## EINNOVATION HANDBOOK

A NURSE LEADER'S GUIDE TO TRANSFORMING NURSING

**BONNIE CLIPPER** 



The global healthcare ecosystem is in chaos, caught in the convergence of pandemicinduced disruption, residual inequities, burnout, and turnover. Nurse leaders can either succumb to the churn or spot and seize—a rare opportunity for true transformation. They must thoughtfully consider all aspects of their traditional roles and tackle trigger topics such as staffing, scheduling, value-based care, outcome tracking, and more. Informed, empowered nurses can re-envision roles. integrate technologies, and develop new models to deliver the highest level of patient care.

The Innovation Handbook is a pragmatic guide and toolkit that seeks to enlighten nurse leaders as they evolve through the current crisis. Author Bonnie Clipper explains concepts and equips nurses with a knowledge foundation that enhances their innovation skill set, spurs ideas and creativity, and challenges them to think differently and apply new concepts. On the cusp of a once-in-a-generation opportunity to create a better future for nursing and healthcare, this book gives nurses the tools to meet the moment!

"This book had me hooked immediately. It covers all the bases and fills a void in the nursing leadership space. It is a must read for all nurses (and others) in a healthcare leadership role."

-Michael Ackerman, PhD, RN, FCCM, FNAP, FAANP, FAAN Director, Center of Healthcare Innovation and Leadership; Director, Master of Healthcare Innovation Program; The Ohio State University College of Nursing

"I hope every nurse leader uses this book and commits to transforming not only their health system but the profession of nursing."

-Marion Leary, MSN, MPH, RN Director of Innovation University of Pennsylvania School of Nursing

BONNIE CLIPPER, DNP, MA, MBA, RN, CENP, FACHE, FAAN, after more than 20 years as a chief nurse executive, founded Innovation Advantage. She was also the first Vice President of Innovation at the American Nurses Association, where she created an innovation strategy to draw more than 4 million nurses into the innovation space.



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#### BONNIE CLIPPER

DNP, MA, MBA, RN, CENP, FACHE, FAAN



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#### **ABOUT THE AUTHOR**



Bonnie Clipper, DNP, MA, MBA, RN, CENP, FACHE, FAAN, is a former health-care executive. After more than 20 years as a chief nurse executive, Clipper founded Innovation Advantage. She was also the first Vice President of Innovation at the American Nurses Association, where she created

an innovation strategy to draw more than 4 million nurses into the innovation space.

An internationally recognized nurse futurist, Clipper was a coauthor of the seminal work *The Innovation Roadmap: A Guide for Nurse Leaders*. She was also the lead author of the international best-selling book *The Nurse's Guide to Innovation*. Clipper regularly publishes and blogs on technologies affecting nursing. She is the sole nurse member of the HIMSS Innovation Board of Advisors and is a startup coach for MATTER, a global health tech accelerator.

Clipper earned her bachelor of science degree in nursing from Winona State University, her master of arts (leadership) degree from St. Mary's University, her master of business administration degree from Lewis University, and her doctorate in nursing leadership from Texas Tech University Health Sciences Center. Clipper is an RWJF Executive Nurse Fellow alumna, an ASU/AONL Executive Fellow in Innovative Health Leadership alumna, and a fellow in the American Academy of Nursing. She enjoys 21st-century problem-solving and is a top healthcare influencer, nurse futurist, podcast host, and global speaker.

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#### **FOREWORD**

How many of you have been in this scenario? After months of planning, you are finally at your organization's innovation event. Dozens, maybe hundreds, of you have assembled, fully caffeinated and crumbling pastry in hand. Today is the day you solve the biggest problems in healthcare.

The morning starts off with a powerful keynote from the leadership team framing the opportunities and encouraging you to be bold, challenge the status quo, and think outside the box. You are revved up, split into teams, and asked to fill out colorful Post-It notes with ideas. Ideas flow from your pen as your excitement builds to share them with your table. The rest of the room is in a flurry of conversation, coffee refills, and "innovation."

