



## Virtual Nursing: Task Shifting & Augmentation

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At its core, Virtual Nursing aspires to meet the goals outlined by Dr. Kathleen Sanford, one of the 50 [most influential](#) clinical executives of 2023. <sup>[2]</sup>

*“We’re doing a complete revisioning of patient care, and we’re starting with acute care, looking at what it is that makes nurses’ jobs less than joyful or less than satisfying. You have to have good pay and working conditions to get them to come work for you at all, but beyond that, what is it that makes a workplace the best place for people to work at the top of their license? What makes it a good place to have a voice? What makes it a good place to work as a team? What makes it a place that you can be proud of?”*

Virtual Nursing and Generative AI have been identified as one of the hot innovations in early 2023.<sup>1</sup> Although there have been unique use cases of remote nurses for continuous patient monitoring in acute care and ICU settings, Virtual Nursing is focused on solving the foundation issues that have been well documented in the healthcare field over decades.<sup>[2]</sup>

Accenture has previously written about Virtual Nursing 1.0 and how the Virtual Nursing Maturity Framework can be used to communicate progress starting from initial pilot programs to implementation across the enterprise, identified early wins in the field, and in this article focus on the **Virtual Nursing Approach** found below in Figure 2 to pull the levers to create change and achieve desired outcomes.

### Foundation to Task Shifting and Augmentation

This article describes inpatient care task shifting and augmentation to align with Dr. Sanford’s intent. As highlighted in the article, Beyond Virtual Nursing 1.0, a similar approach can be applied more generally across various departments and care settings beyond inpatient/acute care to support care delivery across the health system and communities.

Two foundational elements are necessary to facilitate the effort to achieve successful shifting or augmenting of identified tasks. First, a solid understanding of the inpatient nursing process and tasks performed. As shown in Figure 1, there are approximately 40 tasks commonly performed in an inpatient care setting that healthcare organizations can begin to implement within their Virtual Nursing programs.

