A High Need Service Utilizer

A high need service utilizer is an individual with multiple, serious health challenges including physical and behavioral health conditions, and substance use disorders. Because the complexity of these needs is often not met within the current system of services, these individuals make frequent contact with an array of costly social services including emergency room, homeless shelters, detox centers, and jails.

Overview

In May of 2016, the New Hampshire Coalition to End Homelessness, Mental Health Center of Greater Manchester, Families in Transition and New Horizons for NH came together to discuss an increasing number of individuals facing both homelessness as well as significant mental and physical health challenges. Due to their extreme vulnerability, these individuals are often in need of a higher level of care than what can be provided in the emergency shelters or in traditional homeless service programs. As is described in the case studies below, however, the lack of appropriate housing and services for this population has resulted not only in prolonged suffering, but also in significant financial cost to the community. This issue brief is meant to illustrate the complexities in adequately serving this high need population, the financial implications of not providing adequate care, and some possible solutions to the problem that have seen success in other areas of the country and that could be explored for implementation in Manchester.

Detailed below are case studies of three Manchester residents who represent ongoing, complex cases in which individuals continue to utilize costly social and public services, yet remain unable to acquire sufficient long term and sustainable treatment solutions. Each of the following case studies details: 1) The extent of the needs and challenges faced by the individuals; 2) Services utilized by the individuals; and 3) Estimated costs associated with ongoing interactions with the individuals.

The data in this issue brief is intended to provide insight about people with the most significant needs and the services they use. Following the case studies, the “Potential Solutions” section documents systemic changes that have been shown to be effective in providing a comprehensive, cost-effective, and lasting solution for those with the greatest needs.
Case Study 1: Mark

Case Description

39 year old Mark first arrived at the homeless shelter in Manchester, NH, in November of 2015. Driven by factors including cancelled social security benefits, mental and physical health issues, and a restraining order, Mark had nowhere to live. Due to the complexity of Mark’s physical health needs, it quickly became apparent that he needed more extensive help than the shelter was able to provide. In addition to documented Cerebral Palsy and mental health issues, Mark’s physical condition was worsening. He was becoming incontinent, did not bathe himself or maintain a standard of personal hygiene, and had difficulty keeping himself standing. After numerous falls in the shelter as well as a growing staff concern for the safety and health of other guests and employees, staff contacted the local hospital for assistance.

After being admitted into the hospital in April of 2016, Mark was shortly discharged back on to the street. With nowhere to go, he made his way to a local park. Here, homeless outreach staff found him and encouraged him to sign an application for housing assistance through the local public housing authority. Mark signed the paperwork and promised to come back to the shelter for a shower and food. He did not return to the shelter, prompting staff to contact local mental health service providers for further assistance.

From April to May, Mark made irregular visits to the shelter for food and clothing but spent a majority of his time around the park area. Despite efforts to connect him to intake options and housing services, Mark often missed appointments or did not follow up on paperwork. In mid-May, Mark was found to be admitted to the local jail. Upon his release, shelter outreach continued work to get a new birth certificate for him, connect him with food stamps, and mental health services. Meanwhile, Mark’s physical and mental health continued to deteriorate due to the obvious difficulties associated with survival on the streets.

Services Utilized

- Mental Health Services
- Food and Basic Needs Assistance
- Emergency Shelter
- Government Services
- Healthcare System
- Criminal Justice System

As displayed in the chart below, the combined cost of these services represent a significant expense to the community.
Costs of Mark’s Care*

Total Cost: $13,859.57

<table>
<thead>
<tr>
<th>Category</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Room Usage</td>
<td>$1,884.00</td>
</tr>
<tr>
<td>Ambulance Ride</td>
<td>$3,558.00</td>
</tr>
<tr>
<td>Criminal Justice System</td>
<td>$750.00</td>
</tr>
<tr>
<td>Health Services</td>
<td>$504.00</td>
</tr>
<tr>
<td>Emergency Shelter</td>
<td>$7,070.00</td>
</tr>
<tr>
<td>Mental Health services</td>
<td>$93.57</td>
</tr>
</tbody>
</table>

*Cost Notes

**Emergency Room Usage:** An emergency room visit is estimated to be $942.1

**Ambulance Ride:** The average cost of an ambulance ride is $1,779.2

**Criminal Justice System:** The average daily cost of a prison stay in New Hampshire is $93.57.3

**Health Services:** Average cost for a clinic visit is $150, based upon the average of Medicaid & Medicare encounter rates for Federally Qualified Health Centers.

**Emergency Shelter:** The average cost for an overnight shelter stay is $35. Since July 1, 2015, Mark stayed 202 nights in a shelter.

