Brigham and Women’s Hospital – Boston
Home hospital program provides quality care at lower cost

The AHA's Members in Action series highlights how hospitals and health systems are implementing new value-based strategies to improve health care affordability. This includes work to redesign the delivery system, manage risk and new payment models, improve quality and outcomes and implement operational solutions.

Overview

In an effort to provide quality care at lower costs, Brigham and Women’s Hospital (BWH) developed in 2016 a home hospital care model where patients receive hospital-level care in the comfort of their own homes. Though a common care model in other countries, BWH is the first hospital in the United States to study the efficacy as a randomized controlled trial.

Rather than being admitted to inpatient units, selected patients who go to the emergency department (ED) are discharged to their homes, where physicians, nurses and other providers care for them daily at the same levels as if they were in the hospital. Through continuous electronic monitoring, video chats and texts, clinicians track patients’ progress between visits.

Patients eligible for care at home live within five miles of two participating acute care hospitals.

Impact

In results from the first randomized control trial of a home hospital program in the United States, BWH demonstrated 20 patients being cared for at home averaged:

- 52% lower direct costs than the control group being cared for in the hospital;
- Three lab orders, compared with 27 for patients in the hospital; and
- Imaging rates of 5%, compared with 50% for patients in the hospital.

In addition, the 30-day avoidable readmission rate trended down for patients being cared for at home. While patient experience rated high in both care settings, patients at home reported less anxiety, more control, easier time visiting with family and friends and more physical activity. Patients in the hospital recorded an average of 160 steps during their stay, compared with 1,800 steps for patients at home.

“We do get ‘hip hip hoorays’ and cheers in the ER sometimes when patients get to go home,” said David Levine, M.D., M.P.H., M.A., who leads the program. “Most folks want to go home. We like to say we discharge them from home to home at the end of their stay” in the program.
participating BWH hospitals. Those patients have manageable medical issues, such as pneumonia, asthma, chronic obstructive pulmonary disease, cellulitis or urinary tract infections. BWH estimates approximately 15% or more of its inpatients may meet the criteria for this program.

Clinical staff facilitate other services in the home, if needed, such as meals, occupational therapy, physical therapy, social services, home health, ultrasound, X-rays or other care patients would have received in the hospital.

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**Lessons Learned**

Levine said BWH continues to experiment with the staffing model, saying providers other than physicians and nurses may be appropriate to engage in home care. For example, BWH is considering including staff who can support patient care by making routine home repairs, fixing broken windows or removing rugs that pose fall risks. In addition, community health workers are being considered to address social determinants of health, potentially preventing future hospitalizations.

“We are always evolving,” said Levine. “We certainly do not have everything perfect.”

**Future Goals**

Levine envisions BWH will expand the program to include additional diagnoses and more hospitals. He hopes other health systems in the country will begin home hospital programs so multi-site randomized control trials can evaluate the efficacy in rural and suburban communities in addition to BWH’s urban area. He also would like to see the formation of a national coalition to share evidence-based approaches.

Levine said another essential element to home hospital care becoming standardized is sustainable reimbursement. Some Boston-area commercial payers are impressed with the potential for high-quality care to be available at a lower cost, and Medicare is exploring the viability of paying for this model.

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