A short time later, you begin to place your Post-It ideas on the wall, and inevitably, the lumpers and splitters emerge from the crowd. Clumping ideas together, splitting out subgroups, turning 3×3-inch square papers into a work of art in front of your very eyes. Next, the facilitator comes along and hands out colored, sticky dots so you can "vote" on the ideas. After a tense five minutes, the dot votes are in: Idea #1 got 26 votes, and idea #2 got 14 votes. You have a clear winner! Afterward, while the room enjoys a well-deserved pizza lunch, the facilitator walks around the room, taking pictures of all the Post-Its, ideas, and people for the website.

This is not innovation.

What you just experienced is a Post-It note pizza party. You came to the room unprepared, gave out lots of opinions based on your current knowledge base, arbitrarily voted on these ideas, and selected a "winner." That is not how innovation works—yet organization after organization does this every year.

Innovation is a rigorous process backed by data, science, and method that is intended to solve challenging problems with unknown solutions. Innovation requires processes, time, resources, evidence, and leadership as well as brainstorming and energy. The problem is that very few people in healthcare have taken the time to learn the science of change and innovation. The result is that Post-It noting and dot voting become the manifestations of innovation. It's a box to check rather than a culture that is cultivated. While there is value in prioritizing new ideas, the process of innovation takes more preparation.

For nursing and healthcare to evolve through its current paradigm-shifting moment, we need more nurses and clinicians, more leaders, and more organizations to understand and utilize the science and tactics of true innovation. This is why I am excited to see *The Innovation Handbook: A Nurse Leader's Guide to Transforming Nursing*, by Bonnie Clipper. This leader's guide to innovation will be a key resource to help our teams innovate and ultimately transform the way we do things. There is value in using a rigorous process of innovation combined with powerful tools. Together these can elicit new thinking to transform nursing and healthcare and start solving real problems. Most importantly, do something!

-Dan Weberg, PhD, MHI, RN, FAAN

#### INTRODUCTION



"Change is the law of life. And those who look only to the past or present are certain to miss the future."

-John F. Kennedy

"

Welcome to *The Innovation Handbook: A Nurse Leader's Guide to Transforming Nursing.* I am thrilled you are reading this book. I realize there are many books in this space, and I am grateful that you chose this one.

The healthcare ecosystem is in a state of chaos. We have never seen the level of disruption and turnover that we are seeing now. It is in desperate need of true transformation. The same is true for the nursing profession.

As nurses, we must be the ones to drive new models of care delivery, create novel roles, and integrate technologies to provide the care and outcomes our patients and communities need. Engaging in thoughtful and respectful conversations about scheduling, staffing, value-based care, nursing reimbursement, outcome tracking, and more is something that every nurse must do, however difficult that might be. Watching from the sidelines and making negative comments about our profession, colleagues, and patients as an anonymous social media user is not only *not* OK—it diminishes the credibility and importance of our profession.

It is time to lean in to create a better future for nursing and for healthcare overall. Imagine the power of leaders and direct-care nurses working to transform their own practice or organization! We would be unstoppable—leading the way to solve some of the most vexing challenges of our time. Let's use our status as the most trusted profession to accomplish great things.

This book is not intended to be a theory-heavy textbook. There are already a few of those on the market (and they are all fantastic). Rather, it's meant to be a "how to" manual or toolkit. It's intended to be a practical guide and toolkit to enlighten nurse leaders and inform their transformation as we work to solve this crisis. It takes a scrappy, pragmatic approach to provide you with a foundation of knowledge, to give you ideas, and to challenge you as a leader to apply the concepts and think differently. I want you to take notes in it, highlight passages, dog-ear pages, and carry it around in your bag of choice.

There are data in this book that may at times feel unfavorable and even contrary. I've included these data to provoke you, to push you, and to generate a call to action. Transforming nursing and healthcare will require all of us working to create change—and quickly. This book is meant to convey this sense of urgency. Having said that, there are times when going fast in the long-term means moving slowly and methodically in the short term, and this book reflects that too.

The ideal readers for this book are nurse leaders at all levels—including charge nurses, managers, directors, and nurse executives—who are hoping to find inspiration, nuggets of insight, or new ways of thinking about old problems. It doesn't matter if you have years of experience or are new to your role. Learning why we need to change, thinking about ways to change, and becoming a champion of change are all important, for all of us. Leading successful change is a numbers game. We need more trained leaders and direct care nurses with an innovative skill set to accomplish our goals. We are all students of change!