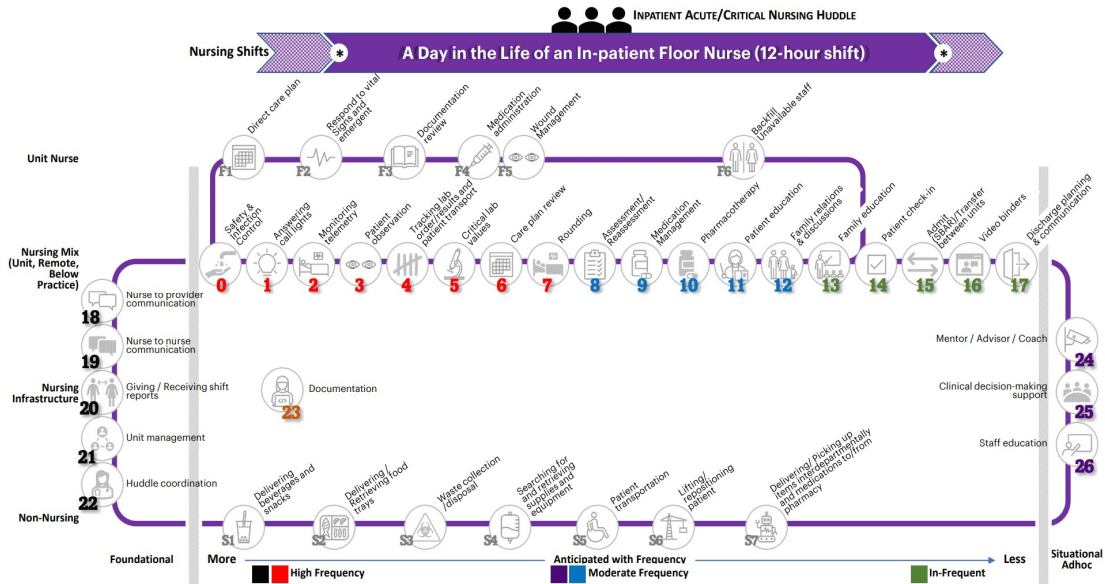


Figure 1: Typical Nurse Tasks and Tasks Frequency in Inpatient Care Settings

Others have identified similar tasks with a few additions or subtractions, but the goal is a shared understanding of tasks to be addressed.<sup>[3]</sup> The objective of this article is to provide insight on how to determine which tasks can be shifted or augmented within Virtual Nursing programs. However, when considering task shifting or augmentation for a particular care setting and a specific clinical department, the process should carefully consider the unique tasks, frequency, and personnel found within these areas. Figure 1 highlights our experience on the typical frequency (high, moderate, low) of specific tasks and the mix of staff most likely to perform those tasks.

The goal isn't to eliminate all tasks from the bedside nurses but to allow them to operate at the top of their license and be patient-centric in how they provide care.

The second foundational element for task shifting and augmentation is the **Virtual Nursing Approach** – which focuses on the required levers to address when shifting or augmenting tasks.

Figure 2 below has proven to be a comprehensive recognition of the levers available to Virtual Nursing. The levers that need to be address and the timing of implementation will depend on the unique needs and intended goals of each specific unit, department, or hospital.

As described in Beyond Virtual Nursing 1.0, traditionally, less than 15% of early identified tasks are shifted, but reaching the prescribed destination is a journey. The green circle below highlights traditional Virtual Nursing 1.0 focus areas. A highlight of each lever can be seen below followed by a detailed overview of each lever's intent.

