

# Home Hospital Program helps reduce ED crowding and improves the patient experience

MASSACHUSETTS GENERAL HOSPITAL

The Massachusetts General Hospital (MGH) emergency department (ED) is a Level I Trauma Center, Level I Pediatric Trauma Center and a Level I Burn Center that provides emergency medical care to over 100,000 patients each year.

## Challenge

One known contributing factor to ED crowding is the limited number of available beds in inpatient units. Aggressive bed management along with the use of alternatives spaces to ED boarding while beds become available that are safe and effective could alleviate moments of high crowding.

## Background

Hospital at Home programs have been popular outside of the United States for decades, achieving widespread use and acceptance in Canada, England, Australia and Israel. In the U.S., the spread has been less rapid, but is gaining some momentum since first being adopted in the mid-1990s by Johns Hopkins Medicine in Baltimore.

## Action

MGH and Brigham and Women's Hospital (BWH) began piloting the Home Hospital Program in 2017 as a collaborative effort among many units in Partners HealthCare including population health, the department of emergency medicine and the department of medicine. Together, these units worked to develop the program's process and clinical guidelines.

Most patients who are eligible for the program come through the ED and have conditions that require inpatient-level care but are stable enough to have care provided to them at home. At MGH, when an emergency provider identifies a patient who may be a good candidate for the Home Hospital Program, he or she pages an Alternative Pathway Navigator (APN). The APN is a physician assistant or nurse practitioner who is trained to clinically review the patient's chart and screen for suitability based on the program guidelines. If eligible, the APN then consents the patient and family members to receive care at home; coordinates with specialty services that the patient might need; and helps arrange a warm hand-off to the home with the program's clinical team.

Patients admitted to the Home Hospital Program are seen by a nurse two times a day and by MGH clinical staff, including an advanced practice provider who sees the patient once a day and a supervising physician who sees the patient in the first 24 hours that the patient is at home. Though the program is open to all adult patients, the average patient is around 70 years old. The most common conditions that bring a patient into the program are congestive heart failure, cellulitis, pneumonia, and urinary tract infections. The daily census for the program can vary depending on where the patients are located and how time intensive it is for the care team to visit every patient on the daily schedule.

<sup>1</sup>Klein S. "Hospital at Home" Programs Improve Outcomes, Lower Costs but Face Resistance from Providers and Payers. The Commonwealth Fund. Available: <https://www.commonwealthfund.org/publications/newsletter-article/hospital-home-programs-improve-outcomes-lower-costs-face-resistance>.

## Outcome

Though logistics can sometimes be challenging, outcomes of the program so far are encouraging. Patients in the Home Hospital Program have an average length of stay of four days. It also helps patients avoid the safety risks associated with staying in the hospital, such as healthcare-acquired infections and delirium. For the hospital, the program saves an inpatient bed and can reduce ED crowding due to boarding of patients waiting for an inpatient bed. Finally, it gives providers a window into the social experiences of the patients they care for, allowing them to observe the home environment, family interactions and even the meals that patients are eating at home. All of this can offer vital insight into the social determinants that impact a patient's ability to be well.

### What is Hospital at Home?

Hospital at Home Programs offer an alternative to traditional inpatient hospitalization for patients who are sick enough to be admitted to the hospital, but stable enough to be treated at home. The programs allow patients to receive care in the home setting, avoiding high-cost inpatient care, reducing the risk of healthcare-acquired infections and improving the patient experience.