Virtual Nursing: Early Wins - Journey Ahead

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It was incredible to be alongside nursing professionals at Catholic Health Initiatives years ago, creating the first programs that make up the foundation of today's Virtual Nursing. [10,11,12,13] With virtual nursing, the goal has been to find solutions to transform the inpatient nursing care model fundamentally and sustainably, by resolving nursing shortages, turnover, and burnout. More importantly, it's about creating new opportunities by introducing solutions which enable bedside nurses to become more patient-centric, elevating the patient care experience.

Agree to the Top Line Problem

Globally and within the U.S., the nursing crisis is significant with well-documented shortages in staff that are available to provide care for the Nation's growing healthcare demand. While the nursing crisis is felt across the care continuum (Figure 1), it is most acute and impactful in inpatient settings where approximately 48% of nurses practice, making up the largest employment category in hospital settings [1].
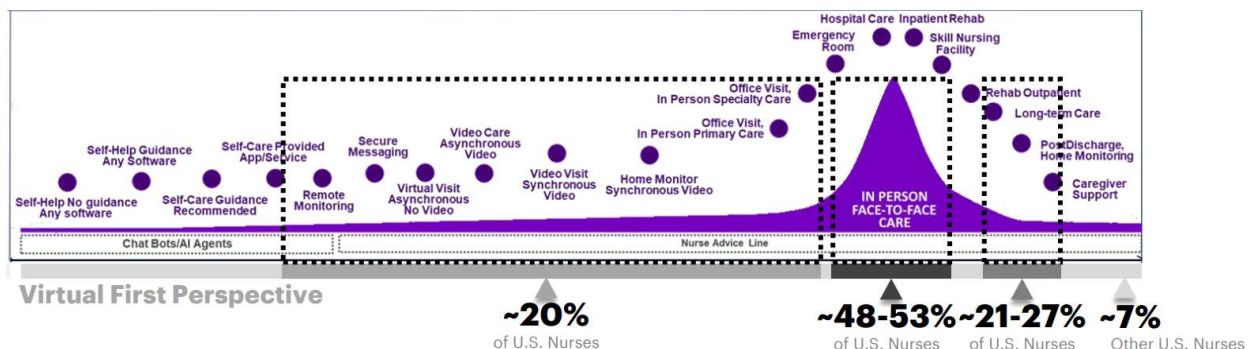

Figure 1: Nursing Employment Across the Care Continuum

Equally concerning are newer findings showing that anywhere between 45% [2] to 85% [3] of inpatient nurses plan to leave their jobs next year (Figure 2). This is coupled with reports of approximately 35% of nurses being new graduates and inexperienced [4].

The nursing crisis is felt across all health care systems, including the U.S. Veterans and Military Health systems.[14] Recently the VA inspector general recently reported that two-thirds of facilities are facing nursing shortages.[15]