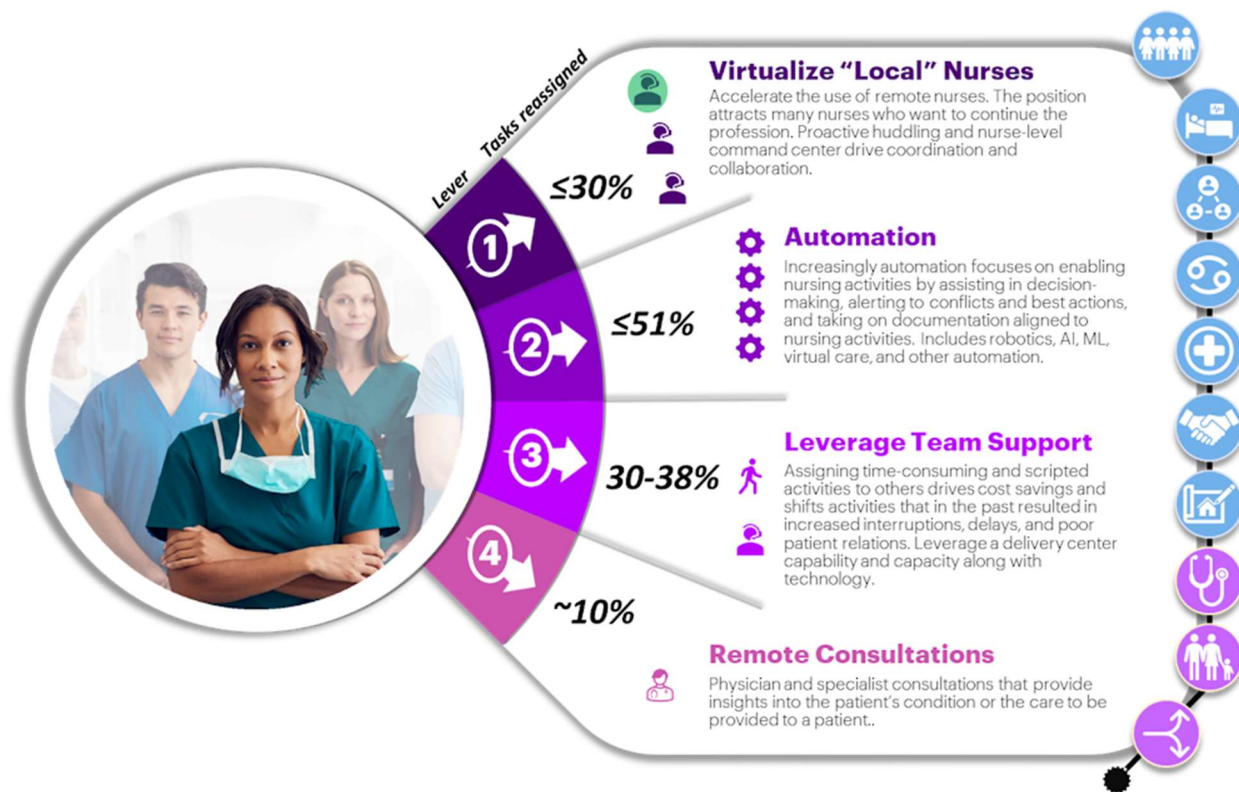


Figure 2: Virtual Nursing Approach: Levers for Task Shifting and Augmentation (green circle is typical of Virtual Nursing 1.0)

- **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 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.

There is a basic assumption to the implementation of these levers. A foundational technology infrastructure that supports collaboration and sharing of data or information will be necessary to achieve successful outcomes. COVID-19 pressured many organizations to begin ensuring an infrastructure was available, but enhancements to the infrastructure will prove essential to support the entire Virtual Nursing journey.

## Where Might the Journey End

As described by the **Virtual Nursing Maturity Framework** (see Beyond Virtual Nursing 1.0), progression and timing for task shifting and augmentation can vary across multiple dimensions. Advancements in nursing practice, technology, and automation will create more opportunities and new ways to improve how tasks are shifted or augmented. Generative AI is an example of how quickly a new advancement creates an opportunity applicable to Virtual Nursing. Figure 3 below shows a perspective on how the four levers approach can be utilized within Virtual Nursing to shift or augment tasks in a meaningful way.

