Taking the Mystery Out of Productivity Measures

When hospital CFO Daniel Heckathorne teaches nurses about productivity measures, he first talks about patient vital signs. "When a patient's blood pressure is 190 over 140, you know something is wrong because there are established medical standards and parameters for monitoring a patient's health," he says. Similarly, hospital executives rely on industry measures and standards when monitoring their organization's financial health. Productivity is one aspect of a hospital's health. "When we see that the hours per patient day are running over an industry standard by a significant amount, we know that we need to do something to correct it," says Heckathorne, who works at Pioneers Memorial Healthcare District, Brawley, Calif.

Labor Productivity Measures and Targets

Productivity Measure: Measuring productivity gives you a picture of how much work it takes to produce a desired result (i.e, quality patient care, low nurse turnover, etc.). A productivity measure can be very simple or very complex. In either case:

> It should be *the* or *a* key result produced by your unit or department.
> It should be the key driver of revenue and/or resource consumption.

Examples of simple productivity measures:

> Nursing unit: Hours per patient days
> Radiology department: Number of hours worked per procedure
> PACU: Hours worked per recovery minute
> Medical records: Charts processed per patient admission

Productivity Target: Taking a patient's temperature would mean nothing if you didn't know that 98.6 degrees Fahrenheit was normal. Similarly, measuring productivity is meaningless unless you have a productivity target or expectation.

Hospitals identify productivity targets in various ways. One way is to look at a unit's past labor hours over months or years and determine what is optimal based on history. Hospitals should also use benchmark comparisons available from national benchmark firms, state hospital associations, etc.

The $ Implications of Missing the Target

Let's say a medical-surgical unit's productivity target is 9 hours per patient day (HPPD). What happens if the unit does not meet this target? As the following scenario shows, running overbudget by 5.5 percent can cost a hospital thousands of dollars, which means the organization will have less money to devote to nurse recruitment efforts, needed medical equipment, etc.

Financial Case 1:
The Unit Meets the Target

Productivity: 9 HPPD

> *Patient days for 2009*: 12,000 days
> *Paid hours for 2009*: 108,000 paid hours
> *Average salary cost per hour*: $25*

Total cost: 108,000 hours × $25/hr = $2.7 million

Financial Case 2:
The Unit Runs Over Budget

Productivity: 9.5 HPPD

> *Patient days for 2009*: 12,000 days
> *Paid hours for 2009*: 114,000 paid hours
> *Average salary cost per hour*: $25*

Total cost: 114,000 hrs × $25/hr = $2.85 million

Difference: $150,000

* This example does not include benefits.

Working with Finance on Your Target

With more than 25 years of experience as a hospital CFO, Daniel Heckathorne has probably heard every objection that clinical leaders have about productivity standards.

"This is not a perfect science," he admits. That's why he's a firm believer in working closely with nurse leaders to come up with a productivity target that is reasonable.

Here are some of the arguments nurse leaders may have about a productivity target—and what can be done about it:

Objection: "The target doesn't take into account the acuity of our patients or the intensity of patient services we provide."

Possible approach: Ask about using a "case-mix adjusted" approach, which takes patient acuity and case-mix intensity into account.

Objection: "We take care of a lot of outpatients (or observation patients). Would this affect our target?"

Possible approach: Ask finance about adjusting your target to take these workload factors into consideration.

Objection: "The midnight census doesn't really measure me."

Possible approach: Ask whether there is a different way to determine average census for your particular unit. (Consistency in measuring is the key.)

Example: Identifying a Unit's Productivity Target

Below is an excerpt of a staffing plan for a hypothetical 48-bed medical-surgical unit at ABC Hospital. Shirley Jones, RN, the unit director, bases her staffing plan on a 1:5 nurse-to-patient ratio.

Census Level	Number of Staff Needed (assumes two 12-hour shifts, except manager, who has one 8-hour shift)					HPPD
	Managers	RNs	LPNs	Nursing assts	Unit clerks	
28	1	6	0	3	1	8.86
29	1	6	0	3	1	8.55
30	1	6	0	3	1	8.27
31	1	7	0	3	1	8.77
32 (average census)	1	7	0	3	1	9 (8.50 industry target)
33	1	7	0	3	1	8.24
34	1	7	0	3	1	8.00
35	1	7	0	3	1	7.77
36	1	8	0	3	1	8.22

* For the purposes of illustration, this example uses the same staff levels for the day and night shifts. Units typically have separate staffing plans for the night and day shifts since fewer staff are typically needed at night. The HPPD would be lower in this example if this hypothetical unit had done this.

Fred Smith, the CFO at ABC Hospital, works with Shirley to determine a reasonable productivity target for the unit. Together, they determine that the unit currently requires 9 hours per patient day (HPPD) during average census days. Fred tells Shirley that the industry benchmark for medical-surgical units in their state (obtained from a benchmark firm) is only 8.5 hours. Shirley thinks 8.5 HPPD is unreasonable given the unit's case mix and patient acuity. After some debate and additional calculations, Fred and Shirley arrive at a productivity target of 8.75 HPPD.

Calculating Hours per Patient Day

Nursing units typically use hours per patient day (HPPD) as a productivity measure. HPPD shows how many staff hours are needed to care for patients and run the unit.

$$\text{Total Staff Hours Worked} \div \text{Daily Census} = \text{HPPD}$$

This formula generally takes all staff hours into account (i.e., RN, nurse aide, manager, unit clerk, etc.). Some hospitals may only include nursing staff in their formula. Whatever is measured, remember to be consistent when comparing actual outcomes to budget or industry targets.

Daniel Heckathorne, CFO, Pioneers Memorial Healthcare District, Brawley, Calif., lent his expertise in developing this Business School for Nurses (dheckathorne@pmhd.org).