Achieve Best Practice With an Evidence-Based Approach

Patricia S. Lewis, RN, MS, CNAA
Cynthia Latney, RN, MSN, CCRN

Successful progressive care units (PCUs) operate in a benchmarking, evidence-based practice environment, and maintain strong interdisciplinary teams to efficiently measure outcomes.

Major health care agencies support this approach, including the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), which encourages organizations to evaluate themselves and perform activities using an interdisciplinary team approach.1

As addressed in the preceding articles of this 6-part series exclusively endorsed by the American Association of Critical-Care Nurses (AACN), measuring outcomes—such as decreased length of stay (LOS)—is critical to gaining staff support for implementing a PCU.2-6

Benchmarking to Improve Outcomes

In health care, the terms benchmarking and best practice are described as continuous, collaborative, and systematic processes for measuring and examining internal programs’ strengths and weaknesses. They’re also commonly used to describe data comparison for the purpose of learning about and adapting best clinical or operational practices.7

Best practice departments exceed the national benchmark. Similar departments nationwide, such as stroke units, compare their processes to determine unique aspects of the best practice department. It’s that unique aspect that allows the department to exceed the national benchmark. To improve quality outcomes, similar departments can emulate the processes of best practice departments.

Another important component of benchmarking is comparing a department or hospital to similar facilities and to regional and national benchmarks. Benchmarking customer satisfaction, staffing, and quality indicators are important goals for hospitals to achieve.

A critical element of quality management programs, customer satisfaction impacts both business results and the community’s image of care quality. Care provision, staff courtesy, and availability drive patient satisfaction. Best practices to improve patient satisfaction include manager rounds, and measurable service standards.

Staff satisfaction is equally important: If your caregivers don’t feel valued, your patients and their families won’t view your service positively. A popular staff assessment method involves having an outside vendor perform the survey, which ensures honest feedback. Survey results enable managers and staff to select several measurable improvement goals—both departmental and institutional.

Staffing Your PCU

Because of higher patient acuity levels, be sure to keep PCU staffing ratios between those of a critical care unit and those of a general medical-surgical unit. Average hours per patient day (HPPD) should fall between 8.75 and 9.5; nurse-to-patient ratios should remain approximately 1:4. Monitor HPPD and cost per patient day to ensure that they meet national benchmarks for appropriate staffing and to stay within budget. You may also need to determine minimum staffing levels if the census decreases dramatically. Evaluate the skill mix of staff RNs, LVNs, LPNs, and UAPs to adequately care for the patient population.

Due to slight fluctuations in the intensity of care over a period of time, many hospital administrators favor “home grown” acuity evaluations several times per year and when the patient population changes. Evaluating overall patient population acuity goes hand in hand with assessing HPPD and skill mix. Also consider competence level, experience, education, staff’s professional certification, agency usage, and unit geography.

In 2002, JCAHO mandated that hospitals select at least two clinical and two operational outcomes to monitor and correlate to staffing adequacy. Measuring clinical and operational indicators will assist you in ensuring adequate staffing and care quality across your patient population.

Nursing-sensitive patient outcomes include patients falls, adverse drug events, skin breakdown while hospitalized, hospital-acquired pneumonias, infections as a result of hospitalization, post-admission upper gastrointestinal bleeds, shock, cardiac arrest, readmissions.

Personnel-related operational outcomes include work-related injury or illness, vacancy and turnover rates, nursing care HPPD, on-call usage, overtime rates, and agency usage.8,11

Measuring Quality Indicators

By measuring quality indicators, you can determine your unit’s adherence to national standards. Most quality monitoring is benchmarked to these standards determined by JCAHO, the Centers for Medicare and Medicaid Services, and other national organizations such as the American Heart Association.

You may also want to develop your own service standards. For example, because bed flow or throughput is a major issue for emergency departments, a service standard might be the time from bed availability to transfer to a unit of the hospital. A service standard for a centralized telemetry department servicing a PCU would include the time from faxed order to initiating telemetry, telemetry utilization, and response time to life-threatening dysrhythmias. To measure service standards similar to the aforementioned, your hospital must have computer technology that can capture this data; depending on the department to manually track the information leads to data collection errors.

What factors measure safety? In the preceding example, a short response time to lethal dysrhythmias and promptly getting the patient placed on telemetry would be the most important outcomes for a centralized telemetry department monitoring PCU patients.