For nurse leaders, these are chaotic times. It can be difficult to remain optimistic. But we don't have to accept the current state of affairs. With the right skills, we can create a future that works for us. Now more than ever, we need to align and collaborate. We must help each other innovate to improve care delivery. We must transform nursing into a more forward-thinking profession, and we must do it together.

In this book, I have identified concepts that I believe will help you become a more innovative leader. I approached writing this book by reflecting on what would have helped me as a nurse leader looking for ways to think differently and to experiment with novel approaches, with the goal of enticing you to join the effort to transform our profession. No book is perfect, this one included, but I believe it will help you start on your personal innovation journey. I hope everyone who reads this book will learn something new and will apply it to make their practice ecosystem better than it was before.

This book flows in a way that is intended to help you connect the dots and generate your own innovative ideas along the way. Each chapter kicks off with a brief preview of what you can expect to take away from that chapter. It also lists objectives. These are clues to target your learning and provide specific ways to put new concepts into action while building your innovation competencies. Various sections in each chapter cover concepts, definitions, ideas, tools, and frameworks to provide a foundation for your innovation practice and build your innovation skill set. You'll see call-out boxes from nurse experts throughout the book that provide insights and different points of view. You'll also find notes and tips sprinkled throughout the book to accelerate your pace of learning and your innovation journey. The overall goal of the book is to inform you, engage you, and challenge you to solve real, deep-rooted problems in your organization, community, or region, or even at a national level.

I want *all* of us to work together to transform systems and modernize nursing practice. Achieving this enormous goal, however, will start with small steps. The first of these is to build competency as a change agent. From there, we can develop broad innovation practices and hopefully attain transformation. Transformation is the pinnacle of change. It's difficult to achieve and even harder to sustain. Don't just dabble in transformation. Running a hackathon or other innovation event every so often won't do. For transformation, you must go all in. I am counting on you to transform nursing!



"If you want to go fast go alone, if you want to go far, go together."

-African Proverb



With gratitude, Bonnie Clipper, DNP, MA, MBA, RN, CENP, FACHE, FAAN

P.S. If you develop your own innovative practices and ideas, don't hesitate to share them with me! You can find me on LinkedIn at https://www.linkedin.com/in/bonnieclipper/.

"The day you are not solving problems or are not up to your butt in problems is probably a day you are no longer leading."

-Colin Powell

#### CHAPTER 5

# Creating a Future-Facing Care Model

#### **KEYWORDS**

#### Care-delivery models, care team, staffing models, virtual nursing

This chapter attempts to provoke new ways of thinking and to encourage leaders to shift current care-delivery paradigms. It discusses topics including new care models, emerging roles, integrating technology into care delivery, and tech-enabled scheduling and staffing—and even touches on updating nursing education and training models.

#### **OBJECTIVES**

- Identify current nursing tasks that could be handed over to support team members or technologies and the plan to do so.
- Articulate the benefits and barriers of a virtual nursing model in your organization.

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If you are not yet convinced that we need to transform nursing, I suggest you scan social media, healthcare journals, and news sites, or solicit the opinions of any nurse leaders you know. The results will rapidly become obvious: Nursing is in crisis.

Previous chapters discussed how we got here. Now, though, it's time to look forward. When you do, you will quickly conclude that we have no choice but to innovate our way out of this. There just simply are not enough human beings in the existing

nursing supply pool, nor are there enough students in the pipeline to make up for ongoing and project-

ed churn.

As discussed in Chapter 1, current data show we will be short 200,000 to 450,000 direct care nurses by 2025 (Berlin et al., 2022). The longer view is even more dire. According to the International Council of Nurses, by 2030, we will experience a deficit of 13 million nurses worldwide (International Council of Nurses, n.d.). This is a huge problem—especially if we continue to use nurses in the same manner and in the same roles as we do today.

The irony is, there are more nurses than ever. The problem is that they don't work in patient care. We must create practice roles to attract and retain nurses in patient care.

In 2021 the nursing profession lost more than 100,000 people—"a far greater number than ever observed over the past four decades," say Auerbach et al. (2022).

Our challenge now is to future-proof nursing by attracting nurses back into patient-care roles. This means using nurses differently than in our current models. We must develop new roles, new care models, new training programs, and even new scopes and standards for our practice. To accomplish this Herculean task, all 4.3 million of us nurses must manage the transformation of nursing practice internally, while at the same time navigate the transformation externally among other disciplines and the general public. And we must do so as if we are on a burning platform: with a sense of urgency.

