



# Virtual Discharge Nurse Program: Feasibility and Lessons Learned



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## Introduction

- **Innovative care models** are in high demand due to **key drivers**:
  - Nursing shortages
  - Increased patient acuity/needs
  - Cost-efficiency expectations
- **Virtual nursing** is an **emerging strategy** for addressing these demands<sup>1-7</sup>
- Hybrid models **embed virtual RNs into routine workflows** (e.g., admissions, discharges, patient education)<sup>2-6</sup>
- **Limited evidence** on this topic for acute care settings contributes to uncertainty about the implementation and optimization of virtual nursing models

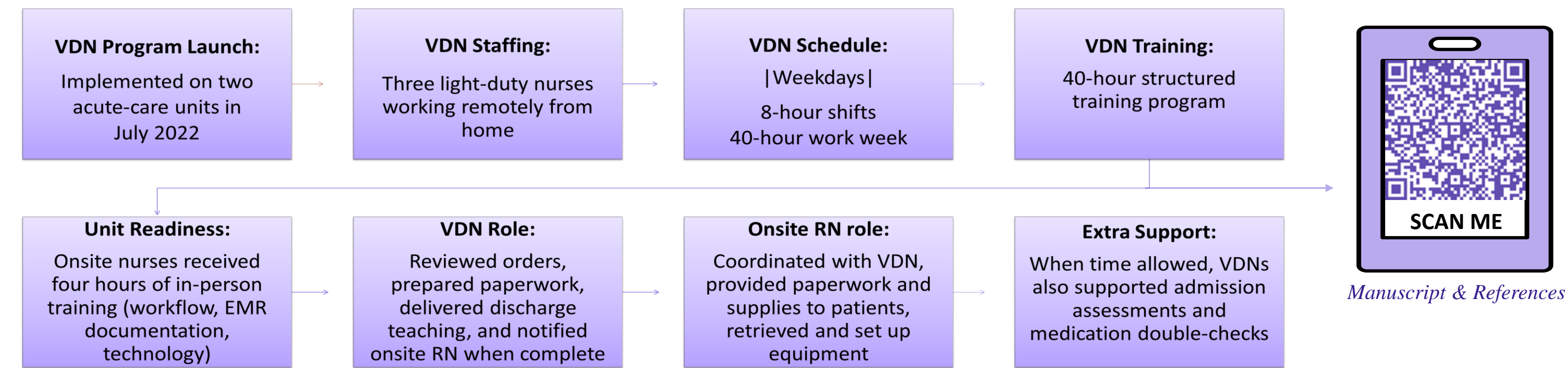
## Purpose

Evaluate **feasibility** and **preliminary outcomes** of a **Virtual Discharge Nurse (VDN)** program.

