Virtual Nursing

Driving New Care Models to Support the Acute Care Crisis

Introduction

Acute care is in the midst of a crisis. The combination of a depleted workforce that is projected to further shrink, rising patient acuity, and shrinking hospital margins has led to frustration and burnout among nursing staff and left us a long way from the goals of the quadruple aim.

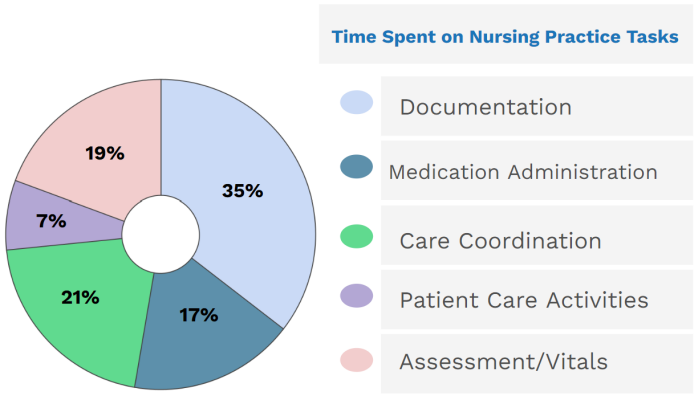
Thankfully, a new class of nurses is rising to meet this crisis, merging digital technology with virtual nursing and helping to fundamentally rethink existing care models. This process is still underway, but the results are already promising: decreasing the average length of stay, improving patient outcomes, reducing readmissions, and improving both the retention and satisfaction of nursing staff.

An emerging opportunity

"Telenursing," as it was originally known, is not a new concept. The idea first rose to prominence in the early 2000s and now has a variety of supporting standards and competencies. But there has been a resurgence in both interest and growth of the practice in recent years, with a 34% rise in the adoption of virtual nursing since 2022. The need is clear—and so is the interest. At AVIA—a network of more than 55 health systems working together to improve healthcare through digital advancements—we have seen a similarly rapid trajectory of interest and adoption of virtual nursing among our member health systems, growing from a group of just 10 AVIA participants in 2021 to over 50 in 2022.

The Case for Virtual Nurse Support

Where are nurses spending most of their time?



Nursing Activities

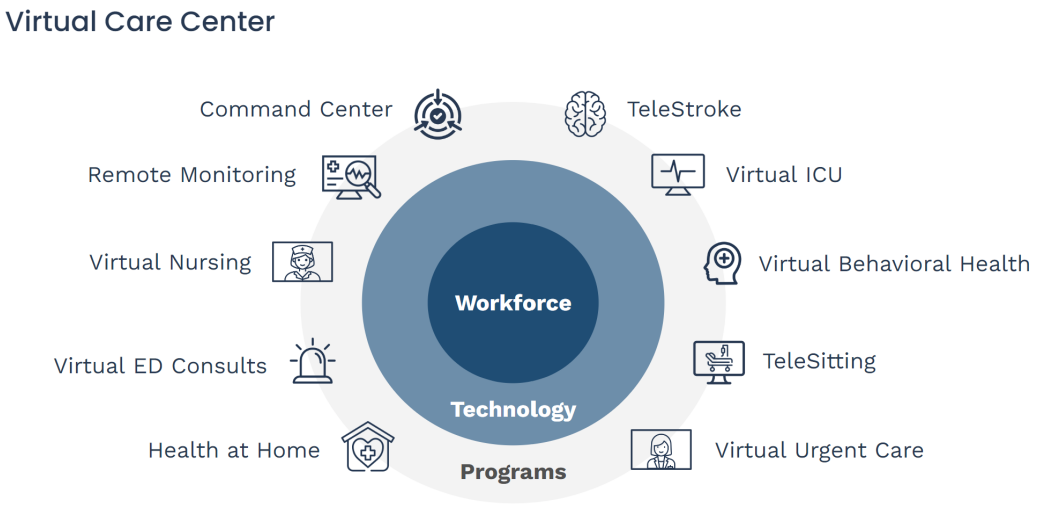
The nurses' activities were clustered into categories and subcategories of how much time nurses spend on activities considered to be nursing practice, nonclinical, unit-related, or waste

Waste	Waiting Looking/retrieving Delivering
Unit-related functions	Preparing equipment Counting narcotics Transporting patients between departments Using fax/copy machine
Nursing Practice	Patient care activities Care coordination Medication administration Documentation Assessment / reading vitals
Nonclinical	Personal time Patient/family care Administration / teaching

Virtual nursing use cases are seeing a similarly rapid uptick, closely linked to a growing understanding of where acute care nurses spend their time. Some of the most promising examples of initial adoption within our membership are focused on admission documentation, discharge planning support, and mentoring new nurses, while a new class of emerging “blended” models that combine traditional care teams with virtual nurses is making it possible to effectively manage patient care across the increasingly complex continuum of acute care, from admission to discharge.