#### **CHANGE STARTS WITH NURSES**

Nurses are often not aligned in terms of what their issues are, how to prioritize them, and how to solve them. It is no secret that nursing has been a hotbed of incivility for many years. To move forward, we must be civil, collaborate, and get to work. Otherwise, we might not have a profession that we identify with in the future.

As nurses, we must define our problems, identify potential solutions, and implement them. We must continually iterate and use rapid-cycle change processes to problem-solve, to progress, and to end the chaos. This cycle will need to happen thousands—perhaps even tens of thousands—of times for us to come up with viable solutions for providing patient care and guiding our profession through this challenging time.

Chapter 1 discussed several unique and complex challenges facing nursing. These include problems with recruitment and retention, the workforce pipeline, faculty shortages, role creation, scope and standards, outdated licensure expectations, staffing, care-delivery models, nursing reimbursement, and nursing value and compensation models.

#### **Our Image Problem**

Ask any patient about their experience in a healthcare setting, and they undoubtedly share a story that involves a nurse. This helps explain why, as mentioned in Chapter 3, nursing has been voted "America's Most Trusted Profession" for 20 years in a row (Senior, 2022).

Unfortunately, however, we as nurses have not capitalized on the significance of this notable achievement. Indeed, we have squandered our opportunity to communicate why our role is important to health and wellness to the general public. Worse, many nurses have not aligned and mobilized around this message to solve our problems and dictate our future. The nursing profession has become fragmented and polarized.

In addition, even as nurses have been consistently voted "America's Most Trusted Profession," we have developed an image problem. This is because the public, other healthcare professionals, and—due to increasing specialization among nurses—even other nurses don't understand what we do. As a result, they don't recognize what we contribute to the healthcare ecosystem, let alone advance, amplify, and advocate for our work.



"You can't build an adaptable organization without adaptable people—and individuals change only when they have to, or when they want to."

-Gary Hamel



#### TODAY'S CARE TEAM

Before we can create a future-facing care model, we need some understanding of our current care teams. Staffing models are not one-size-fits-all affairs. They often include a mix of different types of nurses, such as registered nurses (RNs), advanced practice RNs (APRNs), licensed vocational nurses (LVNs), and licensed practical nurses (LPNs) for direct patient care. Staffing models also include various unlicensed personnel, such as nursing assistants (NAs), certified nursing assistants (CNAs), patient care technicians (PCTs), emergency medical technicians (EMTs), paramedics (EMT-Ps), medical assistants (MAs), and phlebotomists, as well as care coordinators and case managers. Finally, the care team might include respiratory therapists, physical therapists, occupational therapists, speech language pathologists, dietitians, and many other important members. (These are, of course, in addition to those people who provide leadership, management, and high-level oversight of planning, strategy, and finances, as well as those who supervise direct caregivers.)

Not long ago, in an attempt to increase the rate of nurses with a bachelor of science in nursing (BSN) degree, we encouraged the existing associate degree in nursing (ADN) workforce to go back to school to obtain a bachelor's degree. This decreased the number of nurses with only an ADN, and we even scaled back on LVNs/LPNs in hospitals. More recently, however, due to the extreme shortage of nurses, we have pulled many LVNs/LPNs back into inpatient roles and even called some out of retirement

To prepare for the future, we must evaluate the composition of our care teams. This means assessing patient-care needs and identifying which roles are best-suited to provide the necessary care in any given department. Now more than ever, we need to clarify the benefit of each role, ensure that the right roles perform the right tasks, and at the same time, offload to technology tasks that humans no longer need to do.

Nurses today are routinely expected to perform tasks that do not require their level of skill or compensation. In fact, nurses spend 36% of their time on non-value-added work, amounting to \$757,000 in nursing salaries on average per department per year (Storfjell et al., 2008). Moreover, they devote more time to support activities (56%) than to providing direct patient care (44%). Clearly, we are not working at the top of our licenses! This is obviously unsustainable—especially considering there aren't enough nurses to perform the tasks that only they can do. The obvious solution to this dilemma is not to reduce nursing head-count, but rather to delegate non-nursing tasks to unlicensed team members. However, these are in short supply too; between 2020 and 2021, the national average turnover rate rose from 27.5% to 35.5% for CNAs and from 28.6% to 38.1% for PCTs (NSI Nursing Solutions, 2022, p. 9).

