What every nurse should know about staffing

By Jennifer Mensik PhD, RN, NEA-BC, FACHE

Even in the best-run healthcare organizations, staffing and scheduling are complex issues. Research from the last 2 decades supports the importance of adequate registered nurse (RN) staffing in achieving good patient outcomes, safety, and satisfaction. Better RN staffing levels have been shown to reduce patient mortality, enhance outcomes, and improve nurse satisfaction. One study found that for each additional patient assigned to a given nurse, the patient has a 7% increase in the likelihood of dying within 30 days of admission and a 7% increase of failure to rescue.

Yet despite the abundant research, safe and appropriate nurse staffing remains one of the toughest problems for hospitals to manage. This article discusses the components of staffing and explains how direct-care RNs can affect staffing in their units and organizations. All direct-care RNs should have a basic understanding of staffing processes and related terms, know how their unit and organization perform these functions, and be actively involved in unit staffing.

Professional responsibility
Like many nurses, you may be saying to yourself, “But I’m just a nurse.” You may think you lack the knowledge, influence, or formal power to do much about staffing.

In fact, nurses have a professional duty to be knowledgeable about staffing as part of their responsibility to patients. Although nurse managers and other leaders may be accountable to their organization for nurse staffing, all nurses are accountable to their patients and the profession.

The American Nurses Association’s (ANA) Nursing’s Social Policy Statement speaks to one’s commitment as a professional nurse: “Nurses, as members of a knowledge-based health profession and as licensed healthcare 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.”

**Differentiating staffing and scheduling**
Although the terms staffing and scheduling frequently are used interchangeably, they’re not the same thing. ANA’s *Principles of Nurse Staffing* defines appropriate staffing as “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. The provision of appropriate nurse staffing is necessary to reach safe, quality outcomes; it is achieved by dynamic, multifaceted decision making processes that must take into account a wide range of variables.”

Staffing typically is a day-of-operations function in which designated persons assess and determine the shift-to-shift ratio of nurses to patients to ensure adequate staffing on each shift and unit. Typically, staffing processes don’t look further than 24 hours in advance of the shift, or 48 hours for a weekend or holiday.

Staffing may be centralized or decentralized.
- With **centralized** staffing, one department is responsible for staffing all units, including call-in staff, call-off staff, and float staff.
- With **decentralized** staffing, unit leaders (charge nurses or managers/directors) determine the level of staffing needed before and during the shift, based on multiple factors.

Scheduling, in contrast, entails determining a set number of staff and type of staff for a future time period based on such factors as historical census numbers and anticipated surgical volumes. Each organization and unit may determine the time frame for which they schedule. Schedules may range from a 1-month to a 3-month schedule; in some cases, holiday schedules may be completed 6 to 12 months in advance. Direct-care nurses can affect the unit schedule through the unit’s shared governance or staffing committee.

**Staffing models**
Staffing levels can be determined in several ways, but none is sufficient on its own. (See the box below.)

<table>
<thead>
<tr>
<th>Three staffing models</th>
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<td>The three main models of nurse staffing are:</td>
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<td>- <strong>budget based</strong>, in which nursing staff is allocated according to nursing hours per patient day</td>
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<td>- <strong>nurse-patient ratio</strong>, in which the number of nurses per number of patients or patient days determines staffing levels</td>
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<td>- <strong>patient acuity</strong>, in which patient characteristics are used to determine a shift’s staffing needs</td>
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According to ANA, no single staffing model—patient acuity, budget-based, or nurse-patient ratio—is best for all settings and situations. Most organizations use a combination of methods and tailor the overall staffing approach to their specific needs. Concerns about safe staffing may arise when a purely financial approach is taken without considering such factors as acuity, outcomes, or research.

**Budget-based staffing**
Commonly, the number of nursing hours per patient day (HPPD) or nursing hours divided by total patient days is used to determine staffing levels based on national or regional benchmarks. On a medical unit, total patient days reflects the average number of patients for a 24-hour period. Nursing hours refers to the total number of hours worked by all nurses on that unit for a given time period. This staffing model provides a snapshot of the overall day and shift, without concern for “churn” within the shift.
**Staffing by nurse-patient ratio**
The nurse-patient ratio model is based solely on the number of patients on a unit. A pure nurse-patient ratio approach to staffing might not take into account individual patient needs or nursing judgment. A hospital might use this model in conjunction with HPPD, where HPPD is converted to a ratio.

