Cluster Care Planning Report and Program Design Plan

March 2022

Supported in part by a grant from the Fan Fox and Leslie R. Samuels Foundation, Inc.

"The good news is that while difficult, successfully alleviating the supportive service needs of frail elder tenants is possible. Even modest efforts produce positive outcomes. Importantly, not just older residents in need will benefit. Building morale will be higher, incidence of fires and accidents will decrease, … and fewer housekeeping and repair problems will erupt"

(Golant, 2000)

Table of Contents

Acknowledgements

Breaking Ground wishes to acknowledge the time and contributions of the Cluster Care Planning Committee, which was tasked with developing a Cluster Care program plan that could meet the needs of our Safe Haven clients. Planning Committee members are:

Wale Adegbenle, LCSW, Director, Aging Services, Breaking Ground
John Betts, LMSW, Assistant Vice President, Program Development & Innovation, Breaking Ground
Lee Isaacsohn, MD, Assistant Medical Director, Breaking Ground (Janian Medical Care)
Erin Madden, LCSW, Vice President, Programs, Breaking Ground
Jill Maddox, MD, Medical Director, Breaking Ground (Janian Medical Care)
Bonnie Mohan, Executive Director, The Health & Housing Consortium, Inc.
Keona Serrano, LCSW, Assistant Vice President, Breaking Ground
Roberta Solomon, LMSW, Deputy Vice President, Breaking Ground
Tess Sommer, Program Manager, The Health & Housing Consortium, Inc.

We also want to thank the hospital staff and Breaking Ground program directors of our Safe Haven and homeless outreach programs who conducted the needs assessments that informed the design of the proposed program described in this paper.

Finally, this process would not have been possible without the generous support of the Fan R. Fox and Leslie Samuels Foundation, Inc. Healthy Aging Program. The Foundation's Healthy Aging Program aims to improve the way health and social services are delivered by providing support for innovative, effective, efficient and caring organizations.

Executive Summary

Breaking Ground seeks to develop and implement a cluster care model of care to supplement existing onsite services and fill a noted service gap for Safe Haven transitional housing clients who need more assistance than is traditionally provided in a Safe Haven setting. Safe Haven programs provide a low threshold, temporary place for individuals experiencing unsheltered homelessness to live while being connected to services and permanent housing. Many Safe Haven clients require occasional or regular assistance with maintaining their personal hygiene, room cleanliness, laundry, taking medications, and staying on top of their medical care.

To remedy this, we turned to a cluster care model of services as a starting point. For the purposes of this project, cluster care can be thought of as place-based rather than time-based support: traditional home health services are provided to *individuals during individual blocks of time*; cluster care models provide *individualized care to multiple geographically proximate individuals using pooled time.*

To our knowledge, cluster care has never been provided in an emergency shelter or Safe Haven setting. We are interested in utilizing cluster care as a *non-medical intervention* to fill a gap in support services for clients in our Safe Haven programs, with the goals improving their ability to live independently, preparing them for the transition to permanent housing, and increasing staff capacity and training to provide this increased level of support.

Through a comprehensive literature review of different cluster care models and a needs assessment of our current Safe Haven clients, we have designed a customized cluster care program pilot that has the potential to address a critical gap in services for this population and serve as a model for citywide expansion.

Background

As a form of emergency shelter, Safe Havens are subject to New York State Office of Temporary and Disability Assistance (OTDA) Part 491 regulations. Safe Havens and other emergency shelters are independent settings that are not licensed to provide nursing home or assisted living levels of care. OTDA Part 491 Regulations (18 CRR-NY 491.9) explicitly state that no client may be placed ("without the approval of the office [OTDA]") who:

> *(1) has a mental or physical condition that makes such placement inappropriate or otherwise may cause danger to himself/herself or others;*
> *(2) requires services beyond those that the shelter is authorized to provide by law and regulation, and by an operational plan approved by the office;*
> *(3) is likely to substantially interfere with the health, safety, welfare, care or comfort of other residents;*
> *(4) is in need of a level of medical, mental health, nursing care or other assistance that cannot be rendered safely and effectively by the facility, or that cannot be reasonably provided by the facility through the assistance of other community resources;*
> *(5) is incapable of ambulation on stairs without personal assistance, unless such a person can be assigned a room on a floor with ground level egress or the facility is equipped with an elevator;*
> *(6) has a generalized systemic communicable disease or a readily communicable local infection which cannot be properly isolated and quarantined in the facility.*