Some organizations have resorted to hiring nursing students and even students in high school-level health science and STEM programs. This apprentice model has been a win-win, enabling these organizations to meet their staffing needs and providing students with useful clinical experience and confidence, as well as a modest income.

At the same time, we must consider how healthcare might evolve in the next five-, 10-, and 20-plus years, so the care team can evolve with it. This requires a deep strategic planning session with the nursing leadership team, physician leadership team, top-level executives, and local academic partners. This

session will involve using the organizational strategic plan to identify what service lines will grow, what type of care will likely be provided, the goal of that care, where that care will occur, and what roles will provide it. It also involves developing a roadmap to achieve the creation of new types of care models and care teams, as well as a pipeline to fill care roles.

It's likely that the future will bring a shift from an inpatient-centric approach to healthcare to one that is virtual, outpatient, homebased, and prevention-focused. I talk more about this later in this chapter.

## WORKLOAD-INTENSITY STAFFING MODEL

One important consideration is the "right" number or ratio of nurses and non-licensed staff who render care to handle the workload. Most healthcare organizations measure nurse productivity not in terms of care delivered, but by determining the "right" number of nurses to perform care for a specific number of patients—regardless of what type of care is needed. Unfortunately, this approach often devolves into a game of sorts, in which organizations attempt to employ fewer nurses to deliver care, but not *so* few that it isn't safe for the nurse or the patient.

Not surprisingly, from the point of view of the nurses who work for these organizations, the resulting number is rarely enough. In a 2022 survey by the American Nurses Foundation of 12,000 nurses, only 21% of respondents said that their unit had "the necessary number of RN staff with the right knowledge of skills" more than 75% of the time. (See Table 5.1 for additional survey results.)

Table 5.1 Answer to the Question "How Often Does Your Unit Have the Necessary Number of RN Staff With the Right Knowledge and Skills?"

23% of respondents	< 25% of the time
27% of respondents	25-49% of the time
29% of respondents	50-75% of the time
21% of respondents	> than 75% of the time

(American Nurses Foundation, 2022)

This is a losing proposition for patients and nurses alike. Instead of taking this approach, it's far better to do the inverse: Consider how best to safely provide the necessary care in a particular

unit, department, or population, and staff accordingly. This means shifting to a workload-intensity staffing model. In this model, the acuity and needs of each patient within a unit, department, and population, along with the total workload, drive the number of nurses who provide care.

This is generally how physicians provide care, and for good reason. When physicians are pushed into using high-productivity models, evidence shows that patient care suffers

In a workload-intensity staffing model, workload intensity-

and by extension, a safer and more equal distribution of patient assignments and workload—is derived by evaluating patient acuity (Bacon et al., 2022). This involves the use of selfvalidating technology to harvest patient-related information from the electronic health record, including patient activity and the need to monitor tubes and drains, perform procedures such as dressing changes, and administer IV drips and medications. Sometimes the department may need more nurses than planned, while other times the acuity may indicate the need for fewer nurses

In addition to allowing a more balanced approach to patient care, using electronic health records to assist with determining workload intensity allows for far more accuracy than paper-based, unreliable acuity systems of the past. It resolves age-old concerns around the inaccurate assignment of patient-care activities, often done in an attempt to reduce workload.

While this system is not perfect, and implementing it is easier said than done, it is far better than using an arbitrary number or ratio to determine how many patients each nurse should care for. It also addresses a top turnover trigger identified by nurses in survey after survey: workload and staffing issues.

Executives often oppose this approach, citing a significant increase in labor expenses as their reason why. But healthcare organizations currently spend outrageous sums on overtime, double-time, staffing bonuses, and traveling or agency nurses. Why not invest some of the money on loyal staff? It's possible to model the finances in such a way as to create cost savings for the organization *and* make the existing staff feel more valued. The message that all nurses must align behind is for organizations to "see nurses as an investment, not as an expense" (Kerfoot, 2022, p. 40).

