Balancing the Need for Technology - and Human Touch - in Healthcare Education and Care Coordination

Last of three articles from TeleHealth Services highlights value of integrating patient education, engagement, and interactivity tools for hospitals.

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Nurses and healthcare clinicians often find ourselves wrestling over the complex relationship between technology and personal, hands on patient care. Without a doubt, technology offers us sophisticated new tools and systems for analyzing, administering, measuring and improving the quality of care. The idea is to increase efficiencies, foster greater consistency, plan and document customized care coordination and enable us to engage in more personal interaction. That is a laudable goal, as the struggle to increase face-to-face contact with our patients and their families remains a critical need and, for many of us, the reason we pursued a career in healthcare.

Engaging patients and their families in the patients’ healthcare is one of several key goals of the EHR Incentive Program, also called Meaningful Use. The second of five federal health policy priorities, this policy aims at improving patients’ understanding of their health and related conditions so they take a more active role in decision making and in their own care. It also encourages the involvement of patients’ families, as many patients depend on their support.

Well informed and involved patients are more likely to comply with their provider’s recommended regimen. They also communicate important health information to their providers more effectively, which facilitates diagnosis, treatment and recovery. Armed with the information they need to better understand their conditions and care plans, patients and their families can take an active role in healthcare decision making and share in treatment decisions. We see these benefits every day with maternity, surgical and joint replacement patients. The impact of patients’ participation in self-management programs focused on chronic illnesses such as diabetes, heart disease, cancer and asthma can have a substantial positive impact on their health and quality of life, as well as on hospitals’ bottom line.

The Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services, is the primary federal agency for improving access to health care services for people who are uninsured, isolated or medically vulnerable. According to HRSA, in addition to improved outcomes and increased patient satisfaction, patient education efforts can lower underuse or overuse of medical services and reduce readmissions, which in turn reduces healthcare costs and aligns with new federally mandated Medicare and Medicaid reimbursement requirements.

Patient education tools include interactive systems that link illness or condition specific videos, comprehension testing, and customized care planning. Clinicians can assign educational programs on a wide variety of subjects in multiple languages, see an electronic record of what has been viewed, examine results of a simple system prompted evaluation that assesses and documents comprehension, and
then follow up with patients and their families to answer questions or address gaps. Interactive patient education systems also can aid in facilitating successful post hospital transitions by integrating home care services and equipment ordering, and by providing information regarding support groups and ancillary education opportunities.

The more challenging gap, however, remains moving from anecdotal and instinctive support to proven measurement, such as documenting the return on investment in these systems and approaches. Although many hospitals are now linking their patient education efforts with electronic health records to track education outreach, and patient surveys are being used to help address HCAHPS and patient satisfaction issues, establishing clearly defined, measurable benefits has been more elusive.

One quantifiable example documenting the value of focused patient education comes out of Mission Hospital, a 730-bed acute care facility in Asheville, North Carolina. Mission Hospital has an integrated electronic patient-education system in place, and through a collaboration aimed at improving core measures and overall quality ratings, requires viewing of specific videos for patients in its neonatal and maternity units. Subjects include newborn safety, infant CPR and home care requirements for families being discharged from those units. These programs are available in English and Spanish and comprise only a small portion of the Hospital's extensive library of videos. Their digital library covers topics ranging from patient safety, medications, smoking cessation and advance directives to condition specific care for diabetes, heart diseases, stroke, mental health and much more.

Recently, a nurse at Mission Hospital completed a comprehensive study focusing on nearly 1,000 patients who, in 2011, participated in a comprehensive patient education effort targeting Coumadin users. Coumadin (also called Warfarin) is a blood thinner medication, and is prescribed primarily for patients who are at risk for blood clots. This includes stroke and heart disease patients, as well as those having total joint-replacement surgeries. Two specially trained nurse educators were deployed, solely dedicated to patient education about Coumadin therapy.

Patient education included multiple visits, videos, print materials, assessment of learning, and a post-discharge appointment to ensure compliance and proper medical follow up. Study participants included both patients new to taking Coumadin, and those who had been using Coumadin prior to their admission. The percentage of patients receiving this focused education jumped from 17 percent prior to the study period, to 96 percent following the targeted intervention.

Barbara Marsh, RN, BSN, MHS, is a nursing education specialist for Mission Hospital. The goal of patient education at Mission Hospital, she stresses, is not just to share information, but to make sure the information is clearly understood and that patients are capable of doing what is required to take care of themselves more effectively once they leave the hospital.

“Nurses want to spend as much time as possible informing, educating and using ‘teach-back’ methods for verifying comprehension,” Marsh explains. “It’s not enough to hand patients written information and have them simply watch a video. We also have to ask our patients, ‘Tell me how you’ll take this med after you get home, and what will you do or not do, specifically,’ so that we know the messages and learning are being received.”

Five months after the launch of the Coumadin education team, Rebecca Barber, RN, BSAH, MSN, conducted an internal study that examined key measurements relating to that population, including follow-up blood testing appointments and readmissions related to Coumadin therapy.

The results, based on retrospective chart review, were very encouraging, including reduction in Coumadin-related readmissions from 7.2 percent to 1.4 percent. Additionally, the number of patients who had a follow up blood testing appointment increased from 57 percent to 99 percent.

“From this study we can infer that having a dedicated team approach focused on patient education for specific conditions and illnesses translates into greater patient safety and a reduction in health care expenditures,” Barber observes. “Patients with chronic illnesses and
their families face a huge learning curve when it comes to managing home care requirements. We can throw all the information in the world at them, but unless we take the time to really make sure they understand what it means and what to do, we’re not providing them as valuable a service.”

“We also have to ask patients, ‘What do you think you can do?, and ‘What are you willing to do?,”’ Marsh reflects. “Our job includes making our patients and their families or home caregivers comfortable with their care requirements. We need to make sure we’re presenting information via a comfortable medium, and spend more time listening. If it’s not a ‘two-way’ process, we won’t achieve the level of engagement we know we need for improved outcomes.”

Ultimately, Marsh says, technology provides an enormous benefit for improving the hospital and patient experience. But, she cautions, that needs to be balanced by demographics, as well as multi-cultural and age challenges. “Older patients, and some of those from other cultures, struggle with technology, as well as language barriers,” she says. “If learning materials are not provided in formats that patients can easily use and understand, they miss the content. Younger patients,” she adds, “have grown up with computers, the internet, tablets and ‘smart phones,’ and take that technology-based learning for granted. However, that still doesn’t replace face-to-face interactions and the impact of customized education on the quality of care.”

Effective patient education, she concludes, will remain a blend of human and technological interventions, and success always will revolve around engaging patients and their caregivers in the education and care process.