Inpatient Care at Home: The Physician Perspective

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Mr Johnson opened the front door with a warm, "Good morning, Doc!" His attending physician, Dr Shapiro, entered his home, took off his shoes, and casually asked, "How are things going?" He replied, "I'm down 2 pounds again this morning…had a pretty good night, slept well with one pillow, and didn't wake up short of breath this morning. We cooked chicken and veggies last night and used spices from the cabinet without much salt. My edema seems a bit better today. When I went out for the paper this morning, I still struggled a bit, but my breathing definitely seems improved."

A few days prior, our team had admitted Mr Johnson to our home-based hospital care service from the emergency department (ED). He was signed out to the team from the ED clinician as a 75-year-old man with chronic obstructive pulmonary disease (COPD) and a recent admission for acute heart failure who presented to the ED with a recurrent heart failure exacerbation. The day he came to the ED, he described how he had gone to the curb to get his newspaper in the morning and was so short of breath he exclaimed, "I thought I was going to die out there." Now, he had been enrolled in home-based hospital care for a few days.

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Acute hospital care in patient homes is not a new care model. Led by Dr Bruce Leff of Johns Hopkins in the 1990s, a series of landmark studies was completed over the course of over 20 years with researchers at Johns Hopkins, Mount Sinai, and Brigham and Women's Hospital.[1-3] The results of the work had clear outcomes: lower rates of delirium, lower costs of care, lower readmission rates, reductions in mortality, and high patient experience ratings. Despite the significantly positive outcomes, programs were slow to grow due to two major factors: the complexity of the care model made it challenging to build and scale, and there was no reimbursement for acute care in the home outside of individual payer contracts. The public health emergency helped with the second obstacle by presenting a payment option through a Centers for Medicare and Medicaid (CMS) waiver introduced in November 2020. The Acute Hospital Care at Home (AHCAH) waiver provides fee-for-service reimbursement for approved hospitals to provide inpatient-level care in patient homes by waiving the hospital condition of participation that requires nursing services to be provided on premises 24 hours a day. Since the waiver became available, 378 hospitals have interviewed with CMS and have been granted this waiver, including the University of Wisconsin Health system.

Through a collaborative planning effort between UW Health and its home care affiliate, UW Health Care Direct, the UW Health Home-Based Hospital Care (HBHC) program launched on July 11, 2023. This program joined UW Health's existing Home-Based Primary Care (HBPC) Department and UW Health Care Direct's foundational home care business

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lines to expand the suite of services available to patients in their homes in the Madison, Wisconsin, area. HBHC provides acute, inpatient care through daily physician home visits, twice daily registered nurse home visits, and a complement of other care, including medical social worker visits, medication delivery, mobile medical imaging, home meal delivery, and access to an array of specialty consult services. The addition of HBHC to UW Health has allowed UW Hospital to save hundreds of brick-and-mortar bed days since program launch, opening beds for those who require the acute services only available in the hospital facility and assisting with the capacity issues that plague most health systems.

In November 2023, CMS published the initial findings from the first 16 months of the AHCAH waiver initiative, and the results were outstanding.[4] The UW Health HBHC results mirror those found in the CMS journal article: reduced readmissions, lower complications, and extraordinary patient satisfaction.

The encounter described between Dr Shapiro and Mr Johnson is very different than a typical patient visit in the brick-and-mortar hospital. How did Mr Johnson spontaneously provide so much information, while patients in the hospital often require much more prompting? In the brick-and-mortar hospital, we often encounter patients looking at us through sleepy eyes as we round early in the morning, acknowledging they often do not sleep well, and we are waking them up to a litany of questions. It is inherently more challenging for patients to be as engaged in their care in the brick-and-mortar hospital. Now, in his own home, Mr Johnson and the questions had more meaning.

Since being admitted to our HBHC program, our care team members have had ample opportunity for education in the patient's familiar environment. Throughout this episode of HBHC, Mr Johnson slept well in his own bed and tried our advice in modifying how he and his family cook low-sodium meals. Our care team worked together to see if he had clinically improved enough to take the journey to the curb that was so treacherous just a few days prior. His familiarity with his routines and gauging his symptoms in his own environment gave our team a solid benchmark to understand his progress. He was able to sleep in his own bed, away from hospital nighttime awakenings, stay more active, and clinical plans could be created around his real-life activities.

While our care team worked together to optimize his heart failure, Dr Shapiro also dug a little deeper into Mr Johnson's COPD. He had a prescription for home oxygen to use at night and with activity, but while in his home, he was able to demonstrate how none of his oxygen delivery devices are easy to take to the curb and back. He also talked about his fishing boat that sat in the driveway all summer because he worried about carrying his oxygen onto the boat and the possibility of running out of oxygen on the lake. He spoke of the joys of fishing with his son and how this remains one of the most meaningful activities in his life. Although Dr Shapiro did not significantly change his oxygen prescription, he was able to use what she had learned about him to supply a variety of oxygen delivery devices to use to walk to the curb, go out on the boat, and while moving around his home.

On paper, Mr Johnson's hospitalization in HBHC looked quite similar to his recent stay in the brick-and-mortar hospital. Our care team used the same diuretics, did the same daily lab checks, followed his weights and his urine output, and did the same clinical assessments. But the patient and the clinical team were able to partner in a different way than in the brick-and-mortar hospital. Mr Johnson was able to incorporate the education on weights and dietary changes into his daily life while still hospitalized. Our care team was able to better understand his needs and make a number of subtle modifications that have the power to change the trajectory of a chronic illness. He gained a mastery of his disease process and symptoms. Meanwhile, we found ways to tailor his care to support the activities that bring him the most joy. And at the same time, we were able to gauge his improvement against real daily tasks rather than the typical walk down an inpatient unit.

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