In practice, these lines are not as clear. Many residents have a range of chronic medical conditions, serious mental illness, and/or substance use disorder, impacting their ability to care for themselves adequately. However, these residents are often reluctant to enter traditional higher-level care settings (nursing homes or assisted living), despite potentially qualifying, due to perceived loss of freedom and abstinence requirements. Others are in a paradoxical limbo: they do not qualify for nursing home or assisted living care, but they need a higher level of care than traditional shelter services may provide. After falling through gaps in other systems, these folks often end up in Safe Havens. Such a placement is seen as a harm reduction measure: better to be inside than living on the street, even if it is not an ideal setting.

Thanks to the generosity of the Fan R. Fox and Leslie Samuels Foundation, Inc., Breaking Ground undertook a 6-month planning project to better understand how providers can offer additional support to meet some of these service gaps.

Literature Review

In our research, we were unable to find an example of a cluster care program for people experiencing homelessness in a transitional setting such as a Safe Haven. However, there are lessons to be learned from existing programs in other settings and a case to be made for providing these necessary services to individuals experiencing homelessness. This literature review provides an overview of cluster care, summarizes the unique health needs of people experiencing homelessness, discusses the role of home health aides in supporting this population, and showcases two examples of cluster care programs that provide insight into how homeless service and housing providers like Breaking Ground could implement a program for our population.

Overview of Cluster Care

Cluster care is a model of providing health care services to multiple people at once. Compared to traditional care models, clustered care allows staff to provide treatment to patients as needed, rather than during a set block of time, thereby increasing efficiency and flexibility. While cluster care can take many forms, this review focuses on "care plans structured on the basis of assessment and care plan-specific tasks rather than block of time" (Pauley et al., 2016). This method allows care to be distributed to patients/clients as needed.

Cluster care is increasingly utilized by assisted living facilities and supportive housing providers, as it has proven to be "especially effective in high-density communities'' (Pauley et al., 2016, p.35). Pauley et al. note that because supportive housing sites are generally home to people with similar needs, this model can easily provide the necessary support (2016). Typical support needs include assistance with Activities of Daily Living (ADL or ADLs), which refer to actions required to maintain the essential functions of living, including "bathing or showering, dressing, getting in and out of bed or a chair, walking, using the toilet, and eating" (Centers for Medicare & Medicaid Services, n.d., p. 195). Moving beyond ADLs, some additional services provided through cluster care may involve support in Instrumental Activities of Daily Living (IADL or IADLs), which include more complex tasks necessary for independent living such as managing finances, cooking and meal preparation, housekeeping, laundry, medical management, and transportation.

A range of professionals may participate in a cluster care model, including nurses, psychiatrists, primary care providers, home health aides, and more. In a supportive housing site with residents who primarily need assistance with ADLs, home health aides can effectively care for residents through a cluster care model, ultimately helping keep residents stably housed.

When adapted to a transitional housing setting like a Safe Haven program––another type of high-density community composed of people with similar needs––a cluster care model of ADL and IADL support services could similarly help clients remain in the program safely until they are able to be placed into permanent housing. Cluster care models can also help patients build independent living skills to support their transition into permanent housing.

Health Needs of People Experiencing Homelessness

People experiencing homelessness often have physical and behavioral health challenges and deal with higher rates of chronic illness than their housed counterparts (Baggett et al., 2010). Chronic conditions may include: "seizures, chronic obstructive pulmonary disease, arthritis and other musculoskeletal disorders…hypertension, diabetes and anemia" (Ruff Institute of Global Homelessness, n.d.). Additionally, during a point in time census of people experiencing homelessness in 2010, "26.2% of all sheltered persons who were homeless had a severe mental illness" and "34.7% of all sheltered adults who were homeless had chronic substance use issues'' (SAMHSA, 2011, p. 2). In New York, a study by Coalition for the Homeless found that two-thirds of the unsheltered homeless adults interviewed were assessed to have mental health needs (Routhier, 2020, p. 13). Further, the same report found that one-third of New Yorkers experiencing unsheltered homelessness were assessed as having multiple disabling conditions, and 19% of those in shelter had mobility difficulties.