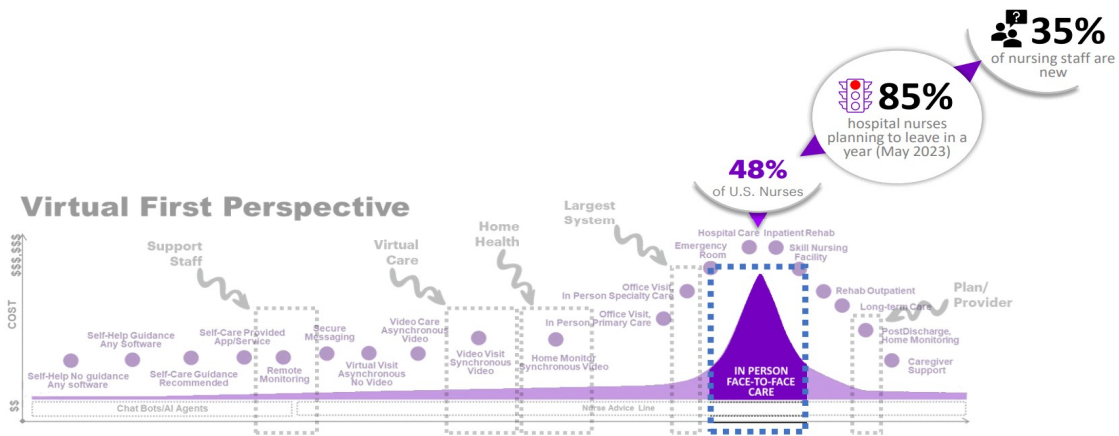accenture

Figure 2: Changes in Inpatient Nursing Employment Raise Concerns

Early Wins Show Promise

Our previous articles showcased insights on some of the early lessons learned with reinventing the nursing care model. Significant wins have been achieved which highlight the value of Virtual Nursing:

1. **Virtual Nursing a Top Trend.** Along with Generative AI, Virtual Nursing has been identified as a "top digital health trend in '23". [5] Applying Generative AI to Virtual Nursing will benefit core nursing tasks (e.g., patient/family education and communication, answering call lights, discharge instructions, formal charting, and documentation/coordination).

2. **Flip-the-Script on Nursing Attitudes.** The early results at Providence won over nurses on the edge of leaving bedside care. By applying Virtual Nursing 1.0, 73% of RNs no longer planned on leaving bedside care and 55% of all unit staff planned on staying at Providence [6]. Providence's retention numbers show that such successes can be achieved, and tangible efforts can be made to prevent the large exodus of inpatient nursing staff.

3. **Ratios and Staffing Improvements.** Although most Virtual Nursing programs are only tapping into 15% of their potential to shift or augment tasks, nurse-to-patient ratios have gone from 1:4 to 1:6 with bedside nurses being less burdened and more focused on value-added tasks with Virtual Nursing support thereby having increased ability to manage more patients comfortably. New insights show typical patient monitoring programs integrated with answering call lights increase outcomes and improve ratios from 1:10 to 1:16 by improving nursing capability. Virtual Nursing supports the ability to do more with less without additional burden on the bedside nurse and ultimately has positive impact on financial outcomes.

4. **Interest and Choice.** New career options exist for nurses. Each program outlined in our earlier Virtual Nursing: Lessons Learned whitepaper has highlighted the benefit of creating new career paths for nurses. For example, an experienced nurse unable to perform physical bedside tasks can continue to offer expertise and experience remotely. Applications for Virtual Nursing roles are attracting more seasoned, semi-retired nurses, as it allows for staff to continue providing clinical care in a virtual setting, eliminating brain drain in the profession.

5. **A Sense of Optimism.** Virtual Nursing is about working with nurses to co-develop new solutions to the current healthcare model. By involving nurses in the implementation of Virtual Nursing programs, not only can we develop a system built for nurses, by nurses, but we can also create a renewed sense of optimism among experienced and new graduate nurses who see real tangible change happening.

Deeper Problem

Success in some instances can creates frustration. A common refrain from health system executives is "We're focused on offering pay and hour flexibility" or "We're doing virtual nursing." Reductions in turnover and positive recruitment buoy some. [7] All sentiments gloss over the depth of the problem.

> *"Speaking of being burned out, that's been in the literature for nursing for 40 years too, if not longer. People act as if that's a big surprise…nursing has been talking about it for many, many decades...Research shows that nurses have felt they haven't had a voice in their jobs; they don't like being treated as a commodity…"* [8]

Dr. Kathleen Sanford, Chief Nursing Officer, CommonSpirit

A four-month pilot program initiating Virtual Nursing doesn't solve a 40-year foundational problem. Recently, a study of inpatient nurses found that nurses want to leave because of "...not feeling valued by their organization and not having a manageable workload." [2] The nurses from the study recognize and expect that alleviating their issues is a journey.

As highlighted in Virtual Nursing: The Lessons Learned, Virtual Nursing as applied today only addresses 15% of the workload of inpatient nurses. Only 17% of health systems are re-designing the model of care [9] - this adds credence to why nurses feel they need to be more valued. Together, there is a cautionary tale - today, nurses are optimistic when implementing Virtual Nursing. However, they will quickly become disillusioned if organizations do not commit to improving further by tapping the remainder of the 85% of the Virtual Nursing workload potential.