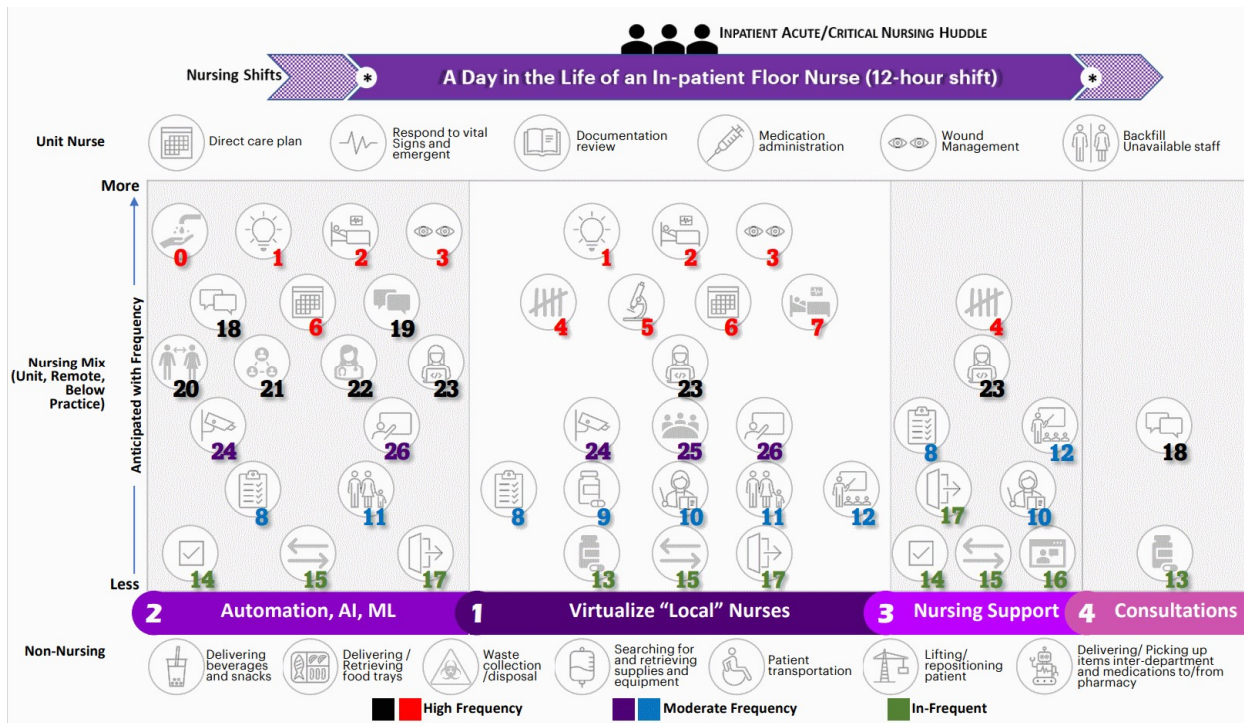


Figure 3: Tasks Shifted or Augmented by Each Lever in the Virtual Nursing Approach

Two essential considerations underpin the task shifting and augmentation described in Figure 3. First, we need to identify which tasks are most appropriate to be completed by a bedside nurse and are necessary to delivering patient-centric care. Then, we must utilize multiple levers to identify the tasks most appropriate for shifting or augmenting which is crucial when considering Lever 2: Automation. This consideration maintains the premise of the value of Virtual Nursing which aims to eliminate non-value-added tasks, thereby enabling the bedside nurse to focus on delivering quality patient care and prioritize their wellbeing.

## How Each Lever Enables Task Shifting and Augmentation

Successful task shifting and augmentation can be achieved by utilizing the four levers in Figure 2 to shift and augment tasks to achieve the goals of reinventing the inpatient nursing care delivery model. By drawing insights and experiences across early Virtual Nursing implementations, similar nursing solutions, and expectations from technology or automation can be realized. The following sections provide greater details on what is known about task shifting and augmentation, emphasizing the **Now** (proven and validated starting points) and the **Next** (reasonable next steps) within each lever.

### Lever 1: Virtualize Local Nursing

The impact Virtual Nursing have had across health systems is undeniable. While some organizations have focused on Lever 3 – Leverage Support Staff, by utilizing offshore or vendor-employed nurses, most health systems are pursuing Virtual Nursing to impact their nurse-to-patient ratios more effectively.

**Now:** The initial steps taken by these early adopters to develop these programs are regarded as Virtual Nursing 1.0 on the Virtual Nursing Maturity Framework. Early implementation models of Virtual Nursing can be seen in Figure 4 below.

