For Johnny Baker, whose health is compromised by severe chronic obstructive pulmonary disorder (COPD), emphysema and complications from the H1N1 virus, the prospect of hospitalization is never far away. Several weeks after a recent seven-day hospital stay, Baker became ill again and, although he needed hospital care, he never left the comfort of his own home. As a patient of Presbyterian Health Services in Albuquerque, Baker is grateful that he has an option that few hospitals around the country offer: a hospital at home.

“Being in the hospital wears you out,” he says. “When I’m there, I’m in bed, on a short oxygen leash, behind a curtain. At home, I can move around as I need to, take my medications and pain pills as necessary and do my own nebulizer treatments. And my wife and kids are here. They don’t need to make the effort to visit me.”

Baker and other patients who qualify for Presbyterian’s Hospital at Home program receive daily visits from both a physician and a nurse practitioner as well as access to all the other services they need, including clinical services, home health aides, social services, diagnostics and medications. Qualified patients have primary diagnoses of COPD, chronic heart failure and community-acquired pneumonia. Telephones and video monitors connect Hospital...
at Home patients directly to Presbyterian nurses and doctors, who keep an eye on such vitals as heart and lung sounds and blood pressure. Away from the hospital, patients like Baker actually have a better chance at getting and staying healthier, since they’re much less likely to be exposed to potential infections or errors in medication, says Lesley Cryer, executive director of Presbyterian Home Healthcare.

“Hospital at Home can be conducive to promoting healthier functioning,” Cryer says. “It gives us the ability to interface with patients for a longer period of time and do the teaching and coaching necessary to help them achieve a level of independence to manage their disease and themselves.”

Since 2008, Presbyterian has served more than 550 patients through Hospital at Home, at a savings of $1,000 to $2,000 per care episode. As the program expands, it expects to see those numbers improve. Its three physicians visit up to five patients each during their daily rounds, traveling within a 15-mile radius of the hospital in Albuquerque. Patients are admitted to the program through one of several ways: Presbyterian’s emergency department, as an early discharge from the hospital, as a referral by their primary care physician, or as home care patients whose condition worsened enough to require hospitalization.

Patients are with the Hospital at Home program for an average of three and a half days, until they’re stabilized enough to be discharged to home care or their own physician. Hospital at Home survey results reflect what the practitioners see in their patients every day—many satisfied customers. Measuring the same outcomes, quality and patient experience, Hospital at Home received a mean score of 95 for patient satisfaction, compared with 88 for inpatients.

“We set up the program so we could very clearly compare quality outcomes and patient experience outcomes with what the hospital was measuring, and they’re exceptionally happy in their own home settings,” Cryer says.

Creating Buy-in

Presbyterian is also New Mexico’s largest managed care organization, providing commercial health insurance and Medicaid and Medicare products. It began its Hospital at Home program with the support of the Hartford Foundation and Johns Hopkins University, which, in 1994, began to study the feasibility and efficacy of the model. It is a system that is “friendly to payers, who know exactly what it’s going to cost,” Cryer says.

“Because we’re an integrated system integrated with a payer, we can push the edges and do innovative things to provide a better patient experience that is more affordable,” she says. That financial guarantee, as well as the willingness of its doctors to participate in the program, contributes to its success. Those factors also keep the model from taking root in other hospitals and health care systems, despite the effectiveness, higher patient satisfaction and cost savings that was demonstrated through by the 1994 Hospital at Home model developed by Johns Hopkins University.

“Hospital at Home is a well proven model that is safe and effective,” says Bruce Leff, MD, associate professor at the Johns Hopkins University Schools of Medicine and the Johns Hopkins University Bloomberg School of Public Health in Baltimore. He is principal investigator for the Hospital at Home program. “The challenge is to build it into a scalable model that has a future in the marketplace.”

Although the potential savings for Medicare, as well as for private payers, are enormous—Hopkins’ early trials reveal the total cost of at-home care was 32% less than traditional

Lesley Cryer
Executive Director of Presbyterian Home Healthcare
hospital care, with the length of stay for patients shortened by one-third – neither currently pays for such programs. Financing is one of the reasons the hospital at home at Buffalo (N.Y.) General Hospital, which served about 75 patients annually from 2001 through 2005, is now a “piecemeal program,” according to Bruce Naughton, MD, chief of geriatrics at the hospital. That restricts the possibility of implementation to a handful of providers who control all or some of their funding.

“After 2005, we couldn’t get the managed care companies to sustain their interest,” he says. “You have to align incentives, and unless a hospital is tied in with a broader network, it’s easier to follow traditional models, especially in this financial climate.”

Following the Johns Hopkins study, which shows that when elderly people are hospitalized, they are more likely to suffer from delirium, incontinence and functional impairments, Buffalo’s hospital at home program also focused on older, frail adults. According to the study, even the transfer of elderly patients from home to hospital and back again can exacerbate serious medical and emotional problems. But it can be difficult to find hospital administrators who understand and are comfortable with the idea of providing medical treatment outside of the hospital’s brick-and-mortar walls.

