the NURSE MANAGER'S GUIDE to INNOVATIVE STAFFING

Praise for *The Nurse Manager's Guide to Innovative Staffing*

"Finally we have a reference book that presents the complex and dynamic realities of nurse staffing and scheduling processes in an easy to read, yet substantive book. The linkage of the achievement of optimal outcomes—for patients, nurses and the organization—is masterfully done. Setting the stage based on nursing principles and scope of practice provides an evidence-driven approach to this challenging work in health care. Not only is this useful for new managers but also it is a must-read for current managers wishing to upgrade their knowledge."

—Kathy Malloch, PhD, MBA, RN, FAAN
President, KMLS, LLC.
Associate Professor ASU; College of Nursing and Health Innovation
Phoenix, AZ
Clinical Consultant, API Healthcare Inc.; Hartford, WI

"This book is a welcome addition to the very sparse literature on staffing and fills a critical need for practical information to achieve excellence in staffing. The topics included represent the broad expanse of knowledge necessary to create excellent outcomes for the patients and also for the nurses and caregivers who work within the frameworks created by staffing models. Dr. Mensik's extensive clinical and leadership experience is reflected in the very operational and usability of the book."

—Karlene Kerfoot, PhD, RN, NEA-BC, FAAN
Vice President of Nursing
API Healthcare Inc.

"This book is an awesome comprehensive guide that explains the complexity of effective staffing in a practical and easily applied manner. The tools are practical and essential guides to provide safe staffing that will achieve the quality and cost-effective care that users of health care deserve.

This book is a must for all the new managers as well as experienced managers of this decade who are accountable for the resources of their units and organizations."

—Carol Ann Cavouras, RN, MSN
Workforce Specialist

"Dr. Mensik's book is a comprehensive resource for current, evidenced-based staffing framed within the context of the current health care environment. In addition to a summary of the current evidence, each chapter offers invaluable practical advice, tips, and things to consider. This book is a must-have for all nurses who have a role in nurse staffing."

—Cathy E. Duquette, PhD, RN, NEA-BC, CPHQ
Executive Vice President, Nursing Affairs – Lifespan
Chief Quality Officer, Rhode Island Hospital

"The Guide is a well written, detailed resource book for all nurse managers from novice to expert. The tips and Consider This sections enable nurses to translate the knowledge gained from reading the material into practice. It is a comprehensive document with great examples collected from across the country. I highly recommend this valuable publication to nurse leaders."

—Linda Burnes Bolton, Dr. PH, RN, FAAN
Vice President for Nursing
Cedars-Sinai Medical Center

“To staff a unit or program is more than dividing the number of patients by the number of nurses working that shift. Dr. Mensik has taken a thorough and thoughtful approach to developing a guide for managers as they assume accountability for staffing their unit or program. In our ever-changing professional world of variability and complexity, it is important for managers to use the nursing process and a set of principles in developing flexible but meaningful staffing patterns. The ultimate goal being to achieve quality outcomes for all patients in their area of responsibility.

This book gives the nurse manager/leader the complete set of issues to be considered when developing their staffing pattern. It is organized in a logical way with the detail and evidence needed to ponder and apply to each manager’s situation. As each chapter ends, the author emphasizes key points for the reader.

I appreciate the comprehensive approach to this complex function and responsibility of a manager. Dr. Mensik has done an exceptional job in helping nurse managers assume the accountability to effectively use their human resources while creating a professional environment in which to practice.”

—Rhonda Anderson, RN, DNSc, FAAN, FACHE
Chief Executive Officer
Cardon Children’s Medical Center
Mesa, Arizona

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Jennifer Mensik,
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The Honor Society of Nursing, Sigma Theta Tau International (STTI), is a nonprofit organization whose mission is to support the learning, knowledge, and professional development of nurses committed to making a difference in health worldwide. Founded in 1922, STTI has 130,000 members in 86 countries. Members include practicing nurses, instructors, researchers, policymakers, entrepreneurs, and others. STTI's 482 chapters are located at 626 institutions of higher education throughout Australia, Botswana, Brazil, Canada, Colombia, Ghana, Hong Kong, Japan, Kenya, Malawi, Mexico, the Netherlands, Pakistan, Portugal, Singapore, South Africa, South Korea, Swaziland, Sweden, Taiwan, Tanzania, the United Kingdom, the United States, and Wales. More information about STTI can be found online at www.nursingsociety.org.

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ISBN: 9781937554798
EPUB ISBN: 9781937554804
PDF ISBN: 9781937554811
MOBI ISBN: 9781937554828

Library of Congress Cataloging-in-Publication Data

Mensik, Jennifer.

The nurse manager's guide to innovative staffing / Jennifer Mensik.

p. ; cm.

Includes bibliographical references.

ISBN 978-1-937554-79-8 (print : alk. paper) -- ISBN 978-1-937554-80-4 (epub) -- ISBN 978-1-937554-81-1 (PDF) -- ISBN 978-1-937554-82-8 (MOBI)

I. Sigma Theta Tau International. II. Title.

[DNLM: 1. Nursing Staff--organization & administration. 2. Personnel Staffing and Scheduling. 3. Models, Nursing. 4. Nurse Administrators--organization & administration. WY 30]

610.73068--dc23

2012045076

First Printing, 2012

Publisher: Renee Wilmeth
Acquisitions Editor: Emily Hatch
Editorial Coordinator: Paula Jeffers
Cover Designer: Katy Bodenmiller
Interior Design/Page Layout: Katy Bodenmiller
Principal Book Editor: Carla Hall
Development and Project Editor: Jennifer Lynn
Copy Editor: Michelle Melani
Proofreader: Heather Wilcox
Indexer: Johnna VanHoose Dinse

Dedication

To Pete, Evan, and Ethan
For believing in me, pushing me, and inspiring me.

Acknowledgments

I feel like I am on stage at the Academy Awards, with all of 30 seconds to thank everyone who has contributed to my accomplishments and thereby my success, and so in no particular order…

Deborah Maust Martin, MBA, MSN, RN, NE-BC, FACHE, senior director of professional practice at Banner Health. We have worked on so many things together; you are a great sounding board, and I appreciate your feedback and knowledge.

Colleen Hallberg, MSN, RN, FACHE, CNO, at Banner Good Samaritan Medical Center in Phoenix, Arizona. You are a great mentor; I have learned so much from you.

Dorothy Sisneros, MS, at Thunderbird Leadership Consulting for really helping me grow and develop over this past year!

Kathy Scott, PhD, MPA, RN, FACHE, Chief Innovation Officer for ProHealth Care, Inc., in Wisconsin and CMS Innovation Advisor, for giving me the opportunity to have done so many cool, innovative things—those were great experiences!

My dissertation committee, even though that was a while ago! Drs. Joyce Verran, Gerri Lamb, and Pamela Reed. My PhD program really was foundational in changing the way I think and giving me a solid foundation in nursing science and art.

Marla Weston, PhD, RN, for being the impetus of all my involvement in the state nursing organization (Arizona Nurses Association at the time) and the American Nurses Association. Being a member of the American Nurses Association is a professional responsibility of every nurse, and I learned that first from her.

The Duck Circle. As you go through your doctoral program, it is vital to go through it together with your fellow students as some of your strongest proponents. Only they know the stress, misery, joys, excitement, and work that you have experienced. My PhD was by far my hardest, but most rewarding, personal accomplishment. Thank you to Drs. Marla Weston, Jane Carrington, Nicolette Estrada, Susan Yount, Lesly Kelly, Barbara Wilson, Susan Brown, Judy Hightower, Ken Wysocki, Kim Shea, Joanne Harrington, Dianna Garcia Smith, Melanie Logue, and Teri Wicker for that journey together.

Joanne Clavelle, DNP, RN, NEA-BC, FACHE, CNO, at St. Luke's Boise and Meridian Medical Centers for passing this opportunity to me.

My dad, Al Mensik; my mom, Susan Weeks, MSN, RN, FNP-C, PMHNP-C; and siblings, Lissa, Nattalie, Matthew, Mark, and Susanne.

All of my colleagues, students, friends, and acquaintances along the way. I could not be who I am today without all those experiences.

Contributions

I want to thank the following individuals for being a part of this book through their great ideas, projects, and innovations!

Tom Aronson, LCSW, MBA
Sherrie Beardsley, MBA/HCM, BSN, RN
Donald D. Day, RN, MSN-L
Emilia Deac, RN, BSN, CRRN
Liz Dietz, EdD, RN, CS-NP
Kristina Fawcett RN, MSN, FNP-BC, CWS
Shane Fernando, RN

Jerri Foster, MSN-L, RN
Judy L. Gates, RN, MSN, BC, CWS, FACCWS
Elizabeth Gilbert, RNC, MS, FNP-BC, CNS
Carol Hatler, PhD, RN
Wendy Kesl, MBA, BSN, RN
Barbara LaBranche, RN, BSN, MBA
Dana Lauer RN, MS, NEA-BC
Pete M. Lopez, RN, BSN
Deborah Maust Martin, MBA, MSN, RN, NE-BC
Carol Olson, RN, BSN, MBA
Erin Olson
Lauren D. Smith, RN, MSN, CPPS
Amy Steinbinder PhD, RN, NE-BC
Toni Tanzella, MSN, FNP-BC
Cathy Townsend MSN-L RN
Rayette Vaughn, MBA, BSN, RN
B.S.W., RN
Angie L. Wallace, BS
Vickie Whitham, MS, RN, NE-BC
Teri Wicker, RN, PhD
Michelle Winters, RN, MBA, BSN, NEA-BC, FACHE

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Jennifer has served as the president of the Arizona Nurses Association, the state's primary professional nurse organization. She currently serves nationally for the American Nurses Association, as second vice president on the Board of Directors. In her commitment to advancing nursing knowledge and science, she also holds the role

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Introduction

I have always been passionate about staffing and scheduling. Passionate that we as nurses and nurse managers do something different. I often think of Albert Einstein's quote: No problem can be solved from the same level of consciousness that created it. How many years and decades have we thought about nurse staffing in the same way? Our profession has evolved greatly over even the last 20 years, so is that reflected in how we staff to care for patients today? There is no magic bullet for solving staffing issues. It will not be found in any one method, including fixed staffing ratios or acuity-based methods; it can be found only in a combination of methods that take into consideration multiple elements. The American Nurses Association (ANA) suggests the following elements should be considered in staffing and scheduling decisions (ANA, 2012a, p. 7–8):

- Governance within the setting (shared governance/leadership)
- Involvement in quality-measurement activities
- Quality of work environment
- Development of comprehensive plans of care
- Practice environment
- Architectural geography of unit and organization
- Evaluation of practice outcomes
- Available technology
- Evolving evidence

Although many nurses, managers, administrators, unions, and legislators may argue for or against any one element or method, many are not taken into true consideration. Additionally, such components as the role of the advance-practice RN and support services should be considered. If you do not have sufficient staff in those categories on

your unit, it can hamper innovation and excellent patient outcomes just as much as inappropriate RN staffing can. As a nurse manager, you staff your unit to take care of the patient and provide the patient with the best outcomes. With staffing, if you want the best patient outcomes, you will need to bring all the pieces together, including the RN, with all the team members and care delivery model.

What I want you to learn in this book is how to take into consideration all aspects of the health care team, the meaning and profession of nursing, and the many components of your unit and care delivery model, including how you organize your unit and how technology can lead to satisfied, happy nurses and excellent patient outcomes. There are so many moving parts. Your job, as a manager, is to figure out which parts work, which ones do not, and which ones you need. One size does not fit all in staffing.

As you tie this all together, you will need to use your resource-management and workforce-planning skills and knowledge. These are critical components as you manage and plan for your staffing and schedules. To start you thinking, the components of resource management include budgeting, scheduling, daily staffing, and management information (Fralic, 2000). I do not touch much on budgeting with this book, and I instead refer you to the second book in this series, *The Nurse Manager's Guide to Budgeting & Finance*, by Al Rundio, for a great source on budgeting. As the book progresses, I talk about scheduling, daily staffing, and management of information. I also hope you have had the ability to read the first book in this series, *The Nurse Manager's Guide to Hiring, Firing, & Inspiring,* by Vicki Hess. Consider that you may have all the staff you need to have a perfect schedule, but if they are not quality staff, really good nurses and employees, then you will not have committed, great staff ready to work, ready to own the patient-care experience.

As you read this book, in addition to the components already listed, think about the following principles of resource management for your unit (Fralic, 2000):

- Place the patient first.
- Limit staff floating.
- Use data to learn and change.
- Manage natural variability.
- Eliminate artificial variability.
- Control costs.
- Eliminate wastes.
- Retain quality staff.
- Improve quality.
- Improve safety.

People, or your human resources, are your greatest resource and should be planned for like all other resources. In partnership with resource management, workforce planning may seem overwhelming to think about. Many times people relate workforce planning to the high-level, larger organization's or country's RN needs for the next 5–10 years, but it can be as focused as just your unit's needs for the next year (Bournes, Plummer, Miller, & Ferguson-Pare, 2010). As a matter of fact, you should have an updated plan quarterly. Resource management and workforce planning are important management principles in addition to the other elements that greatly impact your staffing and scheduling.

How This Book Is Organized

Here's the breakdown of the important insights you'll gain from the chapters in this book:

- In Chapter 1, "Staffing SMARTT," you will learn what staffing is and why it is important.

- Chapter 2, "The Current State of Staffing," as its name implies, goes over the current state of staffing, including federal legislation; acuity-, ratio-, and budget-based methods to determining staffing; and the professional organization's role in staffing standards.
- In Chapter 3, "Start With Understanding Your Unit's Care Delivery Model," I review multiple types of care delivery models and why your care delivery model sets the stage for staffing.
- In Chapter 4, "Maximize the Capacity and Capabilities of Your Nursing Workforce," I discuss the role and potential innovative practice of the RN, LPN/LVN, and unlicensed assistive personnel as well as the legal scope of practice.
- In Chapter 5, "Analyze and Allow Everyone to Fully Practice," I talk about the role and potential of other team members to practice and contribute to staffing and patient outcomes.
- In Chapter 6, "Recognize, Manage, and Maximize Your Variability," I review artificial and natural variability and how you can manage and eliminate issues that create havoc on your staffing and scheduling.
- In Chapter 7, "Target Technology That Improves Staffing and Outcomes," I review and discuss various types of technology and the impacts to budget, staffing, and outcomes.
- In Chapter 8, "Tying All Your Pieces Together," I show how you get your staffing and scheduling numbers as well as methods for dealing with various scheduling issues, such as holidays, vacation, and leave.

- Chapter 9, "Examples of Staffing Documents and Unique Care Delivery Models," is just that. This chapter is where I give great examples of documents and processes used by others in the real world.
- The Epilogue highlights some of the most important takeaways from this book.

Each chapter in this book offers practical advice, personal experiences, tips, things to consider, and examples. Many of the examples come from RNs who have experience managing a unit or department. Some of these examples are about innovative programs, and others are about things that may not have worked as well as had been hoped.

In addition to great shared experiences, you get examples, forms, samples, calculations, and sample processes that can inform your staffing and scheduling processes. You also get a glimpse of my sense of humor, confined by a little professionalism, of course.

A Shift in Thinking

As my graduate students could attest to, I would always tell them that regardless of how many years they have been nurses, they need to put aside what they know unless it was evidence based. Their experiences alone are not sufficient for them to advance their knowledge. Their experiences can bias how they think about something new. Now, was it possible not to be biased, or not to have their experiences still play a part in informing their current ideas and thoughts? No. But what I was able to do most of the time was to get them to incorporate evidence and to think very differently about things. I was looking for a paradigm shift in their thinking. That is what I am looking for from you. I want you to think drastically differently about staffing. Do

not just think about how staffing worked or did not when you were a staff nurse. I need you not to think like everyone else about staffing. Remember, no problem can be solved from the same level of consciousness that created it.

In the end, my hope is that you learn something useful; that you are able to take what you learn and make a difference in your unit, your staff's work environment; and of course, most importantly, that you are able to positively impact your patients. We owe appropriate staffing to our patients most of all. They have entrusted us with their lives and loved ones. We have been the most trusted profession for more than a decade. Let's not betray that trust; let's not lose that trust.

1

Staffing Smart

As staff RNs, we have all been subjected to the ups and downs of the unit's scheduling process and have wondered who created the schedule and what were they thinking when they created it. We have all had those days where we felt there was not enough staff to provide the level of care we believed our patients deserved. Many of us thought, "If only we were in charge, we would do it right!" Now that you are a nurse manager, do you still feel that way? Well, this book is your opportunity to learn how to staff your department by scheduling and maintaining the appropriate number of personnel on a given shift to ensure the highest quality of patient care—while keeping it within budget.

In this chapter, I discuss the definition of nursing and the importance of the nursing process, and I define staffing. As well, I start to touch on patient-flow variability and how nurse-staffing research has demonstrated a positive relationship between patient outcomes and staff satisfaction (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Kramer & Schmalenberg, 2008). From this chapter, I want you to take away quantifiable outcomes, which you can speak of with others, that point out the importance of staffing with high-quality and safe patient care. I also want you to understand that the fundamentals—the definition of nursing and the nursing process you learned about in your prelicensure program—are alive and well today and need to be embraced as the basis from which you understand nurse staffing.

Ensuring High-Quality, Safe Patient Care

Nursing is a profession, and there are many aspects to professional nursing besides the technical or clinical interventions nurses perform (see Table 1.1). In comparing the two, I am not saying technical tasks are unimportant, but somewhere along the line, RNs and their patients began to think that the technical side is the only role of the nurse. At one point in history, RNs could not start IVs or use a stethoscope. Is it time to rethink what RNs do and delegate some of those tasks to others? The technical tasks are the "interventions" of professional practice. RNs spend most of their time on interventions and far too little on the other components of their professional practice. Basing your staffing on these quantifiable tasks only would never fully capture the essence of nursing, nor would it allow enough time per nurse per shift for much of the most important nursing work.

TABLE 1.1
PROFESSIONAL AND TECHNICAL PRACTICE

Professional Practice (Nursing Process)	Technical or "Task"-Based Practice (Standard 5: Implementation step as main focus in the nursing process)
Standard 1: Assessment	Administer medications and injections
Standard 2: Diagnosis	Dress wounds and incisions
Standard 3: Outcomes Identification	Perform routine laboratory work
Standard 4: Planning	Start and maintain IVs and central line dressings
Standard 5: Implementation	Assist physicians in examinations and during surgeries
Standard 5A: Coordination of Care	Administer IV medications
Standard 5B: Health Teaching and Health Promotion	Track and record vital signs
Standard 5C: Consultation	Insert and maintain catheters
Standard 5D: Prescriptive Authority and Treatment (APRNs)	Assist with personal hygiene and dressing
Standard 6: Evaluation (ANA Standards of Practice, 2010c)	Change patient position and ambulation

Reach back into your memory and imagine yourself sitting in nursing school when you were first introduced to the nursing process. Recall those high-quality nursing care plans you feverishly worked on the night before your clinical rotations. Once you found yourself in the real nursing world, did you continue to create those nursing care plans, or did you find yourself doing only interventions, with your care plans nowhere in sight? If you were like most nurses, you forgot the rest of the pieces right away as you focused your valuable time on what you thought were the most important tasks of nursing—or the only tasks you could handle as you struggled with the workload.

Remember these two important foundational pieces:

1. Understanding the definition of nursing
2. Understanding the process of nursing

I discuss both the definition and process of nursing in the following sections.

What Is Nursing?

This book uses the American Nurses Association (ANA) definition of nursing. As per the ANA's Social Policy Statement, nursing is defined as

> The protection, promotion, and optimization of health and abilities, prevention of illness and injury, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, communities, and populations. (ANA, 2010a)

But why use the ANA definition, you might ask? Maybe your organization has its own definition of nursing. The importance of using a standard definition of nursing is that you can more effectively communicate the outcomes of your work on staffing and patient care to finance personnel, administration, your boss, and your colleagues when everyone works from the same page. When we are on the same page, we can start to do such things as compare outcomes and request additional nursing resources, because we have a collective standard platform. As well, the ANA is a professional organization representing all registered nurses.

What Is the Nursing Process?

The *nursing process* is an outcome-oriented method of nursing that provides a framework to guide care. Although

many of you probably remember a five-step nursing process, the current process added several more steps, as noted in Table 1.1.

Some nursing theorists and managers feel that the nursing process is outdated and linear. I believe it is linear only if you make it that way. Whatever your belief, the nursing process gives a name to each of the steps and helps nurses step back from nursing's being a task-oriented process. Nursing should be a patient-centered approach that is built upon both the ANA standards of practice and the standards of professional performance (see Table 1.2).

TABLE 1.2

ANA STANDARDS OF PRACTICE AND PROFESSIONAL PERFORMANCE (ANA, 2010C)

Standards of Practice	Standards of Professional Performance
Standard 1: Assessment	Standard 7: Ethics
Standard 2: Diagnosis	Standard 8: Education
Standard 3: Outcomes Identification	Standard 9: Evidence-Based Practice and Research
Standard 4: Planning	Standard 10: Quality of Practice
Standard 5: Implementation	Standard 11: Communication
Standard 5A: Coordination of Care	Standard 12: Leadership
Standard 5B: Health Teaching and Health Promotion	Standard 13: Collaboration
Standard 5C: Consultation Evaluation	Standard 14: Professional Practice
Standard 5D: Prescriptive Authority and Treatment	Standard 15: Resource Utilization
Standard 6: Evaluation	Standard 16: Environmental Health

Without the nursing process being evident in its entirety, hospital administrators and nurse managers alike will continue to staff and budget for nurses to perform only the *I* (Implement/intervention) in the nursing process. It is only in performing the *entire* nursing process, however, that nurses find satisfaction and reward in their work. Satisfied nurses are less likely to leave an organization or their manager, giving you a more experienced workforce that leads to improved patient experiences and outcomes. (Chapter 2 further dives into the research around the importance of nurse satisfaction.) When nurses utilize the entire process as designed, they will spend more time at the bedside with their patients.

It is essential that all nurse managers and staff nurses understand what they can and cannot delegate when using the nursing process. All state boards of nursing have rules and regulations that specify RN scope, LPN/LVN scope, and what can be delegated to unlicensed assistive personnel (UAP). Many times I have heard that an LPN/LVN has "assessed or evaluated a patient," which, in many states, is beyond the scope of LPN/LVN practice. I then often hear that either the MD or RN has signed off on this assessment, as if that makes it OK. As a nurse manager, you need to understand the principles of delegation and your state board rules and regulations before you staff your unit. (See Chapter 5, "Analyze and Allow Everyone to Fully Practice," which includes further discussion on state boards and scope.)

NOTE

Know the scope of your team's work. Just because your staff have always done something on your unit or in your hospital does not mean it is within their scope of practice.

Based on the ANA *Principles for Delegation* (ANA, 2005), the RN may delegate elements of care but should not delegate the nursing process itself. The decision to delegate should not be assumed from the fact LPNs or UAPs are scheduled with RNs. The decision of whether to delegate is also based on the staff RN's judgment concerning the condition of the patient, the competence of all members of the nursing team, and the degree of supervision that will be required of the RN if a task is delegated (ANA, 2005).

TIP

Staff your nurses to allow them to complete the entire nursing process, not just to complete the interventions for their shift, or you will contribute to task-oriented nurses.

What Is Quality?

Now that you understand what nursing and the nursing process are, the next step is to understand what quality is. Because everyone in the health care industry seems to have a different definition of quality and an opinion on who should define it, I have adopted the Institute of Medicine's (IOM) dimensions of quality for the purposes of this book. The IOM's definition is robust, while incorporating six very important dimensions of quality (National Research Council, 2001):

1. Safe
2. Timely
3. Efficient
4. Effective
5. Equitable
6. Patient-centered care

These six dimensions should always be at the forefront of your staffing decisions.

Understanding Staffing and Your Patient-Flow Variability

Start to think about your unit, or when you practiced nursing at the bedside. Did crazy things always seem to happen during a full moon? Did you always experience an issue with insufficient staffing the third Friday of every month? What are those crazy, seemingly irrational patterns in staffing that you notice repeatedly—or that have been passed down through your facility's folklore? Awareness of patterns is important, and you will explore that further in Chapter 6, "Recognize, Manage, and Minimize Your Variability," but here we focus on defining staffing for our purposes.

Definition of Staffing

Nurse managers know they want appropriate nurse staffing, and there are many variables to take into consideration regarding what is appropriate. We discuss all the variables that impact appropriate nurse staffing in later chapters; after considering the definition of nursing, the nursing process, and the definition of quality, we can define the terms *appropriate nurse staffing* and *scheduling*. And yes, there is a difference between the two:

> Appropriate nurse staffing is a match of registered nurse expertise with the needs of the recipient of nursing care services in the context of the practice setting and situation. (ANA, 2012a, p. 6)

> *Scheduling* is 1. Assigning the appropriate number of workers to the jobs during each day of work, and 2. Determining when an activity should start or end (e.g., stand and end of a shift) depending on its (1) duration (e.g., different shift lengths to accommodate patient flow), (2) predecessor activity(ies) (e.g., admissions), (3) predecessor relationships (e.g., patient education before discharge), (4) resource availability, (5) target completion date (e.g., patient discharge). (Businessdictionary.com, 2012)

By incorporating the nursing process into our staffing decisions, we have expanded the scope of the schedule to include non-nurses as well. Not all interventions and activities need to be done by nurses, after all. Nurses can delegate pieces of the nursing process to other licensed and unlicensed professionals, which is discussed in Chapter 3, "Start With Understanding Your Unit's Care Delivery Model."

Patient-Flow Variability

In discussing staffing, start to think of your own unit—the flow that really leads to your challenges in staffing. If only all patients were the same, all staff were equal in experience, and patients only got sick between the hours of 8 a.m. and 5 p.m. Monday through Friday—and no holidays. But that is not the world we live in; we live in a world of variability. Take into consideration some of the ways patients are admitted to a hospital bed:

- Outside providers, such as physicians' offices or nursing homes
- Emergency departments
- Surgical departments
- Facility-to-facility transfers
- Unit-to-unit transfers

If yours is like the majority of hospitals, you staff to a mean (an average), not to the variability of your patient flow. It can be expensive and time consuming to staff to the mean, and this staffing process does not take into consideration patient-flow variability. The major issue with variability is that your capacity does change. You have the same number of beds and staff regardless of how few or how many patients are admitted.

There are two types of patient-flow variability: artificial and natural (Litvak, Vaswani, Long, & Prenney, 2010):

- *Artificial variability* is controlled by the hospital—for example, when surgeries are scheduled.
- *Natural variability* just happens—such as the flow of emergency-room patients. Natural variability is a result of things we cannot control, such as tornados, earthquakes, mass-casualty events, or a bad flu season.

Artificial flow can be managed to better meet the needs of unit and hospital staffing. (This does not mean you should not do surgeries or admit patients, though, because this is your revenue source.) The only way to deal with patient-flow variability is to manage the patient flow and control census peaks. There are other components of variability to consider, which are described in Chapter 6.

To better consider your staffing situation, consider the following steps to take or questions to answer:

- **Have you met with key physicians to discuss their admitting practices?** As the nurse manager, you can help manage admissions on your unit; you are not totally powerless to admissions. Work with your higher admitting physicians to contact your unit first to help arrange a proper admission time before just

sending a patient over to be admitted. Explain to the physician about the need to be able to identify the most appropriate bed on your unit as soon as possible as well as secure adequate staffing for that physician's patient. Based on the patient's condition, you may be able to move the admission a few hours to help facilitate your unit's flow of admissions and discharges.

- **Do all the scheduled surgeries seem to occur during the first half of the week?** This topic is a little more touchy and difficult to approach without the help and support of those in administration above you. When you have a bulk of scheduled surgeries the first half of the week, you might not have enough room for those patients coming through the emergency room or direct admissions on those days. You will have high bed usage and higher staffing needs, and your patient flow will slow and potentially increase length of stay. You will also underutilize your beds and staff the second half of the week, which is wasted capacity.
- **Do your physicians round in the morning or evening to discharge patients?** If your physicians round on the sickest patients in the morning, say ICU first, and then end on the medical surgical floor last, they might be creating a bottleneck. Physicians typically want to round on the sickest of patients; however, the sickest patients are in intensive care, and they have the most resources and nurses monitoring them already. Orders are written in the morning to transfer to lower levels of care, but there are no beds downstream yet. Someone needs to discharge the medical-surgical patients first. Starting in medical-surgical units for rounds facilitates discharges and flow, freeing up resources downstream first so that patients can move more freely to the appropriate bed and staffing resources.

- **Do you actively manage patient discharges and flow on your unit?** This does not mean you have a discharge time like a hotel, but that you facilitate discharges on your unit to make room for the constant flux of patients you will get. Your staff should be able to identify with the physician potential discharge dates that are not set in stone but are dates the team of care providers now has to work toward. Set goals for having patients discharged and off your unit by time blocks, such as 50% of patients who are to be discharged for the day have left your unit by 11 a.m. and 25% by 3 p.m.
- **Does your unit wait to transfer patients before shift change or accept patients only after shift change?** As staff nurses, we saw this happen, and as a manager, you suspect it may happen more than you want. The end of the shift is nearing, and the staff nurse would much rather have the ED nurse wait to give reports to the oncoming nurse. There are many more scenarios like this, but this action impedes patient flow. In addition research shows that holding ICU admits in the ED increases mortality by 35% (Bukata, 2008).
- **Do you staff to the median or mode of your patient census?** I discuss this more in Chapter 2, "The Current State of Staffing," as you may find opportunities for staffing differently with a mode as opposed the median or average. Mode is a set of numbers that occurs most often in a grouping of numbers. There may be no mode, one mode, or more than one mode.
- **What are the paths patients take to be admitted or transferred to your unit?** Map out for your unit the percentage of patients who typically come to you from the emergency department, direct admissions, surgery, and transfers from other units.

- **Have you taken any steps to manage the artificial flow to your unit?** Now that you know where and what percentage of your patients come from, collaborate with those units' managers to streamline the flow of patients between your units. You will improve quality and patient satisfaction.
- **Does your unit push or pull patients?** Many units have patients "pushed" to them, which means someone calls your unit to ask you to take a patient. Pushing patients slows down the patient flow and creates wider variations in your census and staffing needs. Changing your unit's philosophy to "pulling" patients, where you or your charge nurses call looking for patients to admit to your unit, creates a stable census that decreases wide fluctuations in your staffing needs. If your unit is typically at 85% of capacity, it is easier to staff and maintain even staffing levels than to fluctuate in census and have fluctuations in staffing needs.

Patient flow has a major impact on your staffing needs. By determining artificial and natural variability, you can help manage and eliminate barriers that have a negative impact on your unit's staffing.

Why Is Staffing Important?

I touched on why staffing is important earlier, but there are more reasons to consider in the importance of staffing, including legal accountability. As a nurse manager, the ANA Code of Ethics for Nursing is your code of ethics, whether or not you are a dues-paying member. As a member of a profession, you are held accountable to the code of ethics for your profession in a court of law and by your state board.

The ANA Code of Ethics states, "the nurse's primary commitment is the patient, whether an individual, family, group, or community" (ANA, 2010b, p. 9). This does not say the "staff nurses'" primary commitment, but "the nurse's"—singular. As a member of the profession, and as a nurse, your primary commitment is to the patient. Your role in nursing is as a nurse manager, which gives you additional responsibilities to the organization, your boss, and the financial wellness of the organization. But never forget your primary commitment, for which you are socially accountable at the expense of your role.

The ANA Social Policy Statement also speaks to the commitment and accountability you have as a professional nurse:

> Nurses, as members of a knowledge-based health profession and as licensed health care professionals, must answer to patients, nursing employers, the board of nursing, and the civil and criminal court system when the quality of patient care provided is compromised or when allegations of unprofessional, unethical, illegal, unacceptable or inappropriate nursing conduct, actions, or responses arise. (2010a)

It is important to understand your professional, societal, and organizational responsibilities to staffing. You place your staff and patients at risk, as well as yourself, when you staff with the mind-set of meeting your budget or a set of staff ratios only.

NOTE

In staffing your unit, you are legally and professionally accountable to your patients, staff, organization, and society.

The Health Care Environment

Every generation believes it is living in the most challenging of times, but for health care, the U.S. is at a pivotal point. Health care costs are on the rise. Most of us probably agree that we should spend less on health care. With the Patient Protection and Affordable Care Act signed into law on March 23, 2010, legislators are trying to make changes. According to the National Coalition on Health Care (2011), health care spending was at an all-time high in 2011: 18.2% of the gross domestic product (GDP), or $2.8 trillion dollars (O'Kane et al., 2012). See Figure 1.1. In dollar comparisons, the Department of Defense's proposed budget for fiscal year 2013 was only $525.4 billion (U.S. Department of Defense, 2012), which includes support of the deployed military forces and ensures continued progress in Afghanistan and Iraq.

Furthermore, the IOM (2012) released a report stating that health care wastes equal $750 billion annually. The IOM report identified six major areas of waste:

1. Unnecessary services ($210 billion annually)
2. Inefficient delivery of care ($130 billion)
3. Excess administrative costs ($190 billion)
4. Inflated prices ($105 billion)
5. Prevention failures ($55 billion)
6. Fraud ($75 billion)

How much is $750 billion? The 1-year estimate of health care waste is equal to more than 10 years of Medicare cuts in Obama's health care law—again, more than the Department of Defense's budget, or more than enough to care for the uninsured (IOM, 2012).

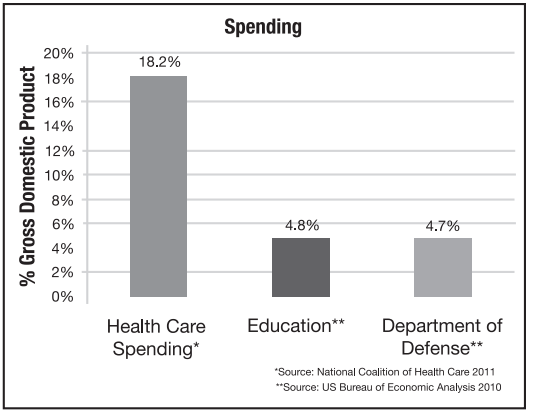

FIGURE 1.1
Comparison of spending by percentage of GDP.