## AUTOMATING SCHEDULING AND STAFFING

Scheduling involves determining which staff will work on which dates and at what time. Generally speaking, automated scheduling tools, which simplify and streamline scheduling, have been around for more than 15 years. However, many healthcare organizations have not leveraged their potential. In fact, nurse

executives frequently report that although their organizations have purchased a costly scheduling tool, not all nurses, or even nurse leaders, use it. Embracing these tools is critical, however, because they can manage scheduling much more effectively than their human counterparts. Ultimately, to maximize the benefits of these tools, organizations should require their use.

The most basic scheduling platforms enable staff to self-schedule by entering their availability using a computer or mobile device (keeping in mind, of course, that nearly all healthcare organizations are 24/7 operations that require nurses at night and on weekends). However, with appropriate rules, guardrails, and operating procedures in place, scheduling platforms can assist with the time-intensive job of staffing the organization with the appropriate number of clinical staff on any given day and shift.

More sophisticated (and costly) scheduling platforms also include tools like artificial intelligence (AI) and predictive analytics (PA). The best of these tools can also scan electronic health records (EHRs) in real time for keywords like *discharge*, *discharge planning*, or even *going home* to identify beds that will soon be freed up due to patients being discharged or transferred. They might even scan operating room (OR) data, data on scheduled procedural cases, and emergency department (ED) data to identify patients who will need a bed after their proce-

dure is complete or after they've been admitted through the ED. Some of these platforms even integrate the scheduling function to predict how many nurses and non-licensed personnel are needed to staff a particular unit. This is where technology helps us and where the magic *really* happens!

These platforms can predict the census and throughput much more quickly and accurately than a human being can—assuming the data are up to date.

Different platforms perform differently and, by extension, provide varying degrees of confidence among staff. However, generally speaking, all of the staffing platforms that use artificial intelligence and/or predictive analytics currently attain 90-plus percent accuracy within an eight-hour window (approximately). Some platforms yield an even higher level of confidence on census predictions, however. In any case, as these platforms continue to "learn" the patterns within a given organization, their accuracy will improve, enabling healthcare organizations to become more efficient at patient placement, staffing, and throughput and to improve productivity by deploying employees to the units and departments that require them, even if only for a few hours. As organizations continue to adopt and optimize these platforms, they will begin to feel their true impact.

Often, these technologies are not more broadly used because they are costly. However, the cost benefits they deliver in terms of productivity and efficiency can vastly outweigh the financial investments associated with obtaining and operating these technologies when they are used as intended.

## CREATING A POD-BASED MODEL

The goal is to leverage these technologies and the efficiency they bring to the point that they enable us to safely staff our units while we avoid stressing our staff in an attempt to meet budgetary goals. This can be tricky, however, because nurses are trained to meet the needs of specific patient populations.

One approach to overcome this limitation is to create *pods* (service line-based staffing) and assign a number of nurses and other caregivers with a given set of skills to each one. Each pod would then consist of a certain number of units and a larger

pool of nurses, which could float to other units within the pod as needed. The unit-based managers work together to ensure adequate staffing across several units instead of just one or two. You can think of this as being like a mini specific float pool—for example, a medical/surgical pod might consist of three to six individual units, where each unit has a manager. Managers would be assigned to individual nurses as their point person to handle performance evaluations, assist with career planning, and address issues or concerns for the nurse. In turn the nurses work among any of the three to six units on any given shift. Since the pod is the larger work team, it reduces the anxiety associated with floating, promotes familiarity with a variety of care needs, and provides more flexibility for staff.

For example, suppose you have a medical/surgical unit with two, four, or even six pods. If the census on another unit rises, requiring additional staff, a medical/surgical pod with the necessary skill set could float to that unit instead of individual nurses. This helps improve the quality of care because each member of the pod is accustomed to working with the others. It also helps maintain a sense of community, strengthening the bonds within the pod while at the same time enabling members of that pod to connect with nurses in other units.

If your organization implements this model, you will want to adjust your hiring practices accordingly and communicate this in hiring interviews. The idea is to hire, orient, and train new nurses for a particular pod so the pod can float across multiple units.

Be aware, however, that because pod nurses may be expected to have or acquire a more extensive skill set, they may require additional compensation.