Be aware that although a nursing unit can stop admitting patients if it hits the maximum nurse-patient ratio, the hospital’s emergency department (ED) can’t stop accepting patients. Federal laws require hospitals to provide medical screening for patients who present to the ED. However, ED patients who need to be admitted to the hospital may have to remain in the ED if additional staff aren’t available on the unit. With a ratio-only staffing model, the minimum staffing level would then become the maximum staffing level.

**Staffing by patient acuity**
Acuity-based staffing considers patients’ level of care complexity. However, those responsible for staffing must consider more than just how long it takes to do certain nursing tasks, such as administer medication, perform assessment, or take vital signs. Breaking down nursing into these tasks runs the risk of underestimating the full scope of nursing practice. Instead, acuity-based staffing should take into account the scope of nursing and the time needed to maintain standards of practice. It must give nurses time to perform all functions within their scope. A nurse who focuses only on assessments and interventions might underestimate the total amount of nursing care she needs to provide. Instead, she should consider each element within that scope so she can plan appropriately for the time needed to perform each element for every patient. (See the box below.)

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**Scope of nursing practice**
The scope of nursing practice must be considered when determining staffing needs. According to the American Nurses Association, the scope of nursing practice includes:
- assessment
- nursing diagnosis
- outcomes identification
- planning
- implementation
- coordination of care
- health teaching and health promotion
- consultation
- prescriptive authority and treatment (for advanced practice registered nurses)
- evaluation


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Patient characteristics play a large role in acuity-based staffing. Not all patients with the same disease or disorder have the same needs. Individual differences can dramatically change the amount of time needed to plan a discharge or provide patient education. Patient characteristics to consider in acuity-based staffing include:
- age
- diagnosis
- severity of illness
- comorbidities
- socioeconomic status
• ability to provide self-care  
• anticipated length of stay  
• family or other caregivers to include in patient education and care planning.

Scheduling by patient flow  
Before reimbursement methods changed in the 1980s, nursing staffing in hospitals was based on the number of beds, not necessarily on whether those beds were being used. Nursing is a hospital’s single largest cost, so as reimbursement methods changed, administrators tried to control costs by matching nursing resources to the average census. This staffing method can cause problems when patient volumes peak above average. A 15% to 40% increase above the average census may be deemed a census peak. Research shows that in the surgical population, census increases up to 25% above an adequate staffing level subject all patients in the unit to a 7% increase in mortality risk; census increases over 25% lead to the addition of new patients with a 14% increase in mortality risk.

Minimizing variability  
Staffing to the peak is too costly, staffing to the valleys isn’t safe, and staffing to the average census doesn’t take into account the peaks and valleys. The next logical step is to control for as much variation as possible by smoothing the peaks and valleys, by actively managing and eliminating as much variability as possible. Variability can be artificial or natural:  
• Artificial variability is controlled by the hospital; for example, surgical schedules.  
• Natural variability just happens, such as the flow of ED patients. It results from factors we can’t control—for instance, natural disasters, mass-casualty events, or a bad flu season.

Artificial flow can be managed to better meet the needs of unit and hospital staffing. This involves working with surgeons to schedule elective and nonemergency surgeries over the course of the week, not necessarily all within a few select days of the week.

Within natural variability are subsets, called clinical and professional variability. Clinical variability refers to the differences among patients, such as symptoms, diseases, and socioeconomic factors.

Direct-care nurses manage help clinical variability in several ways. One way may relate to how your unit and hospital are organized. You may have separate units for cardiac patients and orthopedic patients or a fast track in the ED to categorize patients by symptom acuity. Organizing patient assignments or attempting to cluster like patients on a unit can help decrease clinical variability. Typically, an RN patient assignment might include one patient with heart failure, one with pneumonia, and a new patient with diabetes on a medical unit. But it might be easier to have a patient assignment of all heart failure patients or all diabetes patients. While many factors need to be considered in managing RN patient assignments, assigning nurses to patients with similar disease processes brings clear benefits.