So, what does this have to do with staffing? Remember the definition of quality? It includes being efficient. It may be easier to schedule as many nurses as possible, but it is not efficient. As a nurse manager, you have the responsibility to produce quality patient care while being as efficient as possible. Keep in mind that

> [t]reating the health care system like a (wildly inefficient) jobs program conflicts directly with the goal of ensuring that all Americans have access to care at an affordable price. (Baicker & Chandra, 2012)

Not taking significant steps to control health spending could mean job losses for other workers. There is only so much money to spend on health care; the more money spent on health care, the less money is available for other essential and nonessential goods and services. A promising step for health care reform can be found in Medicare's Shared Savings Program and in accountable care organizations (ACOs), which are discussed later in this chapter.

Appropriate Resource Utilization and Fiscal Responsibility

The Centers for Medicare and Medicaid Services' (CMS) Triple Aim is "better health, better care, lower costs." The Triple Aim refers to better care for individuals, better health for populations, and lower per-capita costs without any harm whatsoever to patients (Berwick, 2010). Donald Berwick, former administrator of CMS, states, "What we know from decades of research is that at the heart of the capabilities to deliver the Triple Aim, better care, better health, and lower cost, is one core design concept in the delivery of care and that is the integration of care" (2010, p. 3). With this in mind, CMS developed Medicare's Shared Savings Program and ACOs. Nursing and nurse staffing can have a positive and negative effect on the Triple Aim.

In consideration of lower costs, how can appropriate nurse staffing be fiscally responsible? In the argument for appropriate nurse-staffing levels, a manager can improve nurse satisfaction, which in turn decreases nurse turnover (think of costs to rehire and train) and decreases adverse patient outcomes. CMS has implemented a policy of refusing to pay medical claims based on hospital-acquired conditions—and rightfully so, in my opinion. If I took my car in to a mechanic, I would expect them to fix everything that needed to be fixed, but not cause additional problems that I would need to pay for. Why should a private or government payer reimburse for conditions hospitals could have prevented had their staffing been appropriate?

Keep this in mind: "Salaries for health care jobs are not manufactured out of thin air—they are produced by someone paying higher taxes, a patient paying for more health care, or an employee taking home lower wages because higher health insurance premiums are deducted

from his or her paycheck" (Baicker & Chandra, 2012 p. 2433). However, each additional patient-care RN employed (at 7.8 hours per patient day) is estimated to generate more than $60,000 annually in reduced medical costs and improved national productivity (Dall, Chen, Seifert, Maddox, & Hogan, 2009). Nurse managers manage this magic number. Not too many and not too few staff for your unit!

FEWER NURSES, MORE PNEUMONIA?

The cost of care for patients who developed pneumonia while in the hospital rose by 84% for that stay. Research from three studies funded by the Agency for Healthcare Research and Quality (AHRQ) found a significant correlation between lower nurse-staffing levels and higher rates of pneumonia. A 10% increase in RN proportion was associated with a 9.5% decrease in the odds of pneumonia (Stanton, 2004).

More Is Not Always Better: Position Control

Have you ever considered overstaffing or overhiring just to make sure you have the staff to take care of the patients when you need them? At first glance that may seem like a potential solution to your staffing issues, but in the long run it can have devastating effects. While being above budget on labor costs, you might be managing overtime and mandatory low census week to week. This is where position control comes in handy. *Position control* is a framework to effectively hire, manage, deploy, and leverage staff based on volume (Pilipczuk & Zukowski, 2012). If your organization

has a position-control process, ask about it and understand how it impacts you. If there is not one, you can implement one for your unit. (Position control is discussed further in Chapter 8, "Tying All Your Pieces Together.")

Research

A lot of useful information comes from research on nurse staffing, much of which can be used as support when arguing the need to increase staffing, increase a full-time equivalent (FTE), or explain your budget variance. Research has demonstrated the impact of staffing on nurse satisfaction and patient outcomes (Stanton, 2004): The lower the staffing, the lower the staff satisfaction. Also, the lower the staffing, the worse outcomes are, particularly nursing-sensitive outcomes.

The Impact of Staffing on Patients

As pressure increases in the drive to decrease health care costs, nurses have already demonstrated the impact of staffing on patient outcomes through research and the use of nursing-sensitive indicators. Nursing-sensitive indicators include:

- Catheter-associated urinary tract infections (CAUTIs)
- Falls
- Pressure ulcers
- Intravenous infiltrations
- Nosocomial infections
- Restraint usage
- Pain management
- Pneumonia
- Shock
- Upper gastrointestinal bleeding
- Longer length of hospital stays
- Failure to rescue
- 30-day mortality

AHRQ (Stanton, 2004) funded multiple studies focusing on nurse staffing and outcomes and published those findings almost a decade ago. There should be no doubt that nurse staffing impacts patient outcomes. Refer to List 1.1.

LIST 1.1
OUTCOMES ASSOCIATED WITH APPROPRIATE NURSE STAFFING

- Higher staffing (above the 75th percentile as compared to low staffing at the 25th percentile) at all levels of nursing was associated with a 2–25% reduction in adverse outcomes, depending on the outcome (Needleman, Buerhaus, Mattke, Stewart, & Zelevinsky, 2001).
- Higher rates of RN staffing were associated with a 3–12% reduction in adverse outcomes, depending on the outcome (Needleman et al., 2001).
- Major surgery patients in hospitals with high RN staffing had lower rates of two patient outcomes (UTIs and failure to rescue) (Needleman et al., 2001).
- Among medical patients, a higher proportion of hours of care per day provided by registered nurses and a greater absolute number of hours of care per day provided by registered nurses were associated with a shorter length of stay and lower rates of both urinary tract infections and upper gastrointestinal bleeding (Needleman, Buerhaus, Mattke, Steward, & Zelevinsky, 2002).
- An increase of 1 hour worked by registered nurses (RN) per patient day was associated with an 8.9% decrease in the odds of pneumonia (Cho, Ketefian, Barkauskas, & Smith, 2003).
- A 10% increase in RN proportion was associated with a 9.5% decrease in the odds of pneumonia (Cho et al., 2003).

- In hospitals with high RN staffing, medical patients had lower rates of five adverse patient outcomes (UTIs, pneumonia, shock, upper gastrointestinal bleeding, and longer hospital stay) than patients in hospitals with low RN staffing (Needleman et al., 2001).

These results are just a few of the many outcomes discovered through research. You probably have your own personal stories about how staffing may or may not have had positive impacts on patient outcomes. Regardless of your type of unit, you have many opportunities to quantify and demonstrate the relationship between your unit's quality measures. Some measures may be collected as mandatory and others as voluntary. Your organization may use different vendors for collection. Some of the quality data collected may be repetitive.

MANAGER EXERCISE

Think about the ways you or your nurses have experienced the impact of nurse staffing on patient outcomes. Write them down on a list. You need to ensure you communicate your unit's patient outcomes, both positive and negative, to support your nurse-staffing needs. How is your pressure ulcer rate? Have you positively impacted patient falls? Have you correlated your nursing sensitive indicators to your staffing levels?

TIP

If you do not have access to your unit's quality data in a timely manner, ask for it. It is hard to make changes in patient outcomes and staffing with data that are 3 months old.

Your organization can collect multiple pieces of data that are important for you to know and review. To compare your staffing with patient outcomes, you can use data from the following sources:

- National Patient Safety Goals (Joint Commission) http://www.jointcommission.org
- National Database for Nursing Quality Indicators (NDNQI) http://www.measurenursingquality.org/
- CMS Core Measures http://www.cms.gov/site-search/search-results.html?q=core%20measures
- Leapfrog Group http://leapfroggroup.org/
- Additional, state-specific requirements

It is important to note that information from any one organization can change or be updated at any given time. Always make sure that you refer back to these organizations' websites for the most up-to-date information.

This is not an exhaustive list; however, it is one that will get you started in the right direction. If your hospital takes Medicare patients, then you will have CMS core measure data. However, if you are a critical access hospital (CAH) or a hospital with fewer than 25 licensed acute care beds, then your hospital is exempt from collecting or reporting certain data points. Based on the size of your unit or the size of your hospital, your sample size for outcome data may be small, inconsistent, or nonexistent month to month, making it hard to use as a data-analysis point to understand the effectiveness of your staffing.

HOW MUCH DATA DO YOU NEED?

For a small organization or unit, use the average, or mean, for a quarter's or year's worth of both quality and staffing data to have a meaningful analysis. For a larger unit or organization, it may be possible to use monthly or weekly data to make meaningful analysis between patient outcomes and staffing.

The Impact of Staffing on Staff

The original Magnet hospital work came during the nursing shortage in the early 1980s. During that time, it was noted that hospitals that were in the same town may have experienced the shortage, whereas others had more candidates for positions then they could hire. Based on the research and further understanding of why those hospitals during a nursing shortage may not have experienced the effects of a nursing shortage, these units were dubbed "Magnet hospitals" for their ability to attract and retain nurses. To understand this issue, the Governing Council of the American Academy of Nursing appointed a Task Force on Nursing Practice in Hospitals in 1981, charging it to examine characteristics of systems that foster or impede professional nursing practice in hospitals (McClure & Hinshaw, 2002). The study, "Magnet Hospitals: Attraction and Retention of Professional Nurses," was the impetus for understanding why during a nursing shortage, not every hospital experienced a shortage. Although the study produced many findings, some specific findings included the following:

- Quality of the staff was apparently viewed to be as important as the quantity.

- Magnet hospitals did not employ nurses from temporary agencies.
- They employed clinical specialists who were seen as valuable resources to the staff as well as enriching to the practice environment.
- Shift rotation was minimized, if not eliminated.
- Great efforts were being made to reduce the number of weekends that the nurses were required to work.
- A number of creative and flexible arrangements had been developed that were tailored to meet the needs of the personal lives of staff.

These findings, while more than 30 years old, are still relevant. Since that time, researchers have continued to study nurse satisfaction and refine and update this original study and its findings. Findings continue to show that satisfied nurses are less likely to leave an organization (Aiken, et al., 2002). Although staffing is only one component of their satisfaction, it is the one that is constantly considered throughout this book. If nurses believe that they can provide quality patient care because of sufficient staffing, then you will not have trouble finding nurses for your unit. Not only will you have plenty of staff to schedule, but your unit costs will be less, because you will have lower turnover and orientation costs.

THE COSTS OF LOSING A NURSE

Atencio, Cohen, and Gorenberg (2003) calculated that the financial cost of losing a single nurse is equal to roughly twice the nurse's annual salary. In a 2007 study, PricewaterhouseCoopers estimated that the average hospital loses roughly $300,000 per year for each percentage increase in annual nurse turnover (PricewaterhouseCoopers, 2007).

Accountable Care Organizations

Medicare's Shared Savings Program (simply called the Shared Savings Program) facilitates coordination and cooperation among providers to improve the quality of care for Medicare fee-for-service (FFS) beneficiaries and reduce unnecessary costs. Eligible providers, hospitals, and suppliers may participate in the Shared Savings Program by creating or participating in an ACO (CMS, 2012). The Shared Savings Program is designed to improve beneficiary outcomes and increase value of care by:

- Promoting accountability for the care of Medicare FFS beneficiaries
- Requiring coordinated care for all services provided under Medicare FFS
- Encouraging investment in infrastructure and redesigned care processes

NOTE

The Shared Savings Program rewards ACOs that lower their growth in health care costs while meeting performance standards on quality of care and putting patients first.

There are two tracks for ACOs. The first track establishes lower risks and rewards, ideally for organizations just getting started with care coordination. They can earn bonuses for 3 years, sharing up to 50% of savings, but they are exposed to potential penalties only during the third and final year.

The second track has higher risks and rewards. Organizations are subject to penalties for all 3 years, but they are eligible to capture up to 60% of savings in annual bonuses based on their quality performance (CMS, 2012).

Here is the CMS definition of an ACO: "an organization of health care providers that agrees to be accountable for the quality, cost, and overall care of Medicare beneficiaries who are enrolled in the traditional fee-for-service program who are assigned to it" (CMS, 2012, para 3). An ACO can include any and all health care–related organizations, including but not limited to clinics, hospitals, insurance payers, home health agencies, dialysis centers, and nursing homes.

Through the proposed payment structure, it is anticipated that a patient episode in the savings program includes the 3 days prior to hospitalization, the hospitalization, and the time period of 30 days post hospitalization. This is different from today in the pure Medicare FFS environment, in which each provider bills Medicare separately for the services rendered.

Here's an example. A heart failure patient today might see his provider in the clinic. The provider may adjust the patient's Lasix and send him home. The provider bills CMS separately for this visit. Two days later, the patient is not feeling better, and the provider tells the patient to go to the emergency room, where, after a workup, he is admitted for 3 days in the hospital. The hospital now bills CMS separately for the ED visit and hospital stay. The patient is discharged, with home health services for the next 30 days. The home health agency bills CMS for its charges related to the home health visits.

In the ACO model of shared shavings, the provider's office visit (within 3 days of the hospitalization), the ED visit, hospitalization, and home health visits (for 30 days after discharge from hospital) are now considered one payment. The three groups must take the one payment and then spread it among themselves for the services provided. Groups in an ACO model by this point have agreed through contracts and negotiations how this will happen.

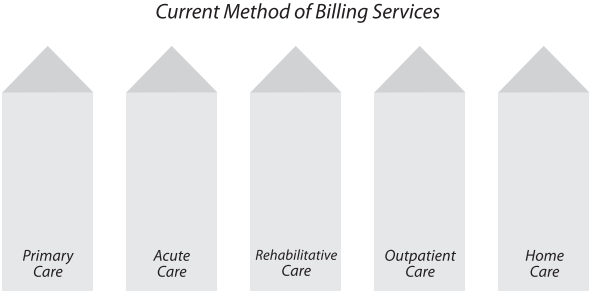

FIGURE 1.2
The current reimbursement model.
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Although participation in an ACO is purely voluntary, many organizations have seen the future and potential benefit and understand that they need to change not only to be successful but also because it is the right thing to do. Doesn't this make sense—health care organizations partnering and working together? The program is designed to allow these partnerships to exist without violating federal laws, such as anti-trust, anti-kickback, and physician self-referral, that govern appropriate competition in the health care marketplace.

PAYMENT STRUCTURE EXAMPLE FOR A CHF PATIENT IN AN ACO MODEL

Mary M. is an 84-year-old congestive heart failure (CHF) patient with Medicare FFS as her insurance. Her provider and local community hospital have decided to participate in Medicare's Shared Savings Program as part of an ACO. Mary saw her physician for exacerbation of her CHF symptoms; however, 2 days later she was admitted

continues >

> to the local hospital. After her discharge from the hospital, Mary was seen by the home care agency to assist in managing her symptoms. The ACO will get a bundled payment for this "episode" and has already determined through prior agreements who gets paid and how much they will get paid for the care provided. Thus, they are more accountable together for providing cost-effective, quality care.

Because acute care hospitalizations consume a majority of health care dollars, an ACO needs to reduce hospital admissions, not just readmissions, in order to reduce health care spending. Eventually, more nursing care will be needed outside the hospital walls to coordinate care among all these providers, opening more positions outside the hospital walls as well as decreasing the number of nurses needed to provide acute care nursing.

Your staffing decisions will be impacted if your organization moves toward an ACO model of care. Becoming an ACO may impact your unit in the following ways:

- Shorter lengths of stay
- Increased use of post-acute services
- Increased transparency of your quality measures to other organizations in the ACO
- Shared reimbursement for a patient, potentially resulting in less reimbursement for acute care services than received today
- Redesign of care delivery on your unit

Health care reform is moving health care organizations to do a better job of care coordination, which will increase

quality patient care while reducing costs. New models of care delivery under ACOs will continue to develop that will have major implications for nurse staffing now and in the future

Summary

Here are the key points covered in this chapter:

- Quality means safe, equitable, efficient, effective, timely, and patient-centered care.
- Per the ANA Code of Ethics and social policy statement, you have an ethical responsibility to ensure nurse staffing that delivers quality patient care.
- How you staff your unit may contribute to task-oriented nurses, so use the entire nursing process as you develop staff guidelines.
- Research has demonstrated that nurse staffing impacts the quality and safety of patient care as well nurse satisfaction.
- Understanding your unit's natural and artificial variability in patient flow enables you to manage to it, not become a victim to it.

2

The Current State of Staffing

As mentioned in Chapter 1, we want quality patient care as the result of our staffing. Scheduling and staffing is a complex and dynamic process that can consume your job and life. Understanding the basics of staffing and scheduling will create a foundation of knowledge for you to build upon. The foundation for scheduling and staffing includes understanding professional organization standards, adhering to federal and state regulations, and applying acuity-, ratio-, or finance-based methods for determining your structure.

This chapter discusses various methodologies for staffing, federal and state legislation, professional organization standards for staffing, and software programs for staffing and scheduling.

The Basis for Scheduling

The schedule is not just a blank slate of holes to fill. It needs some basic information so that you have a template to start to schedule from. The basis for the schedule begins with the rules you apply to it. You start with the premise that you provide care 24 hours a day, 7 days a week. This means you need to know several things:

- Number of staff needed for each shift
- Length of the shifts
- Staffing mix for each shift (number of RNs, LPN/LVNs, unlicensed assistive personnel)

This information you need to fill out comes from several sources. Using only one method to determine staffing needs will not meet the needs of your patients; you will need to take into consideration a mix of ratio-based, finance-based, and/or acuity-based systems. It is important that you understand the methods behind ratio-, finance-, and acuity-based staffing methods so that you can use them to meet the needs of your patients, staff, and organization.

GUIDE TO STAFFING

Many of us belong to multiple professional organizations that may have a statement or guide to staffing in a nursing specialty area. In addition, many states have some sort of staffing legislation. It is important to know your legal responsibility

in those states to uphold the legislation on your unit, whether it is ratio based, acuity based, a combination of the two, and/or you have staffing committees.

Professional Organizations Standards

As more research is completed and more is known about staffing and outcomes, professional organizational standards have changed. For instance, the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) updated its staffing guidelines in 2010 to take into consideration the increase in acuity and workload of the nurses in this population. Increased nursing hours are suggested due to an increased number of women who have complications and/or are undergoing medical and surgical procedures, and new technologies and documentation requirements. It is important to know what your administrators say about staffing, because they may have compiled the research and made recommendations that you should take into consideration.

In Chapter 1, I define staffing and review elements of staffing based on the work of the American Nurses Association (ANA). Although the ANA does not have specific staffing guidelines, multiple specialty organizations have published guidelines. The following list of specialty professional organizations have published staffing guidelines or position papers on staffing:

- American Nurses Association (ANA): www.nursingworld.org
- Emergency Nurses Association (ENA): www.ena.org

- Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN): www.awhonn.org
- Association of periOperative Registered Nurses (AORN): www.aorn.org
- American Association of Critical-Care Nurses (AACN): www.aacn.org
- Academy of Medical-Surgical Nurses (AMSN): www.medsurgnurse.org

This list only includes nursing organizations mainly by service type. There are many other nursing organizations based on population that may have position papers or suggested guidelines for staffing. It is important to review all sources of data to make evidence-based decisions.

NOTE

A professional organization's standards may be different from your state's staffing laws. Although you might want to defer to the better standard, remember you are legally bound to uphold the state's staffing legislation first.

Federal and State Regulations

The argument for improved nurse staffing has led to federal and regulatory language about staffing, in addition to a variety of enacted legislation in many states. Failure to comply with federal, regulatory, and state requirements can lead to penalties for you and your organization. For instance, in Oregon, violation of safe staffing regulations includes civil penalties if there is reasonable belief that safe patient care has been or may be negatively impacted. Financial penalties may be assessed up to $5,000 for no written staffing plan in place, violation of the written staffing plan, no nurse on the staffing committee, and/or the hospital management's not making a reasonable effort to get a replacement nurse (DHS, 2012). It is important for

you to search on the Internet to determine whether your state's requirements and to determine whether you are following the intent of the law. Do not assume that you and your facility members are complying with the law or that someone will monitor this for you. Frequently managers find out they are in violation only after an employee, patient, or concerned family member files a complaint.

The following sections describe some of this legislation.

Federal Legislation

The Centers for Medicare and Medicaid Services (CMS) states in 42 Code of Federal Regulations (42CFR 482.23(b)) that it requires hospitals certified to participate in Medicare to "have adequate numbers of licensed registered nurses, licensed practical (vocational) nurses, and other personnel to provide nursing care to all patients as needed" (CMS, 2010a). Even though this regulation addresses staffing, it leads to a wide range of interpretations.

If you work at a hospital that has "deemed status," you might be surveyed not by CMS but by a different accrediting body for CMS. Deemed status is a status conferred on a hospital by an accreditation organization (such as The Joint Commission) in formal recognition that the organization's review, continued-stay review, and medical care evaluation programs meet certain effectiveness criteria of the accreditation organization and the CMS. Being accredited by one of these organizations means that you not only have passed that organization's survey requirements but also have met CMS's standards.

In July 2002, The Joint Commission stated that staffing effectiveness is the appropriate level of nurse staffing that will provide for the best possible outcome of individual patients throughout a particular facility (Health Leaders Media, 2010). This required hospital administrators to

track two human-resource indicators and two patient-outcome indicators, track data, and determine the variation in performance caused by the number, skill mix, or competency of staff. However, in June 2009, The Joint Commission suspended these standards. There was debate regarding whether there was sufficient evidence between nurse staffing and patient outcomes. The Joint Commission had decided there wasn't enough evidence.

The interim staffing effectiveness standards of The Joint Commission became effective July 1, 2010, and will remain in effect as The Joint Commission continues to research the issues of staffing effectiveness. The requirement states that at least once a year, the administration of a hospital/organization must provide written reports on all system or process failures, the number and type of sentinel events, information provided to families/patients about the events, and actions taken to improve patient safety (Health Leaders Media, 2010). Like the CMS regulation, this can lead to various interpretations, and not just about staffing nurses.

CONSIDER THIS

If you have a scope-of-service document for your unit or organization, make sure that any changes to staffing or your care delivery model are updated. Many times individuals update only before an accrediting or regulatory body arrives. You will be held accountable for what this document states compared to what is occurring on your unit.

Congress, nursing organizations, and unions have attempted to pass federal legislation on safe staffing. Proposed legislation has been modeled after the California Staffing Ratios and has been worded to incorporate a mix of methods, including ratio- and acuity-based staffing with staff involvement. To date, no legislation has been passed.

There have, however, been several states that have enacted some sort of legislation around staffing.

State Legislation

According to the ANA, these states have enacted legislation around staffing as of 2011:

- States that have enacted legislation and/or adopted regulations to address nurse staffing: California, Connecticut, Illinois, Maine, Minnesota, Nevada, New Jersey, New York, North Carolina, Ohio, Oregon, Rhode Island, Texas, Vermont, and Washington, plus the District of Columbia
- States that require hospitals to have staffing committees responsible for plans and staffing policy: Connecticut, Illinois, Nevada, Ohio, Oregon, Texas, and Washington
- States that require some form of disclosure and/or public reporting: Illinois, New Jersey, New York, Rhode Island, and Vermont

To date, California is the only state that stipulates in law and regulations that a required minimum nurse-to-patient ratio be maintained at all times by unit. However, hospital administration, nurse managers, and nurses have to wrestle with tough issues related to this staffing law. Staffing laws do not prevent patients from coming into the emergency department (ED) and federal laws, such as the Emergency Medical Treatment and Active Labor Act (EMTALA), require hospitals to provide a medical screening for patients who present to the ED. Patients may continue to come to the ED who may need to be admitted, but they will sit in the ED because ratios prevent further admissions on the units if additional staff are unavailable.

Staffing Plans

Does your unit or organization have a staffing plan or committee? Some may be required to do this due to state legislation, but even if it is not required, staffing plans and/or committees are a good way to provide a collaborative approach to staffing. A staffing plan is created by nurse managers—or more preferably, a shared governance staffing committee with staff RNs—that matches nurse criteria with patient criteria for each shift on each type of unit. (More is discussed with examples in Chapter 9, "Examples of Staffing Documents and Unique Care Delivery Models.") Three methods related to staff and scheduling are discussed here: acuity based, ratio based, and finance based.

The Acuity-Based Method

The acuity-based method of staffing requires using clinical judgment and considering patient characteristics. Not all patients are the same; they have varying severity of the same diagnosis, different socioeconomic statuses, and different expectations. So why do we treat staffing our units as if patients were the same? Because it is easier and because most of us lack the tools or ability to start to drill down on the differences.

This is where the usefulness of the electronic health record (EHR), nursing documentation, and the nursing process really becomes clear to staff. How many times have you heard RNs (or yourself) say that they do not understand why they have to document so much or why they have to use a care plan? Rightfully so, it seems we place data in a system only to protect us from a lawsuit. But what if the data that nurses document were used to make decisions about staffing? They can be! And an additional bonus? If you link staffing the next shift to the current nursing documentation, you can be assured you will have real-time and thorough documentation.

Whether you have a software program to help you staff, use a Microsoft Excel spreadsheet, or use pen and paper, clinical judgment and patient characteristics are two important components to consider when staffing your unit. Here is how you use the nursing process to assist in quantifying acuity:

Standard 1: Assessment. RN looks at all patient characteristics.

Standard 2: Diagnosis. How many nursing-related issues need to be addressed?

Standard 3: Outcomes Identification. What are the nursing-specific patient outcomes?

Standard 4: Planning. This is time the nurse needs to complete various patient goals during the patient's stay.

Standard 5: Implementation. This is time the nurse will spend to complete interventions or supervise those who do interventions—for example, the LPN.

Standard 6: Evaluation. RN evaluates plan and makes changes as needed.

Patient characteristics may include:

- Age
- Socioeconomic status
- Family or caregivers
- Diagnosis
- Severity of illness
- Comorbidities
- Ability to provide self-care
- Length of stay

The acuity-based method of staffing is a complex process that requires you and your staff to assign a level of

acuity to your patients as well as the work of the nurse. The more objective the measure, the better your "inter-rater" reliability will be among your nurses. In other words, two different nurses would be able to assess and determine the same acuity number or ranking for a patient. This method has many pros and cons (see Table 2.1), but in particular, acuity-based staffing takes into consideration the uniqueness of each patient and his or her specific nursing care needs.

TABLE 2.1
PROS AND CONS OF ACUITY-BASED STAFFING METHOD

Pros	Cons
Based on nursing assessment and interventions (should be pulled from EHR)	Acuity assessment, if separate from documentation system, may be ignored or not completed by the nurse
Most closely aligns with changing needs of patient and family	No minimum staffing level noted
Can give credit of time for patient education and care coordination, which is frequently not considered	Time consuming to build the system correctly, taking into consideration nursing process, patient needs, and churn of the unit
Can take into consideration changes on shift if built to reassess needs as frequently as hourly	Needs automated system to be most effective
Better labor cost management	

The Ratio-Based Method

Ratio-based staffing may be the easiest method for staffing. If you plan to have a ratio of 1:5 on a medical surgical floor, then you ensure you have one nurse for every five patients. Based on this number, it is easy to flex your staffing up and down based solely on the number of patients you have.

Arguments for ratios state, "You have to start somewhere." This is true. There is always a minimum number of nurses needed to staff a unit. Staff and managers alike refer to this as their staffing ratio. Staff and managers typically do not settle for pure ratio staffing. There is an understanding that other factors need to be taken into consideration, such as the following:

- Patient acuity
- Nursing expertise
- Other disciplines or staff
- Technology

Ratio-based staffing has several potential issues. The first is that it is often based on RN-only ratios, leading administrators and managers to staff RNs to that level but cut other assistive staff levels back to manage the financial impact of a fixed ratio. The second is that hospital administrators may interpret the ratio as the maximum number of nurses needed, when on a given day, if acuity is taken into consideration, it is the minimum number of nurses needed. The third is that staffing by a ratio replaces minimally safe staffing for quality patient care and nursing judgment.

The Finance-Based Method

As a manager, you probably do not staff solely based on hours per patient day or any other single financial method for determining staffing needs on your unit. As a manager, you know you are responsible for your budget, and nurse staffing accounts for most of it. Knowledge is power, and although the finance department may hand you your unit's numbers on a weekly or monthly basis, you should know how to calculate your own numbers.

If you were fortunate enough to read the second book in the *Nurse Manager's Guide* series, *The Nurse Manager's Guide to Budgeting & Finance*, then you have seen Al Rundio's calculation of employee-related costs (2012). What follows are the calculations and explanations you need to know to be informed. It is important to note that the nurse manager determines the hours of care per patient per day to be budgeted based on standards of care that will lead to quality patient care.

The average daily census (ADC). To obtain this statistic, first add together census figures for each day in the given period. Then divide that total by the number of days.

Total Census Figures
÷ Total Number of Days
= ADC

The average monthly patient days. To obtain this number, include all days that patients (excluding newborns in the nursery) are hospitalized. The day of admission, but not the day of discharge, is counted as a patient day. If both admission and discharge occur the same day, the day is counted as one patient day. To obtain this statistic, multiply the average daily census by the number of days in the calendar year (365). Then divide the product of that calculation by the number of months in the year (12).

(ADC x 365) ÷ 12
= Average Monthly Patient Days

The number of hours of nursing care to be provided. To obtain this number, multiply the total patient days per year by hours of care per patient day to be budgeted.

Total Patient Days per Year
x Hours of Care per Patient per Day
= Hours of Nursing Care to Be Provided

Skill Mix—Percentage of total nursing hours by skill. This is the percentage of hours worked by RNs, LPN/LVNs, unlicensed assistive personnel (UAPs), and contract staff by unit. To calculate this statistic, take the total number of hours worked by skill set in a specific unit (i.e., RN, LPN/PVN, UAP, or contract staff) and divide by total number of hours worked by staff with direct patient care responsibilities.

Total Number of Hours Worked by Skill
(for example, RN)
÷ Total Number of Hours Worked by Staff
(Hours of Nursing Care)
= Percentage of Care Provided by That Skill

One challenge with using the calculated average, as demonstrated, is that it does not take into consideration that your unit's census today may be dramatically different from tomorrow's census. Here are some definitions you need to keep in mind:

Mean: Most often referred to as *average*. Calculated by adding a group of numbers together and then dividing them by the total number of integers in that group.

Mode: A set of numbers that occurs most often in a grouping of numbers. There may be no mode, one mode, or more than one mode.

Median: In a set of numbers ordered from least to most, the median is the number right in the middle of that set.

NOTE

With a mean, large or small numbers will throw off the reliability of your data, leading to a smaller or larger mean or average than if you used the median. Using the median can correct for outliers.

Sometimes any one of these terms may be referred to as the "average." However, when one uses any of these measures, what they are really looking at is the "measure of central tendency." The nature of the data drives whether you use one or the other. Makes sense, right? You want to know on any given day the central tendency of your census and staff needed. Depending on the type of unit and patient population, you may not want to use the mean but the median or mode instead.

STAFFING FOR PATTERNS

As a young manager, in the early 1990s there were not as many electronic tools or data available to me as there are today. I recognized that working on an OB unit, there seemed to be patterns of higher census. I manually calculated 1-year patient days by days of the week on a 4-week schedule that coincided with the 4-week staff schedule. The pattern indicated that there were more patients during the time of the third week of the staff schedule, which was valuable information.

The nurses worked 8-hour shifts at that time, with the exception of the few nurses who worked 12-hour shifts on the weekend. There were several nurses working a 0.5 full-time equivalent (FTE), which was 1 or 2 days one week and the balance of the other 3 or 4 days on the second week of the pay period. I was then able to schedule a little heavier during that week and on the days indicated by moving their days to that week of the schedule.

A second opportunity I discovered was with the wide fluctuations in census, the mean, or average daily census, was rarely the actual number of patients present on the unit. I convinced my

director to let me try staffing to the mode instead of the median. Although by doing so, there were more times that we had to staff down, much time was saved by not scrambling for staff on a regular basis.

–Deborah Maust Martin, MBA, MSN, RN, NE-BC, FACHE

TIP

Just because the mean has always been used for staffing does not mean you need to use it. Calculate your mode and see what you get. Talk with your boss and ask to trial it. You both may be pleasantly surprised!

In Chapter 1, I discuss patient flow and variability. The key to variability is to manage it. Using the average or mean to schedule staff as you create next cycle's schedule means you are probably treating each day as if the census does not change day to day, and you are left with wide fluctuations in staffing. Instead of managing your census variability, you are managing your staffing, the day of operations, shift by shift. In addition to your average census, two other census-driven data points are helpful in understanding your unit's needs for staffing and scheduling: core census and peak census. There are multiple ways to calculate these numbers so, of course, see if your organization has a preferred definition first.

- **Core census:** the mean census of the lowest 2 months
- **Peak census:** the mean census of the highest 2 months

Knowing these numbers in addition to your average for all 12 months gives you a sense of potential issues around the low and high ends of your census, such as staff needing to take low census or higher float pool utilization to meet the needs of your patients.

Staffing and Scheduling: Electronic Programs

Staffing and scheduling nurses has typically not been an evidence-based process. It is a complex and dynamic task that involves knowing what you need to staff in addition to how you will staff in order to provide quality patient care. Electronic programs are designed to help nurse managers move toward an evidence-based approach. There are two types of electronic programs for staffing:

- Those that assist with creating a schedule (getting nurses scheduled)
- Those that help you determine your staffing needs (how many nurses or personnel you need)

Some programs do both; others do one or the other. Despite the need to move toward an evidence-based approach, less than two-thirds of the hospitals in the United States have automated staffing and scheduling systems in place (Crist-Grundman & Mulrooney, 2011). The typical barrier is cost and competing priorities. A business case can be developed with the help of many of the vendors to demonstrate the positive financial and patient outcomes for purchasing and implementing an automated system.

Programs to Assist With Scheduling

Those hospitals that have implemented software programs have found that an electronic scheduling system helps save time and money (Palmer, 2008). The more effective programs interface with payroll, leading to further cost savings. If your organization does not have an electronic program to maintain your schedule, I highly suggest that you work with your boss to present a case to purchase one. Scheduling systems are not cheap; however, a case

can be built with a return on investment (ROI) for your organization. Your ROI will depend on your unique situation, such as how much you believe you can reduce casual labor costs and how much time will be saved in FTEs by obtaining this system. As you build that case, Table 2.2 includes items to consider.