Flexibility in scheduling and staffing is a winwin

#### HOSPITAL AT HOME

In recent years, due to rapid advancements in technology, we have learned that there is much we can do to treat patients outside the walls of hospitals. Although we were already exploring these possibilities before COVID-19, the pandemic was a key driver in their rapid adoption, as telemedicine consultations replaced many types of in-person visits during its first year.

Since then, a model called Hospital at Home (HaH) has gained momentum among organizations all over the country. With HaH, some types of inpatient acute care—generally of the medical/surgical variety—is provided to certain patients in their own home. While HaH was in use in small numbers and piloted in various facilities, the Centers for Medicare and Medicaid Services (CMS) waiver allows care for HaH patients in a narrowly defined category to be reimbursed at the same level as patients who receive care in a hospital. This was a catalyst for broad adoption of the HaH model. This waiver requires a

physician, nurse practitioner (NP), or physician's assistant (PA) to conduct one telemedicine visit each day and a nurse to perform two in-person visits each day, with some minor differences in a few states. (A specially trained EMT-P may perform one of these visits instead of a nurse.) In addition, the patient is free to connect at any time to the HaH team using technology to express urgent needs or ask questions.

The HaH model can address capacity concerns for healthcare organizations. However, the model does still require organizations to employ nurses, which can pose a challenge for those with multiple vacancies or that have difficulties with recruitment and retention.

#### VIRTUAL NURSING

Virtual nursing care is a care-delivery model in which patients receive care from onsite direct care nurses supported by a virtual registered nurse (ViRN or VN) located outside the inpatient department, off-campus, or potentially even outside the state. VNs "support the team at the bedside to distribute the workload and provide greater satisfaction for both the patients and the nursing staff" (Ball, n.d.). Virtual nursing is not e-sitting, chronic care or mental health coaching, or observing e-ICU or physiologic monitors. It is nursing practiced in a different way. Areas of benefit for virtual nursing include 1) care team experience and outcomes; 2) patient experience, safety, and outcomes; and 3) cost and efficiency.

The onsite team typically consists of a charge nurse/supervisor and some combination of RNs, LVNs, LPNs, EMTs, MAs, CNAs,

PCTs, and potentially others and may not be dissimilar from the current care teams. Virtual nurses do not replace onsite nurses, but rather supplement their work and streamline their workflows. Technologies to support remote patient monitoring—such as in-room sensors, cameras, speakers, and microphones, as well as clinical equipment—assist the VN and onsite team in caring for the patient.

Virtual nursing offers nurses an opportunity to reimagine care models and the delivery of care—and to make nursing practice safer and more satisfying again. This exciting emerging role requires our urgent attention!

Ideally, VNs should have no less than three years of experience and must be competent in a multitude of skills, including team leadership, critical thinking, clinical knowledge, and interpersonal communication. They must also demonstrate proficiency in EHRs and master several different technology skills, all while working remotely (Cloyd & Thompson, 2020). The VN should

preferably have a critical care or emergency department background. The VN often provides documentation assistance and can triage call lights and relay calls to the appropriate team member based on the level of prioritization to decrease call-light response time. In a clinical crisis or emergency, the VN can also provide rapid response support and use ACLS guidelines to guide the team through treatment protocols and administration of emergency care.

#### **VN Responsibilities**

VN responsibilities may include the following:

- Patient monitoring/safety
- · Rapid response assistance/support
- New graduate nurse support through precepting on demand
- · Orientation/onboarding assistance
- · Real-time advisement
- · Staff mentoring/education
- Patient education pre/post-procedure
- Medication teaching/reconciliation
- · Provider rounding support
- · Admission documentation (excluding assessment)
- · Discharge documentation and teaching
- · Triage and assignment of call lights
- Care coordination and communication with the care team (Schuelke et al., 2019, p. 323)

By taking on some or all of these (and other) time-consuming responsibilities, VNs significantly lighten the load of onsite nurses, freeing them up to spend more time with patients. This improves patients' perception of their care as well as patient outcomes.

