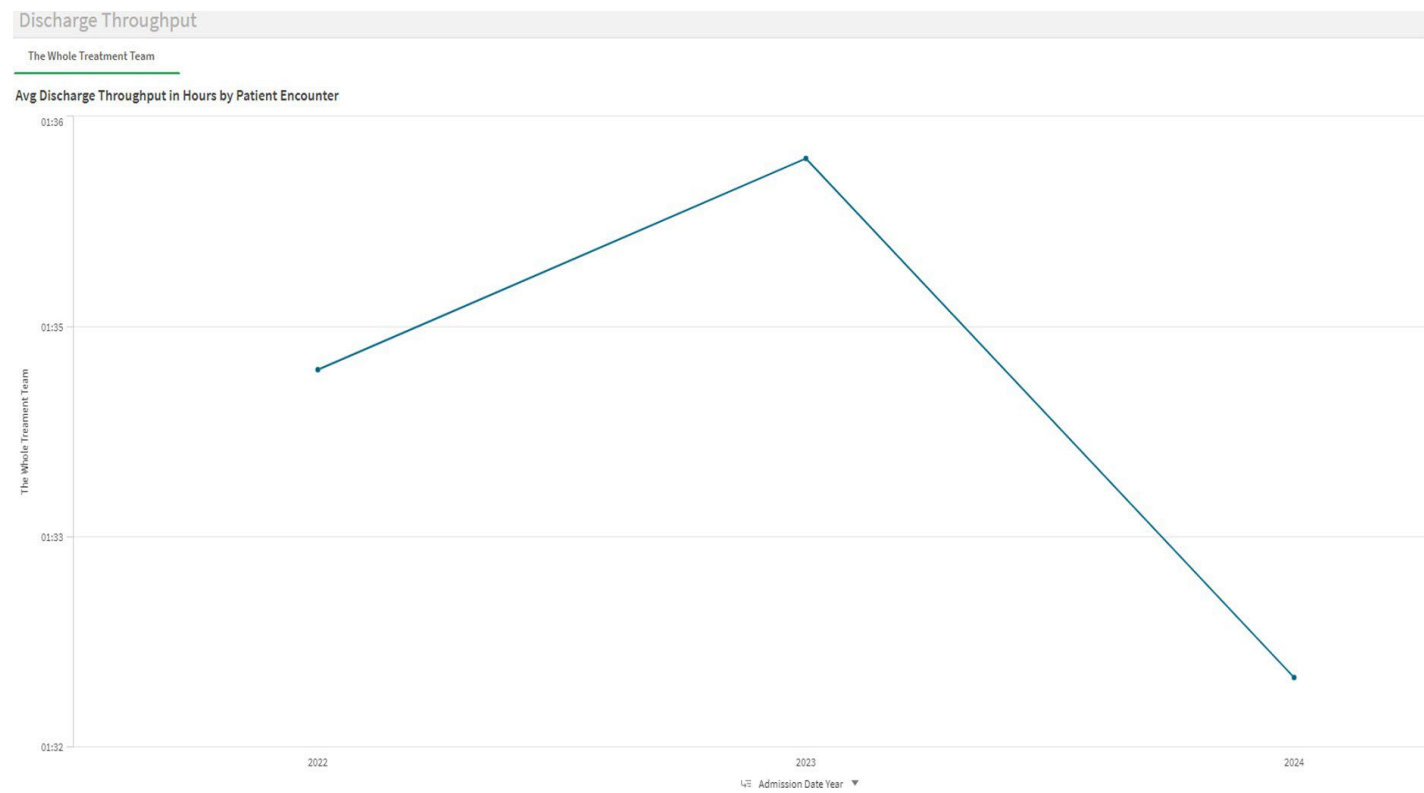
Will provide VRN metrics related to:

- Timeliness of completing admission database
- Completion percentages of databases
- LOS/readmission data
- Completion of patient education
- Timing of discharge orders to 'out-the-door'