Often, mental illness and poor physical health can make employment difficult and lead to homelessness. Conversely, homelessness itself often leads to new health issues and exacerbates existing conditions. The National Health Care for Homeless Council detailed this crisis, noting that living on the street or in crowded congregate shelters increases exposure to communicable diseases, violence, malnutrition, and harmful weather exposure. Medication adherence is also difficult without access to safe medication storage, and proper nutrition is hard to maintain without access to kitchens or nutritious food (Homelessness & Health: What's the Connection?, 2019).

Poor or inconsistent access to comprehensive and preventative health care contributes to the rate of physical and behavioral health issues facing people experiencing homelessness. Baggett (2010) reports that due to insufficient access to care, this population frequently relies on hospital emergency departments for treatment and is more likely to be hospitalized for preventable illnesses. This increases the burden on hospitals and exacerbates the difficult circumstances that homeless people must navigate.

In a study about geriatric conditions in permanent supportive housing residents (a population that has often previously experienced homelessness), 42% of survey respondents reported struggling with ADLs (Henwood et al., 2019). For older segments of the homeless population, having a substance use disorder only increases the risk of ADL difficulties (Spinelli et al., 2017). Given the high rates of chronic illness, serious mental illness, and/or substance use disorder within the homeless population, the ability to maintain ADLs and, in turn, care for oneself adequately is often impaired. ADL limitations can affect one's ability to go through the arduous application process for permanent housing and live independently and successfully in that housing once obtained.

Older homeless adults have medical ages that far exceed their biological ages. Research has shown that they experience geriatric medical conditions such as cognitive decline and decreased mobility at rates on par with those among their housed counterparts who are 20 years older (Brown et al., 2017; Brown, Kiely, Bharel, & Mitchell, 2012, as cited in Culhane et al.,

2019, p. 2). This segment of the homeless population dies an average of 15 years earlier than their general population counterparts, despite experiencing the same diseases (Fazel et al., 2014, p.1532). Given the increased health concerns and higher rates of early mortality of older homeless adults, it is of concern that the United States is witnessing an aging of people experiencing homelessness. New York City will undergo a dramatic transformation of its homeless population, as "the number of homeless adults 65+ will grow from 2,600 in 2017 to 6,900 by 2030" (Culhane et al., 2019, p. 4). Current housing models and homeless services systems are ill-equipped to manage the healthcare needs of this population.

Importance of Home Health Aides

Home health aides (HHAs) are healthcare paraprofessionals equipped with the clinical and behavioral knowledge needed to care for individuals in need of additional support to live safely and independently. HHAs can:

- Assist with activities of daily living, including bathing, dressing, eating, grooming, moving from one place to another, toileting and cleaning up afterward.
- Check vital signs such as blood pressure, respiration and pulse.
- Monitor a client's physical and mental condition; level of exercise; and how much they are eating, drinking and going to the bathroom.
- Handle emergencies such as an accident, heart attack or stroke (Sadick, 2021).

By providing this assistance and care, home health aides can vastly improve patients' quality of life and health outcomes. A study of the clinical impact of home health care found that 90% of patients improved their ADLs between the beginning of care and discharge or 60 days, whichever came first (Han et al., 2013). Patients also self-report improvements in their ADLs as a result of home health services. In an assessment of the experiences of caregivers and their patients, one respondent reported, "The benefits [of having home health aides] are mainly health management and knowledge of nutrition, personal hygiene, house cleaning... My everyday life has become more organized and productive with tasks I couldn't do but can be done by the home caregiver now" (Yang et al., 2021). Home health services are an accepted and trusted method of care for individuals struggling to manage ADLs.

Barriers to Care for Homeless Individuals

Although home health aides can vastly improve the health and quality of life for people struggling with maintaining their ADLs, for individuals experiencing homelessness, accessing these services is often out of reach. Home health services are predicated on the individual having a home where services can be delivered. In a 2020 study on the impact of housing stability on chronic illness, one participant shared, "Having a home health aide is the only reason I'm doing okay. Having a home makes having an aide possible. I never had one before my current housing. Before living here and having an aide, I was managing my health conditions by myself" (Chhabra et al., 2020, p. 95).

Unfortunately, obtaining covered, long-term care for this population is cumbersome and

often unsuccessful. Medicaid and Medicare can cover the cost of home health care, but there are limitations in coverage and eligibility. While Medicare Home Health covers "part-time or intermittent home health aide services," this fails to meet long-term needs (Dey et al., 2011). For eligible individuals, Medicare only covers home health aides for "8 hours of care a day for a maximum of 28 hours a week," and you must be homebound (De Pietro, 2020).

