STAFFING SERIES PART 2

CE 1.5 CONTACT HOURS

Meeting the measurements of inpatient staffing productivity

By Pamela S. Hunt, MSN, RN, NEA-BC, and Denise Hartman, MBA, BSN, RNC-NIC

Last month, in the article "Developing a staffing plan to meet inpatient unit needs," we learned how to determine the full-time equivalent (FTE) need for a unit to ensure a quality and exceptional patient experience. Now that we know how many FTEs we need, the next big question is: "How do you keep them in a productive mode?" This article discusses not only how productivity is calculated, but also gives you ideas on how to keep your team in the green of productivity.

Measuring productivity

Being able to monitor the department's productivity is essential but, unlike an industrial production line, it isn't easy for nursing to quantify productivity. After all, the work isn't measured in widgets made or wires soldered. However, productivity can be measured as a factor of volume versus hours worked.

To evaluate the department's productivity, you must first establish the target or goal for the department if it were 100% productive. The target is determined with the following formula: measurement of work multiplied by the budgeted hours per patient day (HPPD) for a defined period (usually the 14-day pay period).

Using the unit from the previous article, Med-Surg 2 South, as our example, let's say the midnight census for a 2-week pay period adds up to a volume of 420. We already know that our budgeted HPPD are 9.5. Therefore, for this pay period, if the unit were 100% productive, the payroll report would show 3,990 productive hours worked (420 multiplied by 9.5 equals 3,990).

Now that we know what the 100% mark is, it's necessary to compare the goal or target hours with the actual number of productive hours worked in the same time period. The equation is: target hours (census multiplied by budgeted HPPD) divided by actual productive hours worked.

Example: Med-Surg 2 South
Percentage of productivity
- Target hours: 3,990
- Productive hours worked for the same 14-day pay period: 4,370
- 3,990 target hours/4,370 productive hours = 91.3% productivity for this pay period

Many hospitals are now tracking daily productivity. The same equation is used for the daily calculation, with 24 hours as the time period instead of 14 days as in the example.

Overtime percentage

Another useful measurement of productivity is the calculation of overtime (OT): actual number of OT hours worked divided by actual productive hours worked equals OT percentage. This equation is used for the same time period to determine what percentage of the total work hours were worked using OT.

Example: Med-Surg 2 South
Percentage of OT
- OT hours: 125
- Productive hours worked for the same 14-day pay period: 4,370
- 125 OT hours/4,370 productive hours = 2.9% OT for this pay period

In healthcare, 2% OT is a reasonable benchmark. The astute nurse leader knows what's causing the OT and works to reduce these causes. Is the OT occurring because of staffing vacancies that haven't been replaced? More patient volume than was budgeted? Staff schedules not matching the unit's activity volume? Staff not being held accountable for finishing work on time and completing efficient end-of-shift reports? These are just a few areas to investigate if OT is consistently above your organization's target level.

Nonproductive hours

Knowing what percentage of the department's total paid hours is nonproductive versus productive is also a measurement of productivity. Let's suppose that you're reviewing productivity reports. You find that your productivity in hours looks good, but your salary dollars paid in the same pay period are over budget. What caused this variance? You evaluate the number of nonproductive hours paid in the same time period and find that many employees were on paid time off (PTO), getting paid but not working at the bedside. This caused the increase in salary dollars while showing that the productive hours worked are meeting the department's budgeted target. Let's examine the following equation: actual productive hours worked divided by total paid hours equals percentage of nonproductive paid hours.

Example: Med-Surg 2 South
Percentage of nonproductive hours
- Productive hours worked: 4,370
- Total paid hours: 5,060
- 4,370/5,060 = 86% productive hours
- 100% − 86% = 14% nonproductive time

Admissions, discharges, and transfers

The admissions, discharges, and transfers (ADT) percentage for any one unit is calculated by dividing the number of ADT in a pay period by the midnight census for that same pay period. For example, if in a 2-week pay period the unit has 420 total patient days (midnight census each night added together) and the total ADT for the same pay period is 273, the ADT percentage is 65% (273 divided by 420 equals 65% ADT).

Based on benchmark data, a typical med-surg unit may have a 50% to 55% ADT. In the example, 50% of the midnight census would be 210 (420 multiplied by 50% equals 210). This unit had 273 ADT, so it had 63 ADT above what was expected (273 minus 210 equals 63). Translating how much nursing care is needed to accommodate an additional 63 ADT is necessary.

In a very conservative estimate, an ADT takes at least 1 hour of nursing time. Therefore, you can safely estimate that this unit has earned 63 additional hours of nursing care in the productivity target, entitling it to 63 earned hours for the 2-week pay period.