Results | Education Compliance



Results | Discharge Efficiency



Results | Readmission Rate

Readmission Rate

The Whole Treatment Team



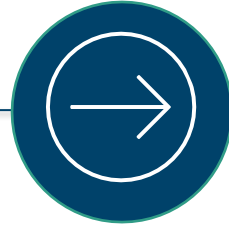
Readmission Rate by encounters



Lessons Learned: Leading through Virtual Nursing Paradigm Shift

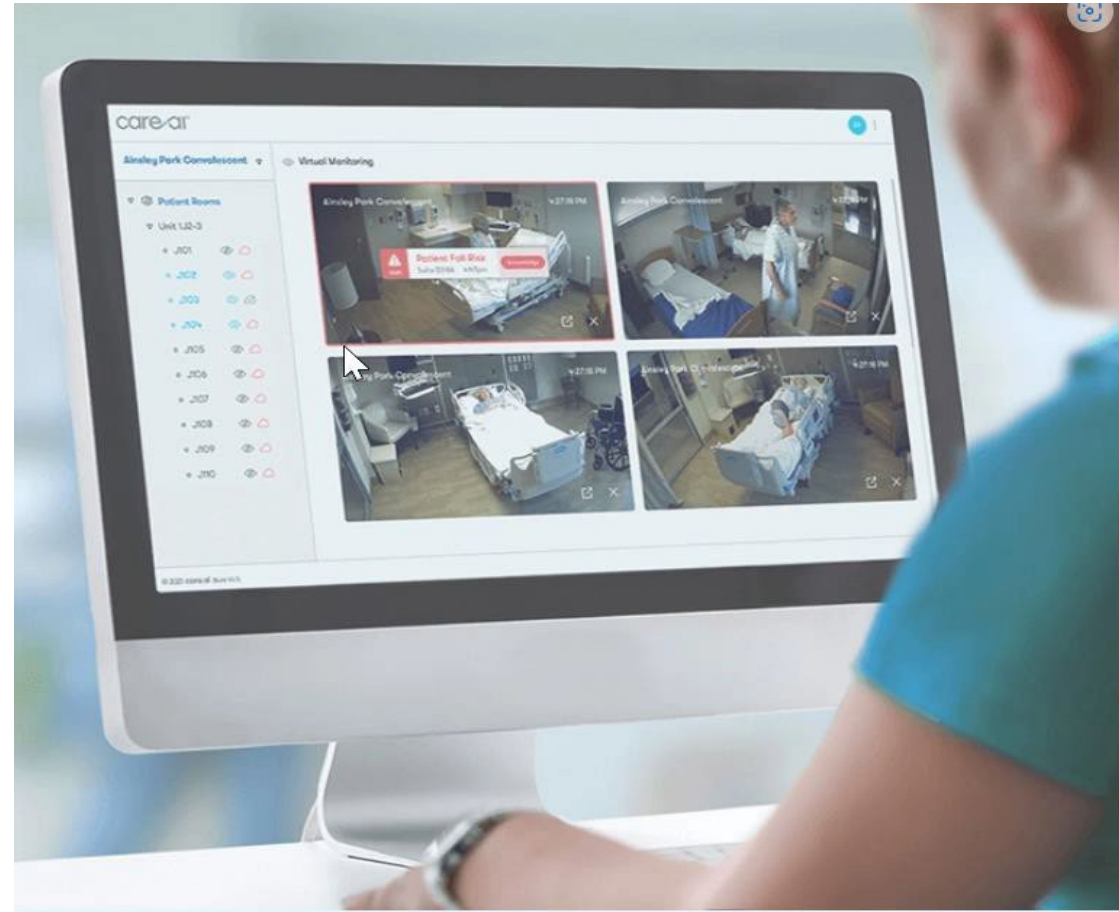
- Staffing Model
 - No *one-size fits all*
 - Unit-based vs Centralized
- Holding true to the Model
- Findings from VRN related to errors and/or documentation gaps
- Results include “Great Catches” due to increased thoroughness
- Leveraging a VRN huddle
- Engaging Key Stakeholders
- Emerging Quality Improvement Projects
- Expansion of Virtual Care

Next Steps



- **Develop plan for sustainability of full-scale model**
- **Future state to include:**
 - Expand Virtual Care model to include Pharmacy by year end.
 - Expand Virtual Care model to include ICU by year end.
 - Implement Care A.I.® two-way camera technology by year end
 - Pilot enterprise specialty/service line virtual nurse model by year end (HemOnc, Endocrine, or Rehab).

Looking into the Future: Virtual Care Program



There have been multiple instances where we have discovered that the patient's caregiver at the bedside is not their legal guardian. We have then escalated to the bedside nurse and done verbal phone consent for discharge to bedside caregiver

Team put WRONG safety person name on patient's dc instructions of DFS case. Had to clarify with social work prior to discharging.

Noticed there were no discharge instructions on how to care for patient's bedsore. Escalated and added to instructions prior to discharge

We have been working on accurate medications lists on discharge paperwork. There have been many times where medications are listed 2, 3, 4x with different dosages. These have been corrected prior to discharge

We have identified families with food insecurities at home that were not previously disclosed. We escalated and provided them with resources...

At discharge, mom notified VRN that the metformin dose ordered/given during admission was 2x the dose ordered for home.

MD ordered Pulmicort flex haler for 2 year old patient. 2 year olds are unable to use flex halers so MD needed to order Pulmicort neb treatments and nebulizer for home.

Patient was being DC home with a foley catheter and there were no instructions for foley care or what signs and symptoms to look out for and who to call if any issues. Escalated and Foley care DC instructions were placed. Parents were thankful and patient was discharged home.

I always have families open their delivered meds to bedside and review them. When mom opened the bag, patient had several medications delivered but was missing one of his medications, which was ordered, but not delivered. I made phone calls and clarified for the family that the medication was ready for pick up at home pharmacy

Patient being discharged with chronic medical history and order place for home O2. Note mentioned possible delays due to changes in DME companies. MD discharge note states that "discharged with plan for oxygen to be delivered in the next few days in case he needs it with another illness".. Family unaware of plan. Able to escalate and clarify dc needs and loop in Case management to confirm delivery.

I was discharging a family here for dehydration, patient with developmental delay issues. While reviewing DC instructions with mom, I always ask are you comfortable going home, she stated not really. Mom expressed her concerns of patient not drinking well. Mom mentioned this is the first time someone is listening to her concerns. I escalated her concerns and the plan of care was adjusted prior to discharge.

Questions?

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Final Reminders

- **Evaluation**

- Please complete the evaluation form that appears on your screen once the webinar ends

- **Continuing Education**

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Questions? Stay in Touch!

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