**Mental Health Services:** The standard fee for an emergency psychiatric evaluation is $504.00. This includes providing Masters level staff to be an extension of the requesting doctor for the evaluation, a record review, consultation with the ED staff and with family members/schools/PCP offices/etc., as needed, consultation with on-call psychiatrist for a disposition, and operationalize the disposition.

---

Where is Mark Now?

For a number of months, Mark continued to live in a local park and make sporadic trips to the emergency shelter while he waited to find appropriate housing that would meet the complexity of his physical and psychological needs. Although it took nearly a year of hard work by numerous professionals from across the service system, Mark did eventually attain supportive housing in Manchester in August of 2016. Mark and the team who worked with him are thankful that this housing was found before his health even further deteriorated, leading to additional burden on the emergency healthcare system or worse, falling into the criminal justice system.

---

Case Study 2: Liam

Case Description

Liam first arrived at the emergency shelter in Manchester, NH in October 2011. Homeless and with an untreated alcohol addiction, Liam spent a total of 177 nights at the shelter between October and May of 2012. After six months of residing in the shelter, Liam was able to acquire his own housing at a local rooming house.

In August of 2014, Liam once again returned to the shelter. From that time until February of 2016, Liam spent another 184 nights in the shelter. During this time, Liam generated 27 incident reports, all related to alcohol consumption or carrying, and required 19 ambulance calls to the Emergency Room.

Through the winter of ‘15/’16, service providers from numerous nonprofit and state agencies worked hundreds of hours to get Liam stably housed and connected to services. Unfortunately, due to his untreated mental health and substance use disorders, Liam would often miss appointments, violate house rules or end up in jail and the ER. Eventually he agreed to and was placed in a 30-day rehab program in northern New Hampshire, driven there by a member of his ad hoc service team at the end of February. Liam completed the program and moved in with a family member in the area. Unfortunately, Liam relapsed and was eventually asked to leave where he was staying. In May of 2016, Liam was again on the streets of Manchester and in the following three weeks, had already utilized the ER and spent nights in jail.

Services Utilized

- Healthcare System
- Government Services
- Mental Health Services
- Inpatient Rehabilitation Stay
- Criminal Justice System
- Food and Basic Needs Assistance
- Emergency Shelter

As displayed in the chart below, the combined cost of these services represent a significant expense to the community.
Costs of Liam’s Care*

*Cost Notes

Emergency Room Usage: An emergency room visit is estimated to be $942^4.

Ambulance Ride: The average cost of an ambulance ride is $1,779^5 (using Trinity EMS as a median measurement).

Criminal Justice System: The average daily cost of a prison stay in New Hampshire is $93.57^6.

Emergency shelter: The cost of an overnight stay in an emergency shelter is estimated to be $35. Liam resided in the shelter a total of 93 nights.

Mental Health Services: The standard fee for an emergency psychiatric evaluation is $504.00. This includes providing Masters level staff to be an extension of the requesting doctor for the evaluation, a record review, consultation with the ED staff and with family members/schools/PCP offices/etc. as needed, consultation with on-call psychiatrist for a disposition, and operationalize the disposition.

30 Day Stay in Rehab Center: A 1 day stay at a rehab center cost approximately $600. Even if a 1 day cost in the Berlin rehab center was $300, Liam would have accumulated $9,000.

Where is Liam Now?

As of September 2016, Liam has returned to Manchester and is a frequent visitor at the emergency shelter. He continues to display aggressive behavior, engage in excessive alcohol use, and utilize the emergency room to treat severe intoxication. He has already been in the local jail since his return to Manchester.

---

Case Study 3: Derek

Case Description

As early as 2005, the emergency shelter in Manchester has reports of Derek visiting. On a regular basis, he has walked into the shelter highly intoxicated as well as verbally aggressive and physically violent. Documented in numerous incident reports, when asked to leave, Derek becomes irate to the point at which the police are called to escort him from the facility. In most cases, he is found at a later time passed out in an alley.

Often, his severe inebriation lands him in the emergency room. Whether shelter staff call for an ambulance, an ambulance picks him up off the street, or he takes himself, Derek is recognized by many hospitals in the area as a “frequent flier.” Since January 2016 alone, it is estimated Derek has been to the ER approximately 128 times.

The expenses associated with Derek’s ER uses are quite high. It is estimated that an emergency room visit is $942, which does not include the cost of ambulance transport. Derek’s 128 times in the ER translates to approximately $120,576 so far this year. Despite repeated rounds of hospitalizations and costly treatment, Derek continues to utilize the ER.