To ensure nursing quality in PCUs, monitor infection rates, pressure ulcer rates, falls, use of restraints, and medication errors. In addition, quarterly monitor LOS for a specific patient population, ICU LOS, readmits to the ICU from the PCU and to the hospital after discharge, and mortality. All of these parameters are benchmarked to national standards, thus enabling you to determine if your PCU meets, exceeds, or falls short of expectations.

Case in Point: Stroke Unit

In October 2001, an 18-bed stroke unit opened to care for stroke patients from admission to discharge. This PCU was set up following the recommendations addressed in the previous articles of this series, including admission and discharge criteria, staffing plans, budget, and specialized equipment and education programs. Staff determined and reported outcomes measures quarterly to an interdisciplinary team, targeting:

• percentage of patients who present within 2 hours of symptom onset and receive thrombolytic evaluation
• percentage of patients who arrive at the hospital within 3 hours of symptom onset and receive a CT scan within 25 minutes
• time from onset to thrombolytic administration
• mortality rate
• readmission within 7 and 30 days of discharge
• pathway compliance.

The unit also chose to monitor a few specific indicators, including percentage of non-neurology admitting physicians and percentage of patients:

• not seen by the stroke team
• not placed on the stroke unit with a diagnosis of stroke
• arriving by EMS
• receiving an initial exam in less than 10 minutes.
These findings prompted unit leaders to create performance improvement teams that analyzed the process from admission to discharge. In addition, the unit maintains a monthly department scorecard and a quarterly nursing dashboard. The monthly department scorecard tracks patient satisfaction, budget variance, vacancy rate, turnover rate, and agency usage. The quarterly nursing dashboard assesses trends for patient falls, hospital-acquired pressure ulcers, nosocomial catheter-related infections, pain management, and restraint usage.

Stroke unit staff benchmarks these elements to national databases such as the American Nurses Association National Database of Nursing Quality Indicators, JCAHO, the American Heart Association, National Registry of Cardiopulmonary Resuscitation, National Pressure Ulcer Advisory Panel, the Centers for Disease Control and Prevention, the National Nosocomial Infection System, and the University HealthSystem Consortium (UHC).

Case in Point: Cardiovascular PCU

In early 2000, another facility designated two 30-bed units as its cardiovascular (CV) PCU to provide quality care to CV postoperative patients and their families and to collaboratively decrease hospital and ICU LOS. Just as the stroke unit had, this CV PCU followed the recommendations detailed in this series.

Specifically, CV unit managers identified the budget based on a new staffing plan that offered a 4:1 nurse-to-patient ratio and dedicated cardiac rehabilitation staff and respiratory therapists to provide additional resources for patient ambulation and respiratory care. The initiated staffing plan reduced ICU readmissions and LOS. Staff underwent an intensive education program that addressed order sets, protocols, and CV patient/family education—which evolved into a patient and family education center on the unit for easy access.

The unit nurse manager also purchased additional equipment to enhance patient care and efficiency, including portable pulse oximetry for ambulation, multiparameter telemetry monitoring, 25-foot markers throughout the unit to track ambulated distance, and scales for every room.

Staff monitored outcomes based on criteria of the American Heart Association, Centers for Medicare and Medicaid Services, JCAHO, and UHC. Clinical quality indicators included teaching and documenting smoking cessation, aspirin and lipid-lowering agents on discharge, sternal wound infections, ICU readmissions, hospital and ICU LOS, mortality rate, and readmission within 7 days after discharge.

Better Standards, Better Results

PCU implementation boosted outcomes for both the stroke and the CV units: In benchmarking with UHC ischemic stroke comparison data, the PCU outcomes measures indicated a low mortality rate, thrombolytic therapy delivered in a timely manner, and low readmission rates. Further, Solucient named the unit a “Top 100 Hospital” for neurology in 2000 and 2001. U.S. News & World Report also ranked the unit in 2001 and 2002. CV PCU implementation offers countless benefits to its facility’s heart center, including decreased ICU and hospital LOS, mortality rates, ICU returns, and readmission within 7 days of discharge.

Clearly, outcomes monitoring helps you ensure quality and evaluate improvement processes. Taking an interdisciplinary approach and benchmarking to national standards positions your facility for consistent, safer care and best practice outcomes.

References
7. Sword, T.: loc cit.