Virtual Nursing's early accomplishment is aimed at showing nurses what is possible within the profession, it allows them to see what is and can be different. The co-creation process relies on nurses' input to give them a voice in the reinvention of the care model, allows them to practice at the top of their license, be recognized for the work they do, and shed tasks that limit their ability to care for patients and themselves.

We've Just Left the Starting Blocks

Initial steps taken to implement Virtual Nursing 1.0 are:

1. To leverage the tangential successes found through using various technological solutions to deliver care to patients virtually. Such uses include:
   a. ICU monitoring to address the shortage of intensivists and, to a lesser extent, ICU capability.
   b. Patient observation sitter-type use cases, such as traditional slip/fall or mental health sitters.
   c. Ambulatory settings which provide timely and convenient access to quality care for patients in their homes and communities to decrease barriers to access.
   d. Delivering care to COVID-19 patients through telehealth monitoring solutions to reduce hospital admissions and prevent infection.

2. Introduce and integrate an experienced nurse who is remotely located into a handful of the core activities in a medical/surgical (non-telemetry) care setting. The diagram below (Figure 3) illustrates the extent of task shifting in most of the early Virtual Nursing programs. Initial tasks shifted or augmented by an experienced remote nurse include assessments/reassessments (focusing on SBAR at admission), rounding, discharge, patient/family education and communication, and documentation review. In most of these tasks, the focus has been on limited, predictable moments when these tasks occur. The driving influence in some instances has been to create scale by leveraging the remote nurse supports multiple units or to share in care team responsibilities.
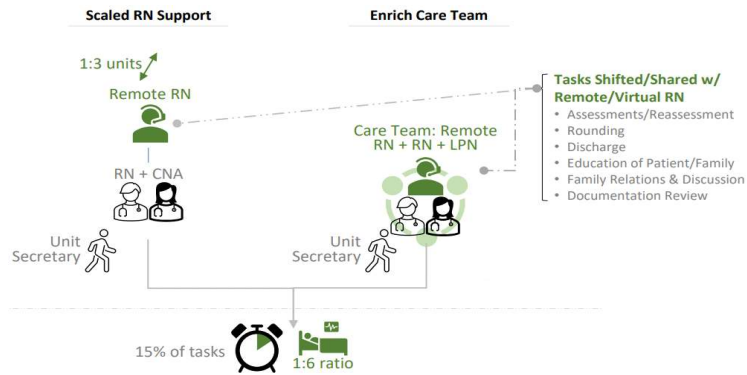

Figure 3: Initial Task Shifting and Augmentation in Virtual Nursing 1.0

The Virtual Nursing journey looks at all the tasks' nurses undertake, in this case, in an inpatient setting. Figure 4 below highlights 40 nursing tasks commonly performed in an inpatient setting, offering a lens into the frequency and the potential for shifting or augmenting tasks vs. those best handled by bedside nurses.
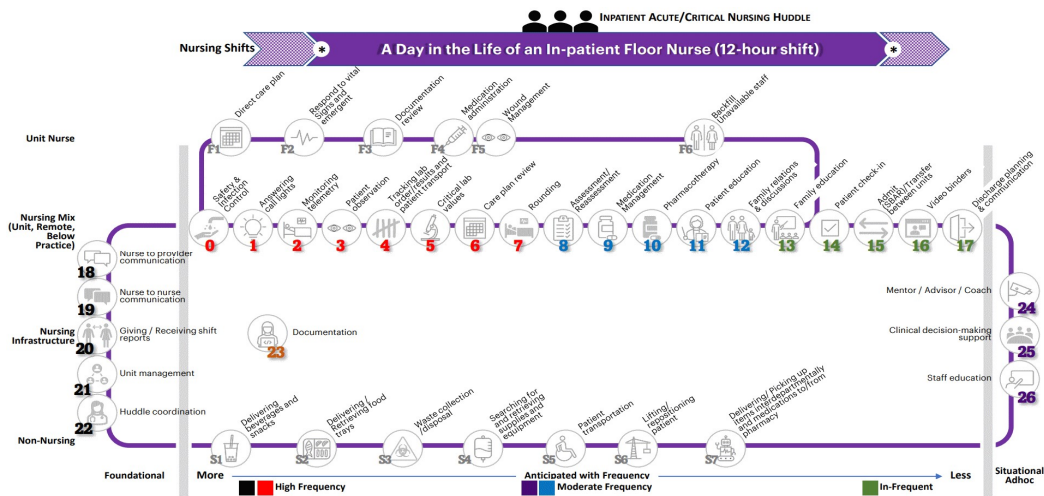

