Wilder Research

Hospital to Home: Reducing Avoidable Hospital Emergency Department Visits While Improving Stability and Health

Initial Report
June 2011

Background

Evidence is increasing from around the country that shows a disproportionate amount of hospital emergency department and inpatient resources are being used by a small group of people who have chronic medical conditions and who also have high risk factors such as homelessness, mental health disorders, and/or substance abuse problems.

These individuals have multiple, complex needs, and, for a variety of reasons, use hospital emergency departments at a high frequency for non-emergency health concerns. This frequent usage results in avoidable health care expenses and ties-up emergency department resources unnecessarily. There is an urgent need to reduce costs by targeting the highest cost patients with alternative interventions.

The Hospital to Home initiative provides an alternative intervention. Guild Incorporated, Hearth Connection, Regions Hospital Departments of Emergency Medicine and Social Work, and the Office of Performance Measurement and Quality Improvement within the Minnesota Department of Human Services partnered to implement this pilot innovation.

The initiative targets adults who:

- Used the Regions Emergency Department five or more times in the past year;
- Have one or more chronic medical conditions;
- Have mental illness of a serious and persistent nature with or without other co-occurring disorders such as chemical dependency; and
- Have long histories of homelessness, specifically those who have been continuously homeless for one year or homeless four times in the past three years (the federal HUD definition of chronic homelessness).

In Hospital to Home, Guild Incorporated engages these individuals in a plan to improve their health, stability, and quality of life. Mobile outreach and engagement strategies build and sustain trusting relationships with participants and remove barriers to success. Guild Incorporated works with participants to secure safe and affordable housing, as housing has

been found to be a significant determinant of health status. The initiative also assists individuals in linking to a primary health care clinic for medical care and mental health services. Through these efforts, Hospital to Home aims to reduce emergency department visits, thus freeing up emergency department resources for acute medical crises and reducing unnecessary healthcare expenditures.

Overview of evaluation

The purpose of the current evaluation is to understand Hospital to Home's impact on participants. The four research questions addressed through this evaluation include:

1. Who are the clients being served by the Hospital to Home Initiative?
2. How has participation in the Hospital to Home Initiative impacted client healthcare usage over time?
3. How has participation in the Hospital to Home Initiative impacted client housing stability over time?
4. How has participation in Hospital to Home Initiative impacted client life functioning over time?

The current report is the first in a series of three reports aimed at answering these research questions. This report addresses the first research question by providing background information about the initiative and the seven participants currently receiving services. Baseline information about participant characteristics, healthcare usage, self-sufficiency, and housing status are presented here in order to provide a context for the services that are provided. Subsequent reports will focus on the remaining three research questions.

In order to measure the initial impact of Hospital to Home, Wilder Research analyzed existing medical claims data from the Department of Human Services, housing and life functioning data from Hearth Connection, and program and participant records from Guild Incorporated. Comprehensive outcomes data are not available at the time of the current report because medical claims may be processed for up to one year after a service was received. Therefore, adequate time must be allowed for this delay in claims processing before the data can be analyzed and accurately reported.

Participant characteristics

- The seven Hospital to Home participants range from age 26 to 56 (average = 43 years of age; median = 44 years of age). Four of the seven participants are women.
- Three participants are identified by Guild Incorporated as White while three are American Indian and one is Black/African American.

- Four of the seven participants are currently receiving healthcare coverage through Minnesota's Medicaid program, Medical Assistance for Families and Children. The other three participants are currently enrolled in the state-funded replacement for the General Assistance Medical Care program. Only one participant is currently enrolled in Medicare Part A and B.

Presenting issues at intake

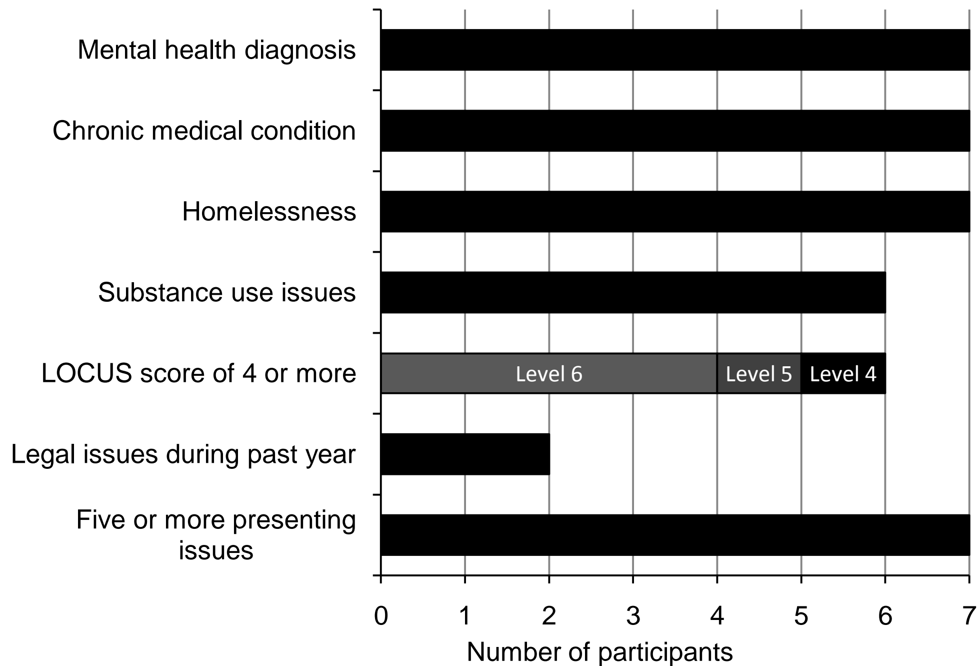
At intake in Hospital to Home, each participant was screened for mental health issues, substance abuse issues, and chronic physical health conditions. Based on this screening:

- All participants were diagnosed with a serious mental illness, such as major depression, bipolar disorder, or schizophrenia.
- All participants were also diagnosed with at least one chronic health condition, including diabetes, asthma, congestive heart failure, or HIV.
- Nearly all Hospital to Home participants also had substance use issues at intake.