Homeless individuals who are undocumented experience even greater barriers to accessing care and as noted in the Needs Assessment section of this paper, undocumented people represent a significant portion of those needing cluster care at Breaking Ground's Safe Havens. Nearly half (45%) of undocumented immigrants in the United States are uninsured (Artiga, 2019). Data is not available for undocumented homeless individuals, but it is undoubtedly even higher. People who are undocumented are not eligible for Medicaid, Medicare, or subsidized coverage through the Health Insurance Marketplace. Their only options for health care coverage are through emergency Medicaid services––which does not cover home health services––or through employer-sponsored coverage or purchasing private health insurance directly from insurers, both of which are either unavailable or cost-prohibitive to those who are experiencing homelessness. Again, data is lacking for this specific population, but the average income of the general undocumented population is $36,000. In 2020 the average private insurance cost for a single adult was $5,472 annually–prohibitively expensive, leaving people underinsured and ineligible for home health services (NYC Human Resources Administration, n.d.).

Even those who do qualify for government-sponsored health insurance, particularly Medicaid, have significant barriers to accessing services. The annual recertification process for Medicaid can be especially complicated for those experiencing homelessness, causing lapses in coverage and therefore services. In 2016-2017, 22.9% of New York Medicaid patients with a homelessness code (i.e., homelessness was documented as a coded condition in the medical record) in 2017 experienced at least one interruption of Medicaid eligibility (Dapkins & Blecker, 2021, p. 92).

Finally, for people experiencing homelessness, there is often no appropriate place for them to receive both shelter and the support services they need. Their needs are not high enough to require hospitalization or admission to a skilled nursing or assisted living facility yet are too high to be appropriate for emergency shelter. The NYC Department of Homeless Services requires an assessment of ADL and other medical needs for all patients being referred to shelter from hospitals or long-term care facilities (Hospital Referral Process, n.d.). Requiring assistance with even one ADL would make them medically inappropriate for shelter. Similarly, needing home health services beyond two weeks would automatically exclude them from accessing emergency shelter.

When no other option is available, these individuals often end up in a Safe Haven program, despite the limited capacity of staff to provide this increased support. Until a more appropriate option is made available for these individuals, providing cluster care ADL support within Safe Havens is a pragmatic and necessary intervention.

Overview of Existing Programs

Clustered care is utilized differently by different parts of the healthcare and housing sectors, depending on patient/client needs. As a result, a limited number of studies detail the specific form of cluster care referenced in this literature review. Two studies stood out as examples representing the potential of clustered care in supportive housing, which providers could adapt to a Safe Haven setting.

Program #1: Evaluation of an Integrated Cluster Care and Supportive Housing Model for Unstably Housed Persons Using the Shelter System

Researchers evaluated a Toronto-based cluster care program at a supportive housing site that incorporated a "care team composed of a primary care physician, a psychiatrist, shelter/alternative housing staff, a dedicated registered nurse (RN), and a personal support worker (PSW), as well as a care coordinator responsible for providing intensive case management" (Pauley et al., 2016). The study aimed to determine the feasibility of a combined supportive housing and cluster care program and evaluate its effectiveness. Pauley et al. interviewed staff and residents from three housing facilities. They found that this program resulted in clients becoming more engaged in services, with a 635% increase in enrollment of clients receiving service. For the 75% of clients studied that received services from a PSW, the top services provided were engagement/social interaction, assistance with activities of daily living, assistance with cleaning, incontinence care, and bed change/laundry (Pauley et al., 2016, p. 38).

It is important to note that clients reported the greatest satisfaction with the program and goal achievement when their own stated goals were closely aligned with staff-stated goals. In this study, there was overall poor alignment between what clients identified as their top goals and what staff stated were their top goals. The goals from 48% (n = 15) of the subjects did not show any correspondence between the staff- and subject-identified goals, whereas partial and good correspondence was observed for 16% (n = 5) and 32% (n = 10) clients, respectively. Across the whole sample, there was only one case where subject and staff goals corresponded fully (Pauley et al., 2016, p. 37-38.) Evaluators recommended greater discussion, planning, and collaboration between the care provider and the care recipient. "Clients can have varying insight into their own needs and goals, but it is necessary that providers receive sufficient training to know how to navigate the principles of client-centered care when working with clients who may or may not have strong insight and/or a consistent goal-directed stance for themselves. Consistent and clear communication practices and periodic reminders regarding the goals of the service provision would seem important with these clients and also consistent with a client centered approach to care" (Pauley et al., 2016, p. 40.) In addition to patient-provider collaboration, the study also indicated that regular interdisciplinary team meetings promoted greater service delivery efficiency.

