White paper

Inpatient Virtual Nursing Fundamentals, Uses and Benefits

Mitigate the Nursing Shortage and Enhance Patient Care with Inpatient Virtual Nursing
The Evolution and Momentum of Virtual Nursing

Virtual nursing is gaining momentum to support inpatient care and is evolving beyond its traditional uses such as pre-admission and post-discharge check-ins. The main adoption driver is the staffing shortage, with health systems being increasingly willing to innovate to try to avoid service suspensions and shutdowns. Virtual nursing is an important component health systems can include in their transformation and care delivery redesign initiatives. Health systems that have created virtual nursing programs to augment their bedside nurses have found virtual nursing can extend nurses’ careers and improve job satisfaction for floor nurses by taking away responsibility for many tasks that do not require physical touch. This allows the bedside nurse to focus on hands-on patient care and contributes to higher patient satisfaction because of the responsiveness and additional attentiveness it enables.

Data from the Telehealth Benchmark Survey for Hospitals and Health Systems suggests the number of hospitals and health systems with virtual nursing programs could double in 2022. Many patients, hospitals and health systems alike gained experience with various forms of telehealth during the pandemic. That has led to increased comfort with using telehealth and for new use cases to be developed, factors that are also helping drive the surge in virtual nursing programs. This white paper provides an overview of inpatient virtual nursing for patient care, its benefits and emerging use cases, and guidance for introducing the practice in a way that will foster acceptance and complement the work done by bedside nurses.
Virtual Nursing Definition & Key Tenets of Successful Programs

For this white paper, “virtual nursing” refers to nursing support for inpatient care at a healthcare facility, and/or other (remote) facilities in the health system. It does not refer to simulations and training. Do not use the term “telenursing” because it connotes audio-only workflows like telephone services. Virtual nurses are responsible for monitoring multiple patients while collaborating with the nurses, physicians, therapists and other staff who provide care at the patient bedside. The virtual nursing unit can be centralized (e.g. nurses work from a command center in a healthcare facility), distributed (nurses can work from home or other remote locations) or hybrid.

In our experience, the following characteristics are essential for successful virtual nursing programs:

• The role of virtual nurses is to complement bedside nurses, not replace them
• Virtual and bedside nurses have the same access to patient information, including real-time access to patient monitors
• Virtual nurses have real-time, two-way audio and video connection to the patient room

Staffing models and how virtual-bedside nurse responsibilities are shared can be specific to each program.

THE U.S. BUREAU OF LABOR STATISTICS PROJECTS THE NEED FOR 2.1 MILLION NEW RNS FOR EXPANSION AND REPLACEMENT OF RETIREES BY 2025.

IN 2021, AS MANY AS 22% OF NEW NURSES WERE LIKELY TO LEAVE THEIR CURRENT POSITION WITHIN THE FOLLOWING YEAR, DUE TO INSUFFICIENT STAFFING LEVELS, THE INTENSITY OF THE WORKLOAD, AND THE EMOTIONAL TOLL OF THE JOB.
Introduction

Many hospitals and health systems already have some experience with virtual nursing, although they may not call it that. Having nurses call patients after discharge to check on their conditions and give reminders about medications or care, virtual nurses completing discharges or admissions and hourly rounding on hospitalized patients via videoconferencing, or command centers where a single nurse may monitor vital signs and other data for multiple patients in the ICU, are all examples of virtual nursing. These programs have been effective for extending care outside the hospital and for leveraging scarce staff.

The emerging use cases for virtual nursing are building on these benefits and experiences to expand the practice both in scope and scale. A key driver is to mitigate the nursing shortage. Adopting virtual nursing provides a way to mitigate potential staffing losses due to short-term injury or other conditions that require nurses to be off their feet. It is also a way to extend nurses’ careers, for example by offering nurses with developing or chronic physical limitations the option of working seated in a command center instead of providing physically challenging care on a nursing unit. Virtual nursing programs can also help attract nurses by providing different options for shifts and work styles. This model supports organizations by enabling them to have virtual nurses work from anywhere – allowing them to provide much-needed care and services without requiring nurses to relocate so that they live close enough to a hospital to be able to go on-site for their shift. Hospitals have reported their floor nurses’ job satisfaction increased after virtual nursing programs were introduced. Removing the physical demands of going from room to room and providing hands-on care can extend careers, thus enabling the health system to retain valuable expertise.