Figure 4: The 40 most performed nursing tasks which can be Shifted or Augmented through Virtual Nursing.

Organizations have yet to adopt the entirety of the Virtual Nursing implementation journey successfully. Nurses expect organizations to be willing to address this 40-year issue or continue to see a degrading nurse capacity. Consequently, health organizations should continue to pull on the four levers found in the **Virtual Nursing Maturity Framework**, as shown below, to ensure they meet the expectations of nurses and create capabilities that establish quality service and financial guardrails. The green circle in the first lever highlights where health systems are today or have begun their Virtual Nursing journey, as reflected in Figure 5.
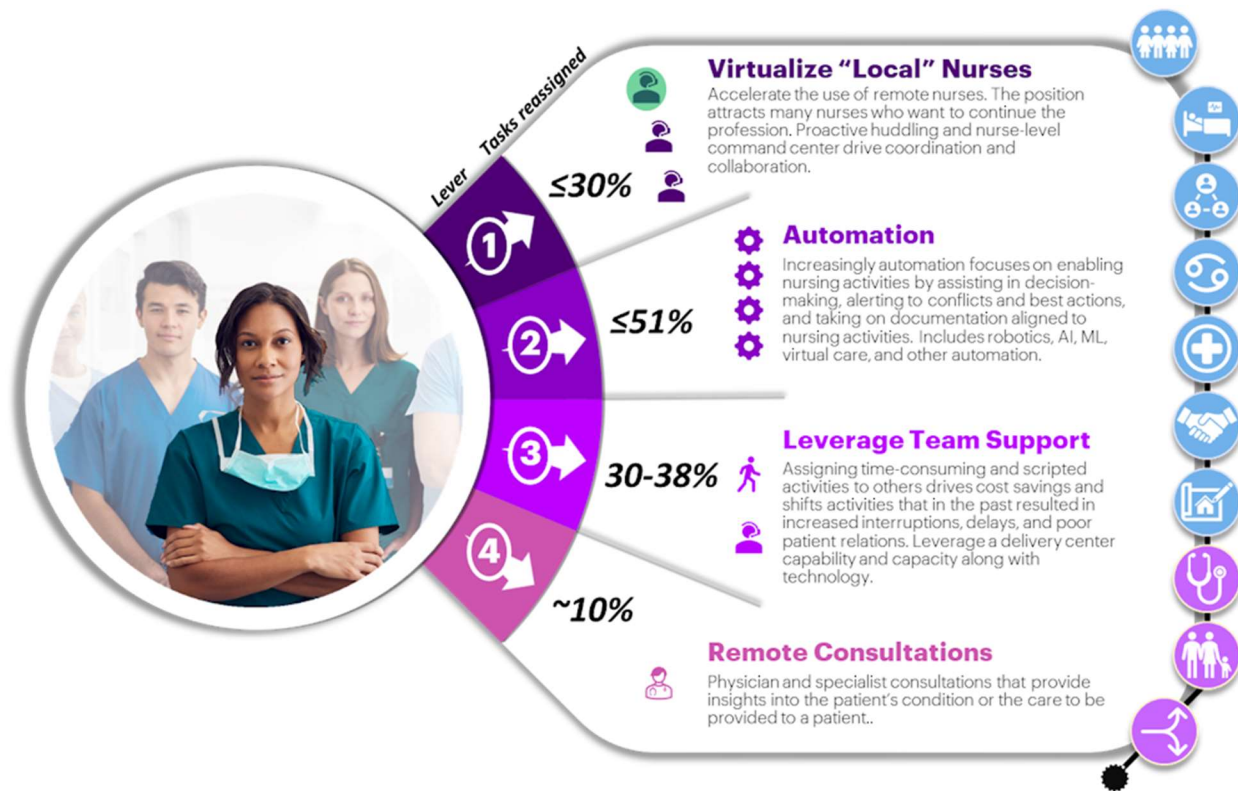
Figure 5: Virtual Nursing Maturity Framework (green circle highlights the lever most often used in Virtual Nursing 1.0)