“It’s a very challenging concept for administrators who have no experience outside of the hospital,” Naughton says. “You need physician leaders – champions – in the system who can provide support for the idea.”

Caring for patients in their homes can also be a stretch for physicians who have little experience making decisions outside of the hospital and who want the full backing of a hospital’s emergency resources.

“There are very few physicians who are comfortable doing this,” Naughton says. “Their concern about being in a hospital at all times is legitimate, but multiple studies have shown that for the right population of people, caring for them at home can be very effective. It’s a model that teaches us to think differently, that shows us that there’s more than one way to care for sick people.”

When Cryer and Presbyterian Hospital at Home program’s lead physician, Melanie Van Amsterdam, MD, interviewed hospitalists for the program, they heard several concerns, including a lack of resources in the home, such as CT scanners, monitors and emergency backup. The physicians also voiced difficulty with the unpredictable hours and work schedules, which vary according to number of patients and their needs. Cryer and Van Amsterdam found that those most comfortable with the program were primary care and urgent care physicians, particularly those who had experience with indigent patients or patients in rural areas.

“In Hospital at Home, we do have access to in-home X-ray, ECG, Dopplers, picc lines and other hospital resources to back us up, and the criteria are stringent enough so that crashing is infrequent,” Van Amsterdam says. “In addition, the physicians and nurses are much more hands-on with the patients and able to respond directly to emergencies. We also found that one becomes more reliant on history and physicals for diagnoses and becomes more creative in determining how to get a range of needs met.”

Changing the mindsets of its residents and attendings also dogged the Portland (Ore.) VA Medical Center’s Program at Home, an initial demonstration project of the Johns Hopkins study.
“Over 90% of our admissions came through the ER, and it was easier to just admit them to the hospital,” says Steve Acosta, MD, medical director of the Program at Home, who takes residents on house calls to introduce them to the idea. “They don’t teach this in medical school, and it’s a challenge to get them to think differently, but it can be a revelation.”

Following the study’s initial focus on geriatric patients, Portland opened the program to patients of all ages with the conditions defined by the study, the top diagnoses that result in Medicare hospitalizations. But the program faltered from a lack of funding and its limited hours of admission, from 8 a.m. to 4:30 p.m., because there were no nurses available to travel to patients’ homes at night. In addition, although the medical center defined a 25-mile radius for the program’s boundaries, the travel is daunting when patients live in opposite directions with no direct connecting roads.

And yet, since 2009, Portland’s Program at Home has begun to grow gain, from 102 patients to a projected 200 this year, and it is hoping to continue increasing by admitting more vets with heart failure. Patients are admitted to the program by either a nurse or doctor, with daily care provided by an RN with physician oversight. Physicians visit Program at Home patients if new developments arise or if the circumstances of a patient warrant.

Creating Economies of Scale

Portland’s program does not currently use telemedicine to monitor its patients, but the medical center will be emphasizing new technologies in the near future, according to Acosta and, looking ahead, he expects that the telemedicine will become more integrated, which Leff sees as key to the widespread practice of hospital at home programs.

“Two-way telemedicine with enhanced biometrics would allow physicians to check in and patients to reach out at any time,” he says. “Nurse practitioner visits would depend on the acuity of the situation and a care coordinator would make sure patients make office visits, one of the weak points of the entire system.”

Twenty-first century mobile technology platforms are at the center of one private company’s efforts to provide acute and post-acute care to patients at home. Offering a stand-alone, comprehensive system of care, Clinically Home, based in Brentwood, Tenn., plans to supply everything from equipment to staff, from intravenous lines to diagnostic tests, as well as the nurses who make daily on-site visits and physicians who manage care for their patients by connecting with them virtually via video and other telemedicine services. Designed in collaboration with Johns Hopkins, Clinically Home’s 35-day program takes patients from acute episodes through to what Michael O’Neil, chief executive officer, calls “complete recovery,” while also bridging the gap between payers and providers and reducing readmission rates.

“Acute patients are not magically well after four days,” he says. “We know that a good number of hospital patients don’t reconnect with their primary care physician once they’re discharged, which can lead to medication confusion, relapse, and readmission. Patients need that continuity, not four days in the hospital and “good luck” afterward.”

The Clinically Home model also addresses what O’Neil calls the “fractured hand-off” from hospital to home health care, to primary care physician with one physician who treats each patient for his or her entire stay in the program. When it launches its first two sites, planned for early 2012, it will use admission eligibility criteria and protocols for pneumonia, COPD exacerbations, heart failure, asthma, cellulitis, urosepsis and deep vein thrombosis. As it expands its list of DRGs, it hopes to increase the number of patients it treats while leveraging economies of scale with one physician responsible for patients across a wide geography.

Presbyterian’s use of telemedicine extends into its home care program, which, according to Cryer, “blends into Hospital at Home” and is one of the major reasons it is so successful. And although Van Amsterdam says her work can feel a bit like “back to the future,” she has no qualms about the value of the service Hospital at Home provides.

“I sometimes feel like a general practitioner driving around in 1918, minus the horse and buggy,” she says, “but I’d like to see Hospital at Home become the standard of care.”