Some nurses do not want to give up the physical contact with patients, and others may be uncomfortable with virtual collaboration. These issues are common, even in hospitals where virtual nursing eventually became highly successful. The keys to gaining acceptance are to get nurse input early in the program development, and to divide bedside and nurse responsibilities in a way both roles are comfortable with – solving for your most challenging problems.
Sample Division of Responsibilities Between Virtual and Bedside Nurses

Virtual Nurse
- Admission navigator
- Dual sign off
- Chart audits
- Discharge planning
- Discharge education
- Nurse mentoring
- LPN oversight
- STAT team/Code blue support
- Calling new consults
- Telemetry sign off in EMR

Bedside Nurse
- Physical assessment
- Medication administration
- Hands on bedside care
- Procedural/transport readiness coordination

While hands-on care will always be needed, many duties can be fulfilled virtually, including coordinating procedures, getting sign-offs from multiple care team members, reconciling medications, providing patient education, answering questions, initiating the discharge process and more.

In many successful virtual nursing programs, administrative tasks like discharge paperwork, medication reconciliation, etc. have been shifted from bedside to virtual nurses. For example, one midwestern, midsize health system reported it reduced the time of its discharge process by 20% by transferring some responsibilities from bedside to virtual nurses.

These examples should not suggest virtual nursing is an administrative position. Virtual nursing systems enable virtual nurses to monitor patients and communicate with them, their families and other visitors and care team members in real time, including responding to patient nurse calls. Several health systems with virtual nursing programs have reported high job satisfaction for their virtual nurses. Nurses say the virtual role enables them to spend more time with patients overall. The extra time, and the complementary nature of virtual and bedside nursing roles, contributes to improved job satisfaction for both bedside and virtual nurses, and positive experiences for patients.

In a healthcare setting, sensitive healthcare information and interpretation are often analyzed via digital platforms that only require clinician intervention in extreme circumstances. The goal of innovation is to improve patient engagement and outcomes while allowing nurses to focus their care on those who need their help most. Healthcare providers may consider enabling such change through digital, clinician, regulatory, and labor union collaboration.”

-McKinsey & Company
Assessing the lingering effect of COVID-19 on the nursing workforce
Workforce Implications

Virtual nursing appeals to administrators because it enables them to leverage available staff and provides more flexibility to put nurses into roles well suited to their preferences and abilities. Ability includes availability – nurses who can’t work on the floor are often able to work in a virtual role. Both bedside and virtual nurses typically report increased job satisfaction that comes from the collaboration and synergies realized with this innovative model. Some nurses are attracted to virtual positions because of their individual needs, and some nurses that do not care for patients virtually view the practice positively because of the support it provides them. As one administrator at a health system in the southeast told us: “We’re seeing our more mature nursing staff take a step back from the bedside and join our virtual ICU program. We’re keeping that experience and helping to train the next generation of nursing staff.” Virtual nursing can be a powerful recruiting tool by enabling a health system to offer work options that others cannot.

As with any new workflow or technology introduction, a virtual nursing rollout should be supported with an organizational change management program. Education and communication are essential. As previously noted, nurses should be well represented and have a meaningful voice in discussions about responsibilities, processes and how virtual and bedside nurses will interact.