If VNs are to be successful, they must be properly trained and prepared. This is not a role that all nurses should simply rotate through; it's a specialty that requires consistent practice and expertise. A successful virtual nursing program can be launched that has approximately 30–50% nurses who consistently work as virtual nurses and 50–70% who work both in the virtual nursing department and on an inpatient unit. The benefit of this type of

staffing is that the nurses build collective trust and understanding. To this end, the American Association of Critical-Care Nurses has established practice standards for what they call the eICU. Similarly, the American Academy of Ambulatory Care Nursing has developed practice standards for telehealth nursing, which have resulted in the creation of a subspecialty of ambulatory care. The challenges of this role require strong nurses who develop expertise in this area; to that end, certification is likely forthcoming.

Although the VN can coordinate patient care, due to proximity, the onsite nurse is typically the default nurse of record and primary decision-maker. If there are differing opinions, they are resolved through communication between the on-site nurse. the VN, and if necessary, the charge nurse/ supervisor. (Clearly, in this model, communication is key!)

For more than a decade, Stanford has used a variety of virtual care models. In addition, Inova and Common Spirit have tested them for several years (Van Dyke, 2022, p. 13), and other systems are beginning to report positive outcomes as well. These models show promise in several metrics, including the following:

- Nurse satisfaction
- Physician satisfaction
- Patient experience (measured through HCAHPS)
- · Hospital acquired conditions
- "Good catches"

- Improved mentoring/precepting experiences
- Shorter length of stay (LOS)
- Improved throughput and discharge times
- · Increased retention
- Improved care efficiency (Schuelke et al., 2019).

It's not a question whether these models work; they do. In fact, organizations that have implemented virtual nursing have experienced a 20% reduction in their length of stay, a 35% reduction in nurse turnover, and a 24% reduction in contract labor (Advisory Board 2021, slide 28). However, we need much more data to demonstrate consistent outcomes and a strong return on investment.

Discussions with organizations that are currently piloting or have implemented the VN role put the patient load for VNs between 12 and 20 patients per VN (depending on the tasks required). However, virtual care models are rapidly evolving, and there are no hard data to indicate how many patients a VN can safely oversee. This too requires study to determine the best virtual nursing model to deliver safe virtual nursing care.

#### In addition:

- Virtual care models can be scaled to additional inpatient units.
- These models are a great way to supplement the on-site care team. This can be particularly helpful in smaller or rural hospitals, which might not benefit from the same level of expertise as larger or urban hospitals.
- Constant observation and monitoring of patients by the VN (or the technology) lighten the load of onsite nurses, providing them with a sense of relief and enabling them to provide better, safer patient care (once they get past the sense of constantly being observed, that is).

- Virtual models represent a helpful recruitment and retention tool, particularly for drawing retired nurses back into the workforce and attracting nurses who have left the bedside due to the strenuous nature of direct patient care.
- Virtual care models are effective in post-acute care and long-term care settings—areas that are experiencing particularly severe nurse shortages.
- Virtual nursing delivered in home care scenarios is more closely aligned to monitoring and assisting with on-demand patient questions/care needs.

For more on implementing virtual nursing, see Chapter 8.

#### **Virtual Sitters**

A close sibling of the virtual nursing model is the *virtual sitter* model. Virtual sitters, also called *e-sitters*, have been around for more than a decade.

Some organizations have demonstrated cost savings of more than \$1M by using virtual sitters. Moreover, organizations that regularly use virtual sitters generally do not report an increase in fall rates, and some even experience a reduction in falls. One organization experienced an overall 50% reduction in the patient fall rate after implementing virtual sitters (Advisory Board, 2021, slide 28).

These outcomes suggest that well-implemented and well-managed virtual nursing and virtual sitting models have strong potential to help mitigate the current workforce issues in healthcare. However, each organization should explore these new care models in a way that is safe and unique to their own risk profile.

For more on implementing virtual sitters, see Chapter 8.

#### CONCLUSION

The reality is that very soon, there will not be enough nurses to provide direct patient care. As nurses, it is important for us to lead the charge in developing novel care models, designing new roles, and providing leadership once deployed. We must give up non-value-added tasks and practice at the top of our licenses. And we need to focus on new opportunities to leverage our expertise as nurses. Directing new care-delivery models will require us to be nimble and push ourselves in ways that make us uncomfortable

Evaluate your organization to build a business case for a virtual nursing model and redesign clinical workflows to promote role delineation through collaboration across the care team. Use this as a call to action, for if we cannot be courageous and bold by adopting new care models, our future as a profession may be in question. As nurses, this is our lane. This is our space. This is what we do best.

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