TABLE 2.2
PROS AND CONS OF AN ELECTRONIC SCHEDULING SYSTEM

Pros	Cons
Decreased time spent calling staff to fill openings	Initial purchase costs and annual maintenance
Better utilization of pool/per diem staff	Need to standardize practices and processes across different units
Better management of floating staff	Time needed to receive input and build system to match organization's needs
Reduction in contract labor	Centralization of staffing may mean actual and/or perceived loss of control by unit leadership
Staff empowerment to be a part of the process	Staff perspective on change in general, need to have good change-management process in place
Accuracy of electronic schedule	
Ability to move to a centralized staffing process	
Improved reporting mechanisms	
Decreased time of higher paid staff to schedule	
Improved fairness to employees	
Transparency of all open shifts in an organization	

IMPLEMENTING A NEW STAFFING SYSTEM

The challenging component of implementing a new scheduling and staffing system is the inclination to think of it as merely a new technology system, underestimating the emotional impact of any change to staff members' work schedules. Work is only one part of our lives, but work schedules can, or can be perceived to, significantly impact those things we value most—time with our families, social functions, self care, finances, etc. On top of a "regular" work schedule, we often ask staff to do more and/or they carry guilt for not being able to do more. Additionally, the stressors of work can insidiously infiltrate time away from work; I suspect few health care professionals are really able to walk out the door of the hospital and leave it all behind at the end of their shift. Implementing a new system needs to be weighted more on allowing staff involvement in design, listening to their concerns, and really understanding the impact of the changes prior to completing the plan for roll out.

–Vickie Whitham, MS, RN, NE-BC

Programs to Determine Staffing Needs

In addition to software programs to complete your staffing, there are programs that help determine what that staffing might be. These software programs take into consideration your patient population and can be individualized for it, or you can use the formulas the company has predeveloped. Often, these programs have proprietary methods that will assist you in accounting for differences in patients'

requirements for nursing care. Based on how you decided to input the data into the software program (manually or by interfacing with your EHR), you can get data to inform staffing your unit hour by hour or shift by shift.

This type of staffing software program can also save you money and time. The administrators at Coffee Regional Medical Center in Douglas, Georgia, implemented one such system. According to the IT supervisor, "We've been able to staff more efficiently and advantageously, which has contributed to a reduction of our overtime costs by an estimated $625,000" (API Healthcare, 2011a).

As with other systems, there are benefits and potential issues of using a staffing software program, as noted in Table 2.3. Because many automated systems are based on acuity, the pros and cons of using such a system may also include those listed earlier in Table 2.1, "Pros and Cons of Acuity-Based Staffing Method."

TABLE 2.3
ADVANTAGES AND DISADVANTAGES TO STAFFING SOFTWARE

Advantages	Disadvantages
Real-time documentation by nurses	Cost
Standardized approach shift to shift	Time to develop
Data to tie to outcomes and budget	Time to maintain, including reliability testing
Transparency of true needs for all units	
Evidence-based decision making to staff	
Improved collaboration with staff	
Improved patient outcomes due to managing appropriate staffing levels (research noted in Chapter 1)	

Fixed, Self-Scheduling, and Rotating Schedules

Whether you go with an electronic scheduling system or use pen and paper, you need to decide whether to use a fixed schedule or to let the staff self-schedule. A fixed schedule is one in which Nurse A always works Monday, Tuesday, and Wednesday, and Nurse B always works Thursday, Friday, and Saturday, for instance. Self-scheduling is when you allow nurses to schedule themselves after you post a schedule of open shifts. Finally is the rotating schedule, where some aspects of the schedule may be fixed, but there is a set rotation for the staff. This rotation may include days to night, for example.

And in some places, staff may turn in their dream schedules, and the manager takes them all and develops the schedule based on all that information. Talk about time consuming. Of all the types of scheduling, self-scheduling has research that demonstrates improved nurse satisfaction rates (Robb et al., 2003; Beltzhoover, 1994).

However, there are benefits and downfalls to all three methods, as noted in Tables 2.4, 2.5, and 2.6.

TABLE 2.4
ADVANTAGES AND DISADVANTAGES TO FIXED SCHEDULES

Advantages	Disadvantages
Staff always know their schedule.	It interrupts staff's lives.
Can provide continuity for patient care.	Recruiting new employees may become difficult.
Some staff prefer fixed shifts.	Staff on fixed schedules become a mini-culture unto themselves.
Unbalanced skill mixes can be fixed.	

TABLE 2.5
ADVANTAGES AND DISADVANTAGES TO SELF-SCHEDULING

Advantages	Disadvantages
Staff has increased control and flexibility.	There are no guaranteed times.
Number of change requests decrease.	Staff wait until last minute to schedule, not meeting FTE.
Manager spends less time scheduling.	Continuity of patient care decreases if staff are not scheduled back to back for shifts.
Schedule fits staff personal life.	It is difficult to manage right skill mix for each shift.
Absenteeism decreases.	

TABLE 2.6
ADVANTAGES AND DISADVANTAGES TO ROTATING SCHEDULES

Advantages	Disadvantages
All staff get equal chance to work day shift.	Staff do prefer fixed or self-scheduling over rotating.
It maximizes staff skill mix.	Health problems increase.
Educational costs decrease by rotating staff through training.	

When determining which method to use, make sure you get staff input! This is their schedule, their life. Many hospitals have seen improved staff satisfaction with self-scheduling, but not all staff will see this method as a positive (Strickland, 2012).

Summary

Here are the key points covered in this chapter:

- It is important to know what your organization says about staffing, because it may have compiled the research and made recommendations to take into consideration.
- Staffing levels for registered nurses and other staff should meet at least those required by state, accreditation and institutional, and professional guidelines.
- One method to determine staffing needs will not meet the needs of patients, whether you use purely a ratio-based, finance-based, or acuity-based system.
- Staffing for quality needs to consider current patient census and acuity, nursing time and interventions, length of stay, skill mix, expertise of staff, and non-patient care time.
- Routine evaluation of staffing impact on patient outcomes needs to be completed, and adjustments to staffing should be made.

3

Start With Understanding Your Unit's Care Delivery Model

Sacred cow: "This is the way we have always done it."

We have all heard it. We have all been at meetings where someone brought up a new idea, and the immediate response was something like: "We are fine, we don't need to change"—which is code for "This is the way we have always done it, and it's not going to change!" Do you sit back and think to yourself, "At least I contributed today," or, "I tried"? But did you? What if you had added, "True, but we all know those who fail to evolve eventually become extinct"?

I open with this scenario because I want you to think differently about staffing. I want you to challenge the status quo. Doing something new or different always requires change management, and nurse managers do not get much education on that. You need to manage the change both for those who want to change with you and for those who do not want to change. Failing to manage change on your unit could lead to a failure to successfully adopt the change.

TIP

One of my favorite leadership quotes is "Culture eats strategy for lunch," by Dr. Peter Drucker. Basically, if you don't understand the relationship between your unit's culture and your change or "strategy," it will always be at risk for failure. Managing change means managing and leading your unit's culture.

This chapter discusses traditional models of care, the impact they may have on staffing, and the approaches to resource support you need to consider. I challenge you to understand the past and present and to create the new future models.

Care Delivery Models

As the nurse manager, you get to manage and lead your unit to great patient outcomes. An exciting way to do this is to think differently about how the care is structured and to do something new and innovative. How you structure your care and who performs that care is at the heart of the care delivery model, which is essentially the method you use to deliver care. The care delivery model determines whom you staff and how you staff, and determines your workload quantification. In the following pages, I discuss various care delivery models. As the nurse manager, seek permission to change or pilot a new care delivery model. Different care

delivery models may have a positive or negative impact on your budget, but so do adverse patient outcomes. On paper, figure out different models with the staff needed and associated costs. Think of your current budget. If you do not exceed your current budget, does it matter how you use that money to provide care? If you exceed your budget, can you offset the increase in costs with improved patient outcomes and or decreased nurse turnover?

There are many definitions of care delivery, whether you are discussing a unit, a hospital, a community, or a nation. At each of these levels, the care delivery model looks very different, because the goals are very different at different levels. The unit and organization have the most direct impact on the patient. Added complexity leads to different care delivery models even within the same organization, which is acceptable. It would not make sense for the medical surgical unit, for example, to be structured like the labor and delivery unit, which has different nursing care requirements with different goals for patient care. When thinking about your care delivery model, you should consider five main components. The model should:

- **Have consistent and standardized structure.** Each shift, each day, every unit-based staff member and float nurse will be able to rely on the same structure without trying to figure out on each shift what they should be doing related to patient care. Staff can rely on always coming to work to provide primary care or team-based care as opposed to the model's being primary care one day and team-based the next.
- **Have accountability and responsibility structure.** Despite your model, ensure that the nurses know who is accountable and whom they report to through the chain of command. If there are problems for staffing or patient care, do they know whom they can reach out to immediately to help them resolve an issue?

- **Provide organization to the rules and structure in policies, procedures, or guidelines.** Educate your staff on these and ensure that your staff know the scope of practice to each person on the unit as well as who and what can be delegated. Inability or lack of confidence in delegation will hamper a team- or function-based model.
- **Define how work is organized, define how staff are deployed, and explain who does what in providing patient care.** This can best be accomplished through pictorial models and job descriptions. A picture that demonstrates the care delivery model serves as a quick reference for chain of command and clarifying the work relationship between members of your care delivery model. Include trust and mutual understanding of roles, skills, and responsibilities.

In addition to appropriate delegation, nurses need to feel comfortable that what they are delegating is within the education, training, and competence of that individual. Having a transparent education record may be useful so that staff can quickly determine whether someone can appropriately carry out a delegated intervention. If there is no trust, then the nurses may be hesitant to delegate, again hampering your care delivery model from functioning correctly.

In reviewing what you want in your care delivery model, think first about consistent and standardized structure. Do you want to manage and staff a care delivery model where the main components are different day to day, shift to shift? If you have a mix of nurses—RNs, LPNs, and unlicensed assistive personnel (UAPs)—due to staffing and scheduling, you may have different models daily. For example, you might have an all RN staff today, and tomorrow you have an all RN staff plus one LPN on the unit. How can you have a primary care model with an LPN? Do you or your staff treat the LPN like an RN? Or

how about those days when you are so short you will take anything, including more UAPs, because you cannot get enough RNs? If this describes your unit in any way, your care delivery model is inconsistent and not standardized. Because you do not have reliability in your model, staff become task oriented as players change. You may find you get outcomes that are inconsistent as well as staff who are confused about their own roles in providing care.

Here are some questions to ask yourself regarding your care delivery components:

- Are you clear regarding what you are accountable and responsible for? How about your staff?
- Does the shift feel calm even when busy (organized), or does each shift feel frenzied and rushed (chaotic)?
- Are you and your staff clear on how patient care is organized among them and other disciplines, or does it seem like staff are duplicating efforts or some tasks are not getting done each day?
- Does each person understand his or her role, the skills of others, and responsibilities to the whole team?
- Are these components clearly defined in your current care delivery model?

Using these components, how would you structure your staff and care differently? As mentioned in Chapter 2 with the Triple Aim, Medicare's Shared Savings program, and accountable care organizations, the care delivery models we have today will be insufficient to meet the outcomes in tomorrow's health care environment. For some of you, maybe that tomorrow is today. The following sections will help you understand the various care delivery models that may work for you, including team, modular, primary, and functional nursing.

Team Nursing

Team-based nursing is the concept of RNs, LPNs/LVNs, and UAPs (such as nursing assistants) working together to identify, plan, implement, and evaluate patient-centered care. The key concept is that the team works together toward comprehensive nursing care. Different types of personnel can meet the goal of team nursing, including the RN, LPN, *and* UAP. Your goal as a nurse manager is to ensure that the care of the patient is distributed among these team members to accomplish the plan of care. The goal is to increase the involvement of the RN in planning and coordinating care and delegating interventions as appropriate. The benefits and potential issues of team nursing are described in Table 3.1.

TABLE 3.1
BENEFITS AND POTENTIAL ISSUES OF TEAM NURSING

Benefits	Potential Issues
Overall unit staff costs less.	RN does not delegate appropriately.
Attitude of "it's not my patient" decreases.	Workload is not distributed evenly.
Opportunity for mentoring increases.	Lack of communication can be detrimental.
Leadership skills of RN in team increases.	Patients may be uncomfortable with multiple caregivers.

STAFF RN'S EXPERIENCE WITH TEAM NURSING

During my last month working as an RN in the labor and delivery unit of a busy suburban hospital, I had occasion to experience team nursing at its finest. The shift began like any other; my very sweet patient was in labor with her

second child, and her pain was intensifying. The patient refused an epidural, stating that she had one during her first labor and it was ineffective. Eventually the pain became too much, and the patient changed her mind. Within 20 minutes of her request, the patient's epidural was placed by the anesthesiologist, but something was obviously wrong. Within 10 minutes of completion of the procedure, the patient stopped breathing, and the fetal heart tones dropped considerably. The epidural medication had migrated up the epidural space as opposed to down and had paralyzed the patient's diaphragm. This required the baby to be delivered while the patient was unconscious and being ventilated with a bag and mask.

It was amazing to have a capable and organized RN team leader who responded to my call out immediately and mobilized a group that included the anesthesiologist, the OB/GYN, several RNs, and ancillary staff members who assisted in the rapid delivery of the baby and reversal of the patient's epidural. I worked more than 14 years in this role and had never experienced this particular patient situation. The fact that the patient suffered respiratory arrest not only was quite alarming but could have easily been disastrous had my team leader and coworkers not mobilized so quickly and been competent and willing to help.

–Toni Tanzella, MSN, FNP

Modular Nursing

Modular nursing is a modification of team nursing, where there is a greater focus on the patient's geographic location

for staff assignment (Yoder-Wise, 2003). In this model, the unit is divided into pods, or modules, with the same consistent RNs, LPNs, and/or UAPs. As evidence-based hospital design continues to advance and is incorporated into our facilities, components of this nursing care delivery model will already be incorporated by design. If your hospital is older or has not incorporated evidence-based design, then this model may be beneficial to you. The space in which care is provided has a major impact on nurse productivity. Think about the time it takes nurses on your unit to walk and get needed supplies and see all their patients. Does it take time away from patient care? This model could improve your unit's productivity. Table 3.2 describes the benefits and potential issues of modular nursing.

TABLE 3.2

BENEFITS AND POTENTIAL ISSUES OF MODULAR NURSING

Benefits	Potential Issues
RN has opportunities for leadership development.	Staff may create subcultures on your unit.
RN focuses on planning and coordination.	Stocking each area with necessary patient care supplies increases costs.
Communication is more efficient.	Not all hospital structures are conducive to this care model.
Staff saves time through geographical closeness.	

Primary Nursing

Primary nursing is the model of care delivery in which an RN (usually teamed with a nursing assistant) provides all the care (that cannot be delegated to the assistant) to a small group of patients. Traditional versions of the

primary nursing model suggested that the primary RN was accountable for care 24 hours a day from admission to discharge (you might consider this version in an accountable care organization); however, the current model assigns accountability only for the length of the shift the RN is working.

The primary nursing model is typically the most expensive model, as it uses the most RNs (the highest-paid caregivers on the team), leading to higher RN hours per patient day. However, research has shown that higher numbers of RN hours lead to better outcomes and decreased adverse outcomes, even when total hours per patient day are taken into consideration (Blegan, Goode, Spetz, Vaughn, & Park, 2011). In non–safety net hospitals (safety net hospitals care for a higher percentage of low income, uninsured, and vulnerable populations), higher nurse staffing rates and a larger number of registered nurses were associated with:

- Fewer deaths due to congestive health failure
- Fewer incidents in which nurses did not note or initiate treatment in life-threatening situations (failure to rescue)
- Lower rates of infection, including infection after operations (postoperative sepsis)
- Fewer patients who were required to stay in the hospital for longer than expected (Blegan et al., 2011)

To determine whether this model would be cost effective for your unit, look at your quality data, such as pressure ulcers, falls, and hospital-acquired infections, such as pneumonia. Based on the research, with an increase in RN staff, how much money would be offset in improved outcomes? Table 3.3 describes further benefits and potential issues of primary nursing.

TABLE 3.3
BENEFITS AND POTENTIAL ISSUES OF PRIMARY NURSING

Benefits	Potential Issues
Limited number of caregivers for the patient	Higher staff costs
Improved nursing-sensitive patient outcomes	RN dissatisfaction with providing all care
Increased autonomy	Limited ability to build delegation skills
Improved skill development (self-reliance)	Failure of RN to ask for help when needed
Strengthened nurse-patient relationship	Uneven patient assignments

Functional Nursing

The functional nursing care delivery model has a task-oriented focus, in which particular functions are assigned to each staff member. To complete the care needed for all the unit's patients, RNs and other personnel are assigned various tasks. This could include assigning an LPN to pass all medications; an RN to complete all admissions, discharges, and transfers; and a nursing assistant to give all the baths. The charge nurse or manager usually decides who gets which tasks after considering team members' strengths and weaknesses. Typically, you see this in non–acute care facilities where there are fewer RNs and a greater numbers of LPNs and other UAPs.

NOTE

If done within the acute care setting, functional nursing should be done for short periods of time only, until more RNs are hired.

This model for the acute care setting has more potential issues than benefits. Table 3.4 describes the further benefits and potential issues of functional nursing.

TABLE 3.4
BENEFITS AND POTENTIAL ISSUES OF FUNCTIONAL NURSING

Benefits	Potential Issues
Lower staffing costs	Fragmented care
Large amount of work completed quickly	Task-oriented or technical nurses
Staff learn to do their tasks fast.	Decreased RN accountability and responsibility
	Diminished RN-patient relationship
	Poor evaluation and documentation of nursing care
	No one person has all answers regarding patient care.
	Increased risk for errors due to increased speed of completing tasks

Additional Support Teams

In addition to understanding your care delivery model, what other types of nursing support services do you have or need? Throughout this book, we look at other nursing and non-nursing support and resources. This next section describes the float pool and rapid response team. Both can have positive impacts on your care delivery model. Knowing that you have additional backup resources for your unit allows you to make informed decisions as you determine your staffing needs and prepare the schedule.

Float Pools

This type of resource has many names. Whether you call these nurses *float pool*, *per diem*, or *resource team*, all perform about the same function for the organization: Fill in schedule and staffing gaps as they arise. Although the float pool may not be a "unit" in the traditional sense, the staff are a unit as a group of nurses, their own culture.

If your organization does not have a robust float/per diem team, your unit-based RNs may be floated to cover shortages in other units. For many, floating an RN outside his or her specialty can cause anxiety, decrease staff satisfaction, and decrease morale (Dziuba-Ellis, 2006). Floating staff RNs in this manner is a short-term solution to your scheduling and staffing issues. When unit-based RNs are floated to an area outside their specialty, such as an orthopedic nurse to a medical unit, the organization reinforces that nurses can work as generalists, or task-based RNs. As health care and medicine advance, nursing care has become as specialized in all the different units, as have physician specialty practices. It is important to note that it takes a certain type of nurse to be successful float nurses, which means learning multiple areas of specialty care so that they remain competent in all areas and units in which they practice.

Floating should be considered a specialty. You should pay appropriate attention to hiring and training nurses who are a good match for this type of work. If you do not have a consistent care delivery model, with role clarity, then any nurse or staff that float to your unit is liable to make errors as they struggle to figure out their roles on your unit in providing patient care.

TIP

Having consistent unit-based staff is important for positive patient outcomes. A unit should strive to have no more than 10% of its daily staffing needs met by float or per diem nurses. Although float staff do maintain competency in multiple areas, your unit-based RNs are the experts for your patient population.

Having a dedicated float pool has several benefits and potential issues, as noted in Table 3.6.

TABLE 3.6
BENEFITS AND POTENTIAL ISSUES FOR A DEDICATED FLOAT POOL

Benefits	Potential Issues
Increases staff morale and satisfaction	Masks issue of higher turnover rates
Decreases turnover of dedicated floor staff	Unit-based staff may not get all their hours in to meet their FTE requirements before float staff are used.
Decreases potential for adverse events	Increases education costs for maintaining education across many specialties
Maintains specialization of nurses to their unit specialty	Treats float staff like outsiders or gives unfair assignments
Decreases costs from fewer premium labor or shift incentives	Easier for poorly performing RNs to "hide"

Two questions typically arise when considering whether to use a float pool:

1. How many RNs do we need in a float pool?
2. What type of RN is best for this position?

To figure the number of float RNs (or other staff) that may be needed, as well as your potential cost savings, you will need to look at your unit's and hospital's information as follows:

1. Choose a specific time period to review data for, preferably 6 months to 1 year. If there was a significant practice change that could affect the numbers, try not to include that time period, but start after that. You can annualize numbers if you believe it will remain an accurate reflection.
2. Identify the total number of hours used for traveling RNs, registry RNs, RN overtime, and RN incentive pay (your organization may or may not have incentive pay, and there may be some overlap in these dollar amounts, such as a travel RN who also gets overtime).
3. Determine the total number of dollars spent in each of those three categories. (If you do not use any one of those categories, obviously you will not include it.)
4. Divide the total number of hours used by 1,872 (0.9 full-time RN working three 12-hour shifts a week/52 weeks a year). Here you will get the number of full-time equivalents (FTEs) used. This number can start to be used as the basis for the number of float staff you and your organization may need.

   Total hours used by RN traveler, overtime, and incentive pay ÷ 1,872 = Total number 0.9 FTEs needed

5. You can also divide the total number of hours from #2 by the total amount spent in #3 to determine the average wage you are paying.

In looking at the final number, is there a cost savings? Typically a float RN makes less than the combination

of traveler pay, incentive pay, and overtime. So take the number from #4, multiple it by the expected hourly wage of your float RN before overtime (not a traveler RN, registry RN, overtime, or incentive pay). Multiply this by 1,872. Then subtract this number from #3. This is your *potential* cost savings. Here's the formula:

Total number of FTEs needed x
average hourly wage of a float RN
x 1,872

Subtract that number from #3
(total amount spent on travel RNs, registry RNs,
overtime, and incentive pay) = potential cost savings

Note: Although you will not be able to reduce all overtime and incentive pay, you may be able to eliminate all travelers. In a few exceptions, this might not be a cost savings if you are very good at utilizing your current resources!

Next, how do you determine how many FTEs are needed to float to each area? When figuring the hours for #2, you should pull these numbers by unit. If you divide the unit number by 1,872, you will get the number of FTEs for that unit. Now add up all like type units. The reason you want to break this out at a unit level is to determine the specialty areas that need the most and least help. If you need the most help in the emergency department (ED) but hire mostly RNs who are experienced floating to medical surgical units and telemetry, you will spend more time orienting them. You would rather hire experienced ED nurses to fill the need and then teach them to float other areas with less demand when your organization has the ability to do so. Here's the formula:

Total the total number of hours used for
traveling RNs, registry RNs, RN overtime,
and RN incentive pay ÷1,872 =
number of FTEs needed in float pool

TIP

Do not treat your float pool as a solution for poor nurse retention. This will still lead to poor staff and patient satisfaction as well as poor patient outcomes. If you have poor nurse satisfaction or high turnover, get to the root of the issue and fix it. Float pool should be there only to help out on an infrequent basis. In low-census months, float pool might be 10% of your unit's staffing, while in high-volume months, it may increase to 15–20% of your unit's staffing. Note that your float pool needs may also fluctuate related to your RN turnover rates.

In determining your float pool, here are the critical business questions you should be asking:

- **Do you have enough core resources?** That is, does your unit have a dedicated staff so that you do not have a high float-pool utilization?
- **How do you ensure that your float RNs are scheduled to their commitments?** This ensures that with your regular staff you will meet your unit's scheduling needs.
- **Are float RNs benefitted FTEs or not?** The preference is not, as you will increase your fixed expenses. Not having benefits decreases fixed costs—therefore, the reason you pay them a higher rate.
- **Will there be a gradual pay increase for committing to more shifts per month?** This increases your ability to cover more holes in your schedule with a dedicated float-pool RN.
- **Who will do their evaluations and monitor their practice?** You want to ensure that consistent evaluations and expectations will increase you and your staff's comfort when staffing them on your unit, knowing that these RNs are just as capable as other RNs on your unit.

- **What will you pay them?** Do you pay enough to incentivize them to work in this unit and to compensate them for the skill of floating? This will increase likelihood of more covered holes in your schedule.
- **Will you promise a certain amount of work or will there be no guarantee of any hours?** If you have no guarantee of hours, some RNs may work at multiple organizations to ensure they get enough hours, which may decrease their day-to-day availability to you to fill in on your schedule.
- **Will you expect a minimum number of shifts per month availability?** Expecting a minimum number of shifts will give you an idea of how many shifts you can count on from float pool to cover unmet scheduling needs on your unit.
- **Will you pay float staff holiday, weekend, and night premiums?** Paying premiums like the regular staff get will increase likelihood that this staff may work more than minimum expectations, again contributing to increased help when you need it.

Float pools provide flexibility in your organization to meet staffing demands as census fluctuates. Float nurses are typically also more cost effective than travel RNs, registry RNs, and overtime for your own staff. Having a proper size float pool will give your organization appropriate coverage to help you ensure safe staffing levels. Next, I discuss rapid response teams and their impact on your unit.

Rapid Response Teams

A rapid response team (RRT), high-acuity response team (HART), or medical emergency team is typically a team of

health care providers, such as a physician and/or advanced practice nurse (NP or CNS), RN, and respiratory therapist, who respond to high-acuity cases in an effort to decrease the risk of further deterioration, such as a cardiac or respiratory arrest. RRTs are invaluable to hospital and nursing staff.

CONSIDER THIS

Whereas some patients will deteriorate despite the best and adequate clinical care, some patients deteriorate because of inadequate care, which includes clinician training and/or staffing to meet the level of care needed by that patient for that patient's condition (Litvak & Pronovost, 2010). Track and trend RRT usage to ensure that your unit and hospital are getting to the appropriate root cause of RRT use, which may be wholly patient related and cannot always be controled, as opposed to things like staffing and training that we do control.

When looking at the support services for your unit, take into consideration the support the RRT can give your staff. Multiple studies have demonstrated positive outcomes with the implementation of an RRT. In one study, the implementation of an RRT was associated with a 50% reduction in cardiac arrests outside the ICU (Buist et al., 2002). As well, another study reported a decrease in unexpected ICU admissions and a significant reduction in the number of adverse events after an RRT was implemented (Bellomo et al., 2004).

As with most RRTs, they are staffed with personnel that have another primary responsibility during the shift. For efficiency, most hospitals do not have a dedicated team (and

I hope no one hospital has so many calls that it requires a dedicated team). Although a staff memeber's secondary job as a member of the RRT is just as important as his or her primary job, this provides a difficult task when staffing for the team as well as staffing a patient care assignment while this member is not on the unit fulfilling his or her primary function.

One way to maintain productivity of the nurse on an RRT is to have that nurse fill in as a non–direct care RN position, such as an admission, discharge, transfer (ADT) nurse or the resource or stat nurse for that shift. That way, if nurses are pulled to an RRT, they will not leave a patient assignment urgently. Another method is to use an ICU nurse during the day without an assignment and use an ICU nurse at night who has a light assignment, such as one stable ICU patient whose care could be transferred to another nurse immediately.

Here are some items to consider for your schedule and staffing if you do not have an RRT:

- **Do you have an expert nurse on each shift?** There should be a resource on each shift who has the experience and competence to assist your newer nurses. Night shift tends to have more new graduate RNs and fewer resources than day shift. Ensure that the schedule has an expert each night to help triage and assist if a patient starts to deteriorate.
- **How many novice or new grad RNs should one shift have?** With the nursing shortage, you may not be able to prevent having several newer nurses on any one shift. But you can have a plan in place where expert nurses help the newer nurses better manage their patient load in addition to providing a mentored experience.
- **What are the resources on night shift for RNs?** There are typically fewer management, educators, and advance practice RNs on night shift, if any. Make

sure it is clear to your staff whom to call and who their resources are after hours. Although you may have an administrative supervisor on during nights, typically he or she is very busy and may not be able to get to that nurse to help immediately. Schedule resources to occasionally flex to night shift, such as the educator, who can assess and work with newer staff during the shift.

- **How do you match up novice RNs with more-experienced RNs as a resource?** After precepting is finished, consider partnering your novice or newer RNs with more experienced RNs in a mentorship relationship. It is helpful if they are on the same shift; however, the connection between the two is most important for a successful partnership. Staff who do not have the same resources as the day shift will appreciate this additional support.
- **Is the charge RN accessible to novice RNs during the shift?** If the night-charge nurses each takes a patient load, this means that they will not always be ready to help the newer or novice RN. The charge RNs should be able to round on all patients and be ready to help with the staff RNs' patients as the need arises without compromising the care of their own patient loads. This is also a great opportunity to build the skills of those newer or novice RNs at night.
- **Have the charge RNs been given the time in their shift to mentor all staff?** Consider the role of the charge RN on both night and day shifts. As you plan the care delivery model and staff your unit, take into consideration the leadership role the charge nurse plays in leading and teaching your RNs on that shift.

RRTs provide an additional layer to assist your staff, particularly your more novice staff, in taking care of emergent issues before they become critical.

Location, Location, Location!

As you have learned, you have many care delivery models to consider, each with a unique impact on your staffing and scheduling. An additional consideration for your care delivery model, productivity, and staffing is the geography of your unit. What is the shape of your unit—racetrack, corridor, or radial? How does each of these floor shapes impact your model and productivity? If you have a corridor-shaped unit, can you have an efficient functional nursing care model? Or if you have a radial-shaped unit, how can you deliver care efficiently in a team-based approach? Again, how do you develop a care delivery model and staff for it in a way that leads to quality patient care? Chow, Hendrick, Skierczynski, and Zhenqiang (2008) note that although no consistent, statistically significant relationship has been found between the various architectural types and nursing time spent with patients, it does impact the distance they travel in a shift.

As noted in the same study by Chow et al. (2008), individual nurses across all study units travel between 1 and 5 miles per 10-hour daytime shift, and nurses walk less distance during nighttime shifts when most activities and patient tasks decrease. On night shifts, the average distance traveled ranges between 1.3 and 3.3 miles per 10 hours (Chow et al., 2008). If you were the nurse who walked 1 mile, you might be more productive than and not as tired as the nurse who walked 5 miles in a shift. You might be able to contribute some variation in distance walked to the nurse's aptitude to plan well or not, but regardless, it is something you must consider and help correct. Although you might not notice walking variations impacting your productivity numbers, you might notice it in nurse fatigue and burnout.

In addition to shape of the unit, other various design elements can improve your staff's efficiency and the unit's productivity:

- Single-patient rooms (tend to be larger than double, and more procedures can be done in room)
- Visible hand-washing sinks in each room
- Gel dispensers in all general and patient care areas (every 20–40 feet)
- Computers at the bedside or right outside the room
- Enough computers for everyone to document immediately
- Decentralized nurses' stations (no single nurses' station)
- Multiple supply closets, and dirty and clean utilities (not just one positioned in a central location)
- Multiple medications, administration dispensing machines or cubicles (not just one located in a central area)

The shape and layout of your unit does have an impact on how your staff function and their efficiency and effectiveness in meeting patient needs. Walk your unit and take notes on how your unit may impede or assist your staff.

Summary

Here are the key points covered in this chapter:

- Understanding and standardizing your care delivery model has a major impact on your staffing.
- There are multiple care delivery models, including team, primary, functional, and modular.

- Staffing your unit should be in harmony with your care delivery model.
- Have one consistent care delivery model each shift, each day.
- Float teams can offer another level of support.
- Rapid response teams assist in providing another level of support to your unit and help you maximize the scheduling of your novice staff.
- Layout of your unit can impact your staff's time and fatigue levels.

4

Maximize the Capacity and Capabilities of Your RN Workforce

Sacred cow: "A nurse is a nurse is a nurse."

How many times have you heard someone say that? Often this misunderstanding comes from someone in a non-nursing department. Disappointingly, I have also heard this come from nursing colleagues. This mentality is then reinforced when we use such calculations as nursing hours per patient day for budget, staffing, and scheduling. It treats everyone the same. How do you take into consideration a nurse who has 1 year of experience with one who has 15 years of progressive experience? Can an LPN under the supervision of an RN do everything an RN can do? If someone says, "A nurse is a nurse is a nurse," that person obviously has never read the legal scope of practice for all nurses.

In this chapter, you will learn how to be innovative with nursing practice through collaboration with stakeholders. Innovation in nursing practice will allow you to do things in your care delivery model and how you staff that may look very different from how it looks today. Remember, at one point in our nursing history, we were not allowed to use a stethoscope. In order to successfully innovate, you will need to know your professional and specialty organization's scope and standards of practice as a framework for innovative practice, the self-determination of your staff, state laws and regulations, and professional liability and risk-management concerns as well as your organization's policies and procedures. Then, you will review education, competency, experience, and certification with your nurses and unlicensed assistive personal and how it may or may not impact staffing and patient outcomes.

Understanding the Legal Scope of Practice

Have you ever created a schedule where you are happy if you just get all the holes filled? Did you treat an LPN the same as an RN on the schedule? Did you staff your unit treating the new graduate RN the same as the experienced RN? Did you really look at the scope of practice for those on your unit, those who may impact your staffing and scheduling, and take those factors into consideration? When you are staffing and scheduling your nurses and other personnel, you are setting them up for success or failure in providing quality patient care. In order to effectively staff and schedule, you must understand your staff's legal scope of practice and how their practice may impact your productivity and outcomes.

The nursing profession includes many different types of licensed nurses: registered nurses (RNs), licensed practical nurses/licensed vocational nurses (LPNs/LVNs), and advanced practice registered nurses (APRNs), such as certified nurse practitioners (CNPs), certified nurse-midwives (CNMs), clinical nurse specialists (CNSs), and Certified registered nurse anesthetists (CRNAs). Each type has a legal scope of practice that is governed by the state board of nursing in the state for which that nurse or APRN practices. The legal scope of practice is state specific and can be different for each type of nurse and APRN. (We review more on APRNs in Chapter 5, "Analyze and Allow Everyone to Fully Practice.") In order to fully utilize your staff to their highest current licensed ability, both you and they need to understand their legal scope as defined by your state board of nursing. As you work on innovative practice and staffing, you will need to partner and work with your state board closely.

