You are a physician at a short-term acute care hospital who has been treating a 50-year-old man who was crushed by a 1,600 lb. tree. The man was airlifted to your facility and initially cared for by the trauma and surgery teams. The patient was brought in with 17 bones broken in 60 places, a collapsed lung, a bruised heart, and a stretched aorta. He is now on a ventilator, has a trach tube, is just coming out of a coma, and has many plates, pins, and screws holding him together.

You feel he is ready to be moved from the acute care hospital. But he still needs to be weaned from his ventilator, relearn how to breathe and talk on his own, regain control of his body, and build strength. He also will need to relearn daily activities such as how to feed himself. In addition, he will need to focus on recapturing both his gross and fine motor skills so he can return to his job or another career and support his family. After that, he will likely need ongoing, specialized outpatient therapies to further his recovery.

As you prepare to discharge the patient, you consider his options: a skilled nursing facility, home care, or your hospital’s transitional care unit. There is another option to consider, however: a long-term acute care hospital (LTACH).

What is a Long-Term Acute Care Hospital?
Long-term acute care hospitals provide medical care to critically ill patients with complex conditions over an extended period of time. There are 432 of them in the United States, two of which are in Minnesota. Bethesda Hospital is the largest with 140 beds. The other is Regency Hospital, which has 68 beds. Long-term acute care hospitals are accredited by the Joint Commission and reimbursed by Medicare and other public and private insurers.

Medicare data indicate that LTACH patients are more severely ill than those treated at other types of post-acute care facilities. Patients typically are admitted needing long-term services for complex medical problems such as multi-organ or multi-system failure, postsurgical or organ transplant complications, treatment of complex wounds, multiple injuries, and traumatic or acquired brain injury. Some need inpatient dialysis or help being weaned from a ventilator. Thus, the case mix index for LTACHs is extremely high.

Patients often are referred to LTACHs directly from intensive care units (ICUs). To be considered for long-term acute care, they must undergo a clinical assessment and meet InterQual or National Association for Long-Term Hospitals (NALTH) admission criteria—that is, they must require ongoing
acute care, need daily physician visits, have had a short-term acute care hospital stay that lasted longer than five days, or have failed a lower level of care and had a readmission. The average length of stay for LTACH patients on Medicare is 25 days; however, some patients may stay for longer periods (by comparison, the average Medicare length of stay in a short-term acute care hospital is five days).

In 2009, 116,000 Medicare beneficiaries were cared for at LTACHs at a cost of $4.9 billion.

Long-term acute care hospitals offer comprehensive, personalized medical treatment and therapies designed to improve outcomes for the medically complex patients they serve. Patients benefit from daily physician visits and the presence of a physician onsite 24 hours a day, which they would not have in a nursing home or other long-term care facility. Long-term acute care hospitals also provide medical and rehabilitation services that are not routinely offered at other types of facilities such as care of complex wounds and injuries and inpatient dialysis. In addition, they provide comprehensive laboratory and radiology services on site. Long-term acute care hospitals employ medical specialists and subspecialists. The staff at Bethesda Hospital, for example, includes pulmonologists, neurologists, psychiatrists, psychologists, nephrologists, pathologists, geriatricians, infectious disease physicians, and general surgeons; the hospital also has in-house respiratory, pharmacy, laboratory, radiology, case management, and social service expertise.

Unlike a nursing home, patients don't live permanently at an LTACH. Rather, the purpose of an LTACH stay is to optimize a patient's ability to 1) live independently and return to his or her home community or 2) achieve the highest level of wellness possible and then move on to the next level of care, be it a skilled nursing facility, transitional care unit, or home with specialized home care services.

**A Team Approach**

Staff at LTACHs use a team approach as they work to identify all of a patient's medical conditions, devise treatment plans, and set goals that will result in positive, long-term outcomes for that individual. Physicians are integral members of those teams. Many of the physicians who work at LTACHs are hospitalists who have been trained in internal medicine, family medicine, or critical care. These physicians, along with the facility's medical director, provide daily oversight of a patient's care and partner with providers from pulmonary care, complex wound care, rehabilitation, dialysis, IV antibiotic therapy, and pain management in developing treatment plans.

The physicians are also supported by nurses, many of whom have advanced training in areas such as wound, ostomy, and continence care; pharmacists; nutritionists; diabetes educators; and occupational, speech, and physical therapists. Spiritual care, creative arts therapies, and recreational therapy also may be part of a patient's care plan. In addition, physicians and other caregivers work closely with patients' families to ensure that any other needs are being met. Certain LTACHs also provide specialty outpatient care clinics to assist patients after discharge. These clinics address concerns such as concussion, memory loss, Parkinson's disease and movement disorders, and neuropsychology.