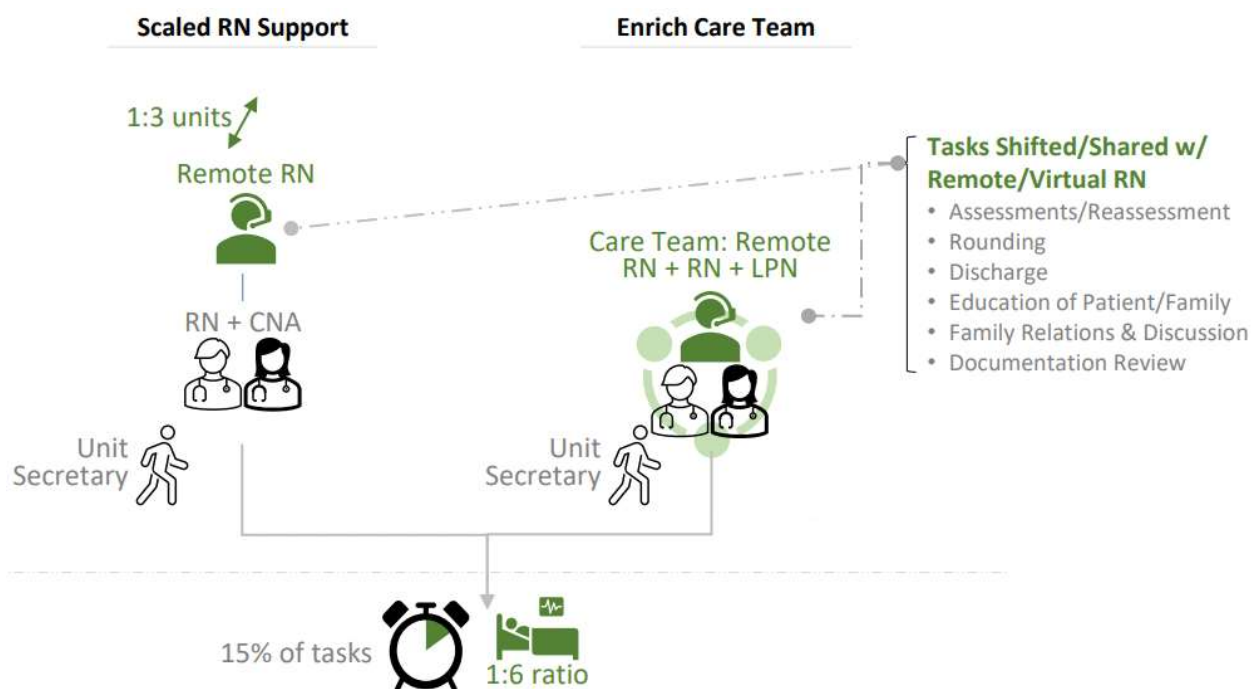


Figure 4: Now - Virtual Nursing for inpatient care based on available literature for beginning programs.

Virtual Nursing 1.0 aims to achieve the following:

1. To leverage the tangential successes found where nurses used various technological solutions to deliver care to patients virtually to address specific patient observation and continuous monitoring challenges.

2. Introduce and integrate an experienced nurse who is remotely located (Virtual Nurse) into a handful of the core activities in a medical/surgical (non-telemetry) care setting.

**Next:** Figure 5 below highlights necessary additions to Virtual Nursing 1.0, which includes remote LPN or multi-disciplinary nurses and a remote unit secretary or medical support assistants (MSA).

Along with additional identified tasks shifting to the remote RN, a significant number of tasks are now, at least in part, being performed by remote staff while maintaining coordination and collaboration with bedside nurses and staff. The diagram highlights inclusion of two additional levers which details delegated staffing and automation which will be described in the next sections.