NOTE

Many states have enacted or will soon enact protected title laws. This means that only RNs or LPNs may call themselves a nurse and only those who have been legally granted the APRN title can call themselves a CNS, CNP, CNM, or CRNA. This type of law is enacted to protect the public and to stop those who have not been granted these titles from using them. In some states, such misuse may be a felony.

Scope of practice, at minimum, is restricted to what the laws, rules, and regulations in your state permit based on what type of nurse or APRN you are. It is important that you read your scope of practice for the state in which you are licensed and practicing as well as the scope of those you work with and those you staff and schedule. Effective

and legal delegation cannot happen unless each licensed individual is aware of his or her own scope and what can or cannot be delegated to others. You can get to your state's and other state's nursing boards and nurse practice acts through an Internet search or via the National Council of State Boards of Nursing website (https://www.ncsbn.org/contactbon.htm).

CONSIDER THIS

Your state legislators are the ones who have final authority to add, alter, or decrease your scope of practice as an RN or APRN. Go to your state nurses' association website and look for the political action committee (PAC) work. Usually they have vetted candidates for state office based on issues important to nursing.

Working With Stakeholders on Innovative Practice

Your state's nurse practice act does not cover every act or every scenario that may come up. This can be good and bad. Let us look at why this could be bad first.

In a past role as director of clinical practice for 23 hospitals in seven states, I read every state's nurse practice act, multiple times. Sounds like fun, right? The main reason I read them was to determine whether something was within scope of an RN, LPN, or APRN as we were developing innovative or standardized practice guidelines and policies. More often than I would have liked, the legal scope of practice was "silent" on the issue I was researching. So, if you are looking for a clear-cut answer on a scope issue, the bad news is you may not find it.

TIP

Many state boards have developed opinion papers that discuss their take on whether something is within or out of scope, so be sure to read those to see if they have a perspective on a specific task or intervention. For example, your state's scope-of-practice documentation may be silent on an RN providing mild to moderate anesthesia, but there may be an opinion paper that declares the state board's opinion on the matter.

Now for the good news: Everything is not defined in a scope of practice; in fact, more is not defined than is. How can that be good? This lack of definition gives you the ability to be innovative with your nurses. So, how do you approach doing something innovative with your staff? With the right process and partnership with your organization and the state board, you might be able to pilot or do an innovative practice!

NOTE

Practice will always evolve positively as long as practice innovation continues to be driven by nurses.

So what are the steps to creating innovative nursing practice? Start with the following resources and review the desired innovation with multiple stakeholders:

- Professional and specialty organization's scope and standards of practice
- Self-determination
- State laws and regulations

- Professional liability and risk-management concerns
- Organizational policies and procedures (ANA, 2012c)

These items are discussed in more detail in the following sections.

Professional and Specialty Organization's Scope and Standards of Practice

In addition to the ANA's Scope and Standards of Practice, many specialty organizations have a defined scope or position paper on this topic. The following organizations have a scope-of-practice or position paper:

- American Nurses Association (ANA)
- American Academy of Nurse Practitioners (AANP)
- American Association of Nurse Anesthetists (AANA)
- American Association of Critical-Care Nurses (AACN)
- American College of Nurse Midwives (ACNM)
- Oncology Nursing Society (ONS)
- National Association of Pediatric Nurse Practitioners (NAPNAP)
- Society of Pediatric Nurses (SPN), a collaborative effort of the ANA and NAPNAP
- American Psychiatric Nurses Association (APNA)

These are helpful resources designed to guide decision-making.

Self-Determination

As you think of practice innovation, think about self-determination. Self-determination is when nurses determine whether they are able to perform the act or intervention safely. This includes consideration of their skills, expertise, and the clinical setting and the skills and expertise of other members of the health care team (ANA, 2012c). In writing your plan, include these items:

- Define the individual who can perform the act or intervention.
- Describe the education, training, precepting, and evaluation method you will use to determine competence. Do not forget ongoing evaluation.
- Determine in which unit or setting this act or intervention can be performed. Are there units in which this cannot be done?
- Identify whether there is a need to have additional support available during the act or intervention. Describe what that support looks like.
- Determine the desired outcome, how you will measure it, and to whom you will report it.

This information will inform your plan, policy, and procedures as you write them.

State Laws and Regulations

If you have not already, you will need to review your state's laws and regulations (nurse practice act) and opinion papers. Consider the following:

- Does the law or regulation discuss an act or intervention, or is it silent on the potential practice? If the law or regulation speaks to it and allows it, great, you can proceed to the next step!

- If the practice is not allowed, schedule a time to talk or meet with the state-board staff member in charge of practice. Can you work on a pilot to demonstrate outcomes? Is there flexibility to do the innovation a little differently? Bring any research or articles that support the practice as well as a detailed plan on the innovation and why you want to implement it.

State laws and regulations need to be followed at all times. If a law or regulation does not make sense, there are avenues to take to change it. Although that may seem like an impossible task, your state nurses' association may be the place to start to look for help.

Professional Liability and Risk-Management Concerns

An important step is to learn how your hospital's legal and risk department personnel will react to this innovation. Will they see it as something they do not want the hospital to engage in due to the additional risk it might bring? Unfortunately, many nurse managers do not understand that these departments provide support services, so when the folks from legal and risk departments tell them no, they go no further. Here is what you need to consider when working with others from this department:

- Work with others in this department to help them understand operationally why this is important.
- Find a key executive who is supportive of this change.
- Approach individuals in the legal and risk department with the attitude that you are seeking their help to make this innovation workable or palatable to the organization's level of risk taking.

- Schedule a meeting with all key stakeholders to discuss the change, including the executive who supports it.
- Do not take the first no as the answer!

The legal and risk department has your organization's well-being in mind. Although at times they may seem like barriers, employees in this department are not all clinicians and may need extra assistance and time in understanding your request and needs.

Organizational Policies and Procedures

Many of us work in an environment that has a policy and procedure on everything, which actually stifles innovation and true evidence-based practice. Does a policy or procedure need to be changed, rewritten, or retired to allow this innovative practice? The great thing about organizational policies is that they are easier to change than state law! Consider this:

- Who is the owner of the policy? Talk with him or her about the desire to change.
- Did you talk with your boss, and did your boss talk with the chief nurse executive (CNE)? The CNE is usually the individual who signs off on the final copy of the policy and approves all nursing practice. Is there organizational approval to move forward?

No one said being innovative was easy. Nursing practice will need to advance to meet future care delivery models as our health care system changes. This will have an impact on how you staff and schedule. The nursing care of your patients tomorrow will be delivered through care delivery models that may not exist today and are waiting for you to develop them.

Accounting for Competencies, Years of Experience, Education, and Certification

Do you take into consideration the competencies, years of experience, education, and certifications of your nurses and APRNs when you create your schedule? What impact would it have on your patient outcomes? An added complexity of scheduling may be due to your staff having various competencies, educational levels, years of experience, and levels of certification. Maybe you have several certified oncology nurses one day and only one the next. This may be due to many factors, including the expense in paying for certifications, but how much time do you even spend trying to make the schedule based on these factors?

CONSIDER THIS

Years of experience, based on research, did not have an impact on patient outcomes (Kendall-Gallagher, Aiken, Sloane, & Cimiotti, 2011). Why? Someone may have 20 years of experience, which in some cases may mean 20 years of building education, certification, and competencies, while others stayed stagnant, not progressing to a Bachelor of Science in Nursing (BSN), not becoming certified, or not maintaining competencies. In other words, they might have repeated their first year of nursing 20 times. So do not equate years of experience with competency.

We know that certification and a BSN-prepared nurse lead to better patient outcomes. These outcomes include lower 30-day mortality and failure-to-rescue rates for

surgical patients. Every 10% increase in baccalaureate-prepared nurses with certification has been associated with a 2% decrease in the odds of a patient dying (Kendall-Gallagher et al., 2011). So why would we not ensure that every nurse has a BSN (or is in school) and is certified? Most importantly, why is it OK for our staff to have varying levels of nursing competency, education, and certification shift to shift, day by day if we know it does make a difference in patient care and outcomes?

I do not want to make this an argument about BSN versus associate degree or diploma nurses, but when an organization such as the Institute of Medicine creates a report such as the "Report on Nursing's Future" in which even physicians argue that 80% of RNs should be BSN prepared by 2020, it is time to get on board. Support, encourage, and push your staff in completing their advance degrees and certifications.

Student Nurses

So, you have created this great schedule (or you think you have), and along comes an administrator or faculty member of a nursing school wanting to place students on your unit. What are you thinking? I hope you are the type of manager who is excited to be involved in preparing for the future generation of nurses.

Just as we need to be innovative with our staff, we can partner on being innovative with nursing students. They need clinical experience, and you have a ton of duties that need to get done that are clinical in nature! Do not think of students as a drain on your resources but as an extra free resource who needs experience. You may be wondering how a nursing student can actually help your staffing and productivity. First, you should change your mind-set. Here is one example of innovation with nursing students.

CREATIVE PARTNERSHIP BETWEEN STAFF AND STUDENTS

Hospitals traditionally provide a wonderful proving ground for training in assessment, time management, teamwork, and care planning. Finding an opportunity to teach nursing students that would not tax nursing load while ensuring value gave rise to a creative solution. The model that was utilized to provide an excellent learning experience supported staffing a required, quarterly house-wide patient assessment. As part of the National Database of Nursing Quality Indicators (NDNQI), patient-safety assessments (particularly for pressure ulcer prevalence and incidence) require significant manpower to perform effectively.

In an effort to staff this, we initially sought staff who could be removed from the bedside. This proved to be a daunting request, especially during high-volume, high-acuity cycles. We proposed to have a nursing student accompany a trained survey nurse to assist with the study. The student was able to facilitate positioning and patient care as needed while appreciating observational teaching moments, including a skin assessment and prevention and intervention measures.

Upon completion of the day, each student had encountered and observed on average 60 patient assessments. This not only increased the students' exposure to the serious process of monitoring patient safety and outcomes but also minimized the impact to staffing and reduced the number of staff needed to complete the study.

–Judy L. Gates, RN, MSN, BC, CWS, FACCWS

How do you find those innovative partnerships with your unit and the nursing students? If your organization has someone who coordinates the nursing colleges and students, connect with him or her first. Then do the following:

1. Find out what each semester's nursing students need for experiences.
2. Plan ahead: Look at your unit's needs, and match them up with specific semester's experiences.
3. Talk with your contacts at the nursing school. Although chances are what you need help with will not account for an entire clinical rotation, it may give a great clinical experience for a day or two that also helps with your unit's workload.

Remember, nursing students practice under the license of their instructor and their nurse preceptor. They do not have scope of practice, because they are not licensed. The nursing school will work with you to ensure the students do not go beyond their student scope.

New Graduate RNs

So we move from the free resource for your unit, the nursing student, to the most costly and resource intensive, the new graduate RN. (New graduate RNs are typically defined as those within their first 12 months post licensure.) Talk about implications for your schedule and staffing! Outside of scheduling their orientation to your unit and those first several months, continuing to work with new graduates through the first year is important. After they have "graduated" from their orientation and no longer have a preceptor helping them care for patients, we frequently add them to the schedule as if they were equal to any other nurse.

The National Council of State Boards of Nursing (NCSBN, 2012) and the state boards of nursing noted that over the years, there have been many issues with the training and retention of new nurses. One key finding is the inability of new nurses to properly transition into practice, which can have serious consequences:

- New nurses care for sicker patients in increasingly complex health settings.
- More than 40% of new nurses report making medication errors.
- New nurses feel increased stress levels, which is a risk factor for patient safety and practice errors.
- Approximately 25% of new nurses leave a position within their first year of practice.
- Increased turnover negatively influences patient safety and health care outcomes (NCSBN, 2012).

The United States is currently facing a nursing shortage, so schools have increased production of RNs, and hospitals have hired increasingly larger numbers of new graduate RNs. Onboarding large numbers of new graduate nurses leads to higher rates of preceptor burnout, higher turnover of new graduate nurses in their first year of employment, and higher staffing costs with no improvement in outcomes. To combat this issue, some hospitals have opened what has been termed a *new graduate unit*, *designated transition unit*, or *nursing education training unit*. Health institutions with transition programs have seen a marked drop in attrition, along with improved patient outcomes (NCSBN, 2012). The Institute of Medicine in its "Future of Nursing" report calls for the implementation and evaluation of nursing residency programs.

Here are some points to consider when staffing and scheduling new graduates:

- Have they completed all competencies needed to work unrestricted on the unit?
- Should their productivity be the same as a nurse who is not a new graduate?
- Do you start the new grad RNs with a patient load the same as the more experienced RNs, or do you gradually increase their workload as they gain experience over many months?
- Do you expect your other nurses to pick up the differences in productivity in order to meet your budget of FTEs and hours per patient day?
- Do you work with your finance department and boss to assign a different weight to your new graduates as partial productive FTEs?
- Do you work with your charge nurses or staff to ensure the gradual increase in productivity over the first year?

See Chapter 9, "Examples of Staffing Documents and Unique Care Delivery Models," for more on innovative transition units.

Experienced RNs

The experienced RNs, the ones who are not new graduates, hopefully make up the majority of your workforce. One area of recent focus for the experienced RN has been what the literature calls the *aging workforce* and *wisdom at work*.

CONSIDER THIS

One thing that always irks me is when the term *aging workforce* is used to mean experienced or expert nurse. It implies in some sense that older nurses must be experts or have many years of experience behind them. Do not automatically assume the 60-year-old nurses have 40 years of experience. They may have the same 20 years of experience as the 40 year olds!

The terms *aging workforce* and *wisdom at work* are not synonymous, but they are related. Aging workforce refers to those nurses who are older and may be approaching retirement in the next 10–15 years. Wisdom at work relates to keeping experienced nurses in the work setting rather than losing their knowledge, which must be relearned by younger, less-experienced nurses, with resulting impacts on cost and organizational performance (RWJF, 2010). Many organizations have attempted various methods to retain these nurses. In a study supported by the Robert Wood Johnson Foundation from 2006–2010, of the 13 initiatives aimed at retaining experienced nurses, 4 were considered staffing projects (RWJF, 2010). These four staffing initiatives included:

- **Using Closed Staffing as a Nursing Retention Strategy:** A nurse staffing model that keeps nurses on their home units rather than assigning them to other units as needed
- **Specialized Admission Role to Ease Patient Gridlock and Help Retain Experienced Nurses:** A program relying on specially designated and experienced admission nurses to facilitate patient admission

- **Impact of the Base Staffing Model on Retention of Experienced Nurses:** A nurse staffing model that staffs for frequent peak occupancy rather than average occupancy
- **Giving Experienced Nurses More Control Over Patient Flow, Discharge, and Admission:** A program that uses experienced nurses to manage patient admission and placement (RWJF, 2010)

Results of these initiatives varied; however, case studies of the top-performing organizations reported that successful retention of experienced nurses focused mainly on two factors:

1. Corporate culture of valuing experienced workers
2. Structured, organization-wide focus on management and developing talent (RWJF, 2010)

If you have an aging workforce, these are definitely initiatives to try on your unit or in your organization.

LPNs/LVNs

LPNs/LVNs are nurses who practice under the supervision of the registered nurse or physician. (There is typically no difference in practice between an LPN and an LVN, just the state's preference in naming convention.) Just like the RN, the LPN/LVN has a scope of practice defined by each state board outlining his or her role and functions within the license. The LPN/LVN educational requirement is approximately 1 year and can be obtained at a vocational school or community college. Although LPN/LVNs can practice in a hospital setting, more hospitals are moving toward an RN nursing staff, because evidence shows higher RN hours improve patient outcomes (Needleman, Buerhaus, Mattke, Stewart, & Zelevinsky, 2001).

When hired into the acute care setting, LPNs/LVNs are usually part of a team-based nursing care delivery model on a medical surgical unit, where patient acuity is less than in a progressive or intensive care setting. In a team-based approach, the RN delegates interventions and tasks to the LPN, and the LPN documents and reports back to the RN as the team lead.

NOTE

When an LPN/LVN is working with an RN, he or she is working under the delegation of that RN, so RNs may be afraid they may risk losing their license if the LPN/LVN does something wrong. It is important to educate both RNs and LPNs/LVNs that each has their own legal scope of practice. If LPNs/LVNs do something that violates their own scope through their own actions (not from inappropriate delegation but by acting independently), they will be held accountable for their own actions. RNs may be held accountable if they delegate something to LPNs/LVNs that is beyond their scope or competency.

There are many benefits to using an LPN/LVN on the team, particularly reduced costs in staffing. Remember, the research does show that the more RN hours per patient, the better the outcomes (Needleman et al., 2001). Keep in mind the cost of adverse events and hospital-acquired conditions. These costs may outweigh the savings of not going to an RN-only nurse model. These costs and benefits will need to be reviewed at your unit level to determine what is best for your patients. (Further benefits and potential issues of team-based nursing are reviewed in Chapter 3.)

Here are some things to consider when staffing and scheduling an LPN/LVN:

- Understand his or her scope of practice.

- If he or she is able to do additional tasks with certification, such as IVs, ensure he or she has the certificate on file and it is current.
- Ensure the RNs scheduled at the same time understand the LPN/LVN scope of practice.
- Make sure the RNs scheduled at the same time feel comfortable and are knowledgeable about appropriate delegation.
- Be sure the LPN/LVN understands the chain of command and takes direction from the RN for all aspects of the nursing process.
- Do not schedule the LPN/LVN with higher numbers of novice or newer RNs.

Depending on your care delivery model, LPN/LVNs can be additional resources for your team. Ensure your RN staff are knowledgeable in delegation principles and that your RNs know their role with LPNs/LVNs.

UAPs

UAPs (unlicensed assistive personnel) are used in many areas across the acute care setting. Typically, UAPs consist of nursing assistants, sitters, patient care assistants, and other non-licensed health care providers; however, they may hold certifications. UAPs should always work under the direction of an RN, LPN/LVN, or other licensed professional. UAPs do have some formal or on-the-job training. The use of these individuals may be part of a primary nursing model (the sole support of the RN) or part of a team-based approach. UAPs do save a unit money and assist the nurse in completing tasks or interventions that can be delegated and do not require a license to perform.

NOTE

What is the difference between a nursing assistant and certified nursing assistant (CNA)? CNAs attended an approved school (regulations governed by the Center for Medicaid and Medicare Services [CMS] and successfully passed their certifying exam.) Nursing assistants do not have a certification and may have been educated through on-the-job training. Different hospitals may call nursing assistants different names, including patient care technicians. CNAs have a scope and fall under some type of state regulation, possibly the state board of nursing. CMS regulations require nursing assistants to be certified in nursing homes and home health care. Nursing assistants do not fall under the scope of the state board of nursing.

Sitters are UAPs who "sit" with patients who may be confused, at risk for falls, or on suicide precautions. Sitters may or may not perform nursing-assistant functions while at the patient's bedside, depending on whether your unit or organization has chosen to orient and determine their competency in providing that level of care. Typically, sitters do minimal hands-on care with these patients. Sitters may be an additional cost to your unit, unlike other UAPs. Due to your not being able to predict the need and usage of a sitter, they may cause you to exceed the budget for your care delivery model. However, it may save the overall organization money in offset costs for reductions in falls. While considering the costs of sitters for your unit, a recent study found that high RN overtime and collective inexperience were associated with greater sitter use (Rochefort, Ward, Ritchie, Girard, & Tamblyn, 2011).

CONSIDER THIS

If you are considering or have a sitter program, look at the cost benefit of training the sitters as nursing assistants. It is an additional cost to

have an individual sitting at the bedside who cannot perform basic personal-care tasks, such as bathing and turning. Remember: Based on your organizational policies and principles of delegation, an RN cannot delegate a task to anyone unless he or she knows that person received the proper training and is competent to perform that task—even a task as simple as a bed bath or ambulating the patient to the bathroom.

For evaluation of benefits over potential issues of the use of UAPs in your care delivery model, review Chapter 3 and the various nursing care delivery models.

Unit Clerks/Ward Secretaries

Whatever you call this individual on your unit, unit clerks/ward secretaries serve a vital role in a paper or hybrid medical record world. They also are the face of your unit, greeting patients, family, and physicians. Traditionally, this role has impacted the nurses positively by decreasing the paper work burden through taking off orders, calling in orders, and facilitating the flow of patients. Many nurse managers have found as they transition to an electronic health record (EHR), including computerized provider order entry (CPOE), the role of the unit secretary has changed, evolved, or become unnecessary.

In a world where physicians enter their own orders, and orders are automatically sent to the corresponding department, managers have found that they have less need for this individual in the current role. As you implement an EHR, here are some points to consider for your unit clerk staffing:

- Do you need a unit clerk on every shift?

- Do you need a unit clerk only during certain high-call-volume times?
- What other tasks completed by the unit clerk might be made automatic?
- Are there tasks not getting done that now can be delegated to this individual?
- Can you share a unit clerk across multiple units instead of one for each unit?

As technology changes, the role of the unit clerk has evolved. As you look for efficiencies in your budget and staffing, this may be one area of opportunity.

Summary

Here are the key points covered in this chapter:

- A nurse is not a nurse is not a nurse!
- All licensed nurses have a scope of practice; read them all.
- To create innovative nursing practice, you will need to work with a whole host of stakeholders.
- Remember, innovation and change do not come easily. Someone might tell you no the first time you ask.
- As your organization adopts an EMR, how does that affect your staff and their time?
- Understand the nursing players on your unit, their scopes, and their abilities so you can maximize your staffing.

5

Analyze and Allow Everyone to Fully Practice

Sacred cow: "Only an RN can do this."

We have all heard at some point that only an RN can do something. Sometimes it is true. But sometimes it is just that we do not really know what the rest of our health care team can and does do every day. Although I focus mainly on nurse staffing in this book, you cannot look at staffing or your care delivery model without considering the other disciplines on the team. Care delivery does not happen with nurses only; nurses and patients rely on a team of professionals to help deliver that care. Depending on your model, a physician or nurse may lead the care. Models that use a whole host of disciplines usually provide the highest quality of care.

In this chapter, we will look at the other important members of the health care team, their practice, and how they can impact staffing. We also discuss unlicensed professionals in this chapter, and I encourage you to keep your mind open about how their practice can help you.

Assessing the Impact of All Staff and Disciplines on Patient Care

It is important to understand the role and scope of other disciplines in the hospital and on your unit. This understanding will continue to drive the evolution of your care delivery model and clarify who might be best for which task. For example, the clinical nurse specialist is used frequently in a nurse educator role on a unit instead of taking advantage of his or her full scope of advance practice in your care delivery model. As well, do your nurses do medication reconciliation? What if a pharmacist performed that role instead? Would that impact your staff's productivity? Or, do you have case managers who focus on discharge planning? If not, would that free up time for your nurses to do other things? As you can see, understanding the roles of others gives you insight into who can do the work and how it can be redesigned to be more efficient and effective.

NOTE

Many more individuals, such as physician assistants; physical, occupational, and speech therapists; and dieticians, impact the team, but they are not covered in this chapter. However, they are just as important to your care delivery model, so make sure you know their roles as well.

Working With Stakeholders on Innovative Practice

When it comes to innovation in practice for APRNs and others, use the same process of stakeholder collaboration as noted in Chapter 4. The difference may be based on your state if the professional is governed by a regulatory agency or board. For instance, there is no board for respiratory therapists (RTs) in Alaska. So, the question for RTs in that state is who determines practice, and who should be at the table when discussing practice innovation? In the following sections of this chapter, I discuss other disciplines and their roles and give examples of their impact on the unit.

Advance Practice Registered Nurses

The APRN Consensus Model for Regulation (2008) designates four advanced practice registered nurse (APRN) roles:

- Certified nurse practitioner (CNP)
- Clinical nurse specialist (CNS)
- Certified nurse-midwife (CNM)
- Certified registered nurse anesthetist (CRNA)

Each role will have an impact on your staffing and scheduling, whether your unit or organization employs these individuals or these individuals have an individual practice.

NOTE

The major issue with practice innovation with APRNs is that the hospital's Medical Staff committee does not allow them to function to the extent they are licensed. Many blame the hospital

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for restricting APRN practice. Please understand that the Medical Staff committee, which has the responsibility for overseeing quality at the hospital and governs itself (granted and regulated through the Centers for Medicare and Medicaid Services, or CMS), is a separate entity from the hospital. Hospital administration personnel cannot tell the medical staff that they have to do something; however, hospital administration personnel can work with the Medical Staff committee to progress their thinking.

Many staffing and scheduling tools do not take into consideration these APRN roles as individuals (as employees). I am challenging you to think about how you can schedule and staff with these individuals as if they were employees to enhance your unit. If you have these individuals coming to your unit as non-employed members of medical staff, they still have an impact on your unit's flow and how you schedule, such as improving discharge timeliness, addressing patient and clinician questions quicker, and attending rounds that should facilitate and collaborate with the team on the patient's care plan toward his or her discharge. (I discuss the latter more in Chapter 6, "Recognize, Manage, and Maximize Your Variability.")

NOTE

As you look at the titles, you may be thinking, I have never seen a CNP. *Do not worry, they are NPs. The APRN Consensus Model for Regulation was published in 2008 with the support of many nursing and advance practice nursing organizations. The purpose was to standardize the titles and scopes of these APRNs across the country.*

Certified Nurse Practitioners

According to the APRN Consensus Model for Regulation (2008) the CNP, or simply nurse practitioner or NP, provides care along the wellness-illness continuum through a dynamic process in primary and acute care settings. CNPs are prepared to practice as primary-care CNPs and/or acute care CNPs, which have separate national consensus-based competencies and separate certification processes (APRN, 2008). A study in the *Chest* journal found that staffing models that included the daytime use of CNPs were safe and effective alternatives to a traditional house staff–based team in a high-acuity adult ICU (Gersherngorn et al., 2011).

CONSIDER THIS

The earliest study on the cost and effectiveness of nurse practitioners was done in 1981 by the Office of Technology Assessment (OTA) and reported that NPs provided equivalent or improved medical care at a lower cost than physicians.

Each CNP does the following:

- Provides initial, ongoing, and comprehensive care, including taking comprehensive histories, providing physical examinations and other health-assessment and screening activities, and diagnosing, treating, and managing patients with acute and chronic illnesses and diseases
- Orders, performs, supervises, and interprets laboratory and imaging studies; prescribes medication and durable medical equipment; and makes appropriate referrals for patients and families (APRN, 2008)

USE OF A DUAL CERTIFICATE APRN ON A CARDIAC ICU UNIT

Our APRN has a dual degree as an APN serving as a CNS and acute care nurse practitioner (ACNP). The combination of both degrees has been influential in advancing the knowledge of nurses. To accomplish this, Jennifer collaborates with nurses and physicians to develop order sets and protocols while maintaining a continual focus on process improvement and medical management. The dual background has been instrumental in the successful establishment of the Extracorporeal Membrane Oxygenation (ECMO) program, wherein she uses her skills to collaborate with critical care nurses, surgeons, and hospital intensivists from the beginning.

Jennifer conducts monthly process-improvement meetings with regards to the program, resulting in process changes. She is dedicated to continuing education of the nurses and physicians by conducting quarterly education and simulation for both nurses and physicians in an effort to improve the program with positive patient outcomes in extremely critically ill patients.

–Dana Lauer RN, MS, NEA-BC

Here is the potential impact of CNPs on staffing:

- Decrease your staff's need to call and wait for orders to change or progress care, leading to efficient nursing care and shorter length of stay
- Spend more time at the patient's bedside, leading to improved patient satisfaction and outcomes and decreasing staff time in finding the physician to talk with the patient

- Spend more time in the moment educating your staff, building a more confident and competent staff (part of a CNP's core competency is to continue to develop nursing science and educate others)
- Round at the right time to facilitate improvement in length of stay and discharge, which can help you manage staffing levels and fluctuations in staffing needs better

CONSIDER THIS

Nurse practitioners who practice in an inpatient setting typically follow industry physician productivity standards. The measurement is called Relative Value Units (RVUs). Medicare pays for services based on submission of a claim using one or more specific Current Procedural Terminology (CPT) codes. CPT codes are numbers assigned to every task and service a medical practitioner may provide to a patient, including medical, surgical, and diagnostic services. Each CPT code has an RVU assigned to it, which, when multiplied by the conversion factor (CF) and a geographical adjustment (GPCI), creates the compensation level for a particular service (CMS, 2010b). Note, CNPs may have different reimbursement rates for the same codes by payer, such as Medicare paying CNPs 85% of the physician payment.

Your hospital may have determined the number of RVUs needed to meet set productivity standards for employed physicians and CNPs. These productivity standards can help you determine how many CNPs you may need on your unit in your staffing as well as a comparison for benchmarking to other units or organizations. Other CNP productivity measures could include visits or dollars/revenue.

The CNP is a valuable member of the care team as a provider. Work with your organization and your CNPs to remove barriers that prohibit them from their full scope of practice. At their full scope and ability, the CNP will be able to provide quality, cost-effective care to your patients and be an excellent mentor for your staff.

Clinical Nurse Specialists

A clinical nurse specialist (CNS) is an advanced practice registered nurse, with graduate preparation from a program that prepares CNSs. A CNS and CNP are not interchangeable; they have different educational preparations and certification tests. The CNS's role is to integrate care across the continuum and through three spheres of influence: patient, nurse, and system (APRN, 2008).

The key elements of CNS practice are to create environments through mentoring and system changes that empower nurses to develop caring, evidence-based practices (EBPs) to alleviate patient distress, facilitate ethical decision-making, and respond to diversity (APRN, 2008). The CNSs are clinical experts in a specialized area and are responsible and accountable for diagnosis and treatment of health/illness states, disease management, health promotion, and prevention of illness and risk behaviors among individuals, families, groups, and communities (APRN, 2008). A recent systematic review concluded that utilizing CNSs in a hospital setting reduced the length of stay and decreased costs of care while improving patient outcomes (Newhouse et al., 2011). In the exemplar in the sidebar on the next page, the C-section rate was significantly reduced. How would you staff differently if your C-section rate dropped from 20% to 10% or your OB patients' labor time was significantly reduced? CNSs can have a real impact on your patients, which will impact your staffing.

Here is the potential impact of CNSs on staffing:

- Develop new innovative nursing care methods that improve patient care
- Continuously educate your staff, leading to a more competent workforce
- Improve engagement of your staff nurses, leading to less turnover

IMPACT OF A CNS IN WOMEN AND INFANT SERVICES

Our CNS serves as a consultant to assist the bedside RN in resolving complex patient-care issues and provides as-needed "hands-on" assistance with nursing care tasks. The CNS role has the unique opportunity to support and mentor the RN at the bedside, which aids in his or her time management and productivity.

Our CNS's focus on EBP and research has engaged and energized the staff. For example, our Newborn Congenital Heart Disease Pulse Oximetry Screening Program was developed by our CNS through collaboration with unit management and bedside RNs. Outcomes of this collaborative approach included development of engaged bedside champions, joint identification of educational needs, financial analysis review, examination/resolution of bedside RN concerns, consideration of the impact on nursing time, analysis of patient-safety factors, and creation of data-evaluation tools. The use of this leadership model by the CNS provided for RN mentorship in teamwork and innovative program development and provided bedside staff the ability to see how they can make a difference in patient care.

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Our CNS's leadership on a project that had a significant quality outcome began with a Labor & Delivery (L&D) RN's observation of the apparent effect on labor of the use of a peanut ball. (A peanut ball is an exercise ball in the shape of a peanut.) Women with epidurals cannot hold their legs apart on their own, which is needed to open the pelvis and birthing canal. When the peanut ball is placed between a laboring woman's legs, it facilitates that opening of the birthing canal and is thought to facilitate a natural delivery. Our CNS developed it into an institution review board (IRB) approved randomized control study, with bedside L&D RNs participating in the study design and data collection. The study demonstrated significant results of a shortened length of labor, decreased use of vacuum and forceps, and a reduction in cesarean sections in labor patients with an epidural. It went on to win our system's highest team-performance excellence award. This research continued its impact as a best-practice when it was rolled out system-wide to our sister hospitals. This outcome highlights how a collaborative partnership between a CNS and bedside nurses is able to improve the quality of care and advance nursing practice.

Finally, as professional certification is known to be associated with better patient outcomes, our CNS has a definite commitment to promote and support professional staff development. Over time, her influence has resulted in our department proudly having 114 certified RNs.

–Carol Olson, MBA, BSN, RN

CNSs can also be reimbursed by Medicare as primary-care practitioners, billing for their services using CPT evaluation and management codes similar to CNPs. However, not all CNS activities result in a CPT code. Direct care is only one of nine CNS competencies.

The nine CNS core competencies are (NACNS, 2010):

- Direct Care
- Consultation
- System Leadership
- Collaboration
- Coaching
- Research
- Ethical Decision-Making
- Moral Agency
- Advocacy

Therefore, defining productivity standards for CNSs is not as easy, which will make it harder for you to quantify your needs for CNSs in your unit's staffing and scheduling. Staffing for CNSs on your unit will be based on your patient population and needs of your staff RNs in combination with your budget. The CNSs, when allowed to practice to their full licensure and scope, can have a positive impact on your nurses, patients, and care delivery model.

Certified Nurse-Midwives

According to the APRN Consensus Model (2008), a certified nurse-midwife (CNM) provides a full range of primary health care services to women throughout the

lifespan, including gynecologic care, family-planning services, preconception care, prenatal and postpartum care, childbirth, and care of the newborn. CNMs may provide care in diverse settings, which may include home, hospital, birth center, and a variety of ambulatory care settings, including private offices and community and public health clinics (APRN, 2008). CNMs' productivity is typically reported out by outpatient visits, relative value units, and/or a combination of deliveries. Productivity targets may have been set in partnership with the CNMs, physicians, and leadership based on internal or external benchmarks.