Services Utilized

- Mental Health Services
- Healthcare System
- Criminal Justice System
- Food and Basic Needs Assistance
- Emergency Shelter

As displayed in the chart below, the combined cost of these services represent a significant expense to the community.
Costs of Derek’s Care*

*Cost Notes
Emergency Room Usage: An emergency room visit cost is estimated to be $942\(^7\). Given Derek used the ER 128 times, it cost the health system $120,576 to tend to Derek this year.
Ambulance Ride: The average cost of an ambulance ride is $1,779\(^7\) (using Trinity EMS as a median measurement). If we estimate half of Derek’s 128 uses of the ER required an ambulance ride, the costs for ambulance transport totals $113,856.
Emergency Shelter: The average cost of an overnight shelter stay is $35. Since July 1, 2015, Derek spent 15 nights in a shelter.
Mental Health Services: The standard fee for an emergency psychiatric evaluation is $504.00. This includes providing Masters level staff to be an extension of the requesting doctor for the evaluation, a record review, consultation with the ED staff and with family members/schools/PCP offices/etc. as needed, consultation with on-call psychiatrist for a disposition, and operationalize the disposition.

Total Cost:
$235,461

Where is Derek Now?
As of September 2016, despite repeated rounds of hospitalizations and costly treatment, Derek continues to utilize the Emergency Room and require police assistance.

As demonstrated in this case study, it is not uncommon for individuals suffering from homelessness and chronic health challenges to seek assistance from multiple service providers including emergency service providers, homeless service providers, and mental healthcare providers, among others. Without a stable place to live, compounded by untreated mental health disorders, substance misuse, or chronic physical illnesses, these cases represent a significant strain on the system of social services in our state. The fragmentation of services not only increases the overall costs of treatment, but can cause significant harm to the individuals through delayed, inappropriate, or incomplete treatment.

Preventing further strain on our social service system and providing effective, lasting solutions for those who are most vulnerable calls for a reconfiguration of the delivery system – an adjustment that systematically coordinates care across a multi-disciplinary team of service providers who can work together to collectively address the needs of the “whole person.” One model for doing so is known as Community Care Teams, which, by managing client’s complex needs across systems of care, has been shown to be successful in improving outcomes for those most vulnerable. Additionally, as a basic need and a powerful social determinant of health, housing can be a strong predictor of health outcomes. Supportive Housing programs have been proven to help vulnerable individuals and families remain stably housed, access critical services, reduce health care costs, and improve long term health outcomes. Finally, expanded respite care options can bridge the gap between acute medical services currently provided in emergency rooms, homeless shelters that do not have the capacity to provide needed recuperative care, and more permanent housing options. Respite care can assist in resolving medical problems diagnosed on admission, educate clients about managing chronic illness and link them with primary health care, and address challenges associated with complying with common discharge instructions including a lack of a safe place to rest, adequate hygiene, nutritious food, clean water, secure storage for medications or assistance with dressing changes.

The following pages provide examples of these integrated care delivery systems.
Traditional models of care delivery have often not been effective in addressing the complex needs of those who are homeless and face significant physical and mental health challenges. In response, the CCT model seeks to create a comprehensive care plan for individuals, including care coordination and customized treatment plans to address behavioral and/or health conditions, as well as other important factors that may constrain an individual’s capacity to maintain stability. The CCT is comprised of a workgroup of representatives from service providers such as hospitals, behavioral health services, substance use services, housing providers, coordinated entry programs, and corrections. Together, the team develops and implements service plans that move beyond addressing discrete urgent needs, integrating the assets of partners from multiple sectors to address the complex needs of the client.9

In Maine:
Eight CCTs were launched in the state in 2012 to support its Patient Centered Medical Home program and expand upon its Healthy Homes Practices Initiative for eligible Medicaid beneficiaries with chronic conditions. The CCTs provide comprehensive services to help manage care for complex, high-need patients. The care teams use a short-term intervention approach between 30 to 90 days and are composed of physician-hospital entities, behavioral health organizations, social service agencies, and federally qualified health centers.9,12

Launches in 2011, Maine’s Kennebec Valley Community Care Team has worked with 57 patients. In this population, ED visits dropped from 429 to 108, hospital admissions dropped from 185 to 36, and overall costs have been reduced 50%.11

In Vermont:
Part of the state’s Blueprint for Health initiative to transform care delivery, multidisciplinary CCTs provide a crucial link between primary care and community-based prevention of chronic disease. Each community health team is led by a registered nurse, and also includes community health workers, behavioral health specialists, dietitians, public health specialists, additional nurses, and other service providers. Together, the team provides individual care coordination, health and wellness coaching, behavioral health counseling, connection to social and economic support services.10