Example: Med-Surg 2 South
Percentage of adjusted productivity
- Productive hours required: 3,990 + 63 ADT = 4,053 (new target for 100% productivity after ADT adjustment)
- Productive hours worked for the same 14-day pay period: 4,370 (the actual hours worked don't change)
- 4,053/4,370 = 92.7% productivity (adjusted productivity percentage)

Remember that the productivity on this unit before the ADT adjustment was 91%. This may seem like a small amount of improvement. Let's put the dollars to the improvement. Consider the following equation: hours variance multiplied by actual hourly rate equals actual variance.

Example: Med-Surg 2 South
Variance justification

- Before ADT adjustment: (3,990 − 4,370) × 28.00 = −$10,640
- After ADT adjustment: (4,053 − 4,370) × 28.00 = −$8,876
- Justification difference of $1,764
- $1,764 × 26 pay periods per year = $45,864 annualized

You should monitor your unit's ADT percentage periodically to ensure that it's close to the benchmark. If there's a consistent variance, it can be used as justification to adjust the HPPD budgeted for the unit. A consistent variance is no longer a variance; rather, it's expected activity.

Staffing efficiently

Now that you have a thorough knowledge of FTE, productivity, OT, and ADT, we'll look at how daily staffing decisions affect key performance indicators and identify staffing efficiency strategies that reduce costs while maintaining quality care.

Balancing the need to provide quality care, support nurse satisfaction, and meet financial targets becomes more challenging each year. Labor costs make up most hospital expenses, and nursing is the largest group of hospital employees. In addition, there are many studies that link appropriate levels of skilled nursing to quality outcomes. The successful nurse leader will develop staffing strategies that support quality care in an efficient manner.

To achieve this goal, the following assumptions are made: quality care and efficient staffing aren't mutually exclusive, meeting staffing targets is supported by all levels of nursing leadership, small inefficiencies will keep units from meeting targets, decreasing variation in staffing decisions will improve productivity, and efficient staffing supports quality care by allowing for staffing up during times of extreme acuity.

Key performance indicators

The departmental performance or budget report compares the actual versus budgeted amounts of revenue, expense, and key performance indicators, including equivalent patient volume or units of service, HPPD, salaries per patient day (SPPD), supplies per patient day, and FTEs used to provide care. For most nursing units, the measure of service is patient days, which is determined by combining inpatients, outpatients, and outpatients in a bed. HPPD can be divided into two groups: productive and nonproductive hours. The type of hours that go into each of these subaccounts will vary, so it's important to know how your hospital manages these hours.

An example of differences between hospitals is that some include orientation and education in productive hours and others may not. In general, productive hours are those hours staff members have worked in direct patient care, as well as some support hours such as manager, meeting, and training hours. Nonproductive hours are those hours paid to staff members when they haven't worked, including PTO; sick days; holidays; and time for funerals, jury duty, and so on. Likewise, productive SPPD include the salary cost of all productive hours, whereas total salary cost includes the salary cost of both productive and nonproductive hours.

Equivalent patient days are made up of observation patients, outpatients in a bed, and inpatients. Payers reimburse observation patients and outpatients in a bed by the number of minutes the patient is in a bed. When the minutes accumulate to equal 24 hours, the area is given credit for 1 patient day. For example, if a care unit has three patients who each stay 8 hours, this is equivalent to 1 patient day volume. Inpatients are paid by a daily bed rate; the inpatient day of discharge typically isn't reimbursed. It's important to be aware of this because there are staffing strategies that can be used to improve performance.

Arranging nursing assignments in a way that allows two nursing assignments to be combined as one after discharges is a way to match nursing hours to the number of hours that patients are in a bed. Many institutions are implementing daily multidisciplinary rounding, which supports discharge education and planning on admission, and facilitates the early dismissal of patients on the day of discharge. Multidisciplinary rounding allows for improved caregiver communication, patient care, and discharge experience. Early discharge decreases labor costs by flexing down staff after dismissal. Another advantage to early discharge is that it opens up beds, allowing for the smooth flow of patients through the building. Managing patient throughput is essential to ensuring a constant readiness to serve.

Appropriate staffing numbers

Staffing acuity systems and grids are tools that can be used to improve consistency in staffing

decisions; however, remember that staffing tools shouldn't supersede critical thinking. If quality care can be delivered with fewer resources than the grid shows, then staffing down is appropriate. If a unit is staffing to grid or acuity and still not meeting its productivity targets, the following questions can be asked: Does the grid reflect current staffing plans/ratios? Does the acuity rating accurately reflect the time it takes to care for a patient? Is there an opportunity to change staffing numbers/ratios at different daily census points to improve efficiency by matching resources with unit activity and patient needs?