CNMs are less likely to be employed by the hospital, but they still have an impact on your staffing. Consider the research findings that demonstrate:

- CNM patients were less likely to receive continuous fetal monitoring and had lower rates of labor induction, epidural injections, and caesarean sections and overall used fewer resources (Rosenblatt et al., 1997).
- CNMs had statistically significant fewer infant abrasions, perineal lacerations, and complications; higher satisfaction with care; and lower hospital and professional fee charges compared to obstetricians (Oakley et al., 1996).

Here is the potential impact of CNMs on staffing:

- Lower cesarean section rates will require different RN staffing levels to care for patients who deliver naturally.
- Lower cesarean section rates will decrease and change your need for staffing your OB operating and recovery rooms differently.
- CNMs tend to do more underwater deliveries. Facilitate structural changes to support their practice and ensure staff competency.

- Lower cesarean sections rates will decrease your length of delivery time and length of stay, which will require you to determine new RN staffing levels and patterns.

CNMs can have a positive impact on your patients' outcomes. This may require a change in your RN staffing and scheduling to meet the needs of more natural deliveries and fewer cesarean sections.

Certified Registered Nurse Anesthetists

The certified registered nurse anesthetist (CRNA) is prepared to provide the full spectrum of patients' anesthesia care and anesthesia-related care for individuals across the lifespan (APRN, 2008). This care can be provided in diverse settings, including hospital surgical suites and obstetrical delivery rooms, critical-access hospitals, acute care facilities, pain-management centers, ambulatory surgical centers, and other outpatient settings (APRN, 2008). As with all the APRNs, there has been concern from the medical establishment regarding the safety of the care provided. Research on CRNAs has found no statistically significant difference in mortality rates for CRNAs and anesthologists (Pine, Holt, & Lou, 2003). Productivity for a CRNA is based on his or her role and may be based on number of surgical cases, pain-management visits, or a combination of both.

Here is the potential impact of CRNAs on staffing:

- Improved pain control through pain committee involvement leads to standardized pain protocols that give the RN a ready-to-use resource and may reduce RN workload of managing pain by decreasing phone calls to other providers for orders.
- Improved pain control through proactive assessment and management between the CRNA and RN

reduces RN workload as they decrease the amount of time spent getting the patient's pain level to an acceptable level.

- Have the CRNAs and recovery-room staff start patients on patient-controlled analgesia (PCA) before coming to the floor to decrease workload of floor RN.

CONSIDER THIS

Choices in pain control (and availability of medications) can have an impact on your staffing. During my recent C-section, the United States was facing a Duramorph shortage. Duramorph is an opioid analgesic and, depending on the dose given, can provide pain control for up to 12–24 hours after surgery. (Luckily for me, there was enough on stock to get this medication.) The alternatives were not as patient and nurse friendly. Getting this medication by my CRNA in surgery meant as a patient not needing to take an IV or PO analgesic for nearly a day, and I had no nausea that might have been associated with taking other drugs. What did this mean for the nurses? Not having to run back and forth providing pain medicine or an antiemetic. That saved the RNs time and made me happier as a patient.

The CRNA can have a positive impact on your patients and your staff. By working collaboratively with your CRNAs, you may be able to decrease your RNs' workload for managing pain by having a proactive process to address it.

Quality-Management Staff

Quality-management staff vary in background and licensure. Some may be RNs, and some may hold additional certifications. Quality-management staff have a major impact on your unit based on their knowledge of quality, particularly core measures. Core measures are a set of inpatient and outpatient quality measures that help the organization improve their own care. These measures are collected by most hospitals in the United States and are reported on the CMS Hospital Compare website. Ask your quality manager for the measures that your unit impacts.

TIP

For those who do not currently have core measures, they are probably coming soon. Watch organizations like the National Quality Forum to get a sense for the direction quality might take. CMS seems to adopt a lot of their recommendations.

With value-based purchasing in full swing, it is everyone's responsibility to ensure your organization's ability to meet CMS core-measure goals. What is value-based purchasing? Value-based purchasing is a program in which CMS rewards or penalizes hospitals for their quality measures. If you do not meet your organization's targets (set by CMS) for your care measures, then your organization can lose money—millions each year. You might say, "My unit does not have a direct impact on or own a core measure, so I why should I care?" Not meeting value-based purchasing core-measure goals affects your whole organization, not just the units that have a direct impact on the measures. The more your organization is penalized, the less money your organization has, and the effect will trickle down to your unit and negatively affect your budget.

NOTE

Not all core measures are a part of the current value-based purchasing methodology. The current method includes both a sample of core measures and patient-satisfaction measures (Hospital Consumer Assessment of Healthcare Providers and Systems or HCAHPS), weighted more toward the core measures.

What does this have to do with staffing? For many core measures, nurses are doing the tasks, such as removing the foley catheter in time or giving the last IV antibiotic—and documenting it or not. And we all know that if something was not documented, it was not done, particularly when it comes to core measures. Some hospitals have required unit staff to keep track of their own measures, while other hospitals have quality staff to collect this data.

Here are things to consider with quality-management staff related to your staffing:

- Without QM staff, the RN may have increase time spent documenting and away from patient care
- Potential for rushed documentation leading to misses in your organizations' data
- Staff needed to educate and evaluate staff knowledge of core-measure definition changes
- Ensuring that your staff know how important it is to complete certain tasks on time or within a certain time frame, including documentation, such as removing the foley within 24 hours (not 24 ½ hours)
- A large number of patients impacting core measures on your unit may necessitate the need for a more hybrid care delivery model that may include parts of a functional nursing care delivery model to ensure you meet your measure targets.

- In the emergency department (ED), there are several new core measures related to time. Continuously monitor your time and goals on those core measures, and review and make the appropriate changes to your staffing and care delivery model in order to meet your organization's goals on these measures.

Having dedicated quality staff to assist with education and data collection means less for your staff to have to do and may help improve productivity. Depending on your core-measure outcomes, it may support the hiring of more quality specialists to work on improving those quality scores.

Case Managers

For some hospitals, case managers are a relativity newer role, and for others, a constantly evolving role. The American Case Management Association defines hospital case management as

> a collaborative practice model including patients, nurses, social workers, physicians, other practitioners, caregivers, and the community. The Case Management process encompasses communication and facilitates care along a continuum through effective resource coordination. The goals of Case Management include the achievement of optimal health, access to care, and appropriate utilization of resources, balanced with the patient's right to self determination. (CMSA, 2012a)

Most staff RNs and many managers do not understand the complete role of a case manager on their unit, let alone the impact case managers can have on length of stay and staffing. Many times the staff underutilizes the case manager in dealing with a complex patient with high needs. Or both the staff RN's and manager's efforts at discharge planning

for their patients overlap with the case manager's role in discharge planning. Because case managers typically report centrally, unit management may be distant and unaware of this individual's full role, skills, and abilities. It is imperative as the manager to know the case managers on your unit (and their boss) and ensure you are effectively working together to maximize their skills and your staff's time.

Case managers typically are RNs or medical social workers (MSWs). The hospital case managers' goals are to ensure high-quality patient care and hospital outcomes, efficient resource utilization, and reimbursement for services. Typical case-management staffing ratios are 1:18–20 case managers to patients, but it is dependent on the model and job functions as well as additional resources they have, including social workers.

Within a hospital setting, case managers can perform the following functions:

- Verify coverage and benefits with the health insurers to ensure the provider is appropriately paid
- Coordinate the services associated with discharge or return home (transitions)
- Provide patient education
- Provide post-care follow-up
- Coordinate aspect of care and services with other health care providers
- Ensure that patients are admitted and transitioned to the appropriate level of care
- Ensure that patients have an effective plan of care and are receiving prescribed treatment
- Advocate for services and plans needed during and after their stay (CMSA, 2012b)

Here are things to consider related to the impact of case managers on staffing:

- Do you and your staff know the high-risk screening tools used by case managers in identifying your high-risk patients?
- Ensure your definition and understanding of a high-risk patient is the same as theirs.
- Implement interdisciplinary rounds that include your staff RN and case managers (and others) to discuss daily patient progression.
- Educate your staff on how and when to contact the case manager to assist in discharge or transition needs.
- Develop and ensure resources for your staff RNs who have to facilitate discharge on complex patients for off times as opposed to keeping a patient over a weekend.
- Based on your unit's volume, consider case-management services/coverage on evenings or weekends to facilitate patient flow and decrease workload and staffing needs for your unit's RNs.
- Create a process where case managers facilitate discharges prior to weekend. Decreased patient volume on the weekend may decrease your staff's need to work weekends, such as every third weekend versus every other.

Case managers have an important role in facilitating patient flow and discharges for your unit. Complex patient discharges can take a significant amount of your staff's time and can increase workload and staffing needs, especially in the absence of case-management resources.

Pharmacists

Pharmacies within hospitals differ considerably from community pharmacies. This difference greatly influences your pharmacist's role in the hospital and your unit. Due to the nature of acute care versus community, the pharmacist in the hospital setting may have more complex clinical medications-management issues.

Clinical pharmacists, those practicing in the hospital setting, specialize in a specific area, such as hematology/oncology, HIV/AIDS, infectious disease, critical care, emergency medicine, toxicology, nuclear pharmacy, pain management, psychiatry, anti-coagulation clinics, herbal medicine, neurology/epilepsy management, pediatrics, and neonatology (Burke et al., 2008). Pharmacist productivity for a decentralized model will depend on his or her workload, which includes such components as verification of orders, discontinuation of orders, patient-profile review, preparation of progress notes, contribution to patient-care plan, consultation, attendance at interdisciplinary unit rounds, reporting of unexpected medication events, and responses to emergency resuscitation codes.

Here are things to consider related to pharmacists on staffing:

- A decentralized pharmacist model and a pharmacist assigned to your unit will decrease RN workload and medication errors as the pharmacist assists or owns the medication-reconciliation process.
- Include the pharmacist with the patients, nurses, and physicians in your interdisciplinary rounding process to improve communication related to the patients' medication regimens and resolve medication issues in real time.
- The pharmacist can work with staff to optimize the patients' medication, including monitoring and decreasing inappropriate or overuse of proton pump inhibitor medications that have shown to

increase hospital-acquired infections (HAIs), such as C. difficile. Increased HAI increases the length of stay for patients and increases your RNs' workload through the additional need to gown up each time they enter that patient's room.

- The pharmacist can facilitate the transition of patients from IV to PO medications and antibiotics faster, decreasing the time RNs spend administering and monitoring time-consuming IV antibiotics.
- Even without a decentralized pharmacist model, include the pharmacist as the lead or a member in the medication-reconciliation medication process.
- A pharmacist on the unit can assist providers in ordering the right drug and decrease the time spent for staff in administering a less-than-optimal medication and or time spent by staff on the phone reconciling this issue (American College of Clinical Pharmacy, 2008).
- Have the pharmacist create a comprehensive drug-therapy plan for patients. This can improve the RNs' ability to ensure and facilitate discharge with the right medications (Burke et al., 2008)

Whether a centralized or decentralized model, pharmacists can have a positive impact on RN staffing by decreasing RN workload around medication use, appropriateness, and administration as well as improving patient outcomes, such as reducing the possibility of HAI.

Medical Social Work

Medical social work (MSW) is a sub-discipline of social work also known as *hospital social work*. MSWs can be employed in many different health care settings. MSWs play a vital role on an interdisciplinary team on your unit, particularly with facilitating complex discharges. MSWs

focus on the socioeconomic and personal issues that face your patients, such as issues in the patient's home situation that prohibits safe discharge to home. Delays in a patient discharge will increase your unit's length of stay, increase resource usage, and decrease net revenue. In many hospitals, MSWs work collaboratively with case managers to facilitate a patient discharge.

The MSW's role can include:

- Working with patients and their families in need of psychosocial help
- Assessing the psychosocial functioning of patients and families and intervening as necessary
- Connecting patients and families to necessary resources and supports in the community
- Providing psychotherapy, supportive counseling, or grief counseling
- Helping a patient expand and strengthen his or her network of social supports
- Collaborating in the development of a discharge plan that will meet the patient's needs and allow the patient to leave the hospital in a timely manner (NASW, 2011)

MSWs also have an ability to quickly and effectively establish a therapeutic relationship with patients. Behavioral health patients can become a time burden and increase safety risk on your nursing staff, particularly if you are not a behavioral health unit. Due to a lack of appropriate behavioral health services in many communities, your staff may face more behavioral health patients needing acute care medical or surgical services. The use of an MSW, particularly when behavioral health nurses and staff are not present, may improve your staff's safety, decrease restraint usage, reduce your staffing costs, and improve productivity.

MSW BEHAVIORAL HEALTH INTERVENTION

We had a patient admitted for a suicide attempt, and as he was not medically clear, he was admitted to the floors. Once on the unit, plans were made to transfer him to a psychiatric facility. The patient became quite belligerent, and security was called. The patient was shouting that he was "special forces" and would take out the three security officers preparing to restrain him. We were able to have the officers withdraw and, with assistance from social work, deescalate the patient to the point that we were able to provide a safe transfer.

–Thomas Aronson, LCSW, MBA

Here are things to consider related to MSWs on staffing:

- Clarify the process for your staff on when to call for a social work evaluation. Your RN staff do not need to do everything themselves; they need to utilize all the resources available to them.
- Understand the process and criteria the social work department has for assessing high-risk patients. Opportunities may exist to teach your staff or work with MSWs to improve their support service to your unit based on individual unit needs.
- Provide behavioral health support to patients, which may decrease the workload to your RN. This may be of increased importance if your organization or community lacks sufficient behavioral health resources and placement agencies.
- Include the MSW in interdisciplinary rounds. Clarify for your staff and other disciplines the role of the MSW and the role of the case manager, which may overlap slightly and be confusing to some staff, decreasing their comfort in requesting help from these resources.

- Post weekend and after-hours coverage of the MSWs for your staff to help manage patients as needed. Weekend and night RN staff may feel they have little or no resources for help and may attempt to do the role of another individual to get the patient the care they believe is needed. This increases the workload of the RN.

MSWs can provide a wide range of support services to your staff, from assistance in patient discharges and social or financial barriers to behavioral health support.

Chaplains

Chaplains assist with pastoral, spiritual, and emotional needs of patients, families, and staff. Health care chaplains are usually highly educated, board-certified members of the interdisciplinary team. Education usually includes a Master of Divinity; board certification requires additional training in clinical pastoral education. Although some hospitals have worked with their community's pastors and chaplains to rotate through a volunteer schedule to cover a hospital's need, other hospitals may employ chaplains. The number of chaplains needed per hospital may vary. According to one study, out of 93 pediatric hospitals, there was an average of 2.1 chaplains per an average of 171 beds (Wintz & Handzo, 2005).

Many managers, hospitals, and staff underestimate the value chaplains bring to the patient experience and needs. As well, many nurses feel unable to meet patient's spiritual needs due to their own discomfort in discussing spirituality or religion. In addition to discomfort, the RN may also feel underprepared to discuss or support a patient's spiritual needs. One study found that chaplains increase the enrollment of patients into hospice care (Flannelly et

al., 2012). This will free up beds on your unit and decrease workload needs of your staff by moving patients to the right level of service.

Here are things to consider related to the impact of chaplains on staffing:

- Determine the highest need times for your patients with chaplain services. Ensure your staff RNs know when the chaplains are available or are on call and how to contact them.
- In addition to the initial assessment question concerning their spiritual and religious needs, work with your staff and chaplains to ensure appropriate follow-up subsequently with the patient to see if needs changed.
- Ensure your staff know the role of the chaplain and when he or she could be contacted, such as in family and patient conflict regarding DNR status.
- Involve the chaplain in the interdisciplinary rounding process to allow him or her to assess for potential chaplain services or needs.
- Consider using chaplain services for staff issues, such as a death or severe accident.
- Post the times for worship services.
- Educate your staff on how chaplains support patients of all faiths and beliefs and how they can assist in finding further support in that patient's religion through their contact list.
- Encourage chaplains to provide staff education on different faiths and beliefs to improve their comfort level with religion and spirituality discussions.

Chaplains offer a beneficial service to your patients and staff that can improve the patient experience and decrease workload of your staff through using all available resources.

Respiratory Therapists

Respiratory therapists (RTs) are health care practitioners who treat patients with respiratory and cardiac issues. Many RTs work closely with pulmonologists and can perform and are specialists in:

- Airway management—actively maintaining an open airway during management of trauma
- Administering of anesthesia for surgery or conscious sedation
- Initiating and managing life support for people in intensive care units and emergency departments
- Stabilizing and monitoring high-risk patients being moved from hospital to hospital by air or ground ambulance
- Administering inhaled drugs and medical gases, such as asthma medication, oxygen, and anesthetic gases
- Conducting tests to measure lung function and teaching people to manage their respiratory condition (Harbrecht et al., 2009)

RTS PART OF THE VASCULAR ACCESS TEAM

Due to a nursing shortage and a decreased availability of physicians, central line placement was slow and did not facilitate timely care. Because there were no shortage of RTs, a pilot was developed to educate them to place central lines under the order and supervision of a physician. An important step was to obtain a position from the

Board of Respiratory Care Examiners in Arizona. The board stated:

> As previously established, central line insertion is considered part of the Respiratory Care scope of practice based on interpretation of the law, given the practitioner has received appropriate advanced training, participates in timely continuing education/skill reevaluation and is performing under medical direction. Preceptorship, after a Respiratory Care Practitioner has met the training and competency standards as previously stated, is at the discretion of hospital policy. (Board of Respiratory Care, 2009)

After meeting the requests of the board, developing hospital policy, procedures, and standards, a pilot was conducted to determine results. Results showed outcomes of insertion and infection rates to be the same as the physician-placed lines.

–Jennifer Mensik

Here are things to consider related to the impact of RTs on staffing:

- RTs are a valuable part of the rapid response and/or code team.
- Ensure the RT attends your unit's interdisciplinary rounds.
- Complete education and clarify when and what respiratory care is provided by the RT and when it may be provided by the RN.

- Cross-train and expand the role of the RT to help meet the needs of your unit, which may include completing EKGs and inserting and maintaining central and PICC lines.
- Clarify the role of the RT on your unit for night and day shift as well as weekends. If your staff RNs perceive no support, then they will attempt to do everything instead of reaching out to the appropriate resource to help. This may decrease their workload.

RTs' productivity is typically measured by RVUs as well, or some combination of RVUs and other measurements. The reason why strict RVUs may not equal a good measure of productivity is that not all RT activities have a corresponding CPT code that will translate into an RVU. A few examples of activities without CPT codes that are critical to producing good outcomes and for which your organization may require an RT include (1) spontaneous breathing trials for ventilator patients, (2) rapid response calls when patients are in respiratory distress, and (3) participation in high-risk deliveries. These components are important in considering the staffing needs of RTs in conjunction with your RN needs.

RTs provide traditional respiratory services but have expanded their role and scope in many areas. Utilize all staff to their ability to decrease the workload and needs of your RN staff.

Hospitalists

Hospitalists are physicians whose primary focus is hospital medicine. A hospitalist is different from an intensivist, whose focus is intensive care. However, hospitalists partner with intensivists and all other specialists, including the primary care provider in treating hospital patients. In this vein, the hospitalists act as the care coordinator among

the other specialty physicians and surgeons for a patient. Hospitalists may also be leaders on various teams and quality champions for ensuring hospital-required quality measures in their control are met.

This medical specialty has really developed recently, as many primary care physicians (PCPs) prefer to stay in their clinics where they can generate more revenue. Many PCPs would see patients in the evening, contributing to longer lengths of stay as hospital staff waited all day for the physician to come in, see the patient, and write orders to advance care. Hospital leadership saw the need to decrease lengths of stay and improve quality. Hospital reimbursement continues to be cut, and mandated hospital quality measures are constantly changing, but these were not a high priority for the PCP. Hospitalists typically do not have a practice outside of the hospital; however, they may provide medical oversight patients post discharge who do not have a primary-care provider or have yet to see that provider. A hospitalist is typically the attending physician for a patient during the hospital stay (Wachter & Goldman, 1996).

Research has shown that hospitalists reduce the length of stay, decrease treatment costs, and improve the care for hospitalized patients (Meltzer et al., 2002). A hospital's productivity is typically always measured in RVUs.

Here are things to consider related to the impact of hospitalists on staffing:

- Hospitalist availability means your staff have faster access to a provider who can write orders.
- The medical plan of patient care progresses faster, so you may need to work with your RNs to match the nursing plan-of-care progress to the medical progression. As well, educate your RN staff that although a patient may be medically discharged, they do need to finish and meet the nursing needs and goals of the patient, which is just as important.

- Understand the hospitalists' schedules, assigned units, and rounding process. If your staff can wait or consolidate questions for when the hospitalist arrives on the unit, it may speed up when the hospitalist arrives on the unit. Additional phone calls from other units will decrease the hospitalist's ability to see patients in a timely manner.
- Based on the needs of your unit (and organization) and patient population, there may be a need for a night hospitalist to facilitate care, which will decrease workload for your RNs and improve their ability to provide timely care.
- Structure interdisciplinary rounds so that the hospitalist can attend.
- Understand which quality measures the hospitalist is responsible for.

Hospitalists are relatively new to the health care team and are growing in numbers as a specialty. Hospitalists, as partners with you, can help your staff provide timely care while improving patient care and decreasing RN workload by having an onsite provider available to them for medical orders.

Residents

Residents provide a valued service to many hospitals in providing around-the-clock care to their patient population, typically in a teaching or academic hospital. A resident is a graduate of medical school. Residencies give the graduate an in-depth training within a specific branch of medicine. Residents, like hospitalists, are always available to see patients and can improve the flow on your unit. However, because residents are still training, they may rely on your more senior nursing staff when handling complex medical patients.

Here are things to consider related to the impact of residents on staffing:

- With their role on the care team, invite them to your unit's interdisciplinary rounds.
- Clarify the process for staff in determining the call schedule when there are multiple residents on the floor.
- Understand their education schedule and process for rounding with their faculty. If there is not a clear process or time for this, work with the faculty to provide some type of schedule. This will improve your staff's availability to an ordering provider and decrease the number of phone calls and pages the RNs make to him or her as they are waiting.
- Clarify for your staff members the chain of command if they do not agree with something the resident orders. Your staff need to feel comfortable escalating their concern to management or the department chair or attending physician. (Some hospitals may or may not consider the resident the attending.)
- Due to the rotation of their schedules, ensure you educate your staff to the new set of residents whom they may start to see on the unit. Nothing will slow down your staff more than paging a resident who is not on rotation in your department and unit any longer. With residents and many teaching hospitals, length of stay for comparable community type patients may be longer. Make sure you take this into consideration related to your staffing and scheduling, as the workload may increase or decrease.

Residents are valuable members of the health care team in academic and teaching hospitals. Due to the nature of their education and rotating schedules, ensure your staff are educated to work collaboratively within this model of care.

Summary

Here are the key points covered in this chapter:

- There are many other professionals who impact your unit and staffing.
- Understand the scope and role of all individuals who may care for patients.
- Ensure that your nursing staff understand the roles and delineate roles for everyone.
- Utilize other disciplines to their full potential, ability, and scope to provide patient care.
- Staff RNs do not need to provide all aspects of a patient's care.
- Utilizing all disciplines and creating a true interdisciplinary partnership will decrease the workload of your staff RNs and improve the quality and satisfaction of your patients.

6

Recognize, Manage, and Minimize Your Variability

Sacred cow: "Our patients are different."

This may come as a shock to you, but most nurses think their patients are different. Your patients *are* different in the sense that no one human is the same. What you want to chalk up to patient differences is due to artificial and natural variability. These "variable traits" make it difficult, if not impossible, to manage if you do not know what they are.

Why do we not know what these differences are? It is often due to a lack of educational efforts on operations management in your hospital. Also, hospital IT systems

do not really focus on collecting data that demonstrate patient-flow variability (Litvak, 2004). This is one area of opportunity for you or your hospital.

So, for the remainder of this chapter until you might start to think otherwise, let us start with the premise that your patients are unique and different. But let us also start with the fact that you can manage and eliminate variability that impacts your unit. In this chapter, we discuss the two types of variability, what it means for you, what control you may or may not have over it, and how you can staff your unit with real information and data.

One Size Does Not Fit All

I will give you a freebee here: What works for one will not work for everyone. For example, what works in one emergency department (ED) may not work in another. But, although some things are not in our control, others are. Focus on what you can change, not what you cannot. As we discuss variability, what variables might impact your unit and make it different?

- Culture?
- Community?
- Economics?
- Nursing shortage?
- New boss?
- Physician politics?

These are the things that really make each of our units different.

The Ebb and Flow of Your Department

Some refer to the natural movement of a unit in their hospital as the ebb and flow, or valleys and peaks. Whatever you call it, that movement typically reflects the coming and going of patients, and it has a major impact on your staffing. From a more scientific perspective, this "movement" is called *variability*.

Before the change in reimbursement of the 1980s and 1990s, hospital administrators staffed nurses based on the number of beds, not necessarily whether those beds were being used. Nursing represents the single largest cost to a hospital, so as reimbursement changed, hospital administrators attempted to control costs by matching nursing resources to average census. The problem with this method occurs when patient volumes peak in excess of the average. For example, a peak in your census may be considered a 15–40% increase above your mean, or average, census. This peak leads to an increase in adverse patient outcomes and high stress on nursing staff (Litvak et al., 2005).

CONSIDER THIS

Each additional patient per nurse was associated with a 7% increase in the likelihood of dying within 30 days of admission and a 7% increase in the odds of failure-to-rescue (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002).

Daily fluctuations in census can be as much as 30% (Litvak et al., 2005). So, you cannot staff to the peak, because it is too costly. Staffing to the valleys is not safe,

and staffing to the average does not take into consideration the peaks or valleys. The next logical thing is to control for as much of the variation as possible by smoothing the peaks and valleys (trying to create rolling hills instead). To do this, you need to actively manage and eliminate as much variability as you can. But first, you need to know what the potential sources of variability are.

There are two types of variability—natural and artificial—and each impacts your unit, some more than others. (Because one size does not fit all, there may be some things that impact your variability that are not discussed here.) First we review all types and subtypes of variability and discuss how you can manage or smooth them on your unit. The key for you to really impact your unit is to understand all your areas of variability. Let us begin by discussing artificial variability.

CONSIDER THIS

When staffing to the average census, keep this in mind: Census increases up to 25% above an adequate (average) staffing level subject all patients in the nursing unit in question to a 7% increase in [mortality] risk (Litvak et al., 2005).

NOTE

The Institute of Medicine (IOM) recognizes the importance of variability methodology in eliminating patient-flow issues caused by operational inefficiencies (IOM, 2010), and the American Hospital Association's Quality Center has recognized variability methodology as a key principle for achieving IOM's Six Aims of Quality: care that is safe, timely, effective, efficient, equitable, and patient-centered (IOM, 2010).

Artificial Variability

Artificial variability refers to the way we schedule services and allocate resources—thus, our inability to manage effectively our beds and staff (IOM, 2010). The interesting thing about artificial variability is that research has shown it has about the same impact on your patient flow as the ED does, which is considered to have natural variability (Litvak, 2004). Artificial variability is nonrandom, is nonpredictable (driven by unknown individual priorities), and should not be managed, but identified and eliminated (Litvak, 2004). One of the greatest drivers of artificial variability is elective surgeries and admissions.

Surgery Schedule and the Impact on the Floor

You have experienced those days, usually at the beginning of the week, where it seems like there is a surgical patient needing a bed every minute. Then, the surgery schedule tapers out by the end of the week, and by Sunday afternoon, your unit is pretty quiet, a definite valley in your "average" census. All the while, Monday and Tuesday are lurking, with a surgical schedule waiting to wreak havoc on your unit. This is the artificial variability that needs smoothing.

Although you cannot really impact unscheduled surgeries, you (your organization) can do a better job of smoothing elective cases. By smoothing the elective surgery schedule, you will improve the surgery throughput as well as overall throughput (Litvak, 2004). If you are not a surgical manager, you may not know how "typical" surgery scheduling happens. I do mention typical, because maybe your hospital does it differently, and maybe it has managed or smoothed this process out already.

At most hospitals, surgeons or specialty groups (such as orthopedic or ear, nose, and throat specialists) are scheduled in blocks, which are fixed times on fixed days. You might

find that certain surgeons "own" their blocks, because they have the highest volume of patients who bring in the most money for the hospital. Or maybe the surgeon has a certain block due to his status in the community. Either way, smoothing surgeon schedules is not easy and will take an organizational approach that is data driven, not emotion driven. These blocks have an impact on your staffing. Underused blocks result in the valleys in surgical volume, for example, and blocks used beyond their fixed amount lead to the peaks in volume. You might need higher staffing on the weekends if you smooth the surgery schedule to have an increased volume on Friday, but you will have better patient outcomes.

CONSIDER THIS

Surgeons' blocked time (artificial variability) may be influenced by, or scheduled in tandem with, professional variability (discussed later). Surgeons may have other demands, such as teaching residents and their clinic hours. You have to work with the surgeons to redistribute surgery schedules, or you might find the surgeon leaving for the next hospital with his or her patients.

So, what is the possible impact of artificial variability on patient flow and your RN staff? Say one day at your hospital that 30 scheduled surgery patients are admitted and tomorrow 50 are admitted, yet budgets staff for an average of 40 patients. The increased demand of 10 more surgical patients that one day increases demand and competition of scarce resources between scheduled admissions and other admissions, such as those through the ED and direct admits (Litvak, 2005). This competition leads to "nurse overload, understaffing, medical errors, and an undesirable work environment" (Litvak, 2005, p. 100) on those days with

above-average demands, while it creates wasted capacity and wasted resources on those days with below-average demands.

Organize Work Differently

Other sources of artificial variability may exist in your unit or organization, that may stem from how you organize work. How many times have you heard anyone say, "That's the way we always do it here"? Does this mentality impact your variability? Does the way your unit or staff do things create unnecessarily variability? For instance, if your case managers have a staff meeting daily at 2 p.m. during the same time as your interdisciplinary rounds, this artificial variability may hamper discharge-planning efforts and lead to decreased patient flow. In the last section of this chapter, on finding your own variability, you have a chance to think about this further.

CONSIDER THIS

Another potential source of smoothing artificial variability is in the rounding practices of hospital physicians. The main reason for ED overcrowding is a lack of ICU and medical surgical beds (Litvak, 2005). Build more hospital beds then, right? Not when the average cost is $1.5–$2 million per bed (Bazuin, 2010). The cheaper route first is to look at physician practice and preference.

Physicians typically start with the sickest patients to round on first, which means intensive care first, then progressive care/telemetry, followed by medical-surgical units. Why is this an issue? You typically cannot transfer patients to lower levels of care (or admit from the ED to ICU) until that

continues >

continued >

medical-surgical patient goes home. And more than likely, the medical-surgical unit is full, too.

Try having the physician round on the medical-surgical patients first, and then have your unit discharge them soon thereafter. I know, physicians are concerned about the more-acute ICU patient, but the more-acute patient also has a lot more nursing resources supporting his or her care.

Natural Variability

Natural variability refers to the random factors that impact your unit. Although you cannot eliminate these random factors, you can manage them. There are three subtypes to natural variability: clinical, patient flow, and professional.

Clinical Variability

Clinical variability refers to the difference between each patient, such as symptoms, diseases, and socioeconomic factors. How do you manage clinical variability? Part of this answer is in managing patient flow in your ED, but another may be in how you organize your unit and hospital. You may have separate floors or units for cardiac patients and orthopedic patients, a fast track in the ED to separate patients by acuity of symptoms, and/or have separate units for medical ICUs and surgical ICUs patients (Litvak, 2005).

Think about the following questions:

- What are the top admission and discharge diagnostic codes for your unit? Your hospital?
- Is your unit or hospital able to meet the needs of these patients?

- Do you have enough social workers to help patients who are challenged financially?

An example of managing this variability might be the bariatric population. Although you might not officially have a bariatric program, you still will have patients of size on your unit. Do you have the right equipment to manage them? Bariatric beds, chairs, scales, wheelchairs? How much time is spent working with this patient type or any other for whom you do not have the needed resources to provide efficient care? Besides using staff time to look for resources, it slows the patients' progression through their stay and creates the need for even more staffing and a higher workload.

Remember, use all your resources to help manage the clinical variability of your patients, and schedule your staff to meet these needs! Hospitals can no longer afford to be 8:00 a.m. to 5:00 p.m. Monday through Friday operations. Your patient variability demonstrates that. If you need case managers and social workers, respiratory therapists, or a hospitalist to help manage your patient variability, then what are you waiting for? As a nurse manager, you need to build a case that shows better care, better outcomes, and lower costs, even if it means adding (but managing) additional resources.

Patient-Flow Variability

Patient-flow variability is best described by looking at the ED. Although there is some ability to predict variations in peak times that patients come your ED (Sunday evening because patients thought they could make it to Monday to go to the office but did not, or the congestive heart failure patients visiting after a salty holiday dinner), the variability is random. People get sick at different times, for different reasons, and either come in right away or wait to come to your ED.

Patient-flow variability can also refer to those patients who may be directly admitted to your unit from the physician's office who are in need of nonelective, urgent admission. Those patients coming to your unit for an elective admission are considered artificial variability, which we discuss shortly. Many units and hospitals try to manage direct admits, as long as the patient does not just show up on your unit with an order for admission.

How do you manage patient-flow variability? Divide your ED by acuity into a fast track and a regular track. Fast-track patients are low acuity, and regular-track patients are those who are more acutely ill. This way, you have managed the clinical variability in your flow.

Consider the following:

- We may joke about all the heart-failure and kidney-failure patients who come in after a holiday dinner that was not part of their diet, yet do you staff for this seasonal variation?
- Do you have a disaster plan for all types of events that may arise, from flu season to a natural disaster?
- Do you partner and keep in closer contact with those provider offices that may admit more to your unit? Create a process where they contact you at the first sign a patient may need to be admitted to give you more time to plan for a bed and staffing.

Remember: You are trying to manage this type of variability, not eliminate it.

MANAGING AND STAFFING FOR AN INFLUX OF ED

In January 2010, Arizona, like many states, experienced a high incidence of viral flu cases. As the emergency director of Yuma Regional Medical

Center (YRMC), I was challenged to manage patient flow to handle the additional volume. Although YRMC is a large 333-bed hospital, it is a rural facility more than 100 miles from any other major hospital, making diversion impossible. The ED was built for a maximum capacity of approximately 125 patients per day, but we were providing care for as many as 300 patients a day.

