Designing and Planning for Equity in Hospital at Home

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Background

In Hospital at Home (HaH), patients who require acute hospitalization are treated at home instead of at a hospital. HaH has led to reduce 30-day costs, good outcomes, and high patient satisfaction. HaH uptake has increased since 2020. Despite the growth, there is scarce evidence on HaH implementation that advances health equity.

Objectives

We conducted a literature review and studied real-world experiences in the Hospital at Home program at UMass Memorial Health to identify best practices and action items to improve health equity.

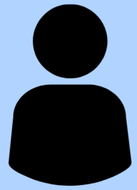
Patient Case

A 39-year old Portuguese-speaking, Medicaid-insured female with type 2 diabetes presented to the ED with abdominal pain and dysuria. She was diagnosed with pyelonephritis and received intravenous ceftriaxone and discharged with oral cefpodoxime. After symptoms did not improve, she returned to the ED the next day and was hospitalized.

The patient was transferred to HaH on day 1 of her hospitalization. She stayed in a 2-bedroom apartment with two children and a caretaker who could provide her meals.

At transfer, she reported headaches, presumably due to lack of sleep. Using an interpreter, a HaH nurse interviewed the patient and performed a medication reconciliation, including a walkthrough of how the patient self-administers medications and checks blood sugars. The bedroom was not spacious, so her dresser and nightstand were used to set up HaH equipment, including a router for high-speed Internet. In a telehealth encounter, the HaH physician explained the planned treatment and arranged a future dietitian consult.

The patient was treated with intravenous ceftriaxone once daily for 4 days. Her symptoms resolved by day 2, and she was discharged on day 4.



Provider-Patient

- Identify and mitigate inequity in patient selection and referral
- Recognize SDOH inequity (ie. Internet access, food security) directly in the patient's home
- Educate HaH providers on interacting with patients and addressing HaH stigma with cultural humility

Program

- Provide services to assist patients with poor digital and/or health literacy
- Provide referrals to services (ie. PT/OT, nutrition) that improve longitudinal outcomes
- Collect and analyze socioeconomic and outcomes data to monitor equitable implementation

Health System

- Advocate for policy that improves HaH equity (ie. expanded Medicaid reimbursement)
- Establish HaH in rural areas and in community hospitals
- Continue research on inequity in HaH access and outcome

Figure. Action items to prevent challenges in HaH health equity

Discussion of Current Challenges

With intentional planning, potential challenges in HaH health equity can be prevented. Challenges in HaH health equity exist on three levels: 1) provider-patient, 2) program, and 3) systemic. We propose solutions to address these challenges (Figure).

We prioritized our case patient's needs when considering her for HaH. She wished to be home with a caretaker and for better sleep. Patients decline HaH often because they deem that home is not an optimal therapeutic environment. Though this stigma should be addressed, promoting HaH while respecting patient preferences that are grounded in cultural values is essential to advancing equity.

HaH has unique advantages in that inequity in social determinants of health (SDOH) can be addressed in the patients' homes. Access to the patient's medicine cabinet improves the accuracy of medication reconciliation. We offer meals at home for patients who experience food insecurity or do not have a caretaker. We provide technology to all patients (tablet, Internet) to communicate with the team and educate patients on how to use them. Programs should educate providers on delivering thorough patient education and recognizing SDOH inequity in the patients' homes.

Minority patients are less often referred to home health services. A HaH program should be designed to address potential inequity in eligibility/referral. At UMass, we record and compare patients' socioeconomic data and outcomes to those of hospitalized patients. Similarly systematic data collection across programs is necessary to evaluate equitable implementation.

HaH is covered by Medicaid in Massachusetts, which allowed our case patient to receive HaH care. However, this is only the case in 8 states; access r patients of lower socioeconomic status is still lacking. Rural areas and community hospitals also have poor HaH uptake. Continuing advocacy and research efforts will be essential to advancing equity on the systemic level.

Conclusion

Through a literature review and real-work experiences, we identified actions to advance HaH health equity. As HaH becomes more widely used, intentional planning and design will be crucial to ensuring health equity.

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