Professional variability  
Finally, consider professional variability, which relates to how nurses, physicians, and others practice and show up to work. This variability affects the pace of a patient’s progress and the number and length of unnecessary delays a patient may experience. Professional variability encompasses staff skills, motivation, competing interests (such as mentoring nursing students), and variations in beliefs about best practices. For instance, the definition of evidence-based practice may differ among healthcare professionals.

Professional variability can have a negative effect on staffing and scheduling. It can be difficult to fulfill a standardized nursing and care delivery model if direct-care RNs have different skill sets, certifications, and abilities. While we can’t control how nurses are educated before they’re hired on a particular unit, we
can have standards that all RNs on a unit must follow. Working to have a base set of clinical skills, certifications, and skill sets helps reduce professional variability so that staffing and scheduling produce more appropriate staffing levels.

**Role of specialty organizations**
Many nursing specialty organizations have developed position papers or guidelines for staffing and scheduling, which offer more precise ways to determine staffing based on the specific area of expertise. Usually, access to these documents is restricted to organization members, but in some cases, nonmembers can purchase the information from the organization’s website. (See the box below.)

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<tr>
<td>Academy of Medical-Surgical Nurses (AMSN): <a href="http://www.medsurgnurse.org">www.medsurgnurse.org</a></td>
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<tr>
<td>Emergency Nurses Association (ENA): <a href="http://www.ena.org">www.ena.org</a></td>
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<tr>
<td>Association of Women’s Health, Obstetric and Neonatal Nurses (AWHONN): <a href="http://www.awhonn.org">www.awhonn.org</a></td>
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<tr>
<td>Association of periOperative Registered Nurses (AORN): <a href="http://www.aorn.org">www.aorn.org</a></td>
</tr>
<tr>
<td>American Association of Critical-Care Nurses (AACN): <a href="http://www.aacn.org">www.aacn.org</a></td>
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**Federal and state staffing requirement**
The argument for better nurse staffing has led to federal and, in some cases, state regulatory requirements. Failure to comply with these requirements can lead to penalties. The Center for Medicare & Medicaid Services requires Medicare-participating hospitals to have adequate numbers of licensed RNs, licensed practical (vocational) nurses, and other personnel to provide nursing care to all patients as needed. Although this regulation addresses staffing, it’s open to a wide range of interpretations because it doesn’t quantify “adequate.” Hospitals can demonstrate they met the intent of the law in any way they choose. No indicator or benchmark exists for which all hospitals can claim they’re providing adequate nursing care.

Make sure you know your state’s requirements. Be aware that your unit and organization must meet the intent of the law. Don’t simply assume that they’re doing this or someone is monitoring whether they are. Issues commonly surface only after an employee, a patient, or a concerned family member files a complaint. In Oregon, for instance, violation of safe staffing regulations allows for civil penalties if a there’s reasonable belief that safe patient care has been or may be negatively affected. Financial penalties up to $5,000 may be assessed for lack of a written staffing plan, violation of the written staffing plan, lack of a nurse on the staffing committee, or failure to make a reasonable effort to get a replacement nurse.

**State laws**
According to ANA, the following states have enacted legislation around staffing as of early 2014.
- Connecticut, Illinois, Nevada, Ohio, Oregon, Texas, and Washington require that hospitals have staffing committees responsible for plans and staffing policy.
- Illinois, New Jersey, New York, Rhode Island, and Vermont require some form of disclosure or public reporting regarding staffing.

California is the only state stipulating that nursing units must maintain a minimum nurse-to-patient ratio at all times. Hospital administrators, nurse managers, and nurses are wrestling with tough issues related to this law.
Role of direct-care nurses in unit staffing
A unit’s schedule may look good on paper, but it may not provide adequate staffing on the shift for which it’s needed. Staff calling off sick or floating to another unit, as well as fluctuations in patient flow, admissions, and discharges also can render a schedule inadequate. While those responsible for staffing might not always be able to control or predict needs, direct-care nurses can help by standardizing delivery of care and unit processes. Because they’re at the point of providing care, they’re well positioned to note problems and make suggestions for improved processes. Two major areas for process improvements are care delivery and patient flow.

Nursing delivery and care delivery models
Every hospital and every unit have a specific model for delivering nursing and care. Because of the high complexity of patient-care needs, different nursing delivery and care delivery models may exist within the same organization. After all, it doesn’t make sense for the medical-surgical unit to be structured like the labor and delivery unit, which has different nursing care requirements and different patient care goals. (See the box below.)