Learning from the recommendations made in the Pauley evaluation, Breaking Ground will include clients in the development of their care plan, with particular attention to helping them develop insight into their own needs in order to set goals for themselves. We will also

implement interdisciplinary team meetings between relevant staff and the client themselves to ensure the team is working together toward the same goals.

Program #2: Affordable Clustered Housing-Care: A Category of Long-Term Care Options for the Elderly Poor

In this report, author Stephen M. Golant (2008) broke down the options for clustered long-term care for aging adults, combining affordable housing and long-term care within a residential setting to allow residents to age in place. Although not all options were relevant to the Breaking Ground pilot, Golant did highlight some important notes about staffing and service options. The report detailed several housing prototypes, and for the purposes of this paper, we will highlight Prototype 2: Government-Subsidized Project, Service Coordinator, and Supportive Service Model. Prototype 2 is typically utilized by the housing provider of a multi-unit residential site subsidized by the government, as is the case of Breaking Ground's Safe Haven program. In Prototype 2, most residents have challenges maintaining their IADLs, and a significant share have ADLs limitations. Services are tailored to individual residents' needs (Golant, 2008, p. 29). While Prototype 2 will use its own staff to execute some of its services, it also relies "heavily on contracts or partnerships with other nonprofit or public agencies to deliver assistance," which is valuable for organizations seeking to avoid overburdening their staff (Golant, 2008, p. 33). Breaking Ground is both the property manager and service provider in their Safe Haven programs and will likely hire or dedicate their own staff to provide this care rather than contracting out. The reasons for this are more fully explained elsewhere in this report.

By framing different methods of clustered housing-care, Golant demonstrates how customizable programs and services can be, with no standard model existing for providing ADL support within a permanent or temporary housing setting. Furthermore, providing supportive services can positively impact the entire residence beyond those receiving ADL support. In his article, *Housing the Poor and Vulnerable Elderly,* Golant (2000) notes: "The good news is that while difficult, successfully alleviating the supportive service needs of frail elder tenants is possible. Even modest efforts produce positive outcomes. Importantly, not just older residents in need will benefit. Building morale will be higher, incidence of fires and accidents will decrease, … and fewer housekeeping and repair problems will erupt." The movement to recognize and meet the needs of older tenants improves housing standards for all residents, regardless of the level of support needed. There is a similar opportunity for Breaking Ground's Cluster Care program to improve overall morale and safety throughout the Safe Haven program.

Needs Assessment

As part of the planning process, Breaking Ground conducted a two-prong needs assessment, surveying staff in medical settings (e.g., hospitals) and director-level staff for Breaking Ground's homeless outreach and Safe Haven programs. These needs assessments were developed by the Cluster Care Planning Committee.

The primary purpose of surveying staff in medical settings was to get a sense of how the lack of ADL support and long-term home health services in shelters impacted their ability to discharge safely their patients experiencing homelessness and to identify the most common ADL support that would be needed. The primary purpose of the Breaking Ground programs needs assessment was to learn the scale and scope of need among their current clients for ADL support to help inform the development of a cluster care program.

The needs assessment of the Homeless Outreach Teams in Brooklyn, Queens, and Manhattan returned a small number of potential clients for the prospective program in its current form. Given the geographic proximity necessary as a precondition for cluster care models, the focus for further assessment included exclusively clients already placed in Safe Havens. Therefore, we do not include the outreach needs assessment results in this paper.

Hospital Needs Assessment

Methodology

The Hospital Needs Assessment was completed using an informal snowball sampling method where survey respondents were encouraged to help identify other participants. Initial outreach to hospitals was conducted in two ways:

- Breaking Ground Safe Haven and Outreach Program Directors were asked to provide contact information for their contacts at area hospitals. These Program Directors, along with the Director of Aging Services, then reached out to these hospital contacts to ask them to participate in the survey.
- The survey was also sent to the New York City Health + Hospitals (H+H) Housing for Health Team, who distributed it through internal H+H lists of social work and medical staff in both inpatient and outpatient settings.