One creative way we worked to handle the influx in patients was to put a tent in the parking lot to screen and manage the lower-acuity patients, in particular those with flu symptoms. Numerous departments moved quickly to open the temporary tents. Facility maintenance personnel put the tents in place and ensured there was adequate heat. Informatics personnel provided the technology support needed to register and track patients. Dietary personnel installed water coolers and snacks that did not need refrigeration. Equipment, including vital-sign machines, glucose monitors, wheelchairs, and stretchers, was borrowed at night from areas that had a low volume, such as the pre-operative care unit, and returned before needed in the morning.

The providers included a rotation of nurse practitioners and physicians. We utilized a variety of staff, including registered nurses, paramedics, and nursing assistants, and designed a patient throughput plan that allowed the appropriate care to occur in a systematic and effective manner. With just a little guidance, the staff were able to create a staffing plan and throughput process to see nearly 100 patients every night for 10 days.

–Teri Wicker, RN, PhD

Professional Variability

Finally, there is professional variability. Professional variability relates to the way nurses, physicians, and others practice and show up to work. This variability impacts the pace at which patient's progress and the number and length of unnecessary delays patients experience (Litvak, 2004). What is considered professional variability?

- Staff skills, motivation, competing interests (such as mentoring nursing students)
- How staff organize and manage work (could be artificial as well, based on why it is organized the way it is)
- Staff illness, medical leave, and disability
- Variations in beliefs on best practice (what is evidence-based practice for one may be different for another)
- Working hours of staff and how staff leave is planned

How does one start to tackle and manage components of professional variability related to staffing and scheduling? Consider the following:

- Work on improving your nurse retention.
- Ensure nurses and staff are as equal in skills as possible.
- Utilize nursing students proactively.
- Assist your staff in managing their priority of patient care while also providing the nursing students with a good clinical rotation.
- The IOM states that 90% of practice should be evidence based by 2020. Where are you? Move your policies, procedures, and practices to all evidence based, and expect your staff to practice evidence-based nursing and medicine.

Patient-flow variability, clinical variability, and professional variability are all types of natural variability. Natural variability cannot be eliminated but can and should be managed to decrease the negative impact on your patient flow and outcomes.

How to Find Your Own Sources of Variability

Now that we have discussed artificial and natural variability, how do we find your sources of variability? The easiest route would be to use (or hire) a process or management engineer to help you with this. The next easiest (and usually free) route is to use a graduate student from your local or state university. The route that will take the most time and energy (although it might be fun if you like these things!) is to do it yourself. I cannot fit all the information you might need into a subsection of a book chapter, but this next section starts you in the right direction.

To begin, you need to determine the sources of your artificial and natural variability. We know now that we can impact artificial variation the most, and artificial variation stems from the way we set things up, usually initially intended to benefit us. But quite often it may actually be counterproductive to quality patient care. How many times have we added to the policy and procedure book? It may be hundreds of pages long. Yet how many times have we taken anything away from it?

In order to do your own high-level analysis, think of a Joint Commission tracer. A tracer is survey methodology in which surveyors choose a patient record and then use it to retrace a patient's movement through the hospital, assessing

and evaluating as they go. So, select a patient record, a policy, a procedure, or a workflow, and map it out to assess and evaluate for sources of variation (NHS, 2008).

Here are some tips to consider while doing a tracer:

- As you perform the tracer and map the process, involve a team of individuals who can help collectively spot opportunities for improvement and redesign that reduce variation.
- Shadow a patient to collect this data.
- Gather data from a group of patients receiving the same or similar services (NHS, 2008).

Once you have collected your data, it is time to analyze and evaluate the information. Take the following into consideration while reviewing your data:

- Is there artificial or natural variability?
- If the variability is artificial, what can you do to eliminate it?
- If the variability is natural, how can you manage it?
- Are there patterns to be managed by time of day, day of week, month, and season?
- Is there an impact on your unit's capacity and demand?
- How does this impact other units before or after your unit?
- Is there a mismatch of staff, vacations, skill mix, rooms, and equipment? (NHS, 2008)

Regardless of whether you used others to assist you in the tracer, you will need to engage others in the solution. As you search for solutions, do keep an open mind. Always ask staff and physicians to help you understand why they may have been doing something a certain way. By approaching

the solution in this way, you decrease the chance of someone feeling personally attacked, and you will possibly gain a supporter.

Now, how do you staff with this in mind? If you have smoothed the artificial variability, your staff resources may be sufficient now to staff to the new and improved (aka smaller) peaks and valleys. And if you need additional resources, it will be mainly due to natural variations, in which case you should still have smaller variations in census. Your newly created float pool (see Chapter 3) will be able to help you out there!

This is also where you start with staffing to the new mode (post smoothing) as opposed to the average or mean when you can. How do you figure demand? Go back to Chapter 2 and read about how medians and modes work, and review the example. This will lead you into the right direction. You will need to calculate your own figures for your unit by taking in a year's worth of data if you can. Unless you have had changes in physician practice affecting volume, you can take the mode each day or week for last September and plan your schedule for this September the same. Does your volume demand dip in the summer? Although this adds more complexity, each day might have a different staffing need as you create the schedule. But we already knew it was different day to day. Instead of waiting until today to refigure your staffing needs for today, it will be more effective and safe for your patients to do it ahead of time.

Summary

Here are the key points covered in this chapter:

- Do not just blame your management issues on the idea that your patients are different.

- Peaks in census add unneeded stress to your staff and increase likelihood of patient death.
- Understand the natural variability that impacts your unit and manage it.
- Understand the artificial variability that impacts your unit and try to eliminate it.
- Using the tracer methodology, you should be successful in finding multiple sources of variability.

7

Target Technology That Improves Staffing and Outcomes

Sacred cow: "RNs will be replaced by robots."

Technology has improved nurses' ability to provide care. Think about the glucometer. Some older nurses out there will remember the days when the only way to test for diabetes was to sip on a patient's urine to see if it was sweet (thank goodness I missed that phase of nursing!). Do you appreciate the telemetry monitors, MRIs, and computers? Or do you have a love-hate relationship with them?

In this chapter, we discuss health care technology across a wide spectrum. Hopefully, you have it on your unit or have at least heard about it. What I talk about is the technology that some hospitals may have, what it means for patient care and nursing, and how it may affect your staffing. I think it is important to remember that technology can assist nurses in tasks that enable us to improve patient care. That is a good thing, particularly for the patient, who really comes first.

Technology Efficiencies

Staffing and scheduling is technology dependent. Most specialty organization's staffing guidelines, set ratios, and even acuity measures do not take into account the efficiencies caused by technology. As you read this chapter, and see the examples, think of this:

- Do you know the impact technology has on your staff and care delivery model?
- Do you need to change your care delivery model to match the technology workflow?
- What efficiencies will or have your staff gained through technology?

Consider the following ways that technology can help the nurse:

- Increase efficiency by removing the nurse from the communication chain that does not require his or her attention
- Help organize work through clinical decision support systems

- Empower the patient to receive and learn education through an interactive system, improving nursing efficiency for other nursing-needed tasks
- Improve communication by prioritizing and routing messages, either a nurse looking for another nurse, a patient's call light, or alarms to the nurse's wireless communication device (Turisco & Rhoads, 2008)

If you are not seeing the efficiencies, spend time with the nurses on the floor. Sometimes nurses have practiced so long a certain way, that instead of changing their practice with the new technology, they keep their same practices with the new technology making them more inefficient. You should see improvements, particularly with an increase in acuity of patients, and your current staffing may not have to increase.

Although it is unclear whether all technology will positively improve RN efficiency, any improvement will probably be offset by the cost of technology. A main barrier in the implementation of technology is financial. Many organizations have an IT budget for the whole organization that includes a committee and process to review and approve IT capital and manage IT equipment refresh (refresh is the process by which equipment such as computers are replaced on a regular frequency). Although the cost of technology may not come directly from your budget, it does lower the overall dollar amount available for the entire organization for other needs. Capital spending for IT applications in 2008 was projected to be 47%–52% of a hospital's total capital budget and will remain relatively constant through 2013 (HIMSS, 2008).

Wireless Communication

Wireless communication can impact staffing? Yes, in many ways.

The Joint Commission has long considered communication a top priority, even making it a patient safety goal. In a review of sentinel events in hospitals, The Joint Commission (2007) found that breakdowns in communication was a factor in nearly 70% of such events between 1995–2005. The current National Patient Safety Goal 02.03.01 (The Joint Commission, 2011) is to get important test results to the right staff person on time under "improve staff communication." It seems like it should be simple, yet the problem is really complex, with all the ways we communicate with each other in health care.

As noted in the last few chapters, a whole host of individuals are involved in providing patient care. In addition, communication among us all can be much better. How many times does anyone read the nurse's notes? Do the nurses read other discipline's notes? Not every unit has interdisciplinary rounds that force everyone to come together to talk about the patient. And we are all busy. How many people do not document until the end of their shift? If you have a paper chart still, you probably have staff who "wait their turn" to document. Even in the world of electronic documentation, if the staff do not complete real-time documentation, how will their information be shared in a timely manner? Oh, yes, by the great invention, the piece of paper we take report on. Then add on a combination of pagers, overhead pages, text messages, nurse call systems, landline phones, e-mail, computer documentation, communication boards, and the patient's white board.

While I joke, not all those communication methods are bad in and of themselves, but some are the future and others we need to stop using. Wireless technology, such as nurse call systems, text messages, and computer documentation systems, are the future and need to be incorporated and made compliant per the Health Insurance Portability and Accountability Act (HIPAA).

Nurse call systems are not just for nurses but for all staff. They involve wearing an individual wireless device where a staff member or team can be called by name (as opposed to remembering a long list of phone numbers for everyone). Computer documentation systems usually have notification systems that can be turned on to alert and send messages to staff when a lab is complete or when an intervention is needed. And my favorite: text messages. Many hospital administrators cringed and outlawed text-message communication between nurses and physicians because it can violate HIPAA and is not as secure as it needs to be. However, if your tech-savvy staff have gone to texting results and are asking for orders this way, take note: Your unit's communication methods are ineffective, and your staff have found a clever workaround.

CONSIDER THIS

Think about a wireless badge system. You will decrease overhead pages significantly, decrease the time other staff run around looking for someone, decrease mass management of cell phones, and decrease the need for unit secretaries to make every phone call.

In addition to the expense of purchasing technology, such as a wireless nurse-call system, many hospitals' infrastructure may not support it. As technology changes, the demand for power and bandwidth changes as well. For wireless technology to work, hospitals need to add more lines or completely replace old wiring.

Nonetheless, here are the positive impacts of wireless communication to staffing, which may outweigh the costs associated with implementing such a system:

- Unit secretaries spend less time "calling people."
- Information can be communicated in real time.
- Clinicians can act sooner due to shorter wait times for information.
- Length of stay is reduced due to minimized delays in care.

Wireless communication can improve communication among caregivers and facilitate safe patient care. Consider this technology for your unit, remembering to consider patient safety, nurse efficiency, communication, and your budget.

Electronic Health Records

An electronic medical record (EMR), or electronic health record (EHR), is or will be more than just a paper version of the patient's hospital chart. With the varied implementation of EMRs at different hospitals, nurses have given the EMR a mixed review. Some staff complain it causes more work, especially if they work in a paper and electronic medical-record hybrid.

When fully implemented, an EMR can automate manual tasks, streamline documentation, and enhance

communication among caregivers (Staggers, Weir, & Phansalkar, 2008). With a paper system, staff may spend more time looking for one particular record or waiting to use it. A systematic review found that bedside terminals and central-station desktops reduced nurses' time spent on documentation by 24% (Poissant, Pereira, Tamblyn, & Kawasumi, 2005). Related to staffing, one study noted that nurse time savings were not large enough to reduce staffing but could reduce overtime costs by $11,000–$33,000 annually for a large hospital (Thompson, Classen, & Haug, 2007).

Even with mixed review from staff and patients, there is a national mandate tied to payment to adopt EHR systems in all hospitals and provider clinics. The American Recovery and Reinvestment Act (ARRA) of 2009, also known affectionately as the Stimulus or the Recovery Act, was in response to the recession, and its main purpose was to save and create jobs. Secondarily, it was to invest in infrastructure and health, among other things.

ARRA included the enactment of the Health Information Technology for Economic and Clinical Health Act, also known as the HITECH Act. Before the Affordable Care Act of 2010, this act was considered the most important piece of health care legislation in 30 years. The point of the act is not just to put in an EMR but to use it meaningfully by having providers and health care staff achieve significant improvements in care. There are many requirements, and penalties for missing those requirements, starting in 2015. For an eligible hospital or critical access hospital to meet the meaningful use requirements for Phase 1 for 2011 and 2012, there are 24 objectives/measures. The objectives/measures have been divided into a core set and menu set (HHS, 2009).

NOTE

To see the full list of the core requirements and a full list of the menu requirements, visit U.S. Department of Health & Human Services (HHS) news release for August 23, 2012, at http://www.hhs.gov/news/press/2012pres/08/20120823b.html (HHS, 2012).

Staff RNs do appreciate the electronic environment, and many demand it. The younger generation of nurses grew up with computers, so it is hard to understand how health care might not use computers for everything. On the other hand, if you or your staff do not share the same appreciation for computers and thought you could dodge an EMR until retirement, you may need to retire sooner than later.

A STAFF NURSE'S PERSPECTIVE

Physical paper charts were cumbersome and time consuming because of illegible handwriting. Errors were inevitable. Working in a hospital with an electronic charting system has contributed to a workday focused on utilizing the time I have on patient care and safety rather than on order translation. Gone is the fumbling in the chart trying to decipher orders for clarification. Orders are clear, precise, organized, and space saving. I can now focus on critical thinking, order follow through, and care anticipation.

–Pete Lopez, RN, BSN

When I became director of a home care agency, I adopted a hybrid documentation system. Only part of the organization had gone up on the EMR, and those staff who

did not want to go up were hanging out on the other home care teams, still on paper. One of the first things I did was create an implementation schedule to finish the rollout of the EMR to everyone.

On the human side of an EMR rollout, it is important to demonstrate, or model, how to use the technology while providing patient-centered care. Just because you are typing on a laptop in a patient's home or at the bedside does not mean you cannot still engage the patient and family. As the manager, model best practice for your staff, or find a staff member who can to engage and demonstrate to other nurses real-time documentation. As a patient, I always felt safer knowing that the nurse was immediately documenting my care, which I knew would improve my safety.

TIP

For a successful adoption, role modeling appropriate use of the EMR while caring for the patient is critical. Even the most expert staff nurse who has worked 10, 20, or 30 years in a paper record is a novice nurse in the EMR. It is not just good enough to show them where to chart what. You need to demonstrate to them how they can merge their documentation with their practice in real time so that they can become expert nurses in the EMR.

Staffing for a Go Live

The answer to how to staff for a go live may be the holy grail of EMR implementations (aka, go live). Your EMR vendor probably has an answer and may have examples from other go lives. Keep in mind, the vendor really wants a positive implementation and so may err on the comfortable side of staffing. The vendor is not taking into consideration your budget. That is another issue.

Consider these costs and staffing points when planning for go live:

- What is the needed super user ratio to staff?
- How much time is needed for classroom education?
- Are there different classes and lengths of education by staff position?
- How long do the super users themselves train prior to go live?
- How much time will the super users need for ongoing education of the system?
- How long is the recommended time to have super users out of the count to assist staff at go live?
- Is this coming from your budget, or is there a central budget for these costs?
- What is the average time for staff to become comfortable with the EMR?
- For your per diem or part-time staff, how will you ensure their education and competency?
- Who will assess ongoing competency and appropriate use of the system?
- Do you get to alter productivity targets for the go live?

CONSIDER THIS

I was recently in charge of the clinical operations aspect of a go live for our new hospital registration, scheduling, and bed board (this was the "first phase" of the rollout for our new EMR). The company stated that the super users to end users was a 1:8 ratio. When they started to work

> with our IT department, they were taking into consideration all staff on the unit to plan for super user coverage (and note, the cost was coming out of the individual unit's budgets). What I caught could have been a very pricey and overstaffed go live. Because not every staff RN needed access to the first-phase EMR components, focusing the super-user support to only those who needed it, such as the charge nurses, unit secretaries, and case managers, was more cost effective. So, instead of having multiple super users scheduled per floor, we needed only one super user per several floors.

Implementing or changing your EHR is a resource-intensive process and can have major impact on staffing levels during the learning curve. Understand the impact of a go live on your unit and your staff to ensure the best utilization of super users and support to minimize costs to your unit and organization.

Clinical Decision Support

Once you have an EMR up and going, one of the next stages of an EMR's capability is clinical decision support (CDS). The main purpose of CDS is to assist your staff and physicians at the point of care to determine diagnoses, analyze patient data, and determine next steps in care, or to guide the next set of interventions (Berner & LaLande, 2007). Some have taken this to mean that the CDS makes decisions for the nurse. Relax, current theories on CDS do not really support that view.

Many may think of a CDS as a system in which the nurses enter data and out spits what they need to do next

and act upon the system's decision. The new way to think of a CDS is as an interactive tool. The CDS assists the nurse, using the nurse's inputs and knowledge with the CDS to help the nurse analyze all the information together. The CDS might give several suggestions and have the nurses choose the actions on thier own. "In a systematic review of computer based systems, most, 66%, significantly improved clinical practice" (Kawamoto, Houlihan, Balas, & Lobach, 2005, p. 1). Additional features of clinical decision support are (Garg et al., 2005):

- Alerts of critical values
- Reminders of overdue preventive health tasks
- Advice for drug prescribing
- Critiques of existing provider orders
- Suggestions for various active care issues

In understanding the basic development of CDS, there are two main types: knowledge based and non–knowledge based (Berner & LaLande, 2007). A knowledge-based system enables users to edit the knowledge base to keep up with changes in nursing or medicine and then uses the data from the knowledge base with the patient's data. A non-knowledge-based system instead uses machine learning, where the computer learns from experiences and finds patterns in clinical data (Berner & LaLande, 2007).

TECHNOLOGY AND POSITIVE PATIENT OUTCOMES

Renee has been a labor nurse for 6 months on a busy unit. Although she has minimal experience, she has several tools to assist her in the care of her patient. The fetal heart rate is displayed on a central monitor where other nurses on the unit can review

it and advise Renee as needed. In addition, she is documenting in an EMR that has robust CDS. As Renee enters the characteristics of the fetal heart-rate pattern (baseline, variability, periodic changes), the system confirms her evaluation. If her charting is not consistent with the algorithm in the system, she is prompted to assign a different evaluation or change her documentation. And if the evaluation is a concerning fetal heart rate pattern, Renee will be prompted to perform appropriate interventions.

In another example, Lisa is a postpartum nurse preparing to discharge her patient. When she enters in the EMR her intent to print discharge instructions, she is presented with an alert that says, "Be aware you are preparing to discharge this patient, but vaginal packing has not been removed." When she had received a report from the previous nurse, nothing was said about vaginal packing. Lisa reviews the delivery report and finds a reference to vaginal packing being placed for a laceration on the vaginal wall. When the physician rounds, Lisa mentions the alert she received in the EMR. The physician had forgotten about the packing and removes it before the patient is discharged. Without this warning, the patient would have been sent home with a retained foreign object, increasing her risk for infection.

–Barbara LaBranche, RN, BSN, MBA

A CDS system can have a positive impact on staffing. Because the system assists your staff with decisions, they will be able to progress the patient care more safely and faster. A CDS system needs to be taken into consideration as you determine your safe staffing needs. The CDS does not

replace all your nurses or physicians but definitely supports your staff in making complex decisions and enables them to monitor and assess patients more effectively.

REVIEWING ALL SOURCES TO DETERMINE STAFFING NEEDS

In 2011, the Association of Women's Health, Obstetrical, and Neonatal Nursing (AWHONN) announced new staffing ratios for labor and delivery, antepartum, and postpartum areas. Meeting these ratios would have been cost prohibitive. The nursing leadership met and agreed that they could meet the intent of AWHONN's guidelines with the additional support of the technology available on the unit. Central fetal-monitoring surveillance and an EMR with robust CDS ensures nurses are identifying and responding appropriately to the patient's condition.

–Barbara LaBranche, RN, BSN, MBA

Here are some implications to consider when staffing with a CDS system:

- Do you follow a specific nurse-to-patient ratio?
- Can you assess the ability to change the ratio?
- How much time does the CDS save your average nurse?

CDS systems have been shown to improve patient care and may have an impact on nurse staffing. Take CDS into consideration when reviewing workflow, care delivery model, and patient outcomes in determining staffing needs.

Electronic Medication Administration With Bar Coding

Many hospitals are adopting electronic medication administration with bar coding, primarily to reduce medication errors. As noted in an IOM (1999) report, "To Err Is Human," 98,000 preventable deaths occur each year due to medical errors, of which medication errors are the most common. Additionally, 400,000 adverse drug events occur annually, increasing the cost of health care by $3.5 billion. Medication administration is the last step where an error can be caught—thus the importance of improving administration.

The handheld scanner quickly identifies the five rights of medication administration once the medication is scanned and the patient's identification band is scanned. I remember learning, as well as teaching, medication administration, and the process actually was supposed to happen three times with the good old-fashioned nonelectronic method: first time in reviewing the order/medication sheet, second while pulling the medication out, and third and final during the actual administration. Then, we graduated from nursing school and needed to find ways to work more quickly, plus we were feeling like experts after a while with medication administration and, knowingly or not, shortened the five rights processes at those three critical points.

Many nurses who use bar coding complain it takes them longer to pass medications. Review of the literature does state that although this process improves safety, it typically has not improved efficiency of the nurse (Turisco & Rhoads, 2008). I argue that it really is not slower than the nonelectronic method; if nurses were passing medications doing the five rights all the time, I think they would appreciate the speed of bar coding.

Here are the implications of electronic medication administration for staffing:

- If you have a functional, team, or primary care delivery model, what is the impact with bar coding and timely medication administration?
- Are there enough scanners for each nurse? Or do you make nurses share? Knowing that the Centers for Medicare and Medicaid Services (CMS) has requirements for passing medications timely, and most meds are scheduled at the same time, you will be frustrating staff and decreasing their productivity if they do not have their own scanners.
- With the scanners, are the docking stations located centrally, or are they placed around the unit to decrease the amount of time your staff spends looking for them?
- Do all departments use bar scanners? Do you use them in fast-moving and time-sensitive departments, such as the ED and ICU? If so, do you need more staff to assist in passing medications?
- If you are going live, will you need to staff up to support the learning curve?

Medication administration technology can improve patient safety and outcomes. Staff may believe this technology negatively impacts their efficiency; therefore, it is important as the manager to understand how the preceding factors may impact your unit and increased workloads.

Electronic Monitoring

When we think of remote surveillance, we tend to think of telehealth in the community. However, think of this as telehealth for the acute care setting. There are various

types of remote-surveillance models, including simple video monitoring or the much more complex electronic, or "tele," ICU. As technology progresses, lengths of stay become shorter and reimbursement dwindles, and it becomes increasingly important to incorporate technology into our care delivery models. It has a profound impact on staffing and scheduling—not only for the electronic unit but also for the units that are being monitored.

Video Monitoring

Video monitoring at a basic level is just that: monitoring a patient through a video camera and a television. Again, technology is not a replacement for RNs; it can be used to successfully augment the oversight of a specific patient to improve care while reducing care costs. One specific example is Tampa General Hospital, a Magnet-designated and Joint Commission–certified hospital. After assessing the reasons for their sitter usage (43% due to confusion/fall risk/agitation), the literature, and alternatives to sitters, a video-monitoring program was started and first tested in its neuroscience medical-surgical unit. The initial benefits for this program were mostly financial, as the pilot was unable to measure a change in patient outcomes. Despite startup costs of $160,000, the first year savings was $470,000, or approximately 21 full-time equivalents (FTEs) (Davis, 2010).

Electronic Intensive Care

Tele-intensive care is a combination of video monitoring, CDS, and expert physicians and RNs who continuously act as an additional layer of support for intensive-care patients

in the hospital. Well over 300 hospitals have started to use electronic intensive care, some for nearly a decade or more. Hospital administrators have implemented this technology for two main reasons:

1. To combat the intensivist shortage in the United States
2. To obtain better patient outcomes

This technology is an intensivist-led team located separately from the hospital and inpatient ICU beds in an office and may be considered the "hub" like an air-traffic control tower. Electronic ICU does not house patients or replace the hospital ICU, physicians, RNs, or staff but supplements the care given in this setting. The electronic ICU is usually staffed with board-certified intensivists and/or acute care nurse practitioners as well as experienced critical-care nurses. The hub has two-way voice, two-way video, and data technology for the staff to "take care of" the ICU patients remotely. The physicians and nurses execute predefined plans or intervene in emergencies when a patient's attending physician is not in the ICU.

CONSIDER THIS

The Leapfrog Group has concluded that having full-time intensivist staffing in metropolitan areas could save 53,580 lives annually (Goran, 2010). However, fewer than 15% of ICUs are able to provide this level of coverage (Goran, 2010). The Leapfrog Group has recognized this challenge and acknowledges that tele-ICU may assist in obtaining this quality objective (Goran, 2010).

Typical staffing ratios are as follows for the different clinicians in the electronic ICU hub:

- 1 tele-intensivist ratio is about 60–125
- 1 eRN 30–40 patients
- 1 clerical assistant to 50–125 patients (Goran, 2010).

An electronic ICU has the following components:

- **Smart alerts:** Patient information, such as physiologic and laboratory data, flows from the bedside medical record into the electronic ICU software, where algorithms look for trends in data and alert the electronic ICU staff. Care interventions occur earlier because monitored patient information is processed faster, and the intensivist or RN is able to intervene earlier, usually stopping an adverse event. Software prompts indicate when a patient is straying "out of bounds" (for example, early sepsis), enabling the electronic ICU physician to intervene, often precluding an adverse event.
- **Clinical documentation:** Some electronic ICU software has an EMR component that may or may not be used at both the bedside and in the hub. Or, interfaces are built to send data seamlessly between two different systems.
- **Evidence-based practice**: Standards of care are maintained and often improved as clinical data and best practices are built into the system for clinician triggers.
- **Outcomes:** Clinical outcomes, resource utilization, and operational efficiency are tied to the Agency for Healthcare Research & Quality (AHRQ) recommendations and are regularly tracked with the electronic ICU Programs' Reporting Solutions. Daily

management tools enable real-time patient-specific analysis for compliance with best practices. Ad hoc queries can be customized to facilitate ongoing research (Phillips, 2012).

There is a lot of research around the benefits of an electronic ICU, and the outcomes are all very similar. Here are three of the outcomes demonstrated:

- Severity-adjusted hospital mortality rate 23–29% lower than the national average for ICU patients (Goran, 2010; Willmitch, Golembeski, Kim, Nelson, & Gidel, 2012)
- Reduced severity-adjusted length of stay (Lilly et al., 2011; Willmitch et al., 2012)
- Variable cost reduction varied from 16–24.6% (Jarrah & Van der Kloot, 2010)

There are some considerations for staffing your patient side of the ICU or the electronic ICU hub, including the following:

- You should hire only experienced ICU nurses. It is not unlikely that the minimum years of experience of an RN in the electronic ICU hub is 10 years in critical care, preferably 15 years (Goran, 2010).
- With this level of expert ICU nurse, more novice nurses at the bedside have another resource and mentor/preceptor to enhance their learning, provide safer care, and have a ready source day or night to bounce questions or concerns off.
- Older nurses enjoy the electronic ICU role, as it allows them to maintain their knowledge and be productive RNs very involved with patient care while not having to stand 12 hours a day.
- Due to the rapid rise in electronic ICUs, there is now a certification available to RNs who work in this setting.

- Although this does not replace minimum staffing levels or RNs at the bedside, it may positively affect the 1:1 RN-to-patient ratio at the bedside in the ICU, allowing them to expand to a 1 RN-to-2 ICU patient ratio more often based on patient condition. With the advances in technology, surveillance, and ability of the electronic ICU staff, the bedside RN has more than just a second set of eyes.
- Initial barriers to an electronic ICU with staff include the reluctance to work with the electronic ICU RNs, such as the feeling that they are "big brother watching."

Tele-intensive care has demonstrated improved patient outcomes and decreased lengths of stay. There are multiple implications for effective and efficient nurse staffing in the hub and on the unit for nursing that need to be assessed by the nurse manager.

Summary

Here are the key points covered in this chapter:

- Technology can make nurses more efficient.
- EMRs have been found to reduce nurse overtime.
- CDS systems can improve efficiencies impacting actual staffing needs.
- Electronic ICUs can reduce mortality and length of stay.
- Electronic ICUs can impact workload and 1:1 nurse-to-patient needs at the bedside.
- Your more novice nurses will have more around-the-clock support from expert ICU nurses, particularly at night when there always seems to be more novice nurses and fewer resources.

8

Tying All Your Pieces Together

Sacred cow: "Tried this and it didn't work here."

We have all heard it. Someone suggests something, and of course, "Nancy Naysayer" says, "We tried that, and it didn't work." But do not be dismayed. The person said, "Tried." Maybe there was an issue with the first time it was tried. I remember that my mentor once told me, "A good idea is a bad one at the wrong time!" So what did not work then may work now. The issue just might have been an issue of timing. Do not hesitate to point that out. That was then, this is now, things are different, and it is worth another try.

In this chapter, we review the key components that affect your schedule and your scheduling process as well as provide helpful hints and potential solutions. We also review direct, nondirect, indirect, productive, and nonproductive time and show you how to calculate these numbers.

Where Do You Go From Here?

Where do you go from here? First, you need to assess your own unit's and organization's policies, processes, procedures, and guidelines. Then you can start to incorporate what you have learned so far in this book to build and explain your ideal staffing and care delivery model.

In your assessment, you should include key unit-specific measures, with real-time data, so that you can make the best—and predictive—staffing and scheduling decisions. By now, you should have a good understanding of your base staffing needs and what positions you may need, so how do you keep the schedule and daily staffing with no holes in it?

Earlier we discussed a float pool, but remember, you cannot rely on that to always fill your holes. A position control sheet is a great way to organize your human resources. It will help you understand at a glance your full-time equivalent (FTE) needs, how many positions are filled and by whom, who is on orientation, and what hiring you still need to do. This document is an important component that makes your workforce planning easier and more organized. If you need a position control sheet example, look in Chapter 9, "Examples of Staffing Documents and Unique Care Delivery Models."

A confusing point in your budget may be that you have two distinct numbers for employees: employees as a number of actual people and employees added together to determine the actual number of FTEs you have. So, remember, the number of staff you have usually does not equal your FTE number; it is more. On your position control sheet, you will note the physical bodies of the staff members, and their FTEs. A full-time, 40-hour-a-week employee is a 1.0 FTE. An RN who works three 12-hour shifts each week is a 0.9 FTE; an RN who works two 12-hour shifts is a 0.6 FTE. Every 4 hours an employee was not hired in to work in a week equals a 0.1 decrease in the FTE status. This is important to note as you plan for education and other events, whether you take into consideration your staff numbers by total FTEs or by total physical bodies.

TIP

Create and update your unit's workforce plan (position control sheet) every quarter. You need to be able to project forward what your unit will need to maintain quality staffing levels.

In your current scheduling and staffing process, as well as on your position control sheet, you need to consider how you do or how you will plan for the following:

- Sick time
- Overtime
- Agency/traveler use
- Unit turnover rate (transfers and resignations)
- Pregnancies and maternity leave

- FMLA (Family and Medical Leave Act)/LOA (leave of absence)
- Budgeted FTEs
- Current vacancies
- Time to hire (from resignation letter to start date of replacement RNs)
- Time your replacement RNs start until they complete orientation
- Staff competence, education, and certification levels

Day and shift changes in staffing and needs based on issues above create a lot of work, and maybe even chaos, for you and your staff. Planning and spending an adequate time properly preparing the schedule takes time. In a recent study, charge nurses reported spending up to 90% of a shift resolving intrashift staffing issues (Wilson, Talsma, & Martyn, 2011). What do you want your charge nurses doing? There are many other things your charge nurses can be doing to gain management and leadership skills rather than dealing with the result of a bad schedule and poor staffing.

CONSIDER THIS

If your workforce planning and schedules are solely based on last year's staffing patterns and census, you are setting yourself up for failure. How many days or months last year were there staffing issues? Scheduling problems and budget issues? So knowing that, why would you still use last year's data to project the next year's needs? You have to stop and be the one to clean up the data!

TIP

If you staff to your midnight average daily census (ADC) and find that you do not have the staff needed that reflects the churn in your day, think about using this modified version of an ADC. Take your midnight ADC and add half a "point" to each discharge you had in the previous 24 hours. So, if your midnight ADC is 24, and you had 6 discharges, then your modified ADC is 27 [24 + (6 x 0.5)]. You can now determine your needed FTEs based on this modified ADC that hopefully better reflects your unit's needs.

Unit Assessment

To start your unit assessment, read your unit's and organization's policies and procedures on staffing, scheduling, and time off. Also, be sure to have your completed position control sheet in front of you (see Chapter 9 if you still need to create one). This document will give you an understanding of what staff you have, how many FTEs that equals, and how your position control sheet compares to your budget. From here, you will be able to start to understand what influences your staffing.

TIP

Just because your budget or your position control document says something now does not mean it is the right number. Chances are you will need to do some adjusting to get it right. Remember, you need to update all this data quarterly. Things do change—technology changes, physicians switch hospitals and referral patterns, and even your patients may actually change acuity. Also, try the modified ADC.

As with everything you do, always find out what your organization's policy is as well as definitions and formulas. I define terms in Chapter 2 in case you need to use that as a reference. The following section reviews further calculations related to productive and nonproductive time.

