



# Virtual Nurse: A Trial in the Neonatal Intensive Care Unit at Johns Hopkins All Children's Hospital

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## Background

The nursing profession has experienced many challenges since the pandemic of 2020, including staffing shortages due to an aging workforce and nurses seeking positions away from the bedside. These challenges have increased the rate of inexperienced staff caring for patients needing additional assistance to provide safe bedside care. One strategy to meet this need for assistance is a virtual registered nurse (VRN) to complement the bedside role in informing and educating care partners while offering support to nursing staff using technology-based applications. This modern approach to care has an added benefit to care partners that cannot be at the bedside to receive valuable information while meeting regulatory documentation requirements related to the admission record.

## Aim of the Project

To utilize a new staffing model to supplement bedside nursing, virtually, with a focus on non-hands-on care and workflow.

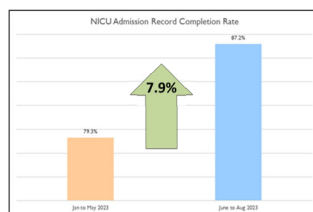
- Improve regulatory compliance with an increased admission record completion rate by 5% during the three-month trial period
- To align with JHACH's strategic goal of pursuing excellence and making JHACH easy by offering care partners an easy, convenient, and beneficial service that they would perceive as helping prepare them for their time in the NICU and caring for their child after discharge
- Reduce documentation burden and assist in expediting the admission and discharge process, as perceived by 75% of NICU nursing staff

## Description of Data Collection and Analysis

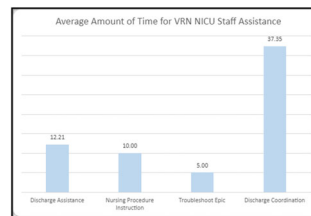
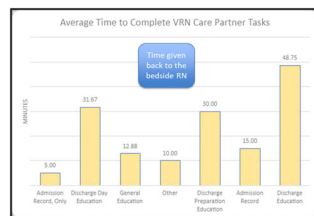
The project was evaluated using the following outcome measures:

1. Care Partner Survey (4 questions) after discharge to evaluate the effectiveness and convenience of VRN
  2. Nurse survey (5 questions) to evaluate the effectiveness and convenience of VRN
  3. Compliance and completion of the admission assessment
- The surveys were scored on a 5-point Likert scale and the admission assessment was scored as complete or incomplete 24 hours post-admission. Comparisons were made using descriptive statistics

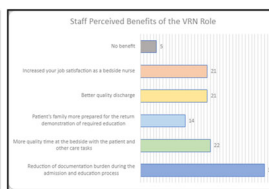
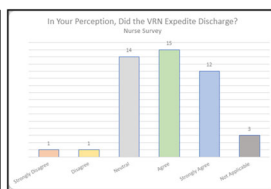
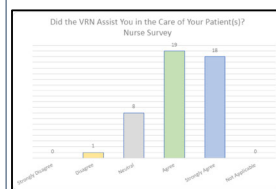
## Outcomes Measures or Results



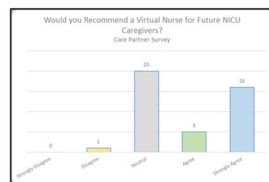
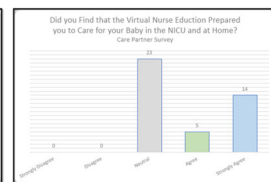
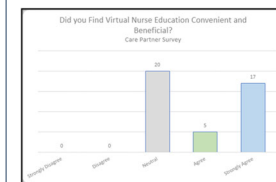
### VRN Tracking Data (time):



### Nurse Survey (n=46):



### Care Partner Survey (n=42):



## Description of the Intervention

Created a virtual RN position (0.9 FTE for 3 months) to assist the bedside registered nurse role including one-on-one communication that focused on completing the unit introduction, admission record, care partner education and discharge navigation utilizing PDSA methodology.

## Implications for Practice

This modern approach to care proved to be a beneficial strategy to supplement the bedside role in informing and educating care partners while offering support to nursing staff using technology-based applications that were already available.

## Lessons Learned

In a future PDSA cycle, we would utilize telehealth technology and 24-hour coverage of the VRN role. It was important to choose a VRN with experience as well as someone that was embedded in the culture of the unit and had strong communication skills. The VRN care model emphasized quality, safety, and support in the NICU.

## References

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