Examples of nursing and care delivery models
Nursing delivery models aren’t the same as care delivery models—but both are vital for adequate nurse staffing and delivery of high-quality patient care.

Nursing delivery models include:
- primary nursing
- team-based nursing
- modular nursing
- functional nursing
- float nursing.

Care delivery models include:
- 12-bed hospital model. A registered nurse (RN) acts as patient-care facilitator for a small group of patients (approximately 12), coordinating all care and serving as a liaison for other healthcare team members involved in each patient’s care.
- primary care team model. An RN care manager partners with another RN or a licensed practical nurse and assistive personnel; together, they are responsible for a specific group of patients.
- transitional care model. A transitional care RN is assigned to a patient at admission, coordinates this patient’s care throughout the hospital stay, and follows the patient through discharge and up to 3 months afterward.
- Planetree patient centered. All staff members are considered caregivers, and patients are partners in their care.
- hospital at home. Acute hospital-level care is given at home with nursing visits once or twice daily to assess infusions, assess the patient, and provide education.

To promote continuous appropriate staffing, organizations optimally should use a consistent and standardized structure. Do you want to practice in a nursing or care delivery model that differs from day to day or shift to shift? If you practice with a mix of RNs, licensed practical nurses (LPNs), and unlicensed assistive personnel, staffing and scheduling issues may mean different models are used daily. For example, the staff may be all-RN one day but all-RN plus one LPN the next.

It’s hard to use a primary-care model when a unit isn’t always staffed by RNs only. If this is happening on your unit, your nursing or care delivery model is inconsistent and not standardized, which may be
confusing to you and your colleagues. Direct-care RNs run the risk of becoming task oriented when the nursing and care delivery models aren’t consistent, as the consistent components usually are patient assessment and medication administration. Confusion about individual roles and responsibilities in providing care may lead to inconsistent outcomes.

**Staffing committees and plans**

In some states, healthcare organizations and units are required to have a staffing plan or committee. But even if your state doesn’t require these, having a staffing committee is a good way to provide a collaborative approach to staffing. Typically, a staffing committee oversees the process or gives input on unit scheduling and staffing policies and procedures; this may include development of a staffing plan.

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, and the care delivery model. Staffing plans help reduce variability and build standardization of care into the unit. They provide a means to communicate specifics about staffing and scheduling. The staffing committee might make decisions on holiday schedules, vacations, trading shifts, low census, and different shift lengths and start times. Every unit should have policies on these issues so all nurses are aware of the standard and can uphold the standard the same way. Adhering to the policy limits the risk of one staff member receiving special treatment.

**Think outside the box**

Nurses should understand the role and scope of other disciplines on their unit and in their organization. This understanding should continue to drive the evolution of a unit’s nursing and care delivery models and clarify which type of clinician might be best for a specific aspect of a patient’s care. Understanding others’ roles provides insight into who can best perform a particular task and how it could be redesigned to be more efficient and effective. For example, in some units, clinical nurse specialists are used as nurse educators, which fails to take advantage of the full scope of their advanced practice. Also, many nurses perform medication reconciliation even though a pharmacist or pharmacy technician could perform this task instead. Making these changes can improve a unit’s work flow and influence nurses’ ability to practice within the full scope of their practice.

**Outcome measurement**

With pressure building to decrease healthcare costs, nurse researchers already have shown the impact of staffing on patient outcomes through research and the use of nursing-sensitive indicators. As a direct-care nurse, you should know how your care is being measured and how the combined patient outcomes of your organization’s nursing units are being measured. Also check unit outcomes as they relate to nurse staffing; in many cases, such data are used to justify improved staffing levels.

Many indicators are sensitive to nursing care and can be influenced by appropriate or inappropriate nurse staffing. Nursing-sensitive indicators affected by staffing include:

- catheter-associated urinary tract infections
- patient falls
- pressure ulcers
- I.V. infiltrations
- nosocomial infections
- patient restraint use
- pain management
- pneumonia
- shock
- upper GI bleeding
• failure to rescue
• longer lengths of stay
• 30-day mortality.

