Balancing quality and costs during economic downturns

By Linda Harrington, PhD, RN, CNS, CPHQ

During tough economic times, nurse leaders can be faced with difficult financial choices. Changes in payer mix (especially an increase in underinsured or uninsured patients), decreasing volumes for elective procedures, and losses in investments can have a profound impact on an organization’s financial status. Strategic decisions that balance quality and costs are called for in the delivery of nursing care during economic downturns.

From a high-level view, you manage processes and outcomes of nursing-care delivery. By managing inputs and throughputs, you can evaluate trends in costs per outputs or patient discharges over time. By going one step farther, you can more fully realize the interaction of each of these measures and the impact of changes in inputs and throughputs on outcomes—both costs and quality.

Resource management

There are many resources used to provide patient care, ranging from laundry to telecommunications and much more. For nursing management, the largest resource costs involve personnel, equipment, supplies, and, increasingly, information technology. The cost of each is relatively easy to measure, and together they make up the majority of direct costs for the entire organization. Resource management focuses on resource use and costs, with negligible reimbursement for either of these. The costs of resources are difficult to reduce, especially as they pertain to personnel. Even with equipment and supplies, long-term cost reductions are difficult to achieve.

The use of resources is a different matter. Methods to reduce use involve standardization of equipment and supplies, improved inventory management, and involving staff in the evaluation of equipment and supplies. Customization of equipment and supplies for multiple providers costs both in the variation of expenses and the storage and shelf time for these products. Effective management and routine turnover of inventory help reduce product expiration and the costs sitting on the shelf. Involving staff members in decisions about equipment and supplies is critical. Focus their evaluation of products on those that make patient care more efficient or cost-effective. Staff members know what they need to practice, as well as what they don’t use and can do without.

Management of human resource use often includes increasing RN-to-patient ratios, and is often combined with increasing use of unlicensed assistive personnel. There’s evidence that this approach to reducing inputs and the impact on throughputs may be counterproductive. Emerging research suggests that this strategy increases errors and infections and prolongs length of stay. Money quickly saved by reducing staff can be almost as quickly eliminated by costs resulting from lower quality care.

Care management

Care management is another strategy for controlling costs that focuses on the costs directly related to patient care. For example, the average cost per discharge for patients on a ventilator in a hospital is $19,444. If the patient becomes dehydrated during his or her stay, the cost can go as high as $50,000. The difference in payment the hospital receives for both cases is zero. This is a very simple and very real example of how care costs, and less-than-optimal care costs more.

Care-based cost management is based on the premise that resource management has limited opportunities to significantly lower costs and nurse leaders must now focus on the drivers of costs related to the actual care of patients. Using this strategy, practice variation is the largest target, affording the greatest opportunity for delivering the highest quality, most cost-effective care. Practice variation creates unnecessary costs in one of three ways: overuse, underuse, or misuse.

Overuse of care refers to providing healthcare services when the related risk of harm exceeds the potential

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benefits. The classic example of overuse that most healthcare providers are aware of is the unwarranted use of antibiotics.\textsuperscript{5} In this example, costs were incurred for the inappropriate treatment of viruses with antibacterial agents, generating little or no benefit. Harm was produced when antibiotic overuse created “super bugs,” microorganisms resistant to current antibiotics. The cause of overuse varies from patient expectations to fear of malpractice and can include physician enthusiasm for particular interventions.\textsuperscript{4}

Underuse of care refers to failures in providing effective healthcare services that would produce favorable outcomes. For example, a recent study of patients with coronary artery disease and chronic obstructive pulmonary disease found that 54\% were denied the prognostic benefits of beta-blockers when presenting with acute coronary syndrome despite proven benefits in these patients.\textsuperscript{6} To counteract underuse, practice should be based on current evidence.

Evidence-based practice reduces variation in patient care and promotes the highest quality, most cost-effective care.\textsuperscript{7} Nurses can support medical practice in the use of appropriate practice guidelines while also leading efforts to comply with current evidence-based nursing practice. Compliance with guidelines to prevent pressure ulcers, falls, ventilator-associated pneumonia (VAP), catheter-associated urinary tract infections (CAUTIs), and central line-associated bloodstream infections can reduce unnecessary costs.

One of the first studies linking patient care and costs was published in 2008.\textsuperscript{8} In this study of 3,200 inpatients, researchers found that each additional adverse event, such as medication errors, falls, CAUTIs, pneumonia, and pressure ulcers, resulted in a $1,029 increase in cost per case for patients with heart failure (ranging from $300 to $2,400). In surgical cases, the increase was $903.

It’s simple to understand that patient-care practices vary among healthcare professionals. Each practice absorbs costs, so there’s a variation in costs associated with the variation in practice. By reducing practice variation based on current evidence, you can affect both the quality and costs of care.

**Balancing act**
During tough economic times, cutting back on human and material resources can be quick and simple to do. They create large targets that are easy to hit financially. However, this tactic may have unintended consequences that must be carefully considered. That’s why it’s important for you to know the seminal research in this area.

In 2002, researchers focused on the association between nurse staffing and 25 outcomes in medical-surgical patients.\textsuperscript{9} In a sample of 799 hospitals in 11 states, the researchers found that a higher proportion of the total hours of an RN care day and a greater absolute number of RN hours per day were associated with a shorter length of stay and lower rates of CAUTIs, upper gastrointestinal bleeding, hospital-acquired pneumonia, shock or cardiac arrest, and failure to rescue. Each of these adverse events was associated with costs.

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Another influential study focused on the relationship between patient-to-nurse ratios and patient mortality and failure to rescue (deaths following complications) among surgical patients. Data were collected from all 210 hospitals in Pennsylvania. The researchers found that after controlling for patient and hospital characteristics, the addition of one patient to an RN’s workload was associated with a 7% increase in mortality. Through these two studies, we see that altering the inputs of personnel, both the number of RNs and the patient-to-nurse ratios, impacted patient care outcomes.

Another study analyzed data on the costs of improved nurse staffing from 799 nonfederal acute care general hospitals in 11 states. More specifically, researchers looked at costs associated with raising the number of nursing hours provided by RNs without increasing total nursing hours. The researchers found that estimates of costs by the improved nurse staffing were offset by avoided hospital days, morbidity, and mortality.

Research to date has focused more on the quality and quantity of nursing staff and less on actual patient care. The greatest challenge for nursing is that nursing processes involve variations in staffing levels and mixes, work environment conditions, critical thinking, and many practices.

The survival of hospitals is challenged with the increasing trend of quality-based reimbursement. This process is especially critical in economic downturns and makes effectively balancing decisions that affect costs and quality all the more important. The costs of healthcare aren’t fully covered by most payers, including Medicare, Medicaid, and self-pay. Operating margins are achieved in large part by managed care contracting or private insurance.

As the largest number of healthcare providers spending the most time with patients, nurses have the greatest opportunity to impact the quality of patient care. Thus, the costs and quality achieved through nursing practice and patient transitions through the healthcare system have a far greater reach than the positive outcomes for patients. They impact the ability of hospitals, healthcare systems, and other providers to successfully negotiate reimbursement based on quality to cover the costs of providing care for all patients.

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**Effectively managing resources**

Processes affect both quality and cost outcomes in care delivery. Although quality costs, poor quality costs more. It’s important to understand the relationship of processes to outcomes when making decisions. It’s also important to consider the outcome of decisions related to reducing costs, especially during times of economic downturn when there’s little margin for error. Effective management of resources and care offers the greatest opportunities for success.

**REFERENCES**


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