Each day, physicians round with nurses and a mix of other providers, sharing information and viewing the patient's status from a variety of perspectives. Between seven and 10 days into a patient's stay, team members hold an update meeting to discuss the patient's progress, ensure that everyone is on the same page in terms of care progression, and address the nonmedical aspects of the patient's care. The team continues to meet weekly to discuss clinical and social issues affecting a patient, review the person's progress, and define goals for the coming week.

Good communication among LTACH staff, between staff and patients, and between LTACH providers and community providers is essential. Because most patients are referred to an LTACH by an intensivist or hospitalist at a short-term acute care hospital, communication between the receiving LTACH hospitalist and the referring doctor on the day of transfer is critical. LTACH physicians also communicate with the patient's primary care physician if there is a significant change in the patient's condition and prior to discharging the patient. After discharge, the LTACH physicians are available to help the patient's primary care physician get up to speed on the individual's recent care and prognosis and to answer questions. The goal is to help patients make a smooth transition from one location to another.

**Improving Quality, Controlling Costs**

Like short-term acute care hospitals, LTACHs are concerned with improving clinical outcomes for patients and are engaged in quality-improvement initiatives. The National Association for Long-Term Hospitals maintains a database that LTACHs nationwide can use to assess their clinical performance. Areas of particular concern include ventilator weaning rates, ventilator-associated pneumonia rates, central line blood stream infection rates, urinary tract infection rates, fall rates, and hypoglycemia management. As part of the Patient Protection and Affordable Care Act of 2010, the Centers for Medicare and Medicaid Services must implement a pay-for-reporting program for LTACHs by 2014. A panel is in the process of developing 10 to 12 measures based on those LTACHs are already using for quality monitoring.

A key measure for LTACHs is the ventilator weaning rate, as it is an indicator of whether a patient will do well long-term. Bethesda's ventilator weaning success rate for the first quarter of 2011 was 68%. The national average rate during that same period was 61%, according to benchmark data from NALITH.

Successful weaning means many things: Not only are patients less likely to be readmitted to the hospital after discharge from the LTACH, but they also are able to retain their mobility; travel to physical therapy; free themselves from restrictive medical equipment such as feed...
ing tubes; regain their vocal abilities so they can clearly indicate their needs; and heal more quickly. This translates to a better quality of life for the patient and lower health care costs.

Long-term acute care hospitals help reduce costs in a number of ways. First, the cost of care provided at an LTACH is less than that at a short-term acute care hospital for certain patients. For those with tracheostomies, for example, Medicare spending for care was lower for those who stayed in an LTACH than for those who did not. In addition, nursing costs per day at an LTACH may be half the cost of nursing care in a short-term acute care hospital ICU, according to industry comparisons. Further, because some patients may do better at an LTACH than at a short-term acute care hospital, they may recover more quickly and be discharged earlier. A Connecticut study comparing short-term acute care hospital patients with those admitted to an LTACH with similar conditions found that the LTACH patients spent fewer days in the hospital than those in the short-term acute care facility (37.5 days vs. 19.5 days, respectively). The LTACH patients also were more likely to be discharged home than the patients in the short-term acute care facility (31.1% vs. 10.7%).

Short-term acute care hospitals can address their own length-of-stay challenges and ultimately control costs by referring patients to an LTACH if and when those individuals meet admission criteria. In addition, patients treated at LTACHs tend to be readmitted to short-term acute care hospitals less often than patients treated in other post-acute care settings. According to MEDPac’s 2004 Report to Congress, patients treated in LTACHs were readmitted to acute-care hospitals 26% less often than patients with similar conditions who were being cared for at skilled nursing or long-term care facilities.

Physicians also report that working at an LTACH provides the luxury of time, not only to formulate a customized care plan but also to get to know patients and their families. Often, they develop lasting relationships with them. This builds a strong sense of community at the LTACH and contributes to the physicians’ satisfaction with their work. In 2011, for example, Bethesda Hospital had the highest physician satisfaction rates in the HealthEast system, which also has three short-term acute care hospitals and 14 clinics.

Conclusion

Long-term acute care hospitals have emerged as an important component in the continuum of care. Data have shown that care in an LTACH can result in lower costs, fewer hospital readmissions, and more successful ventilator weaning. Thus, it is clear that LTACHs will continue to have a place in a reforming health care system. Because they serve patients with conditions that are beyond the scope of a short-term acute care hospital, transitional care facility, or skilled nursing facility, LTACHs have a unique niche. And because they are experienced at taking a team approach to patient care, they are a model for providers in all settings, as they demonstrate the benefits of interdisciplinary teamwork in caring for patients with complex medical needs.

Rahul Koranne is medical director of Bethesda Hospital in St. Paul. He is also the medical director for HealthEast Care Navigation and Home Care.

References