Virtual nursing has a deceptively simple definition: the ability to provide nursing services through an electronic platform. This usually entails nurses (both RNs and NPs) providing a variety of virtual tasks while assessing, planning, and evaluating patient outcomes. Using this definition, AVIA views virtual nursing on a continuum from low to high complexity. Virtual sitters, for instance, require little complexity in terms of adoption and have already seen widespread acceptance, with an accompanying decrease in both labor costs and the incidence of falls. We have also seen a rise in more complex virtual nursing capabilities such as eICU adoption, as Intensivist coverage in smaller hospitals is increasingly challenging, and Command Centers, which have seen growing adoption as hospitals grapple with acute care capacity, overflowing emergency departments, and bottlenecks in transitions of care.

It would be a mistake to view virtual nursing as simply a collection of use cases and capabilities. Rather, it is an evolution of existing care models, and one that can benefit from optimization and careful application. Hospitals increasingly understand the need to house Virtual Services in a discrete Virtual Care Center where they can combine virtual services, benefit from economies of scale, and carefully target interventions to better align them with larger problems and organizational goals.



Early lessons learned

Despite the relative newness of virtual nursing, early adoption in the field has already presented a variety of informative lessons learned. First and foremost is the need to align the inpatient and virtual care teams to identify and emphasize the best models of support, while also establishing an ongoing process of communication, collaboration, and shared goals. Most health systems will also benefit from starting small and focusing on areas with a clearly identified need, while keeping in mind the importance of understanding and aligning the workflows of different care teams.

It has also become clear that not every nurse is the right fit for virtual nursing; candidates should be selected based not just on their nursing capabilities but also their degree of comfort with both technology in general and working within a virtual environment in particular. The largest gains can be realized by

recruiting nurses who have been in the acute care environment and may have left the bedside, but want to continue nursing. These nurses bring a deeper understanding of the workflows and process, while also having the critical ability to serve as mentors for newer, less experienced nurses. Offering a rotation of nurses from the floor to the virtual care center on a regular basis also offers an influx of ideals, fosters collaboration, and improves retention.

Many of AVIA's member health systems start off simply with their technology, using their existing virtual care capabilities and iPads. But as programs scale, it's been increasingly recognized that more specialized digital solutions with capabilities such as ambient listening and AI create opportunities to consolidate services, increase gains, and deliver care through additional mediums like TV screens in patient rooms.

Whatever route is taken, it's essential to introduce KPIs and to ensure you are focused on the problem you are actually trying to solve, both before the program and through ongoing monitoring to measure progress, collect feedback, and gather lessons learned. (Refer to the chart below for some of the key KPIs you should be considering.)

Areas of Impact	KPI	Type of Measure	Demonstrated Virtual Nursing Impact[1]
Finance Labor Costs	**Overtime Costs**	Process	**Reduced End of Shift Overtime Costs 11.95%** Increased staff productivity 4% through the use of virtual nurses 1 support to bedside nurse
Nursing Satisfaction and Turnover	**Staff Turnover Labor Costs**	Process/Outcome	**Nursing turnover decreased 56%** in first 33 months after eICU implementation saving **1.1 Million**
Care Management and Coordination	**LOS and Readmissions**	Outcomes	**12.6% decrease in LOS and 37.7% reduction in readmission** through the use of Virtual Case Managers
Quality/Patient Satisfaction Clinical	**Quality of Care**	Qualitative	**Decrease in falls and falls with injury by 50%** with the use of virtual sitters
Patient Satisfaction	**HCAHPS**	Outcome	**20% increase in HCAHPS** scores for "Communication with Nurses" through the use of virtual nurses support to bedside nurses

Collaboration is critical

The rapid rise of virtual nursing is a heartening development that has already shown a wide variety of early promise, from improving patient care and easing the current bottlenecks in acute care to improving both patient and hospital outcomes. Collaboration will be key for further progress, and forums like VirtualNursing.com and AVIA's Member Huddles are excellent vehicles to share and learn from fellow health systems implementing virtual nursing, whether in early pilots or as mature programs.

Nurses have always used their ingenuity to find ways to "get the job done." Virtual nursing is just the latest example of that ideal—and it's one with the exciting promise for truly lasting change.