- **Lever 1: Virtualize "Local" Nurses** - Utilization of remote nurses responsible for participating in care delivery, clinical decision-making, care coordination communication, etc. Virtual Nursing care teams at this initial lever are often comprised of:
    1. Advanced Practice, and/or experienced Registered Nurses; and
    2. Licensed Practical Nurses (e.g., vital signs, sitting, sepsis, wounds, etc.); and
    3. Unit Secretaries and/or Medical Support Assistants (MSA)

Each member of the Virtual Nursing care team supports different tasks, which can result in realigning up to 30% of tasks. Utilizing remote care teams create a change within the department as bedside and remote nurses proactively huddle, coordinate care at the bedside or in other venues, and leverage command center-like capabilities to enhance care delivery. Virtual nursing also creates opportunities and diverse career paths for experienced nurses.

- **Lever 2: Automation (Robotics, Virtual Care platforms, Artificial Intelligence [AI], and Machine Learning [ML])** - Increasingly, automation such as generative AI, will enhance nursing activities by assisting in early identification of adverse changes or deterioration in patient's status, providing data insights to enable appropriate decision-making, and supporting assigned documentation when appropriate.

- **Lever 3: Leverage Team Support** - Research has shown up to 38% of time-consuming, repetitive, and scripted clinical department activities can be shifted to remote support teams to drive greater efficiency, safety, cost savings, and improve nursing staff wellbeing. Often, these time-consuming, repetitive bedside tasks are due to increased interruptions, delays, and poor patient engagement. The remote support staff, including nurses, can leverage the global scale of a virtual communication platform available through Virtual Nursing and focus on both clinical and non-clinical decision-making activities.

- **Lever 4: Remote Consultations** - Advanced Practice Nurse, Physician and specialist consultations that provide insights into the patient's condition or the care to be provided to a patient.

The Virtual Nursing journey fundamentally and permanently impacts nurses and changes the way nurses provide care. The journey will result in shifting and augmenting inpatient nursing tasks in a meaningful way like the examples in Figure 6 to achieve care reinvention.
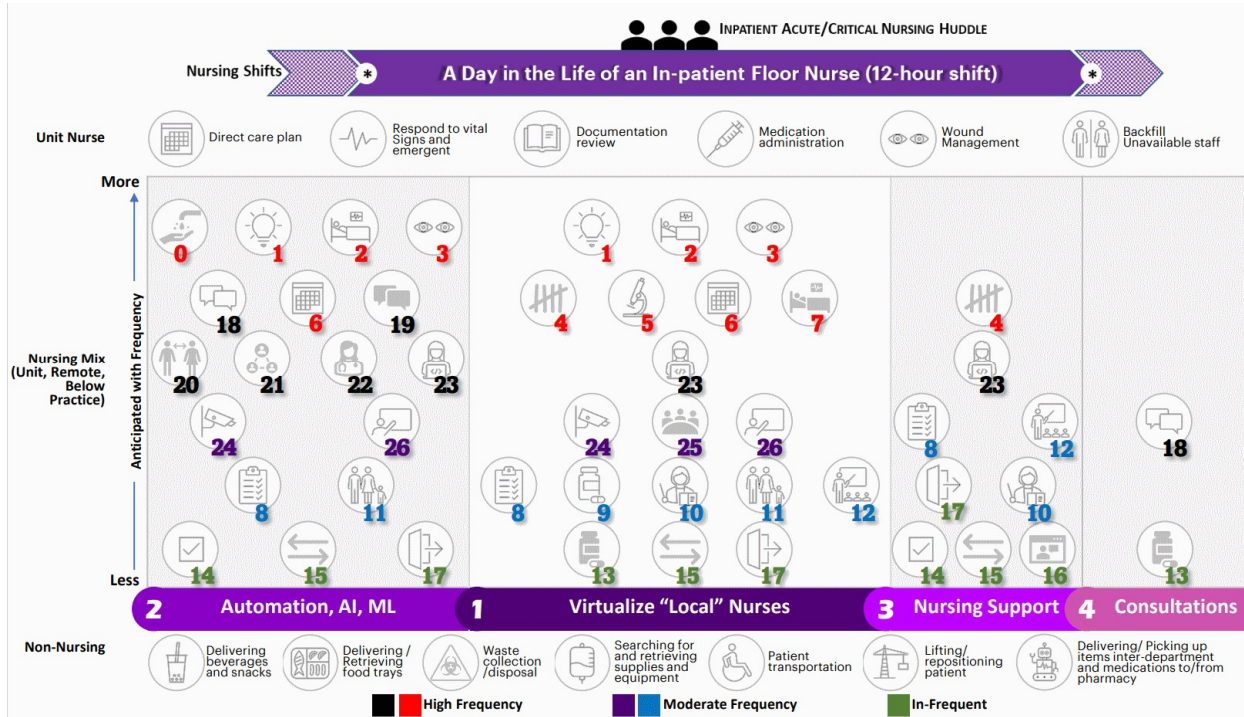