If quality care can be delivered with fewer resources than the grid shows, then staffing down is appropriate.

It's important to realize that a staffing grid calculator typically looks at those hours in direct patient care. Unless specifically added into the calculations, there are hidden hours that won't show up on this tool. Depending on your institution's definition of productive versus nonproductive hours, these hidden hours may include early clock-ins; late clock-outs; and manager, meeting, and training hours. Using a typical nursing unit as an example:

- shift staffing grid calculator without hidden hours
  —392 direct care hours in a 24-hour period divided by 37.8 equivalent patient days equals 10.37 HPPD
- shift staffing grid calculator with added hidden hours
  —2 hours: 4 staff members clock out 30 minutes late
  —10 hours: 5 staff members attend CPR training for 2 hours each
  —12 hours: 2 RNs are on orientation for 12 hours each
  —2 plus 10 plus 12 equals 36 total hidden hours
  —The new total productive hours increases to 428 hours (392 direct care hours plus 36 hidden hours)
  —428 divided by 37.8 equivalent patient days equals 11.32 HPPD.

The initial shift calculator showed the HPPD at 10.37. After adding in the hidden hours, the true HPPD are 11.32—a difference of 0.95 HPPD. Although many of these hidden hours may be necessary to support unit functions, you need to be ever vigilant of the number of these hours and look for opportunities to minimize them. Training and orientation of new staff can be a huge drain on budgeted productive hours, making it important to support staff engagement and decrease staff turnover.

Drilling down to find the number of early clock-ins and late clock-outs allows you to identify the reason for these overages and initiate strategies to decrease them. The previous example of end-of-shift late clock-outs may seem like a small number of hours related to the total number of productive hours used in a day, but early and late clock-outs combined with other overages quickly add up and can be the difference between meeting or not meeting financial targets. In the example, we showed 2 hours of late clock-outs. Two hours of daily late clock-outs over a month is 60 hours, or an additional five 12-hour staffing shifts.

Strategies to decrease late clock-outs may include giving staff members the same assignment as the previous day, allowing for faster report; looking for opportunities to standardize shift report, allowing for streamlining of information; evaluating the level of effective communication between licensed and unlicensed staff, ensuring a team plan with the same priorities for the day; having the charge nurse identify RNs who've fallen behind on documentation before the end of the shift and take over patient care, allowing the RNs to com-

plete their documentation and leave on time; and mitigating change-of-shift admissions and transfers by streamlining the discharge process.

Even the busiest units can have an occasional low census day; overstaffing just a few days a month can have a negative impact on overall productivity. Low volume takes away economies of scale and can make staffing assignments more difficult to manage. A detailed, written, low staffing plan is a key to ensuring efficiency. Points to consider in a low census plan include identifying the census point at which the charge nurse or manager is in assignment, developing a plan to consolidate patients to the same geographic area to improve nursing workflow, creating guidelines for voluntary and mandated canceling of extra staff, and promoting the expectation that all staff members are clocked out within 30 minutes of the given low census time and they aren't held over to relieve for lunches or potential patients that may never arrive.

Decreased variation

There are clear data showing that process variation increases waste, and the processes used to determine appropriate numbers of staff are no exception. To ensure quality care and efficiency, all staff members who are responsible for making daily assignments need to have a thorough orientation that includes patient safety and regulatory concerns, how to determine correct staffing numbers, licensed to unlicensed staff ratios, when it's appropriate to staff down or up from the staffing acuity or grid tool, and how to access the chain of command. You should oversee daily staffing to identify coaching opportunities, including mentoring those who are in charge on the night and weekend shifts. On many units, the census goes down on the weekend and patient needs may decrease on the night shift, so it's imperative to take advantage of down staffing when the opportunity presents.

Having a checks and balances process ensures efficient and consistent staffing between charge nurses. Touch base with charge nurses throughout the day and evening to mentor, discuss staffing plans for the following shifts, and establish guidelines for the charge nurse to contact you if he or she believes that the plan needs to change or if there's a need to staff above the acuity or grid tool. Waiting until after the shift to discuss the details of how the staffing decisions should have been implemented is too late.

Are you on the staffing bubble or did you think you were getting a new patient who never arrived? Both situations have the potential for overstaffing. Proactive discussions with charge nurses regarding these situations, along with well thought-out staffing strategies, are essential to avoiding staffing pitfalls. When on the staffing bubble and trying to determine to staff up or down, it's advisable to staff down initially, with the option of calling in additional help if needed. It's much easier to call in a staff member than send one home after he or she is in assignment.