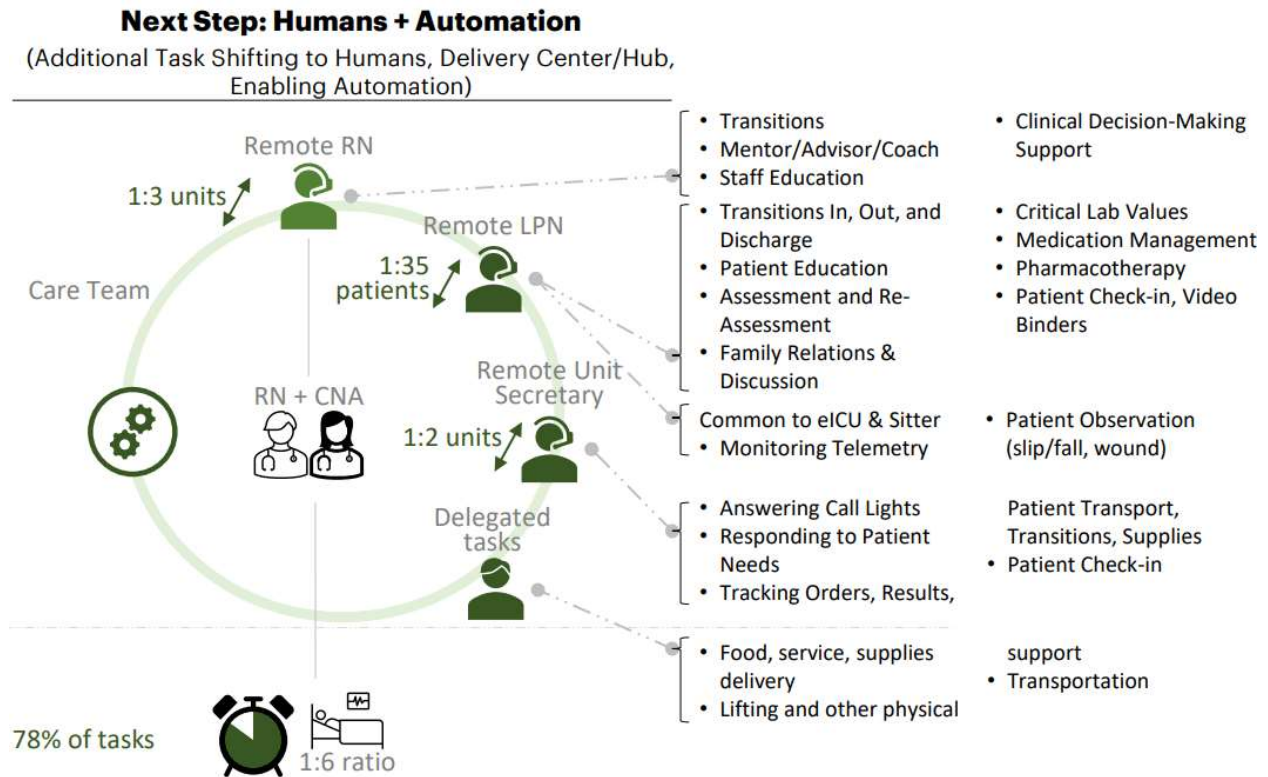


Figure 5: Next - Tasks Shifted or Augmented in Lever 1 of the Virtual Nursing Approach

The initial reaction to Figure 5 in many instances is the perception that additional staff are being added to the Virtual Nursing program. However, it is important to keep in mind that the remote staff aligns with the progression of the Virtual Nursing program by establishing or expanding into a centralized care “delivery center” model. A delivery center includes resources that remotely contribute to tasks and are scaled to meet the regulatory or care needs for nursing.

## Lever 2: Automation

Technology and automation will be pivotal in reinventing the inpatient nursing care model. While research has attempted to document what percentage of tasks can be shifted to automation, additional insights are needed to outline specific tasks where automated capabilities can be incorporated appropriately.

Augmenting tasks most appropriate for automation can be achieved to further support Bedside and Virtual Nursing to focus on value-added tasks necessary for enhancing quality patient care. COVID-19

created the need for technology that supported clinicians to interact remotely, even in an inpatient setting. Those technologies will remain important in Virtual Nursing.

**Now:** Currently, automation is aimed at enhancing nursing activities where appropriate and decreasing time spent on non-value-added tasks in an inpatient setting.

Figure 6 identifies the percentage of time automation is used across different nursing tasks. It also highlights which tasks have capability available to utilize automation, based on a clinical department's unique needs. In addition to patient care, automation can also provide capabilities to connect nurses to well-being services seamlessly.