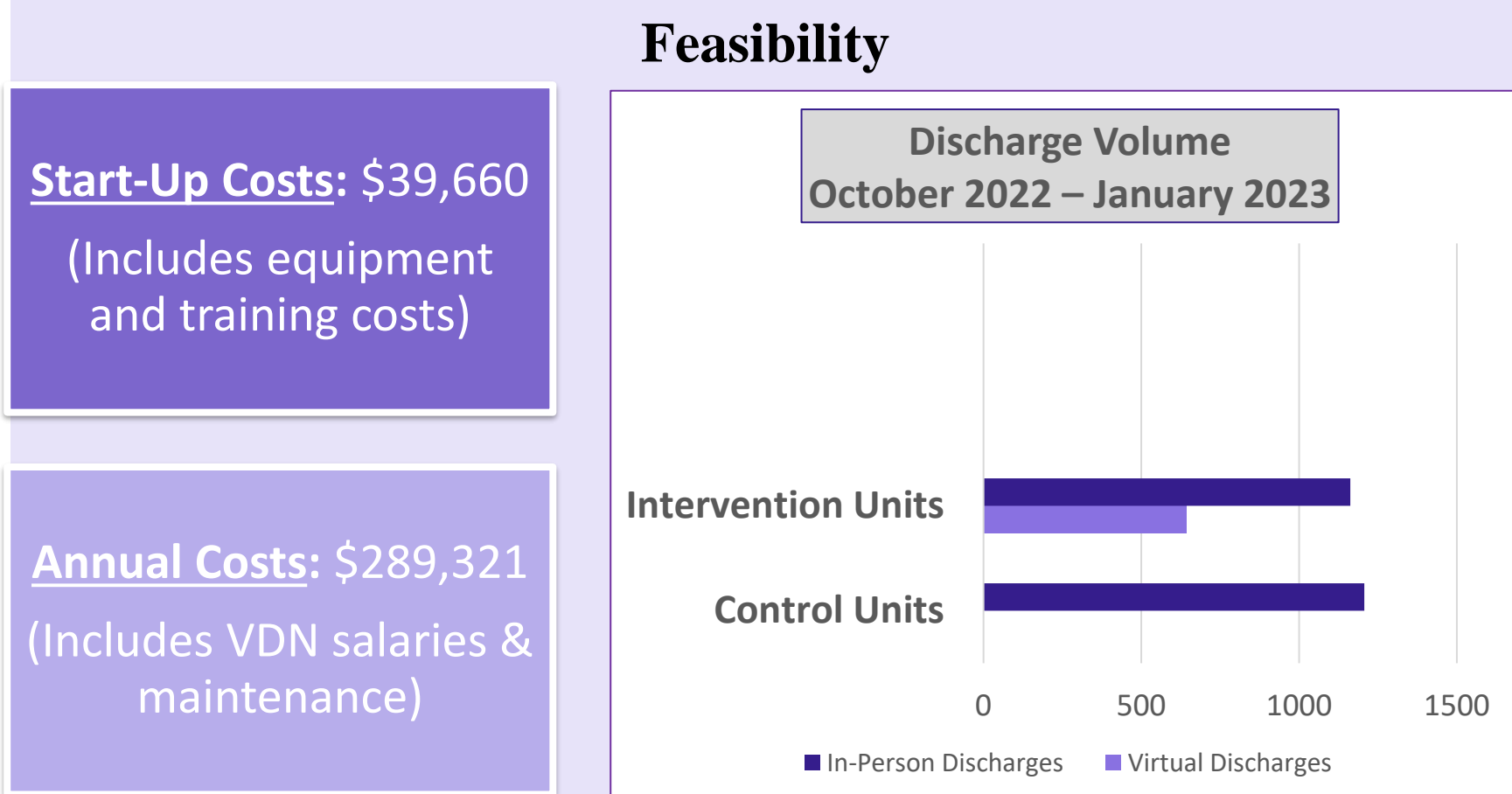


## Methods

- **Design:** Quasi-experimental, posttest-only
- **Setting:** 112-bed Magnet-designated hospital (Southeastern US)
  - **Intervention units:** Post-Surgical Med-Surg; Cardiac/Renal Progressive Care
  - **Control units:** Pulmonary Med-Surg; Cardiovascular Intermediate Care
- **Participants:** Direct-care RNs and patients/families from the study units
- **Measures**
  - **Feasibility:** Discharge volume, program costs, patient/family and nurse feedback
  - **Preliminary outcomes:** Perceived quality and missed nursing care (electronic survey)
- **Analysis methods:** Descriptive/inferential statistics and conventional content analysis



## Results



### Preliminary Outcomes

	Intervention Units (n = 48)	Control Units (n = 48)
<b>Nurse Perceptions of Quality</b>	"In general, how would you describe the quality of nursing care delivered to patients on your unit?"	"How confident are you that your patients are able to manage their care when discharged from the hospital?"
<b>Range (reverse coded for analysis)</b>	1 (excellent) – 4 (poor)	1 (very confident) – 4 (not at all confident)
<b>Mean (SD)</b>	No significant difference in means between the intervention units 3.54 (0.72) and control units 3.43 (0.79), p = .630	No significant difference in means between the intervention units 2.88 (0.79) and control units 2.83 (0.72), p = .826

### Post-Discharge Feedback (Patients/Families)

**Exemplar Quotes**

**Virtual Discharge (n = 113)**

- 1. Appreciation of Convenience**  
"I loved that I could join the discharge call from home without arranging childcare."
- 2. Medication-Related Issues**  
"They verbally reviewed my new diabetes med[ication]s over video but never sent the e-script."
- 3. Overall Discharge Satisfaction**  
"I appreciate the virtual discharge's efficiency and clear overview of my follow-up appointment..."

### Nurse Feedback: Positives

- **Time savings/reallocation** towards other patient care tasks
- **Added value** through VDN oversight (trend monitoring/identifying documentation gaps)

### Nurse Feedback: Pain Points

- **Technology challenges** (setting up tablet/cart; initial connectivity/ usability issues)
- **Coordination challenges** (VDN contact/ discharge timing)

### On the most recent shift/day you worked, which of the following activities were necessary but left undone because of time constraints?

	Intervention Units (n = 24)	Control Units (n = 24)	X <sup>2</sup> (df=1)	p
Comfort/talk with patients	12 (50%)	14 (58.3%)	.34	.562
Oral hygiene	12 (50%)	12 (50%)	.00	1.00
Teaching/Counseling	9 (37.5%)	7 (29.2%)	.37	.540

## Lessons Learned

- **Role clarity** is essential (VDN vs. bedside responsibilities)
- **Reliable technology** is non-negotiable (audio/video quality, usability)
- **Upfront technology investments** are notable, but operational efficiencies may offset long-term costs
- **Patient/family needs** extend beyond teaching (e.g., resource linkage, transportation); VDNs may be useful in helping to address these needs
- Successful **VDN implementation requires thorough training, a communication plan** at launch, and **thoughtful recruitment** of nurses for VDN roles
- **VDN Program sustainability** requires **engagement** (involvement of onsite nursing teams in program development), **standardized RN orientation**, and **monitoring** (track performance for continuous improvement/visibility)

## Conclusions

- The VDN Program was feasible, with measurable utilization, acceptable cost estimates, and actionable stakeholder data to guide decisions and refinement
- Virtual nursing offers potential to preserve expertise of experienced nurses, strengthen discharge quality, and improve patient experience with refined processes
- Addressing technology and workflow logistics is critical to strengthen adoption and scale impact



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