



Evaluating a new virtual nursing model: Strategies for systemwide expansion and sustainability

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Background



- The U.S. healthcare system aims for safe, effective, person-centered, efficient, and equitable care
 - Workforce issues impact patient outcomes and costs
 - COVID-19 intensified these challenges
- There will be an estimated deficit of 3.2 million healthcare workers by 2026 nationwide
 - In one state, 39% of surveyed nurses reported intentions of leaving their job within one-year

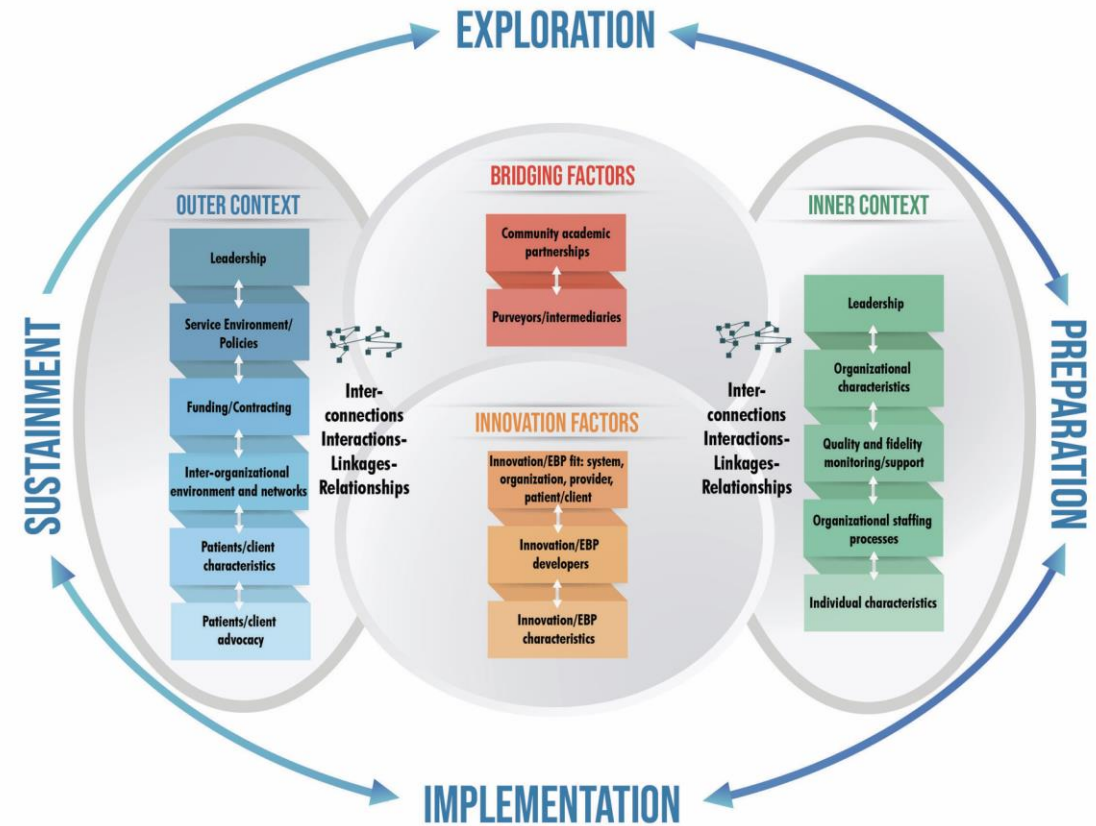
- To address these concerns, a **Virtual Nursing program was developed as an innovative care delivery model**, leveraging teams of remote, virtual nurses (VRN) to support bedside nurses in providing care via technology
- VRN offset time-intensive tasks, allowing bedside nurses more time for patient care
- **This presentation describes the implementation and expansion of a novel VRN model**