To avoid the work of inappropriate transfers in and out of a unit, develop written guidelines that state the type of patients appropriate for the area and ensure that the charge nurse is involved in the transfer decision. When able, avoid calling in additional staff until the patient arrives on the unit. It's often possible to absorb a new patient with current resources versus staffing up. The charge nurse may take a light assignment to get through a busy time, take over another RN's assignment so that he or she can take the admission, or give a strong clinician an additional patient with increased unlicensed or charge nurse support. Many hospitals have house supervisors who may be able to assist with care or they may know of another area of the hospital that can send a staff member for a few hours. The consistent use of these lean staffing strategies can lead to an improvement in productivity.

Salaries per patient day

Productive SPPD are a result of multiplying productive hours worked by the average hourly rate. There are many variables that affect SPPD. It's possible for an area to meet its HPPD targets but not the SPPD targets, and vice versa. If an area is well staffed, requiring very little premium pay, and has low orientation expense, the SPPD may be below target, whereas the HPPD may be at or above target related to low volume or high acuity. To keep SPPD within target, staff to core so that there are enough staff members to meet the most frequently occurring census, which leads to decreased OT use, incentive pay, and use of agency or resource team nurses who receive a higher hourly rate. There's variation between institutions, but, in general, when value-added OT expense exceeds 2% of the total salary cost for an extended period,

it may be time to look at increasing the core staffing. Adequate core staffing is important to maintain quality and staff satisfaction, and keep costs down by ensuring staff members aren't working excessive hours above their FTE.

OT expense can be reduced by creating a balanced schedule, including weekends and holidays; maintaining a 70-to-30 ratio of full-time (0.9 FTE) to part-time staff to ensure minimal use of weekend-only staff and provide adequate holiday coverage; ensuring all regular and as-needed staff members are working their full FTE or contracted hours; developing clearly written PTO guidelines to minimize staffing holes; cross-training staff from like units to allow floating between units in place of OT staff; and coaching staff members who have persistent OT hours. Creating a balanced schedule includes a proper skill mix of licensed to unlicensed staff. Nurses should be working at the top of their license while unlicensed staff members provide care that doesn't require a license and can be done safely within their scope of practice.

Hiring nursing students in the nonlicensed role is a win-win. This provides clinical and critical-thinking experience for the student while increasing the number of nurse extenders. This can be especially helpful in the summer when many students are looking for full-time hours and many RNs are requesting PTO. During times when premium pay must be used, it's important to have clearly written guidelines that state when this pay is used and that staff members who are receiving premium pay are the last to be used and first to be released when patient needs decrease.

Engagement

The current nursing shortage is projected to get worse, making turnover costly and a potential quality of care concern. Creating an environment of trust and mutual respect between nurses, physicians, and administration leads to increased engagement. Taking the time to listen and respond to staff concerns regarding the physical work environment and conducting time trials and environmental assessments demonstrate administrative support. For example, purchasing BP cuffs and pulse oximeters for each room, using bedside carts that contain admission and daily supplies, providing bedside computers along with a shelf to place items, and furnishing hydration stations where family members can obtain water for themselves or the patient allows staff more time at the bedside, increases organization, and improves efficiency.

Nursing or unlicensed staff turnover can be costly in loss of valued experience and dollars. Selective hiring is crucial for staff stability, and hiring the right fit for an area is important to create a positive work environment. Encouraging high performers to refer potential hires is a great way to recruit other talented staff members. The development of a well-designed clinical orientation program, skilled preceptors, support tools, and postorientation mentorships is essential to new hire longevity. To help offset orientation costs, it's important to identity areas of concern early so that the new hire receives timely support and can complete his or her orientation on schedule. Near the end of orientation, when trainees are taking full assignments, it may be possible for one preceptor to work with two new staff members versus 1:1 training. This helps decrease

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preceptor costs and encourages new hires to function in a more independent manner before coming off orientation. Lastly, all staff members should be encouraged to take personal accountability for their professional development and that of their peers. Creating a high-functioning team requires all staff members to mentor and support new hires, as well as one another. It takes a village!

Staying in the green

Meeting measurements of productivity can be both difficult to understand and frustrating. However, it's critically important to the organization, the care team, and the delivery of quality patient care that you understand and know how to respond to fluctuations in productivity. Close monitoring of staffing and implementation of the suggestions presented in this article will equip you to provide quality care in the most efficient manner. Knowledge, attention, and action are the keys to success. NM

RESOURCES

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Pamela S. Hunt is the vice president of patient services and chief nursing executive for the north region of Community Health Network in Indianapolis, Ind., chairperson of *Nursing Management* Congress2018, and a *Nursing Management* editorial board member. Denise Hartman is a performance excellence consultant for the patient care division of Community Hospital North in Indianapolis, Ind.

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