The Agency for Healthcare Research and Quality funded multiple studies focusing on nurse staffing and outcomes, and published the findings almost a decade ago. Today, no one should doubt that nurse staffing affects patient outcomes. Staffing and scheduling are complicated processes that need to involve not only managers and staffers but direct-care RNs as well. With their wealth of knowledge about clinical care, these nurses can provide invaluable knowledge that can improve care, processes, and quality. Remember—as a direct-nurse, you’re not “just a nurse.”

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Selected references


Post-test: What every nurse should know about staffing
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Purpose/goal
To provide nurses with information on how they can best participate in staffing efforts so patients receive optimal care

Learning objectives
1. Differentiate nurse staffing methods and models.
2. Identify the roles of nursing associations, regulations, and legislation in staffing.
3. Describe the direct-care nurse’s role in staffing.

Please mark the correct answer online.

1. Staffing processes typically don’t look further than:
   a. 72 hours in advance of a shift.
   b. 24 hours in advance of a shift.
   c. 72 hours in advance of a weekend or holiday.
   d. 24 hours in advance of a weekend or holiday.

2. Which statement about staffing methods is correct?
   a. The hours per patient day method takes patient acuity into account.
   b. The nurse-patient ratio method takes patient acuity into account.
   c. Most organizations use a combination of methods.
   d. Most organizations use a single staffing method.

3. Research shows that for each additional patient assigned to a given nurse, the percent increase in the likelihood that the patient dies within 30 days of admission is:
   a. 2%.
   b. 5%.
   c. 7%.
   d. 10%.
4. Which statement from the Center for Medicare & Medicaid Services (CMS) related to staffing requirements is correct?
a. CMS requires Medicare-participating hospitals to have adequate numbers of licensed RNs and licensed practical (vocational) nurses to provide nursing care to all patients as needed.
b. CMS requires Medicare-participating hospitals to have adequate numbers of licensed RNs, licensed practical (vocational) nurses, and other personnel to provide nursing care to all patients as needed.
c. CMS specifies that Medicare-participating hospitals must keep detailed logs to demonstrate staffing rationales.
d. CMS specifies that Medicare-participating hospitals must hold annual staffing conferences for staff members.

5. Which state requires hospitals to have a staffing committee responsible for plans and staffing policy?
a. Ohio
b. Virginia
c. New York
d. California

6. A care-delivery model where an RN care manager partners with another RN or LPN and assistive personnel, who together are responsible for a specific group of patients is called a: a. primary care team model. b. 12-bed hospital model. c. transitional care model. d. team delivery care model.

7. Which statement about nursing delivery and care delivery models is correct?
a. All areas of an organization should use the same nursing delivery and care delivery models.
b. Organizations should vary the type of nursing delivery model used on a specific unit every week.
c. Different nursing delivery and care delivery models may exist within the same organization.
d. Organizations should vary the type of nursing delivery model used on a specific unit every month.

8. Which statement about staffing and patient flow is correct?
a. Staffing to the peak of patient flow is most cost effective.
b. Staffing to the valleys of patient flow is safe.
c. Staffing to the average of patient flow takes peaks and valleys into account.
d. Staffing to the average of patient flow does not take peaks and valleys into account.

9. A direct-care nurse can help manage clinical variability by: a. mixing different types of patients in the same unit. b. assigning nurses patients with dissimilar diagnoses. c. mixing different levels of care in the emergency department. d. assigning nurses to patients with similar diagnoses.

10. Which statement about professional variability is accurate?
a. It refers to staff skills, motivation, competing interests, and variations in beliefs about best practices.
b. It refers to differences between each patient, such as symptoms, diseases, and socioeconomic factors.
c. It has a positive effect on staffing and scheduling.
d. It can’t be reduced with a base set of skills and certifications.

11. **Which statement about staffing plans and committees is correct?**
a. A staffing plan bases staffing levels only on the care delivery model.
b. A staffing plan bases staffing levels only on available support staff.
c. A staffing committee develops the staffing plan but doesn’t oversee processes or give input on staffing policies and procedures.
d. A staffing committee oversees the process or gives input on unit scheduling and staffing policies and procedures.

12. **Which of the following is not an example of a nursing-sensitive indicator?**
a. Nosocomial infections
b. Upper GI bleeding
c. Reaction to opioid administration
d. Longer lengths of stay

Test code: ANT140201