Workload Measurement

Workload measurement means what it says: It is the measurement of work requirements. It can also be referred to as *acuity*. This can include the time, skills, and knowledge needed to perform specific interventions within various categories or domains of care (Scherb & Weydt, 2009). These domains are typically informed by using a nursing classification or standardized language system. These methods of determining workload are very labor intensive. Acuity software systems do exist to do this for you, at a cost of course. Examples of standardized language systems that may be used in an acuity software program include:

- Nursing Interventions Classification (NIC)
- Nursing Outcomes Classification (NOC)
- North American Nursing Diagnosis Association International (NANDA-I)
- Systematized Nomenclature of Medicine—Clinical Terms (SNOMED CT)
- Omaha System

Workload measurement has also been used in relationship to diagnosis-related groups (DRGs) or case mix index (CMI). The trouble with using DRGs is that they are a medical diagnosis, and the amount of nursing work between two patients with a DRG of hysterectomy may be vastly different. The CMI has the same issue. The CMI is the average DRG weight for all Medicare volume. Although nursing care does depend partly on the medical diagnosis, it does not measure the nursing components of care.

You need to know whether your organization uses any workload measurement already; if not, you need to determine this yourself by maybe using your unit's average

CMI. The best solution is to buy acuity-based staffing software that determines acuity for you.

Workload Calculations

To determine workload, you need to have your workload measure, whatever that may be. As mentioned previously, you might use DRG or CMI. Once your workload is quantified into an average number, you can determine the total number of FTEs you need based on your acuity as opposed to solely on historical staffing or finance data. Remember, we review how to determine your hours per patient day (HPPD) in Chapter 2.

Here's how to calculate FTEs for a unit based on acuity (Dugan Claudio, 2004):

1. Direct hours

   Acuity/workload measure x target hours
   = direct care HPPD

   NOTE

   Target hours should be in part based on professional standards. Example: Your professional organization states that there should be 5.0 hours of nursing care per patient per day. What is the difference here? Remember, we are figuring out HPPD based on acuity, taking the professional standard into consideration.

2. Nondirect hours

   Nondirect FTEs for the unit x 40 hours /168
   = nondirect HPPD

3. Total HPPD

   Direct HPPD + nondirect HPPD = total HPPD

4. FTEs

   Total HPPD x ADC x 365 / 2,080 hours per 1.0 FTE = total FTEs

So now you have figured out your FTE need based on workload. Again, as with your ADC, if you can use the modified ADC (the one where it takes into consideration churn with points for discharge), use that number here. And remember that this is only the workload calculation to determine FTEs needed if they all showed up to work each day, never got sick, and never went on vacation, and you have no turnover.

Nonproductive Time

By now, you have figured out or know how to figure out how many FTEs you need for quality staffing and scheduling based on a workload measure. However, there are more steps! The preceding number assumes that your nurses never take time off. This downtime might be called something different at your organization, such as *benefit replacement* or *allowance time*, but typically it is considered *nonproductive time*.

In order to make the appropriate adjustments and hire sufficient staff to cover leave of all kinds, consider a 22% allowance (ICN, 2006). Your organization may have its own number, so ask first.

Here is an example of how to calculate nonproductive time:

Take the prior FTE count from the calculation before (results of step 4) x 1.22

This equals total number of FTEs for your schedule, including coverage of vacation, sick time, and other types of leave.

Remember, your organization's ratio may be different from 1.22, which is the allowance recommended by the ICN. Also, know whether or not your organization includes what we define in Chapter 2 as nondirect time in your organization's nonproductive time. You do not want to include nondirect time twice in your productive and nonproductive numbers.

Staffing for Direct, Indirect, and Nondirect Time

I know I am adding more complexity with each section, but it all is very important. So far, you have figured out how many nurses you need. In addition, you have figured out the benefit replacement time to give you an additional number of nurses you need. But did you consider how much time they would spend in direct and nondirect time? What about the staff who provide indirect care?

The nice thing about nondirect time is that you have some control over it—unlike nonproductive time, which is somewhat fixed (amount of vacation time a nurse may accrue) and something staff are legally entitled to (FMLA). You may decide that you will let your nurses have 20 hours a year of continuing education and that your nurses get a maximum of 15 hours per year to participate in a shared leadership committee. These are items you can control and have flexibility with.

Indirect time refers to the time spent by staff that do not flex, such as unit clerks, charge nurses, and support staff. It is important to benchmark these numbers as well. The Labor Management Institute (2009) provides a benchmark for indirect hours by service line (see Table 8.1).

TABLE 8.1
INDIRECT HOURS BENCHMARK BY SERVICE LINE

Service Line	Percentage of Indirect hours
Critical care	13.2%
Intermediate care and specialty units	15.9%
General medical surgical	11.4%
Women's and children's	14.1%
Perioperative services	15.5%
Emergency department and other units	20.1%
Behavioral health and skilled nursing	18.6%

The following formulas assist you in determining how all your budget and staffing numbers go together and what they mean to your budget:

Total productive time (hours) includes direct time + nondirect time

Total productive time + indirect time + nonproductive time = the total dollars needed in your budget

The best way to figure out these numbers is to know your total budget and benchmark it against other databases, hospitals, and like units to determine what you want to set as a budget for indirect time and nondirect time.

Front-Line Leadership Schedules

Front-line leaders are usually the charge nurses. You might have charge nurses in or out of the count, meaning they may or may not take patients based on your unit's needs. If you have dedicated charge nurses who do not take patients unless a critical need occurs on the unit, consider how you schedule them related to time. Does your charge nurse

work 12-hour shifts if your staff mainly work 12-hours shifts? Or does the charge nurse work a different length shift than your staff? It is important to understand that the charge nurse's schedule can improve your day of operations staffing.

As you learned earlier, charge nurses spend a lot of time on intra-shift staffing. So have your charge nurses come in an hour before the change of the staff nurse shifts. There are several benefits to having charge nurses start earlier than staff shift change. The charges nurse can do the following:

- Hand off important issues between themselves with fewer interruptions
- Focus on their incoming staff
- Plan effectively for staffing before the staff arrive
- Be there throughout the shift to see how well (or not so well) their plan worked

An additional benefit is that staff understand the expected patient volume for the day.

Some organizations may have the outgoing charge nurse prepare the staffing assignments for the oncoming shift. There is some argument to support this practice, such as the off-going charge nurses know the unit's patients better as they have just spent the entire shift with them. The concern is that they may not know the oncoming staff's ability and they are not staying on the shift to see the direct impact on how they staffed related to the impact on the flow of that shift.

A typical point of confusion is that your charge nurses may take a patient assignment. This now effects your direct and indirect time. How do you take a working charge nurse's time into consideration for budgeting related to direct and indirect hours? Most benchmarking organizations place all the hours into the direct care bucket for individuals who work in direct patient care 50% of

the time or more. If your organization has the ability to split individuals into both the direct and indirect bucket, then by all means do that. If not, follow this calculation to determine the percentage of time your charge nurse or support staff are in direct and indirect care. Suby (2010) proposes a commonly used formula to define the position(s) as a percentage: Divide the required indirect time by the direct time and multiply by 100%:

Indirect time ÷ Direct time =
240 minutes ÷ 480 minutes x 100% =
50%

Being able to understand your direct and indirect hours and costs is important to support your FTE needs and staffing. Make sure you count every staff member appropriately in the right bucket so that your data are as clean as they can be.

Maintaining Staff Morale

Regardless of where you work or how long you have worked there, scheduling can be a very heated and political topic. Unfortunately for those of you who are conflict averse, this can have a negative impact on your morale. So, how do you deal with these issues? If you have a shared leadership committee, these are the types of decisions that it should help make. Whatever decision it makes, you need to own. You cannot delegate your responsibility as the manager to the shared leadership team, particularly to have it make a decision you do not want to make.

TIP

If you make someone happy, you have probably upset someone else. You cannot make everyone happy all the time. Your job as the manager is to be friendly to your staff, not to be friends with your staff.

You should have a process that is very clear and written down in a policy or procedure guide about scheduling components such as tradeoffs, signing up for shifts, holiday rotations, and weekends. In order to maintain morale, you need to have a process that is fair to all staff but consistent with human-resource policies and organizational expectations. If the organization supports the scheduling process by seniority, then it is clearer that those with the most seniority might have the ability to sign up first for holidays and other preferred days.

In an attempt to retain all staff, many organizations have moved away from rewarding employee seniority. Rewarding seniority is a way of recognizing the nurses who have stayed at an organization the longest. However, it is fraught with issues. Is seniority measured from time of hire no matter what positions they had first? Does it start at the time they became RNs? Does it measure only time on that unit? A senior nurse on one unit may not be a senior nurse on another unit. Treating all staff equally does have its own issues, but staff at all levels will feel they are being treated fairly.

Building the Initial Schedule

Say you treat all staff the same. How do you go about creating a schedule that is fair? Consider these methods for decreasing "scheduling hogs," assessing tradeoffs, and determining vacation days and holidays.

Initial scheduling is complex. If you have an electronic scheduler where staff log on and choose their scheduled days, you can build many of these rules in to decrease your work after the staff enter their desired days. If you are on paper schedules, make sure that everyone is aware of the processes and that they stick to them.

Here are two options for structured staff involvement in scheduling:

- Post the open schedule to your full-time staff first, followed by your part-time staff, then your per diem staff, allowing for several days in between. This may not seem as fair, but keep in mind the full-time employee needs more hours than the other two groups. They also have a larger FTE requirement for your unit.
- Take all your staff and place them in two to five groups that are equal in full-time, part-time, and per diem staff. When you open the schedule, open it first to group 1, followed by groups 2 and 3 respectively. Then, for the next open scheduling period, group 2 gets to be first to schedule, followed by group 3, then group 1. Continue to repeat. This way, each group is equal, and it rotates through everyone, decreasing a scheduling-hog effect.

However you decide to structure staff involvement, it is important that you remain consistent, fair, and vigilant in monitoring for staff concerns. All your staff may not like the process, but as long as they know that the rules are the same for everyone and there is no favoritism going on, they will respect the process.

Vacation Days

For vacations, always start with understanding your organization's policy first. Make sure you have the following questions answered or ensure you answer them for your unit in your staffing and scheduling policy with the input of your staff (if they can have input in this).

- Is there a set time frame for requesting vacation or paid time off (PTO)? (Example: not sooner than 6 months before.)

- What is the maximum amount of time anyone can take off at one time?
- Can staff request vacation time even if they do not have enough hours at the time of the request to cover the days off? What if they do not have the hours needed at the time the vacation comes?
- How many staff can you allow to take vacation at one time?
- Did you figure in your unit's average sick calls, FMLA, and LOAs when determining how many staff can have vacation time at once?
- Is the float pool going to be able to meet your needs to replace your staff on vacation?
- Do you have the slack in staff to cover the vacation time without outside unit help?
- Does your organization allow vacation time during and around holidays?

Now, once you have those questions answered and understand your needs and abilities, you can figure out who gets it! Here are two useful methods:

- One method is first come, first serve. This method is fair for those who know what they are doing months in advance but not as fair to those who have an event turn up at the last minute. You know your staff: the planners and those who live life one day at a time. Before you say that people need to plan better, remember your morale and the fact that some tendencies like these are innate to who they are as people.
- Another method is to open requests for vacation whenever you like but wait to take all requests into consideration until right before the schedule opens. Now, if you complete a schedule one month at a time and post 2 weeks before, that is an issue for

those wanting plane tickets. Consider building out a 1- to 2-month schedule that is posted 2 to 4 weeks before. As you consider those requests, take into consideration what that staff requested for last year and the reason. You will have staff who know their wedding dates a year out. Are you going to deny their requests? Probably not. There is some individual judgment involved, but if the staff understand your reasons for doing what you do, they will consider it fair even though they may not like it.

CONSIDER THIS

You will still need to smooth the schedule before it is posted. You will need to make sure that your staff all meet their FTE requirements, weekend requirements, holidays, and vacation needs. Make sure the staff know that the schedule is not final until it is posted. Too many times staff take an initial version and fail to check the final version. Also, have a process in place to notify the staff in case a change was made after the official posting of the schedule. Once posted, it is unfair to make a change without letting the staff know.

A close relative of vacation time is personal request days. A personal request day may be considered like a vacation day in your organization where the staff must take their vacation time to cover the day. A personal request day is used mainly as a way to request a single day off for a physician appointment or other personal reason. With a personal request day, staff would still be required to work to their FTE in that given work week if not required to use their vacation time. Occasionally staff may abuse

this process, using it to get the days off they want without having to use vacation or sick time, so as the unit manager you will need to monitor this process for abuse. If done correctly, this process will improve staff satisfaction with scheduling, as they can improve their work-life balance without needing to use vacation time for non–vacation time reasons.

Staff vacation time is very important, and it is a delicate balance for the staff in asking for time off and confirming their plans for personal or vacation time. Although this can be an emotional issue, especially if their request is denied, remember that the process needs to remain consistent and fair to all staff.

Holidays

Not many people like working the holidays, so you will always have someone unhappy about working one. To make it easier for the staff, involve them in this process to determine how they want to staff holidays. What is your organization's policy on holidays? Start with ensuring that your holiday list includes what your organization considers a major and/or minor holiday. Many organizations may state that staff have to work one or two major and minor holidays a year. Also, is there leeway to add additional unit holidays? Do you have a unit where there are many staff with young kids? Maybe everyone wants Halloween off or the day after Thanksgiving off. Have your staff determine whether unit-specific holiday rotation is needed. You can add it on top of their organizational requirement.

An added complexity to holidays is your night staff. What the day staff may consider a holiday may not be the same to the night staff. Keep in mind that your staff

involvement in this will include both day and night staff. Here are two options for staffing night staff around holidays:

- The easiest method is to keep track of who worked which holidays from the prior year and let them take them off this year. However, what do you do if you have staff who transferred from another unit who had to work it as well last year and are requesting it off? Not an easy call.
- Another way is to again divide your staff into groups—1, 2, and 3 (or as few or as many as you need to cover the days)—and assign holidays in blocks (see Table 8.2). This year group 1 works holiday group 1, and next year, group 1 works holiday group 2. As staff are hired in, you add them to the holiday group in which they are needed, and this way you can let them know up front what their holiday commitment will be. Based on night staff, you might have Holiday Day groupings and Holiday Night groupings. Keep in mind that your number of groupings is based on the number of staff you have and how many you need to cover each day and night shift.

TABLE 8.2
EXAMPLE HOLIDAY DAY GROUPINGS

Holiday Group 1	Holiday Group 2
Christmas Eve Day (major holiday)	Christmas Day (major holiday)
New Year's Eve Day (major holiday)	New Year's Day (major holiday)
Thanksgiving Day (major holiday)	July 4th (major holiday)
Labor Day (minor holiday)	Memorial Day (minor holiday)
Mother's Day (unit-chosen holiday)	Halloween (unit-chosen holiday)

Again, get the staff input in the holiday schedule and rotation. Which nonholidays are important to your staff?

Is it the same every year? Remember, a fair and consistent process for holidays is just as important as the overall schedule.

Trading Shifts

Tradeoffs should be quite straightforward; however, there is always the he-said, she-said aspect. Someone thought he or she made a trade in a shift with another person, and somehow the other person really did not agree or forgot. Create a process that allows tradeoffs after the schedule is closed and posted. This process should include the following items:

- Create a policy or unit guideline that staff understand tradeoffs cannot create overtime or shift incentive for someone.
- It is the responsibility of the person wanting to trade a shift to find someone to trade with, to complete the process, and to work the shift if he or she does not find someone to trade with.
- Create a tradeoff document that states the name of the person wanting to trade, the person who will take the trade, the dates of the trade(s), the specifics of the policy that need to be reinforced (such as cannot create overtime), a spot for each person's signature, and a spot for your signature. A trade is not considered approved until all signatures have been obtained. Make sure your staff know this includes your signature, because you need to assess the tradeoff prior to approval.
- Allow only yourself (or your designee) to make changes to the final schedule. The last thing you want is staff writing all over a posted schedule. If you have an electronic schedule, same thing—allow only yourself (or your designee) to approve and make the change there as well.

Your staff need the ability to trade shifts as need be. It is important as the manager to help the staff balance their work and private lives. Having a policy that clearly outlines the process will ensure a fair and clear trading process.

Low Census

Now you have mastered the perfect schedule; you have managed your resources and did not overhire; flu season was not as bad this year (natural variability); and you have fewer patients. But now you have to deal with low census. Some staff hate low census, while others seem to want it every day.

Again, start with your organization's policy on low census and conform to it. However, there might be specifics that you need to manage on your unit. Here are some considerations for managing low census:

- Create a log on the unit that the charge nurses manage to keep track of all your staff, what dates they took low census, and who had low census last.
- Take turns. You may have people who always want low census. I have always been okay with that, passing it around the staff that like it and request it. But that group still needs to take turns getting it.
- Work with the centralized staffing office or other units before you grant low census. Are the other units covered sufficiently?
- Ensure that you have covered this topic and the process of low census for your unit and always incorporate your staff in this topic.

Managing your resources (artificial variability) will help ensure that your low-census days are kept low so that you do not burden your staff with unnecessary days off. Most people work because they need money and would rather not take their vacation days to cover a low-census day.

Multiple Shift Lengths

Having multiple shift lengths seems like a way to create more chaos on your schedule; however, it can help to fill shifts. Multiple shift lengths can also create confusion for staff and patients, so they need to be managed well. Here are some good reasons to consider having some multiple shift lengths:

- You have older or retired nurses who may not be able to work a 12- or 8-hour shift but can work part of a shift to cover full-shift nurses while they take breaks or lunch.
- You can alternate long and short shifts for older or retired nurses to give them a break between long days for increased rest.
- You can bring in a nurse during the 4 hours of highest admissions and discharges to improve patient flow.
- You need to fill an open shift day of operations, and you can get two staff to cover one shift.
- You have a great shared leadership committee and involvement. However, the meetings are on the same day as the staff's direct-care day. Having a 4-hour shift might allow your staff members to attend their committee meeting (and it demonstrates your commitment to shared leadership).
- You have a few nurses who want to job share or split a position. Two nurses who will partner together and work the same days, while one works the first half and one works the second half.
- Short shifts are not as conducive to taking a patient assignment but work better when tasks or functions are assigned to this nurse. If a nurse takes an assignment on a short shift, have a plan to cover those patients once the nurse is done with the short shift as opposed to making the nurse stay longer.

- Many of these ideas suggest older or retired nurses, but maybe there is a nurse with daycare issues who can work the same short shifts to give breaks to staff.

NOVEL HOLIDAY SOLUTION THAT DID NOT GO AS PLANNED

I was a manager of a small ICU in a community hospital where most of my new RNs in the ICU were hired at the same time. As the holidays approached, the hospital's holiday policy and intense political overtones were beginning to affect the newly hired ICU nurses. The hospital's past holiday policies were basic and had worked well for that small community hospital. The policy gave staff members who were employed the longest the days off that they wanted. For that reason, the long-standing hospital policy was not going to work for the ICU. The newly hired ICU nurses were beginning to discuss leaving. Because it was difficult to find RNs who knew basic E.K.G. arrhythmias along with more advanced skills, I wanted to save the newly hired ICU RNs and ensure patient safety during the holidays. We researched holiday staffing policies in surrounding larger communities and city hospitals. Ideas were generated at various nurses' meetings. Some great ideas were brought forth during these meetings, voted on, and forwarded to Administrations. The response from the Hospital's Departmental Administrations was, "Old traditions are hard to break." Finally, I found an article in a nursing management magazine that sounded like a good possibility.

The article presented a possible solution for smaller hospitals' holiday-staffing issues that had been highly successful at other community hospitals on the east coast. Basically, the article said to take the 12-hour shifts and break them into 6 hours, and everyone would have to work one 6-hour shift during the holiday. Even though all nurses would work, they also would get most of the holiday off. The entire hospital was very positive, and the various departments wanted to try the 6-hour-shift policy. Administration released a memo stating that if the trial holiday policy of 6-hour shifts was successful over the upcoming holidays, the older policy would be replaced.

What happened in the ICU went unbelievably wrong. As the manager, I did not anticipate that politics among the physicians did not mix with the new trial 6-hour-shift holiday policy. Without anyone's knowledge, a well-loved physician gave three ICU nurses the permission to change their 6-hour shift into 1½- to 3-hour shifts, which was not discovered until part way through the first holiday shift. The 6-hour-shift holiday policy was successful in all the departments in the hospital, except the ICU.

–B.S.W.

Multiple shift lengths do not have to add complexity to your schedule. Assess the need on your unit and determine how you can best improve the flow or work day with a partial-shift employee.

Daily Staffing

We have touched on daily staffing throughout this book and this chapter. If you have spent the time creating a great schedule, been fair with staffing, managed your resources, and understood your workforce needs and budget, then you have done as much as you can up until this point in staffing for quality patient care.

Although your schedule and staffing is typically a process owned by you, the day-of-operations staffing might be owned by a centralized staffing office or the house (or administrative) supervisor. This department or individual is usually responsible for taking into account all the happenings in the entire organization to make decisions. Although it may seem like you are losing some control over your unit, another unit or department may be worse off for various reasons. Therefore, it is important to get to know your house supervisors and those in the centralized staffing department. Here are some important questions to ask them:

- How do they make decisions for adding, floating, or low censusing staff?
- How do they make decisions to place patients?
- Do they know your processes? Your budget and staffing concerns?
- Do they work with your charge nurses and vice versa? Do your charge nurses work with them?
- When do issues need to be escalated up to you?
- Is there an agreement for timely feedback? Telling you about an issue a week later does not enable you to manage effectively. Conversely, if there is an issue or staff member who is an issue for them, you need to fix it.

CONSIDER THIS

Nothing irks me more than someone saying it is not our patient. Staff do it all the time, and managers do it too, when it comes to protecting their unit. Whether you are in the ED, Labor and Delivery, ICU, or med surg, any patient that comes into the hospital, regardless of where they are or who their nurse is, *is your patient*.

THE HOUSE SUPERVISOR'S ROLE IN DAILY STAFFING DECISIONS

Staffing, much like nursing, is both an art and a science. In our health care world, which is ever evolving with challenging payer mixes, we must become more creative as we balance patient safety, extraordinary patient care, and RN satisfaction, while always keeping budgets at the forefront of our decision-making.

The science side is quite easy, as a matrix is created based upon a budget, and a staffer simply matches the number of patients with the number of nurses and ancillary staff needed. Sound simple? Not at all, as now the art and experience piece comes in. The decision-maker for staffing, often a house supervisor, must take this snapshot in time and determine how many more patients will be discharged or transferred and how many more will be admitted along with the acuity of the patients as a whole on a nursing unit. There are a number of acuity systems available on the marketplace, but most require manual data entry and a good deal of interpretation.

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The house supervisor works with the RN managers on the nursing units, the ED, OR, and other procedural areas to determine the anticipated patients for the upcoming shift. He or she must also work with the nursing staff and the physicians to determine the number of patients that we discharge or transfer. Estimate too many and the nursing staff is stretched too thin, estimate too low and a unit is overstaffed, and all eyes are on the decision-maker.

Oh, yes, and do not forget the acuity piece—the house supervisor must be keenly in touch with the skill level of the managers as they evaluate the acuity and needs of the unit. Oftentimes the leader directly influences the flow and stress level of the staff. Just a few things to think about as the decision-maker balances the art and science of staffing a hospital while being always mindful of the budget.

–Jerri Foster, MSN-L, RN

In the end, remember that everyone has a tough job, and people do not come to work saying they want to do a lousy job. Before thinking that people are out to get you or that they just do not get it, talk to them. People think they make the best decisions they can at the time they make them. If they do not have any feedback, how can they know to improve?

Disaster Management

Since September 11, 2001, and then with Hurricane Katrina, there has been a heightened focus on disaster management. All hospitals should have a disaster-management plan. To understand your unit's role and

your role as a manager in a disaster, read your facility's plan first. In addition, many organizations require staff, particularly managers and leaders who might be involved with a disaster, to take disaster-management courses offered online by the federal government. The Federal Emergency Management Agency (FEMA) has a lot of helpful information on its website (http://www.fema.gov). This site does not provide information on how to staff in a disaster, but it does give you more things to consider.

Although disaster management does not have much to do with your schedule or daily staffing today, it can be a large and important issue if an emergency does happen. Emergencies are not just terrorist attacks and natural disasters; they can be brought on by a bad flu season, a hospital fire, or a mass casualty. If something does happen, are you and your unit ready for the additional volumes of patients?

CONSIDER THIS

Many nurses are concerned about whether or not they are legally responsible for responding in a disaster. In some states, they are legally bound to, and so it is important to have a conversation with your state board of nursing to understand your role and your staff's role in legally responding to an emergency or disaster. Whether or not staff are legally bound to help will have a major impact on your ability to staff and provide quality patient care, especially because the beginning phases of a disaster can last days to weeks.

There is not much research on nursing, nurse staffing, and disaster management, but there are case studies to help guide us. Although different types of disasters require and

place different demands on resources, one recommendation is that an adequate number of nurses typically is at least 1.5 for every 1 physician (Margalit et al., 2002). Another study found that nurse-to-physician staffing is typically 2-to-1 for field hospital and on-scene triage (Yin et al., 2012). Ratios for your unit may vary based on what patients you will get from disaster or your role in helping out other units.

Here are some items to think about related to staffing and a disaster:

- Ensure you have all the updated contact information (cell-phone numbers and street addresses) for your staff. Know which staff have and use the text message feature on their phones. When land lines and cell-phone lines become overrun with calls, text messaging may be the only way to contact your staff outside work.
- Develop a list of nurses who have four-wheel-drive vehicles (in adverse weather).
- Develop a pick-up list, in a case of adverse weather, that identifies which nurses can pick up other nurses to drive into and from work.
- Understand which nurses have family commitments that may come first during a disaster. Who will need to secure child, elder, or pet care in order to come in to help?
- Know whether staff can come in if you can assist them with their family and personal responsibilities.
- Have a list of people who can come in who do not have other responsibilities that would prevent them from coming in.
- Determine whether there is space for staff to sleep at the hospital or on the unit in case they cannot leave.
- Ensure that there are food and water for staff who come in or stay during an emergency.

- Know where disaster supplies (extra protective gear, etc.) are kept at the hospital.
- Determine whether your facility has tents to use in case it needs to set up triage outside the facility.

No one knows when a disaster will strike, and no area is safe from a disaster. The best plan is to be prepared for anything. Understand your hospital's disaster plan and how your unit will be able to respond in partnership with the overall plan.

Summary

Here are the key points covered in this chapter:

- A good idea is a bad one at the wrong time.
- Update your unit's workforce plan every quarter.
- Use shared leadership to engage your staff, improve morale, and get buy in.
- Change your and your staff's perspective that all patients, regardless of where they are currently located, are your patients
- Treat all your staff fairly. Create clear documents that outline processes and procedures for staffing.
- Spending the time ahead, managing resources, and planning for your workforce will result in a better end product (schedule).

9

Examples of Staffing Documents and Unique Care Delivery Models

Sacred cow: "It's not our culture."

This is my all-time favorite sacred cow. What culture does not like change or want to stay relevant? For the person who wants to make change, remember Peter Drucker, who says, "Culture eats strategy for lunch." Culture is not really formed by the manager, but through leadership. Culture is formed from the bottom up in an organization even more so then the culture is formed from the top down. If you want to implement something unique, innovative, or different, take the time to understand the culture and work with your staff to get them to buy in first with what you want to do. Remember, your followers will only follow a leader in the direction that they want to go. You need to set up the vision that they want to be a part of and get your staff to want to

change by being the owners with you. Only together can you change the culture, and through changing your culture, you will be able to be innovative.

This chapter gives examples of documents we have discussed in prior chapters as well as touches on some innovative care delivery models. Not everything here may work for you right out of the book; you may have to tweak it to meet your unit's needs. Feel free to take something from one and mix it with a different tool. It will take work and trying different things to see what will work for you.

Examples of Staffing Plans, Policies, and Committees

As you have read and learned more about staffing, you have learned how complex and dynamic it is. It is critical that there are policies and procedures that clearly outline how staffing and scheduling are done so that there is a base level of agreement and understanding across the hospital. There may be some variations for units based on services provided, to whether nurses are on call for weekends or work every other one, but for the most part, having a standardized approach will treat all staff and managers fairly in the long run. Here is an example of someone's experience as well as the tools he developed in the process.

THE IMPORTANCE OF EFFECTIVE STAFFING AND STAFF INPUT

Health care systems face challenges on a day-to-day basis around effectively staffing the nursing unit/area to proactively meet the needs of the patient while also reducing costs and improving quality. The manager must also take into consideration the

model of care needed and evaluate if and how the model supports the structure and function of the dynamics mentioned earlier. Integrating evidence-based practice into the hiring process impacts the care for patients at the highest level. Having BSN-prepared RNs does not add to the bottom line, and the patient receives the most prepared caregiver at entry level, thus transcending the care into efficient cost and improved quality.

Another factor effectively helping the nurses on the medical oncology floor is engaging staff in the daily decision-making. Currently staff members are using an evidence-based acuity tool to determine care assignments. The acuity tool researched and implemented by our shared governance group at the unit level helps identify the needs of the patient so the charge nurse can match the appropriate assignment with the experience of the nurse. The staff members are more content and less likely to argue about assignments being too heavy, as the tool helps distribute the workload evenly. The onus is then on the charge nurse to use the tool effectively. Happy nurses translate a healthy work environment into higher patient satisfaction as well.

–Donald D. Day RN, MSN-L

Sample Acuity Tool

After reviewing the literature, this may be better stated as a "best practice" due to the collage of work from all areas. The unit-based council at Scottsdale Health Care (SHC) looked at how four resources could be put together to create a working document for the oncology unit. The developing tool was passed around to many day- and night-shift staff members and tweaked over a 3-month period. The tool

survey was used to determine whether the group was on track or not. This is an interdisciplinary form: The nursing assistants start the sheet, and the RNs finish it before assignments are made.

Here is their unit's acuity tool that was developed by taking several and re-creating their own, as noted in Tables 9.1 and 9.2. Those resources are noted below under references.

As with any change, SHC measured it by using this tool with their staff, as noted in Figure 9.1.

Acuity Tool Survey

1. Do you use the acuity rating tool…
   - ○ 100% of the time
   - ○ 50-99% of the time
   - ○ 0-49% of the time
2. Please rate the accuracy of the E/M/H scale by nursing judgment only.
   - ○ Low accuracy
   - ○ Medium accuracy
   - ○ High accuracy
3. Please rate the accuracy of the new acuity tool.
   - ○ Low accuracy
   - ○ Medium accuracy
   - ○ High accuracy
4. Do you prefer…
   - ○ Nursing Judgment Acuity Scale
   - ○ New Acuity Tool
5. Do you feel patient assignments are more evenly divided after the new acuity tool was implemented?
   - ○ Yes
   - ○ No
6. Comments: _____

FIGURE 9.1

Acuity Tool Survey.

TABLE 9.1

3C ACUITY TOOL: CLASSIFICATION LEVELS

	1 Point	2 Points	3 Points
Activity of Daily Living	Independent/ minimal assistance	Partial assistance with ADLs/ assistance with ambulation	Complete assistance/total care/ turn q2 hours/incontinence
Assessment	Protocol-unit norm vitals and assessment	Neuro checks/drains/remote telemetry/continuous pulseoximetry	Frequent vitals-assessment due to medications/blood sdministration/restraints/ CIWA/instability/> 3 drains with I&Os/post-op
IV/Medication	Capped lines/maintenance fluids with minimal IVPB/ IVB or pushes	PCA/epidural/multiple lines/IVPB or IVP > 3 per shift/occasional prn medications	Blood product > 2 units per shift/ IV meds > 5 per shift/frequent prn medication/ insulin gtt
Nursing Intervention	Minimal nursing inter- vention/lab draws/ pain intervention 1–2 times per shift	Trach suctioning q4 or less/lab draw <= q6 hr/uncomplicated and Infrequent dressing change/pain intervention > 3 per shift/isolation	Continuous bladder irrigation/frequent drain emptying/uncontrolled pain/new trach/frequent complex dressing change
Education/ Psychosocial	Minimal educational and psychosocial needs	Moderate educational/psychosocial needs q4-6 hours/call light > 6 per shift approximately	Complex educational needs/1:1 care/ call light > 8 per shift/new complex diagnosis/postmortem care
Chemo/ High-Intensity Medication	No chemo/oral chemo 1–2 times per day	Chemotherapy infusion/complex patient teaching regarding chemo/ fever with neutropenia workup	Complex medication and chemo administration/patient at high risk for adverse reactions

Directions: Tally points for each patient, keeping in mind points are assigned by having one qualifying factor in the classification level. If there are multiple qualifying factors in the same category, points are not increased. Nursing has judgment to change acuity half steps (ex. E/M.).
Easy: 6–8 Medium: 9–14 Hard: 15–18

TABLE 9.2
NURSING ASSESSMENT ACUITY TOOL

Rm	RN (RNs leave blank)	E M H	Chemo s/p AL	MISC…	N A T	Epi/ RT	Alerts/ Prec	Div wt	VS q4	Diet	Accu √
3301							ALARM/ Fall/Conf/ Sitter/Isolat				Ac&hs 0300 q__hr
3302							ALARM/ Fall/Conf/ Sitter/Isolat				Ac&hs 0300 q__hr
3303							ALARM/ Fall/Conf/ Sitter/Isolat				Ac&hs 0300 q__hr
3304							ALARM/ Fall/Conf/ Sitter/Isolat				Ac&hs 0300 q__hr
3305							ALARM/ Fall/Conf/ Sitter/Isolat				Ac&hs 0300 q__hr
3306							ALARM/ Fall/Conf/ Sitter/Isolat				Ac&hs 0300 q__hr

E/M/H – Easy/Medium/Hard **N/A/T** – Neutropenic/Anemic/Thrombocytopenic **D/C** – Discharge Pending **Epi/RT** – Epidural/Remote Tele

Rm	Activity	Toileting	Lab Sample	Linen/Baths *Check when complete		D/C	Lab Draw	Anti-coag
3301	Ind/x1/ x2/walker/ Rest/Total	Void/Urinal Foley/BSC/ Brief/Pan	Urine BM				RN Lab	Heparin Coumadin ASA
3302	Ind/x1/ x2/walker/ Rest/Total	Void/Urinal Foley/BSC/ Brief/Pan	Urine BM				RN Lab	Heparin Coumadin ASA
3303	Ind/x1/ x2/walker/ Rest/Total	Void/Urinal Foley/BSC/ Brief/Pan	Urine BM				RN Lab	Heparin Coumadin ASA
3303	Ind/x1/ x2/walker/ Rest/Total	Void/Urinal Foley/BSC/ Brief/Pan	Urine BM				RN Lab	Heparin Coumadin ASA
3305	Ind/x1/ x2/walker/ Rest/Total	Void/Urinal Foley/BSC/ Brief/Pan	Urine BM				RN Lab	Heparin Coumadin ASA
3305	Ind/x1/ x2/walker/ Rest/Total	Void/Urinal Foley/BSC/ Brief/Pan	Urine BM				RN Lab	Heparin Coumadin ASA

E/M/H – Easy/Medium/Hard **N/A/T** – Neutropenic/Anemic/Thrombocytopenic **D/C** – Discharge Pending **Epi/RT** – Epidural/Remote Tele

Position Control

In earlier chapters we touched base on position control sheets. Figure 9.2 is an example of a position control sheet you may use or modify for your unit. This document is best created as an Excel spreadsheet.