Additional background information was also collected, including criminal histories, experiences with homelessness, and an assessment of the intensity of services needed.

- According to Minnesota court records, six of the seven Hospital to Home participants have a criminal history. Four participants' criminal charges occurred more than a year prior to enrolling in Hospital to Home, while two participants had charges within a year of enrolling in the initiative.
- At intake, all seven participants were homeless and met the federal Department of Housing and Urban Development (HUD) definition for "chronically homeless," which requires either one continuous period of homelessness lasting a year or more or at least four episodes of homelessness in the past three years, as well as a disabling condition, as demonstrated by the serious mental illness and chronic health conditions described above.
- Hospital to Home participants were also assessed with the Level of Care Utilization System (LOCUS) for Psychiatric and Addiction Services to determine their recommended level of care. All participants assessed had a recommended level of care of three or higher range, which requires care ranging from high intensity community based services (Level 3) to medically managed residential services in a locked environment (Level 6).

1. Presenting issues at intake



Baseline healthcare usage

One of the primary goals of Hospital to Home is to decrease the number of participant emergency department visits. In particular, the goal is that the longer participants are engaged in the initiative, the less likely they will be to use emergency departments. One potential barrier to tracking emergency department usage for individuals is high mobility in the locations visited for services.

The Hospital to Home initiative also seeks to increase participant comfort and relationships with primary care clinics so they will seek medical care from clinics rather than emergency departments. The initiative also tries to assist participants in accessing consistent preventative medical care, resulting in a long term decrease in the medical services required. Because participants tend to have complex mental and physical health needs, a longer-term relationship with a single primary care clinic and provider is especially important.

- In the year prior to enrollment in Hospital to Home, the seven participants had a total of 110 emergency department visits (including 5 to 31 visits per person), and 355 primary clinic visits (including 5 to 45 visits per person).
- Overall, the rates of both emergency department usage and primary clinic usage across all seven participants increased prior to enrollment in the initiative.

- The number of locations visited also peaked just prior to enrollment for emergency department care (8 locations) and primary clinic care (41 locations).
- There was some variability between the participants in terms of mobility. The two participants with the most frequent emergency department visits were also particularly mobile prior to enrollment. However, two participants' use of medical clinic locations leveled off or decreased prior to enrollment.

Hospital to Home seeks to help participants gain more consistent and reliable healthcare, including access to medications. Participants need access to affordable medications with enough consistency to allow for medication monitoring. The goal is, therefore, to moderate participants' pharmacy usage and assist participants in building relationships with a limited number of pharmacies.

- In the year prior to entering Hospital to Home, the seven participants had claims for 456 medications at 24 different pharmacies.
- Aggregated pharmacy claims more than doubled in the six months prior to enrollment and each individual increased their use of pharmacies over time.
- Overall, the number of pharmacy locations visited doubled from one year prior to enrollment to six months prior to enrollment. However, one participant accounted for the majority of this increase while the other participants remained relatively stable.

Baseline housing stability

One of the cornerstones of Hospital to Home is housing stability for participants. Safe, stable housing is a strong determinant of physical and mental health outcomes. By securing stable housing, participants will have the ability to develop stability in other facets of their lives as well, including healthcare usage.

- All participants were homeless at intake.
- The length of homelessness prior to enrollment ranged from 14 months to 22 years.
- All participants were securely housed in private rental units in the community within three months of enrollment in Hospital to Home using a rental subsidy administered by Hearth Connection.

Baseline self-sufficiency

One of the core goals of Hospital to Home is to increase participants' health and self-reliance. The Arizona Self-Sufficiency Matrix assesses participants' ability to meet these goals and the level of support required to do so.

- In the retrospective ratings of participants' self-sufficiency, participants were very low in most domains.
- In particular, all participants were given the lowest possible score in housing because they were all homeless at intake.
- Participants were also scored low in the areas of employment, income, and community involvement, all of which are likely connected to one another, and to housing. However, it should be noted that participants may have additional unique barriers to self-sufficiency in these areas as well.
- At intake, there was greater variation in participant self-sufficiency in the areas of healthcare, legal, and substance abuse due to differences in presenting issues and existing access to services across the participants.

Conclusions

High need participants and integrated, coordinated, and intensive services

- Despite the complex and severe presenting issues, all of the participants are currently served by community-based services, rather than residential or facility-based services.
- A multi-disciplinary community health services team provides individually tailored care, based on participant needs and preferences.
- The mobile nature of the community health services team allows services to follow participants, wherever they are, thus keeping participants engaged and essentially serving as their health care home.

Next steps

The changes sought by the Hospital to Home initiative are significant and long-term. Therefore, it will take time before all of the initiative impacts can be seen. The next report in this series will be released in the fall of 2011 and it will capture preliminary participant outcomes in healthcare usage, housing stability, and self-sufficiency for approximately one year after program enrollment. The following report will be released in the fall of 2012 and will reflect approximately two years worth of changes after program enrollment for the current cohort. If the project expands during that time, preliminary comparisons between cohorts of participants may be explored as well. This series of reports will provide a thorough exploration of the impacts that the Hospital to Home model can have on individuals and the broader community.

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