Figure 6: The Projected Results of Inpatient Nursing Task Shifting and Augmentation

At the core of Virtual Nursing is the intention to reach the destination described by Dr. Sanford and to create flexibility for the healthcare system. Fundamentally, the role of nurses will change, allowing for more diverse career trajectories. Health systems will be able to have increased predictability in their labor supply as well as the ability to extend the reach of their nursing capability to other settings and increasingly into the home, leading to Care Anywhere.

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[1] Bureau of Labor Statistics

[2] "Reimaging the nursing workload: Finding time to close the workforce gap," McKinsey & Company, May 26, 2023, Berlin, Bilazarian, Chang, Hammer.

[3] "85% of nurses plan to leave hospital roles 1 year from now: Survey," Ashleigh Hollowell, Becher's Hospital Review, 2023.

[4] Webinar - A Guide to Virtual Nursing: Inpatient Settings, July 20, 2022. Link.

[5] "ChatGPT, virtual nursing, remote monitoring: Top digital health trends so far in '23," Giles Bruce, July 2023

[6] "Providence rolls out virtual nursing to 8 hospitals," Giles Bruce, June 6, 2023. Link.

[7] "Nurses stream back to hospitals amid temp job slump," Mariah Taylor, Becker's Hospital Review, 2023. Link.

[8] "Nursing shortage is more than a pandemic problem, says CommonSpirit's CNO Dr. Kathleen Sanford," MacKenzie Bean, Becker's Hospital Review, Nov. 8, 2021.

[9] "2023 NSI National Health Care Retention & RN Staffing Report," NSI Nursing Solutions, Inc.

[10] "Virtually Integrated Care: A New Paradigm in Patient Care Delivery," Denney and Miller, Oct/Dec. 2017, Nursing Administration Quarterly, 41(4):p 288-296.

[11] "Virtual Nursing: The New Reality in Quality Care," Schuelke, Aurit, Denney, Oct/Dec. 2019, Nursing Administration Quarterly, 43(4):322-328.

[12] "Virtual Nursing, a Postpandemic Plan for Efficiency and Cost Savings," Patton, Oct/Dec. 2023, Nursing Administration Quarterly, 47(4):p 350-354.

[13] "Nursing 2023 A New Emphasis on Nursing Strategy," Sanford, Oct/Dec. 2023, Nursing Administration Quarterly, 47(4):p 289-295.

[14] "Despite hiring efforts, 92% of VA facilities report severe nursing shortages," Eric Katz, Government Executive, August 22, 2023. Link.

[15] "Nursing Shortage Impacts On Military And Veteran's Healthcare System," Achieve CE, Blog, Industry News, Feb. 24, 2023. Link.