Virtual Nursing Workflow Example
Hospital-grade telehealth solutions support all these use cases and others. Virtual nursing programs backed by appropriate infrastructure provide the flexibility to tailor nursing roles and responsibilities from facility to facility and even ward to ward.
Inpatient Virtual Nursing Benefits

Most of the benefits to enabling virtual nursing have already been referenced—staffing flexibility, potential retention and recruitment advantages, the ability to leverage staff resources, favorable nurse and patient satisfaction—but there are a few other issues to highlight. Many of the reported benefits and highlights of virtual nursing are for specific hospital or department programs. There have been few, if any, published studies on nurse satisfaction, patient outcomes or other success metrics across multiple health systems or practice areas. Many hospitals and health systems have implemented virtual nursing programs and report positive benefits like:

- Differentiated and improved patient experience, with potential associated improvements to patient satisfaction and HCAHPS and NPS scores
- Shift and workflow flexibility that provides a potential retention and recruitment advantage
- Improved hours per patient day (HPPD) for nurses
- Increased adherence to best practices
- Faster response to alerts
- Improved efficiencies and fewer unnecessary in-room visits
- Reduced adverse events from the convenient availability of a second nurse for consultation and/or sign off
- More efficient consults by eliminating travel time to the patient room
- Reduced length of stay, resulting in improved throughout
- Reduced cost for traveling and temporary nurses and overtime
- Reduced transfers out/denials
- Improved training and onboarding effectiveness
- Time savings in the discharge process
- Improved nurse job satisfaction

Virtual nursing to support ICU patients is one of the most studied use cases and has some of the best-documented benefits, including reductions in mortality and average length of stay.
One hospital in an 18-facility, not-for-profit system created an inpatient virtual nursing unit to meet the patient volume surge from COVID and to try to address the ongoing nursing shortage. The virtual unit provides full, real-time, two-way audio and video connection to the patient room and full access to the EHR. Virtual nurses supported bedside nurses with rounds, pain assessments, answering patient questions, dual sign-offs and more, and took the lead on admission and discharge work, medication reconciliation and some other activities. Bedside nurses accepted the virtual unit, and were able to increase their patient load from four to five.

The unit quickly grew to care for an average of 2,340 patients per month. Analysis found the hospital was discharging patients supported from its virtual unit 20% faster than those in traditional units, patients supported with virtual nursing were typically discharged two hours before patients in other units, and the hospital’s percentage of patients discharged before noon increased by 44%.

The hospital’s director of virtual care credited the program with helping the health system improve on more than a dozen metrics related to quality, safety, workforce and patient experience, outlined below.

**Quality:** Falls, CAUTI, HAPI, CLABSI, C-diff, mortality

**Safety:** Adverse event reduction, improved oversight

**Workforce:** Hours per patient day (HPPD), salary cost/HPPD, engagement, turnover, vacancy

**Patient Experience:** HCAHPS, responsiveness

### Conclusion

Inpatient virtual nursing is a growing practice because of increased patient and provider comfort with virtual care, plus telehealth technology advances that have improved communication and responsiveness and made more remote care activities possible. The practice has its roots in ICU support, where its benefits are well documented, and is now spreading to other inpatient care. Virtual nursing provides extra attention for patients, staffing flexibility for hospitals and career options for nurses. It also offers a lot of flexibility for how it can be applied, so thoughtful program planning and organizational change management efforts are essential.

Teladoc Health is a leader in developing telehealth solutions for inpatient care and has helped leading hospitals and health systems plan and implement virtual nursing programs. From clinical consultations for high-acuity care (e.g. stroke, hospitalist, critical care) to virtualizing non-physician use cases (e.g. nursing, social work, pharmacy), Teladoc Health offers whole-person virtual care solutions that enhance today’s operations and anticipate the needs of hospitals and health systems of tomorrow. Visit our [Hospitals & Health Systems website](#) to learn more about how we can help your organization advance care and meet its strategic goals.

---

2. 2021 Telehealth Benchmark Survey for Hospitals and Health Systems.
4. Teladoc Health client success story “Addressing the nursing shortage with virtual care inpatient solution”
About Teladoc Health: Teladoc Health is empowering all people everywhere to live healthier lives by transforming the healthcare experience. Recognized as the world leader in whole-person virtual care, Teladoc Health leverages clinical expertise, advanced technology, and actionable data insights to meet the evolving needs of consumers and healthcare professionals.