Staff Involvement in Development

How do you elicit staff input in their schedule? If you have not thought about engaging their input, do not be afraid to. In addition to the help you will get from your staff by including them, it will support the source of evidence for Magnet documentation, Exemplary Professional Practice, or "EP" 10. This source of evidence wants to know how nurses developed, implemented, and evaluated action plans related to unit-based staff recruitment and retention (Magnet Recognition Program, 2008).

TIP

Being the manager does not mean you have to have all the answers. Being a leader means you engage others to identify issues and come to a solution together. If you and your staff developed the framework for scheduling and how you staff, then your staff will own it just as you do.

Nursing Productivity Committee/ Shared Leadership Staffing Committees

To get staff input, form a shared leadership council that can assist with staffing, productivity, and resource issues. After you have formed your committee, what do you cover, what do you talk about, and how do you get started? If you want more on shared leadership or shared governance, you will need to get a book on it.

EMP No	Last Name	First Name	Certification	JOB CODE	FTE	Days	Nights	Total FTE
1111	Mensik	Jennifer	chem o	RN	1.00	1		
					RN Subtotal	1.00	0.00	0.00
					UAP Subtotal	0.00	0.00	0.00
					US Subtotal	0.00	0.00	0.00
					Grand Total	1.00	0.00	1.00

	D	N	FTE
Actual	0.00	0.00	0.00
Budget	0.00	0.00	0.00
	0.00	0.00	0.00

Total budgeted FTEs	0.00
Actual Total vs Budget	0.00

FIGURE 9.2
Sample position control document.

For the purpose of this book, the following steps serve as a pathway to a decision-making style that is evidence based and will help develop staff and management skills in a shared decision-making style (Rudner Lugo & Peck, 2008):

1. Develop the shared governance team and define the problem.
2. Find, interpret, and utilize research to guide decision-making.
3. Develop a strategy to improve the reassignment experience, support nurses, and provide high-quality patient care.
4. Implement recommendations.
5. Evaluate and monitor the revised program (Rudner Lugo & Peck, 2008).

The ANCC Magnet source of evidence (2008) EP 9 wants to know how direct care nurses participate in staffing and scheduling processes. This can be done through many avenues, but committees/councils showing direct care nurse participation reinforce shared decision-making that should be embedded in the organization. Note, the committees have all sorts of names but usually do the same functions. Incorporating staff input through committees serves to enhance your staff's engagement and can help you on your Magnet journey.

Staff Buy-In

Two fatal mistakes often made in shared leadership or any staff-based committee are that the manager talks and makes all the decisions, or, worse yet, the manager lets the staff make all the decisions without "guardrails." Staff nurses who may not have a strong belief in a shared leadership philosophy usually have had experiences where decisions

were made by the committee only to be undone or "not approved" by higher levels of management. This is one reason that staff may not buy into the process.

A guardrail can also be considered a nonnegotiable. This is a rule or set of rules that cannot be crossed or broken, but the staff have the flexibility to work within. Guardrails allow you to communicate to your staff upfront the boundaries so that they will not bring forward a recommendation that exceeds them unless they truly believe they need to. Another benefit is that you do not have to go back to them after they spend so much time working on a decision only to tell them no.

Another reason staff may not buy into the process is that the managers in the committee or outside the committee do not listen to the staff. You do not need to listen and jump. But listen, and let them know you are listening. Thank them for their thoughts and input. If there is a problem or issue, it is OK to say you need time to research an issue and you will get back to them. It is also OK to reinforce a guardrail and explain the reason (as long as it does make sense).

A third reason for staff not to buy into the process is that they fail to see improvement or change based on their decisions or an evaluation. For instance, you collect data on their satisfaction level on staffing and floating. You might display the results yet do not do anything to address issues or talk to them to let them know you heard their frustration. If so, your staff will be wary of your commitment to really listen and change. If you have not bought into the process, you cannot expect your staff to.

Staffing Plans

A staffing plan is a unit- and shift-specific plan that sets nurse staffing levels based on patient acuity and needs at

any given time, available support staff, technology, the care delivery model, and many of the aspects covered in this book. In many states, staffing plans may be a legal requirement for a hospital and your unit. Staffing plans are a way to communicate the specifics about how you will staff and schedule.

The PatientCareLink (PCL) website (www.patientcarelink.com) has sample staffing plans. PCL is a health care quality and transparency collaborative comprising the Massachusetts Hospital Association (MHA) and the Massachusetts Organization of Nurse Executives (MONE). Massachusetts is the first state to publicly report staffing plans on the Internet for patients and families to review. To see actual staffing plans from a variety of hospitals, visit its website at http://www.patientcarelink.org/staffing2011/hospitals.cfm

If you do have a shared leadership committee, usually this group will take on writing the staffing plan. If not, managers will write it, hopefully with staff input. The chief nurse executive is the highest-level nurse in the hospital, and this individual will usually need to sign off on the plan because he or she is accountable and responsible to its correct implementation.

RESOURCE MANAGEMENT COMMITTEE AGENDA

A Resource Management Committee (RMC) is an organized forum that supports optimal staffing and scheduling. The RMC committee model ensures collaboration among nursing departments in addition to efficiency, consistency, and fairness when managing staff schedules. Nurse managers routinely meet on a weekly basis to discuss staffing needs and surpluses. Standing agenda items that

meet the unique needs of the organization should be identified and addressed at each meeting. Typical agenda items include:

1. Unit vacancy rates
2. Unit productivity and staffing needs
3. Staff cancellations
    a. Cross-training opportunities available for staff to maintain their hours
    b. Order of cancellation of staff (in the event of low census)
4. Casual labor (travel and registry nurses)
    a. Timing the use of casual labor to match census fluctuations
    b. Contracts that are ending or travel nurses that can be moved to another unit
5. Per diem staff (opportunities to block schedule on units with higher vacancy rates)
6. Staffing incentives for units with high vacancy rates
7. Holiday schedules
8. Self-scheduling guidelines
9. Patient throughput issues as they relate to adequate staffing

One of the challenges to effectively managing nursing resources is nursing leadership participation. It is essential that managers in all nursing areas be committed to the process and to meeting attendance. Scheduling meetings on the same day and time each week can help nurse managers plan their workloads.

–Michelle Winters, RN, BSN, MBA

Your Change, Their Process

The difficulty in change lies with more than just an individual. Change may impact roles, expectations, adoption of new standards of practice, and incorporation of additional responsibilities with unknown results (Wang, Hyun, Harrison, Shortell, & Fraser, 2006). To facilitate your change, ensure you have integrated old and new processes, and, most importantly, include motivating your staff to continue to participate in designing, rolling out, measuring, and evaluating the change. This is where that vision really can help!

Measuring Your Change

Measurement is how you will understand your outcomes. Have you ever heard the saying, "garbage in, garbage out"? What you decide to measure is very important to getting the best outcomes. If your measures and the associated data are bad (garbage in), then your subsequent evaluation and outcomes (garbage out) will be, well, garbage. And as you present your data, they will not support your best argument and may be called out, to your dismay, in a meeting.

Everything you do—pilots, changes, your care delivery model—will be scrutinized by your staff, your boss, and his or her boss. Think about the business case for why you do or will do what you do. Think of your unit as your own business. You need to analyze the value of what you plan to do. Think of these factors in creating your business case. Remember, the more quantifiable your measures, the better. And when you present your data, place your "soft, fuzzy, feel-good" info into a case study or real-life example, not just a generic list like bullet points. It can have an impact on those in your audience who are wired more to appreciate and understand its value.

Here is a list of items to consider measuring to demonstrate outcomes:

- Are there financial implications? Costs? Savings? Are you adding more staff?
- What are the equipment or technology needs?
- Is there a return on investment (ROI)? If so, when will the ROI materialize?
- What is the impact on quality measures, such as core measures and patient satisfaction? If you are adding staff, will the cost be offset by improvements in these areas?
- Will the change in your care delivery model significantly impact length of stay? And are there patients to backfill the beds on your unit that are now more available?
- What are the benefits to the staff? The patients? The community?
- What are your hospital administrators measuring and most concerned with? Does it have a positive impact on that?
- Can you tie this back to your organization's strategic plan or nursing strategic plan?

Remember this: When determining your ROI, you need to understand how your hospital gets paid by the various or larger insurers. The three types of payment are: charges or a percentage of charges, per diem (flat fee per day), and per discharge (one payment for a patient based on DRG, regardless of services used or length of stay). If your organization still has a large percentage of reimbursement coming from charges or percentage of charges or per diem, reducing the length of stay is not a good thing; it essentially reduces the payment. Per discharge, regardless of utilization, is where a decreased length of stay will be a financial benefit

to you and your organization. So, if you want to increase your staffing level, and believe you will decrease length of stay, how you get paid may impact how this is seen. But remember, neither payment nor payer should ever drive the way you provide care.

Measuring your change is vital. If you do not have quantifiable outcomes, you will have no data to show and support your efforts in change. As hospital finances become tighter, those with outcomes and data will have greater success in obtaining needed resources.

Evaluating Your Change

It is extremely important to understand how data will be used. Now that you have outcomes to your measures, what is the "so what?" One of my dissertation committee members told me about the "so what?" What you might find interesting, or data you think you can collect to report, has to mean something to someone besides just you. When looking at your data, ask yourself, "so what?" now that you collected it. Consider the following:

- What do you do with it?
- What is the next step?
- Do you need more data?
- Did the data support why you are doing something?
- Is the data worth continuing to collect?

If you are a Magnet facility or on the Magnet journey, keep in mind the sources of evidence! One source asks how nurses use trended data to formulate the staffing plan and allocate the necessary resources (Magnet, 2008).

We have discussed staffing and shared leadership committees. This is the group you need to work with to make your change happen. You gave them a vision for the change but worked with them on the process. They are now owners with you.

Sample Scheduling Process Flow

As mentioned in the previous chapter, it may be difficult to have a completely fair scheduling process. But this section provides you with a process calendar that demonstrates how to start a scheduling process, uses group sign-up for shifts, and provides options for how long to give individuals to complete the tasks in each part of the scheduling process.

Here is what occurs during the various weeks of the scheduling process:

- **Week "0":** This is when scheduling specialists evaluate core staffing or staffing to meet their minimum requirements.
- **Week 1:** Unit leadership and staffing specialist readjust staffing core numbers if need be and mark off those whose vacation and education have been preapproved.
- **Weeks 2–4:** This is when the schedule opens for staff to self-schedule. Note that the schedule opens for the predetermined groupings at different times so that staff rotate fairly who gets to sign up first, which also decreases the burden on the system to handle everyone trying to get into the system at the same time.
- **Week 5:** This is when the clinical support unit, or float/per diem staff, can sign up ahead for any openings that may be available after all the floor staff have scheduled and met their FTEs. It is where a decision for incentive shifts may occur depending on how many open shifts still occur prior to day of operations. The process is being monitored and adjusted by the scheduling specialists the entire time in partnership with unit leadership.

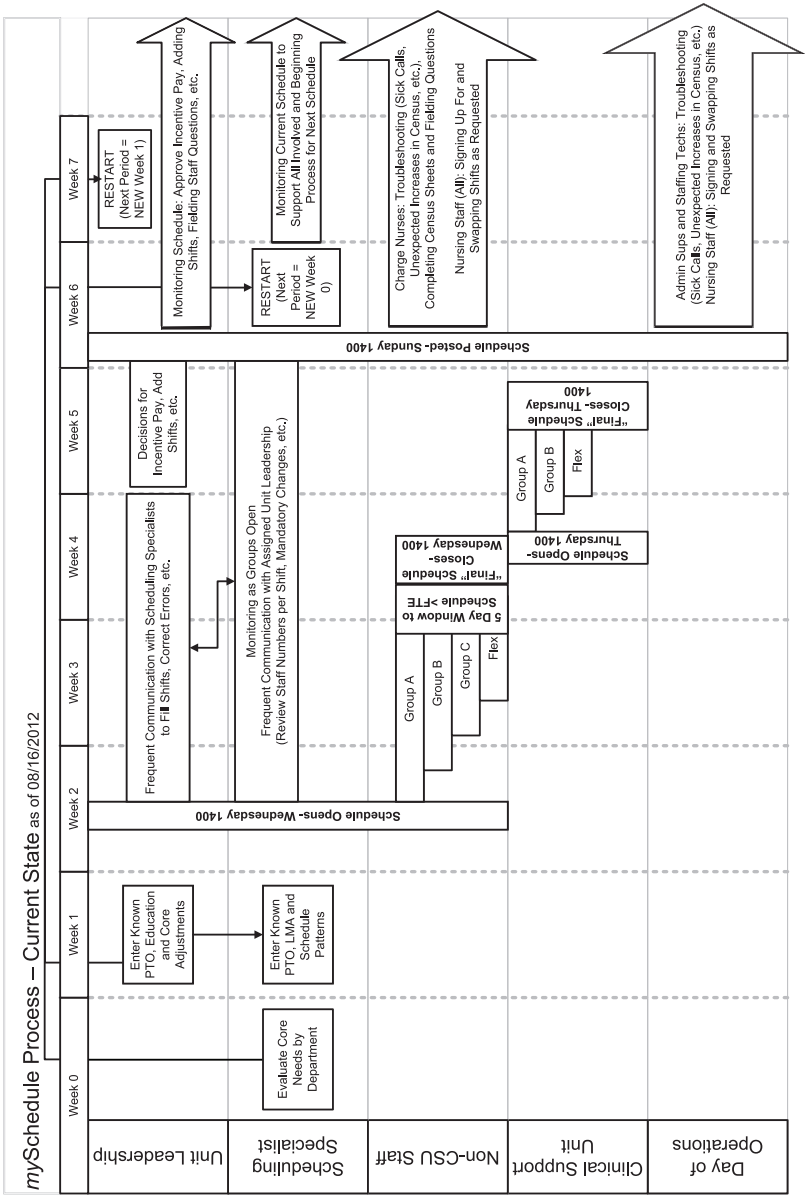

FIGURE 9.3
Sample of scheduling tasks by week.

- **Week 6:** Note that in week 6 a new week "0" starts all over again, and week 7 starts a new week 1. Other activities in weeks 6 and 7 depend on your role in the overall process, but because the schedule has gone live, you might be monitoring day-of-operations changes, filling in sick calls, adding incentive shifts, and other troubleshooting activities.

Unique Care Delivery Models

We all basically have the same levels of care and the same service types. However, based on your patient characteristics, nurse skills, and even local and regional health care services, you may need to staff your progressive care unit differently from what you read in the literature. When thinking about what makes you different, you need to consider where your nurses spend their time. It is important to consider regardless of the care delivery model the amount of time the RN will spend with the patient and create a model that enhances the nurse-patient relationship.

CONSIDER THIS

To maximize this relationship, you need to understand how your nurses spend their time. Multiple studies have tackled where nurses spend their time:

- Nurses spent only 30.8% of time in patient rooms (Hendrich, Chow, Skierczynski, & Lu, 2008).
- Nurses spend up to 55.7% on indirect care (Desjardins, Cardinal, Belzile, & McCusker, 2008)
- Nurses spend 38.6% at the nurses' station (Hendrich et al., 2008).
- Nurses spend 9% on nonnursing tasks. (Desjardins et al., 2008)

This section includes a discussion on innovative care delivery models and innovative resources. As you read the next sections, consider how nurses spend their time in each of these models. How do the models serve the purpose they were designed for while maximizing the nurse-patient relationship?

Transition to Practice

Once the new RNs are "on their own" and no longer need a preceptor, an organization is at greater risk for losing those individuals. From this point to the end of the first year is a very stressful time for the RNs and can profoundly impact their career (Hatler, Stoffers, Kelly, Redding, & Carr, 2011). Some new graduate RN units are dedicated for the first 12 weeks of hire, while others actually start at the end of the first 12 weeks and continue through the end of the first year. Although ongoing precepting beyond the traditional 6 to 12 weeks may seem excessive, it can lead to lower turnover rates and in turn save the unit and organization money.

New graduate RN turnover is higher than an RN who is not a new graduate (defined as within first-year post-graduation basic education). The new graduate turnover is estimated to be between 30% and 60% during the first year (Bowles & Candela, 2005). The resources placed into precepting and preparing your workforce can reward you in the end in lower costs and lower turnover. Total cost savings for one new graduate unit in one hospital totaled $800,000, mainly due to retention and turnover costs (Hatler et al., 2011). As stated in Chapter 1:

- The financial cost of losing a single nurse has been calculated to equal about twice the nurse's annual salary (Atencio, Cohen, & Gorenberg, 2003).

- The average hospital is estimated to lose about $300,000 per year for each percentage increase in annual nurse turnover (PricewaterhouseCoopers, 2007).

DESIGNATED TRANSITION UNIT

Our new grad onboarding is designed as a 4-week program on the Designated Transition Unit (DTU) with an additional 6 to 10 weeks on the nurse's home unit. During those 4 weeks on the DTU, the new graduate RN (NGRN) works with a single preceptor. The preceptor and NGRN "share" the patient assignment, which is four patients, with the NGRN is expected to fulfill an increasing assignment over time. This means that week 1, the NGRN has one patient; week 2 the assignment is two patients, etc., until a full patient load of four patients is taken by the NGRN by week 4. The NGRN then is transferred to the "home" unit for the final 6 to 10 weeks of orientation. The NGRN assignment may go back to three patients for another week or so on the home unit. The advanced practice nurse who serves as the mentor for NGRNs follows each NGRN for 12 months.

The emphasis for the 4-week DTU experience is not on accomplishing tasks but rather is on developing clinical judgment, communicating effectively with colleagues and physicians, and setting expectations for continuing professional development.

–Carol Hatler, PhD, RN, St. Joseph's Hospital & Medical Center

Here are three more examples of unique new graduate models.

Specialty Training Programs Provide Comprehensive Onboarding of New Grads

Summary: New graduate RNs are hired to selected specialty patient care units and attend an extended training program to learn practice standards, skills, and expectations for providing care to that patient population.

Details: Specialty nursing units, such as ICU, Women and Infant Services (WIS), and Periop, have extended training programs. These programs are designed to onboard and train both experienced nurses transferring to the specialty and, when appropriate, carefully selected new graduates. Selected new graduates have been screened and selected based on prior experience (perhaps they were nursing assistants or LPNs in that area previously) and a variety of attributes demonstrated through the interview process. Positive experience in the specialty unit with the new grad as a student is often another factor in the selection process.

At hire, the new grads attend the standard new-graduate orientation program. They then join the scheduled specialty training program alongside experienced RNs who are transferring into the specialty. (Timing of the specialty program, new-grad orientation, and hire date for the new grads are carefully coordinated whenever possible.) Depending on the specialty, the program may run 6 weeks or up to 6 months. During this time the new grads are attending didactic, skills labs, and precepted clinical experiences. Clinical experiences are often on the unit where the new grads have been hired but could also involve rotational assignments to provide a richer learning experience.

Outcome: Careful selection of the right new grad for the specialty unit is the first factor in success for the new grad and the unit. Support from clinical educators, preceptors, unit leaders, and unit staff are critical factors in supporting the new grad's successful transition into practice. Occasionally, despite best efforts, a mismatch is identified. The best outcome in these cases is transferring the new grad to a less-specialized, better-fit unit.

Facility-Based Nursing Pool

Summary: New grad RNs are hired into the facility staffing pool to allow for mutual identification of "best-fit" unit.

Details: A small number of new grad RNs (three to five) are selected by a facility committee and placed in the staffing pool for a selected specialty area, which encompasses several units, such as WIS. The graduates attend the standardized new-graduate training program and the specialty-unit training program. The new grads are given a rotational assignment to expose them to all units within the specialty service line. They are assigned to a single unit for a specified period to learn the competencies, practice, and patient care standards of that unit. At the end of that time, they rotate to another related unit until they have completed the training and onboarding program.

Outcome: At the conclusion of the program, the new graduates and the specialty/service line leadership have identified the units that would both best benefit and be benefited by the new graduates. The new graduates are moved from the staffing pool to core positions in the identified units.

Nurse Externs

Summary: Student nurses in the last year of their nursing program are competitively selected to participate in a paid Nurse Extern Program.

Details: Senior nursing students apply to a limited number of nurse extern positions. These positions provide the opportunity for the soon-to-be new graduates to learn more about the areas of nursing in which they would like to begin their practice. Externs are paid and have a maximum number of hours they can work. The work-hour limit is in place to support the externs in successfully completing their nursing program. During the extern program, the student nurses are allowed to perform skills, with some exclusions, that they have learned and have been validated by their nursing program faculty. Verification of competency is also obtained when the nursing students begin their extern program. The program heavily relies on preceptor guidance and decision-making regarding the externs' readiness to take on more responsibilities. The extern program provides an excellent opportunity for the nursing students not only to enhance their technical skills but also to learn how to assimilate as members of the patient care team. Skills such as communication, interdisciplinary collaboration, and time management are honed during the extern experience.

Outcome: The Nurse Extern Program enhances the nursing student's education and facilitates post-graduation transition to practice. The program also provides the opportunity for the nursing student, unit staff, and leadership to determine whether the individual would be successful as a new graduate in that unit. On average, more than 90% of externs are hired as new graduates on the units in which they were externs.

Although there is a mix of innovative structures for new graduate units, here are some of the basics to think about in designing for a model of care:

- It should be on a closed medical surgical unit with or without telemetry capabilities.
- Patients admitted to this unit are aware of the unit and the expertise of the staff and new graduates.
- New graduate RNs may come to the unit after their initial 6- to 12-week orientation with their first preceptor.
- New graduate RNs may spend the first 12 weeks only on this special type of unit.
- A shift assignment typically starts at one and gradually increases.
- Additional support staff (nursing assistant typically) are utilized as needed.
- Preceptors are staffed in addition to the new graduate RNs.
- Preceptors are chosen based on advanced practice degrees and excitement to teach.

New graduate RNs face many challenges in their first year as nurses. Creating a work environment that supports the new graduates in their education and orientation will improve patient outcomes and improve your new-graduate retention rate.

Collaborative Care Nursing Unit

We have all heard at least one patient say, "Why are you asking me this information *again*?" This is typically in response to a patient's having the physician and the nurses

each asking the same information independently and then inputting it into their own sections of the medical record and not necessarily collaborating with each other to create a joint plan of care in place with the patient. And then typically the admission assessment or plan of care may not be completed until up to 24 hours after admission, which is typically one-third of the way into the patient's complete stay. In response to this very issue, ThedaCare in Appleton, Wisconsin, created a collaborative care nursing unit to change the way inpatient care was delivered to patients. This care delivery model change was part of the Institute for Healthcare Improvement's Transforming Care at the Bedside initiative. In this model, an RN, pharmacist, and physician meet with each patient together within 90 minutes of the patient admission. Actual benefits of this model include (ThedaCare, 2012):

- Plan of care created that all staff and the patient and family know and understand
- Decreased cost of care by 30%
- Reduced waste of the patient's and family's telling each provider information separately multiple times
- Average length of stay decreased by 20%
- Increased patient and nurse satisfaction

Although there are many benefits to a collaborative care unit, Table 9.3 notes some additional considerations for staffing and budgeting.

A collaborative care model has positive benefits for the physician, nurse, and other providers as well as the patient and family. As the focus grows greater on coordination of care, this is one model that has shown success for the inpatient unit.

TABLE 9.3

BENEFITS AND POTENTIAL ISSUES FOR COLLABORATIVE CARE UNIT

Benefits	Potential Issues
Decreased time spent by multiple nurses in completing plan of care and admission assessment	Staffing with budget but also allowing an RN to meet within 90 minutes of patient admission
Increased time of RN spent on coordinating and managing patient care	Staffing with physician/hospitalist and pharmacy to meet together within 90 minutes of patient admission
Increased and improved delegation of tasks to LPN/LVNs and UAPs (increased use of lower-costing care providers)	Potential resources shifted away from other patients in order to maintain 90-minute goal if staff are expected to care for patients on other units
Decreased RN turnover	

Variable Acuity Unit

A variable acuity unit (VAU) is a type of unit where a patient can stay in the same hospital bed for ICU, progressive care, and medical care as he or she steps down in acuity as opposed to changing beds for those different services. There are multiple names for a VAU based on your state licensing regulations. VAU is a type of licensed bed, and regulations in your state may or may not allow this type of bed. VAU may be used in a smaller hospital where providing service in separate intensive care, progressive/telemetry, and medical surgical units may be inefficient and ineffective. As well, in a new hospital this type of unit, while census is lower, may offset the costs of maintaining separate units while census builds. A hospital does not

need to be built with VAUs in order to provide this type of service; most private rooms can be fitted with the necessary equipment and supplies to make it appropriate for intensive care services. This type of bed may be used in a specialty hospital or department, such as cardiac services. In Arizona, the department of health refers to it as a multi-organized service unit (MOSU). In other states it may be called a universal bed, flexible monitoring, and acuity adaptable.

ONE CHIEF NURSE EXECUTIVE'S EXPERIENCE WITH A MOSU

Cathy Townsend, MSN-L, RN, was the chief nursing officer at Banner Ironwood Medical Center (BIMC), a new medical center that opened in November 2011. Cathy was intimately involved with the development of the MOSU with the opening of the hospital. The MOSU is a 24-bed critical, progressive, and medical surgical care unit. Staffing for a MOSU is a very dynamic process done by acuity; however, ratios do not exceed 1:2 for critical care patients, 1:4 for progressive care patients, and 1:6 for medical surgical patients. Those numbers are taken into consideration for staff, who may have pure ICU patients (which are low- to moderate-acuity critical care; higher acuity is transferred out) or a mix of ICU and progressive care or progressive care and medical surgical patients. Productivity targets were developed with the help of a process engineer and currently range between 9.8 and 11.5 hours per patient day.

The RNs who practice on the unit are, or eventually are, trained in all areas of the MOSU, including

critical care, progressive care, and medical surgical care. A few RNs are even able to float to newborn nursery and the emergency department. Cross-training of this level requires extensive education. Education is through an accumulative process, with the mindset of "what can you learn today?" through observation, doing at the bedside, fellow nurses, and even visiting larger sister facilities.

Lessons learned: When BIMC opened, several ICU-trained nurses had been hired for the unit; however, turnover was high for these RNs, because it was difficult for them to flex to the lower acuity, higher ratio if needed. Today, progressive and medical surgical nurses are hired and are trained to ICU. To progress to ICU training, the RNs must demonstrate that they are proficient in both medical surgical and progressive care, typically a year after hire. ICU training occurs at a sister facility for 8 to 12 weeks.

The RNs who work there love the variety. The patients and families are extremely happy, because they love staying in the same room and seeing the same staff. As the hospital grows, the MOSU unit with critical care will be reconsidered. Currently, there has not been more than 5 critical care patients on any given shift; however, as that census increases to between 8 and 10, consideration for opening a separate critical care unit will begin, leaving the MOSU for progressive care and medical surgical care only.

A list of benefits and potential issues for a VAU are noted in Table 9.4.

TABLE 9.4
BENEFITS AND POTENTIAL ISSUES FOR A VAU

Benefits	Potential Issues
Decreased costs due to time and staff not needing to transfer patient between units	Difficulty in training RNs to all levels of care
Improved safety from decreasing number of personnel communicating around care	Need for surveillance and alarm notification
Improved patient and family comfort and decreased unease	Floor/unit layout without space for monitoring
Improved staff satisfaction due to variety of care and learning experiences	
Decreased loss of patient personal belongings	
Decreased length of stay	

VAUs are a unique care delivery model that brings the nurse and resources to the patient. This type of care delivery model would be one to consider for smaller hospitals or services lines that want to streamline care.

Observation Unit

Observations units are not new, but they can be innovative and have a major impact on your unit's staffing, whether staffing for the observation unit or staffing your unit if your hospital has an observation unit. Currently, only one-third of U.S. hospitals have observation units (Baugh et al., 2012). It is important to know that there is a large reimbursement difference between patients who are billed as "inpatients" and those who are billed as "observation or outpatients," even if they are in an inpatient hospital bed. Inpatient and outpatient or observation have a legal definition for billing as set by CMS and in partnership by what the admitting provider orders.

These short-stay patients, defined as those who stay in the hospital less than 24 hours, mixed in with longer-staying patients create a higher churn for your unit, increasing your RNs' workload of admitting and discharging and decreasing your overall unit's length of stay, which may give a false sense of acuity or care needs. If you have inpatient and observation type patients mixed together on your unit, you will increase the workload of your staff. Separating these patients will have a positive impact on your staffing as well as your unit's and the hospital's finances, as you will be able to manage the care delivery model to both these groups differently.

Research has demonstrated positive outcomes for dedicated hospital observation units, including (Baugh, et al., 2012):

- Average cost savings per patient: $1,572
- Annual hospital cost savings: $4.6 million
- Care in observation units equal or better in quality and lower in costs than in inpatient care for specific conditions

RN staffing for observation units may be 1:5 ratio, with processes and paperwork or computer work like assessments streamlined for efficiency to match the requirements and needs of a short-stay patient. Decreasing or eliminating short-stay patients on an inpatient unit does have implications for staffing and patient flow, as noted in Table 9.5.

Observation units designated for patients staying in the hospital less than 24 hours can improve your RN staffing and workload, streamline efficiencies, and save your unit and hospital money.

TABLE 9.5
BENEFITS AND POTENTIAL ISSUES FOR OBSERVATION UNIT

Benefits	Potential Issues
Decreased staff confusion about admitting and discharge paper/computer work needs between observation and inpatient patients	Need dedicated space for unit; may take away from total number of inpatient beds
Improved efficiencies and decreased workload of inpatient RNs, who will have less frequent admissions and discharges	Need to assure oversight by physician or provider for care
Improved efficiencies for observation unit staff, who will be staffed to manage the higher churn of patients with a decrease in paper/computer work requirements	
Evidence-based evaluation and standardized protocols are used to stop inpatient admissions	
Potentially freeing up more inpatient beds that will improve patient flow	

Summary

Here are the key points covered in this chapter:

- There is no one right way to do anything.
- Feel free to take from many tools or resources to develop your own.
- Innovative and unique ways of doing things take a lot of change and management skills to be successful.
- Always involve your staff.
- When determining measurements and collecting data, remember, "garbage in, garbage out."
- The new ways of providing care are not yet developed!

Epilogue

Whew. Take a deep breath. Congratulations on finishing this book! You are busy. The professional life of a nurse manager is not an easy one. I bet you are also just as busy in your personal life. Reading a book to improve your knowledge, your skills, and your ability as a manager is not an easy thing to fit into your schedule, but you did it. I hope you learned many things that will help you in your role as a nurse manager. I hope you experienced a paradigm shift in thinking.

Let me highlight a few important things to take away from this book, using the SMARTT model of effective and innovative staffing:

1. **Start with understanding your unit's care delivery model.** Understand and standardize your care delivery model, because it has a major impact on your staffing. Your unit's staffing should be in harmony with your care delivery model. If you have RNs and LPNs and UAPs but have a primary care delivery model, guess what? That does not work. Also, be sure to have one consistent care delivery model each shift, each day. Staff need to know that

they will always have a primary care or a team-based delivery model (or whatever you decide) each day they come in. This decreases confusion and improves the ease of your staffing.

2. **Maximize the capacity and capabilities of your nursing workforce.** A nurse is not a nurse is not a nurse! You need to know and understand the scope of practice for all the different staff you have. You must know them all and use them to make your staffing easier and your quality of care better.
3. **Analyze and allow everyone to fully practice.** Many other professionals impact your unit and staffing, and you must understand the scope and role of all individuals who may care for patients on your unit. Also, you need to ensure that your nursing staff understand the roles and that you and other managers have delineated those roles for everyone. In addition, do not be afraid to utilize other disciplines to their full potential, ability, and scope to provide patient care.
4. **Recognize, manage, and minimize your variability.** Although it may be easy to blame your unit's issues on the fact that your patients are different, do not! You need to assess and know your variability. Remember, eliminate your artificial variability, and manage the natural variability.
5. **Target technology that improves staffing and outcomes.** Although some might not agree, technology such as clinical decision support systems can make nurses more efficient. Technology is just a piece of innovation, but it has significant impacts on patient safety and quality. When implementing new technology or just getting your staff to embrace the technology you have, do not forget the power of role modeling the technology to others in a patient-centered manner.

6. **Tie all your pieces together.** It is always important to remember that a good idea is a bad one at the wrong time! As you go forward in doing something innovative and different, make sure you create a shared vision for change with your staff. Your staff buy-in is vital to your success.

Just as I have shared my experiences and many others' great experiences in this book, I hope you do the same. As you learn what not to do, or you create a great solution to your staffing and scheduling, I hope you communicate it, whether by writing it up for a journal or presenting it with your colleagues or in a local, state, or national conference. Remember, we all learn from each other. A shift in my thinking in my PhD program was that even if you do not find that your hypotheses are supported in your research, that answer or result is just as important. Just as we need to share what works, we also need to share what does not. It is all about learning, not about what is wrong or right.

In closing, again, I hope you have learned something; I hope you think differently about staffing; and I hope that maybe your paradigm shifted as it relates to staffing and scheduling!

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