Vermont’s program found significant decreases in hospital admissions and ED visits, and their related per person per month costs. After statewide rollout, it is projected to save 28.7% in incremental health spending by its 5th year.9

In North Carolina:
The CCT is a public-private partnership between networks of physicians, nurses, pharmacists, hospitals, health departments, and social service agencies. Patients who have high hospital costs and emergency department use are identified through referrals, claims review, and screening and assessments. Care teams provide cooperative, coordinated care and visit patients’ homes after hospital discharge to help create a plan for recovery and management of health conditions.9,12

North Carolina has reduced admission rates by 7%, reduced ED use by 4%, and reduced overall costs by 3% in addition to improving performance on 17 quality measures.9

Access to safe, quality, affordable housing and the supports necessary to maintain that housing constitute one of the most basic and powerful determinants of health. For individuals struggling with long or complex histories of housing instability and multiple chronic physical and behavioral health conditions, the absence of safe, quality housing can negatively impact their health trajectory. Combining permanent affordable housing with wrap-around supportive services, the Supportive Housing model helps people who face the most complex challenges to live with stability, autonomy and dignity. An evidence based practice, Supportive Housing is increasingly recognized as a cost effective health intervention for not only reducing homelessness and increasing housing stability, but also lowering public costs by reducing the use of crisis services, including shelters, hospitals, psychiatric centers, jails, and prisons.

Who Lives in Supportive Housing?
Supportive housing is designed to serve those who would not be able to remain successfully housed without services and likewise would not be able to successfully engage in services without stable housing. The demographics of people living in supportive housing usually reflect the demographics of people who have experienced long-term homelessness and often face persistent obstacles to maintaining housing and remaining engaged in appropriate primary, preventative and behavioral health services. Common conditions faced by tenants in supportive housing include serious mental illness, substance use disorders, and/or chronic medical problems.

Is Supportive Housing Cost-Effective?
Cost studies in six different states and cities found that supportive housing results in tenants’ decreased use of homeless shelters, hospitals, emergency rooms, jails and prisons. It was found that in New York, reductions in service use resulted in an annualized savings of $16,282 per unit, which amounts to 95% of the cost of providing supportive housing. In Portland, the annual savings per person amounted to $24,876, whereas the annual cost of housing and services was only $9,870.

Does Supportive Housing Affect Use of Public Services?
Supportive housing provides an essential platform for the delivery of services that lead to the stability and health of an individual. It couples the provision of physical safety and access to basic needs with improved access to health care by providing a physical space for service delivery and access to staff that can connect residents to community services. Ensuring housing stability and wellness also requires that Supportive Housing Providers can access Medicaid funding for the provision of comprehensive tenancy supports to those who are Medicaid eligible.

---

Respite care involves acute or post-acute care for those who are too ill or frail to recover from a physical illness or condition, but who are not ill enough to be hospitalized. Housed in a variety of settings, including freestanding facilities, homeless shelters, nursing homes, and transitional housing, respite care allows individuals the opportunity to rest in a safe environment while accessing medical care and other supportive services. During their short-term stay, patients receive support in day-to-day activities as well as assistance in medication management, 24-hour supervision, and transportation services. Respite care meets the post-hospital recuperative care needs for people who are homeless while reducing public costs associated with frequent hospital utilization.

In Massachusetts:
Boston Healthcare for the Homeless Project provides medical respite care through the Barbara McInnis House Program. This 104-bed facility provides short-term medical and recuperative services for homeless people whose conditions are too complex for life in shelters. The average length of stay is about two weeks and referrals come from hospitals in the greater Boston area as well as directly from clinicians. The Barbara McInnis House has become a nationally recognized and emulated facility.

In North Carolina:
The Community Medical Respite Program provides eight beds at the Raleigh Rescue Mission Homeless Shelter and 10 beds in several locations, including shelters, a treatment facility with apartments, and a Catholic worker home. Key to the respite program’s capacity to respond to patient needs, this program facilitates monthly or bimonthly meetings of an advisory group, including heads of discharge planning and mental health/substance abuse services at local hospitals, directors of the homeless health clinic, and representatives of shelters and other facilities with available beds.

In Illinois:
The Interfaith House is a 64-bed freestanding facility serving over 1,000 homeless clients per year. In addition to supporting clients during their medical recovery, this facility assists patients in finding appropriate stable housing. On average, patients stay 60 days with a maximum length of stay at 90 days.

“It costs Northwestern $500,000 a year to treat its patients who are homeless. We expect the contract with Interfaith to save the hospital about $100,000 in the first year. This partnership helps better manage and secure the right to longer-term healing.”

-Jessica Soos Pawlowski, Patient Care Manager at Northwestern Memorial Hospital