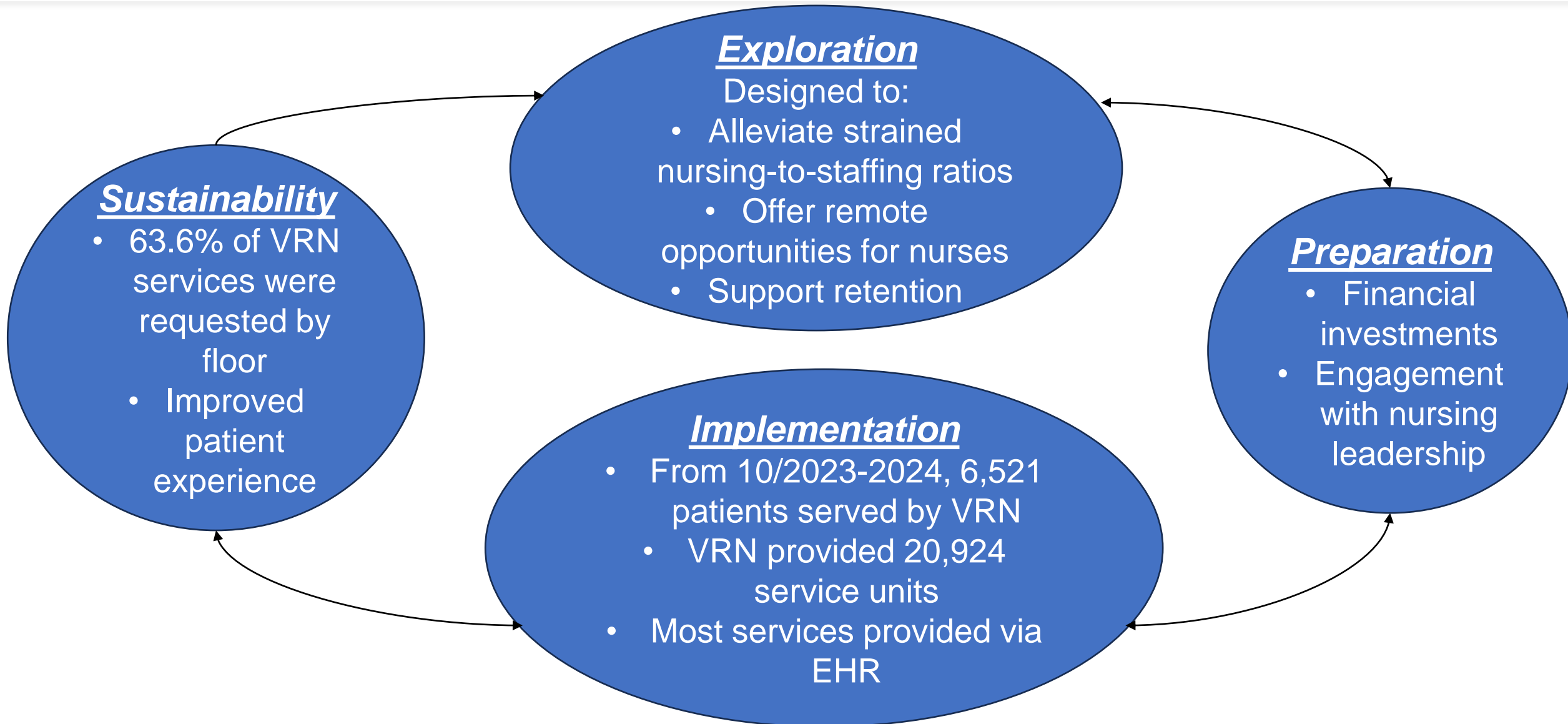
Methods

- Multiple data sources are triangulated for ongoing evaluation, including:
 - Electronic health records data for patient information and provider efficiency
 - Program tracking within REDCap
- Hospital Consumer Assessment of Healthcare Providers & Systems (HCAHPS) is a standardized survey of patients' perspectives of hospital care, capturing patients' experience with admission, discharge, and communication with nurses.
- Primary outcomes of interest include: VRN utilization data, service unit types, and patient satisfaction
- Descriptive statistics are used to analyze quantitative data

Methods: The EPIS Framework

- The Exploration, Preparation, Implementation, and Sustainment (EPIS) framework is applied to **iteratively and rigorously evaluate** the implementation of evidence-based interventions
- Each EPIS phase is well-structured to provide **dynamic, real-time feedback**, guide data-driven decisions, and evaluate program resources, activities, and outcomes





Key Takeaways

Implementation

- VRN provided 20,924 units among 6,521 patients
- Only 22% of VRN services required video, with a majority completed in electronic health records

Sustainability

- 63.6% of VRN services were requested by the floor unit
- Improved patient experiences in all units with VRN
- Plan to expand from 5 to 35 units in 2025

Breakdown of VRN Care by Service Type

| | |
|----------------------|-----|
| Quality surveillance | 51% |
| Education | 45% |
| Care plan management | 42% |
| Admission tasks | 41% |
| Documentation | 25% |
| Discharge tasks | 6% |

Discussion

- National efforts to address gaps related to healthcare access, quality, and workforce **have elicited little success**
- Technology provides an opportunity to **improve healthcare access and quality**, while also reducing the burden placed on healthcare providers that often leads to burnout



Discussion & Next Steps

- VRN may provide a **strategic first step** to improving healthcare access, quality, patient outcomes and satisfaction, and alleviating the stressors within the healthcare workforce
- Ongoing VRN evaluation will examine its impact on patient outcomes, providers' perspectives, and system-level cost savings



This study is part of the Telehealth Centers for Excellence at the Medical University of South Carolina. Scan the QR code to learn more about this program and others.

Questions?

Please feel free to reach out to Caitlin Koob at
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Thank you!



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