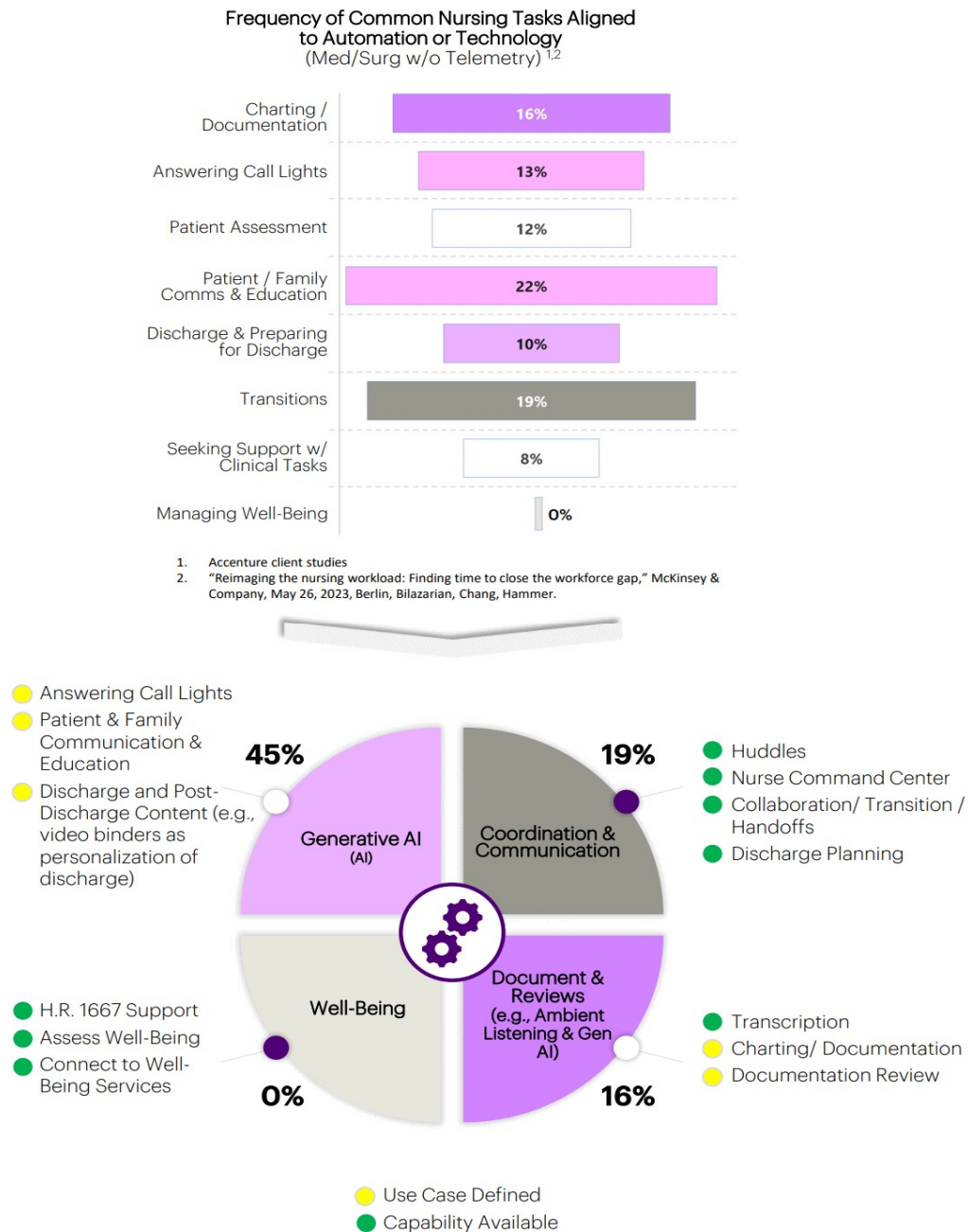


Figure 6: Now Automation Task Shifting and Augmentation

**Next:** At the core, inpatient nurses remain pivotal in delivering, managing, and maintaining relationships with the patient and their family. Additional task shifting, or augmentation will occur from the introduction of Generative AI, ambient listening and documentation, virtual assistants and robots, staff location and availability, sensors and medical devices, clinical decision support and mentoring, and the metaverse. Around the core will be any number of automation enhancements that can be leveraged by inpatient nursing, as seen in Figure 7.

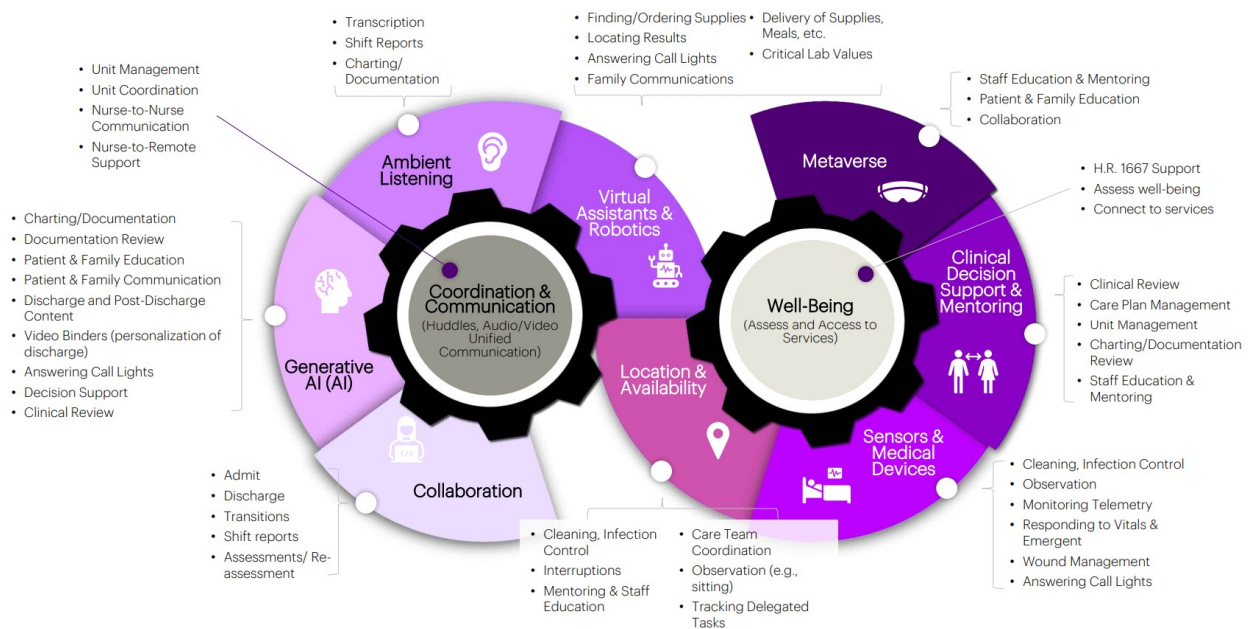


Figure 7: Next Automation Task Shifting and Augmentation

### Lever 3: Leverage Team Support

**Now:** Currently, there have been many use cases where remote support staff has supported nursing tasks, including tracking supplies or delivery center deployments to patient monitoring. Significant outcomes to many of these task shifts or augmentation exist, while others, such as delegation of discharge portions, are still proving the value.

**Next:** Other relevant tasks can be delegated to other staff, either local to the care location or through some remote delivery center, including food delivery, supply tracking and delivery, movement of patients, etc. Additionally, scripted, non-clinical decision-making tasks or portions of tasks can be delegated to staff in a delivery center.



## Lever 4: Remote Consultations

**Now:** Prior to COVID-19, various examples exist of how to bring remote consultations to the bedside and the pandemic further promoted those efforts. The pandemic drove rapid adoption of virtual technologies necessary to accommodate social distancing and help reduce the spread of COVID-19 but the question remains how healthcare organizations can further leverage these technologies to achieve greater benefits.

**Next:** Remote consultations, as needed to care for patients in an inpatient setting, will continue to leverage the technology infrastructure that supports the ease of remote collaboration. Nearly every health provider's capability should be imagined as a candidate to support remote consultations at the bedside.

### Virtual Nursing Approach: Task Shifting or Augmenting

Debate will always surround an effort to resolve a 40-year-old nursing shortage problem. Each section in this article uses existing examples and reasonable expectations for innovation to imagine how we achieve the aspirations set out at the beginning. The approach here also offers a method and a resulting infrastructure that will be useful as an organization expands to other care settings and resolves similar, persistent shortage issues for other clinical professionals.

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[1] "ChatGPT, virtual nursing, remote monitoring: Top digital health trends so far in '23," Giles Bruce, Becker's Hospital Review, July 2023.

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

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