Hospitals whose staff completed the needs assessment included:

- New York City Health + Hospitals: Bellevue, Coney Island, Correctional Health Services, Elmhurst, Jacobi, Kings County, Metropolitan, Queens, Woodhull
- NYU Langone Hospital - Brooklyn

Those staff worked in units/specialties including inpatient medical/surgical, inpatient psychiatry, outpatient, behavioral health, geriatrics, cardiology, primary care, safety net clinic, nursing, social work, and at Rikers Island correctional health services.

Staff were asked to complete a survey through Microsoft Forms. The survey was not patient-specific but rather intended to get a sense of the staff's general experience with patients experiencing homelessness. The full question list can be found in Appendix A but the following are some highlights of the information we solicited through the hospital needs assessment:

- Rough estimate of the number of patients per month that they referred to a homeless shelter, but were deemed inappropriate for shelter due to medical needs, and the most common ADL needs that prevented the patient from going to/returning to shelter
- Whether they have had to keep someone in the hospital beyond medical necessity simply because long-term home health aide or similar services were not available at the shelter where the patient was living

Key Findings

A total of 65 hospital staff completed the needs assessment survey. Below are a few key findings from that survey:

- 65% of respondents (n=42) reported that they have referred a patient to a homeless shelter, but the shelter or the Department of Homeless Services said the patient was inappropriate for shelter due to medical needs
    - Collectively, respondents indicated that this happens to a total of 130 patients per month, with an average of three patients per month per respondent
    - Of these respondents, 93% (n=39) had the opinion that if long-term home health services had been available in the shelter, some of these patients would have been able to be discharged safely to shelter
- 74% of respondents (n=48) reported having to keep someone in the hospital simply because long-term home health or similar services were not available at the shelter where they were living

The survey provided a list of common ADL and IADL needs and asked hospital staff to indicate what their patients typically need support with to be discharged safely. Figure 1 provides a list of those needs and the percentage of staff who indicated that their patients typically need support for each ADL need.

Figure 1. *Most Frequently Cited ADL Needs by Hospital Staff. Healthcare Providers Cluster Care Needs Assessment, 2021.*

ADL	Percentage of respondents who indicated support was needed (n=41)
Self-management of illness/medical needs	59%
Mobility (including transferring)	46%
Communication/cognition	34%
Bathing/dressing/grooming	32%
Bowel/bladder control	27%
Toileting	24%
Feeding	10%

Safe Haven Needs Assessment

Methodology

Program Directors from four Breaking Ground Safe Haven sites (totaling approximately 375 beds) were asked to complete a basic, point-in-time survey in Microsoft Forms about their respective programs and clients. The full question list can be found in Appendix A but the following are some highlights of the information we solicited through the Safe Haven needs assessment:

- Whether the program had ever had to discharge a client––or not accept them back from the hospital––because they were no longer appropriate for a Safe Haven level of care and how many of them many might have been appropriate to remain at a Safe Haven if they had long-term home health aide support who could assist ADLs
- If staff had ever had to clean up a condition created by someone who was unable to care for themselves on an ongoing basis (e.g., repeated incontinence, incontinence due to alcohol) and how frequently
- The extent to which the program site facility had sustained any damage requiring more than just simple housekeeping due to a condition created by someone who was unable to care for themselves, and how frequently this occurs
- The frequency of clients going to an emergency room to address an ADL or other medical issue created by an inability to care for oneself and the most common issues that create the need for these emergency room visits

Program Directors were then asked to do individual assessments for those clients who were identified as potentially benefiting from additional support with their ADLs. Lists of potential clients were compiled and refined based on conversations with Assistant Vice President Keona Serrano, who oversees the Safe Haven programs. Prospective client lists were considered "point-in-time" with the understanding that not all clients remained at the Safe Haven during the entirety of the planning process described here.

To gain more insight into the type of support that prospective clients might need, Program Directors were asked to complete a brief functional assessment of the prospective clients. For ease of rating and data analysis, the user-friendly Shah version of the Barthel Index was selected. This tool is a validated, clinician-scored instrument that gathers information about a person's current level (notably, not potential level) of functioning in ten domains: feeding, bathing, grooming, dressing, bowel control, bladder control, transfers (bed to chair and back), toilet use, walking, use of stairs (Nedea, 2020). Using the Barthel scoring template for the various domains and preliminary feedback, the Cluster Care Planning Committee also added additional domains that were believed to represent areas in which clients commonly needed more support: laundry and housekeeping.

For each domain, Program Directors were asked to rate potential need as either High (multiple times/day), Medium (daily), Low (at least once per week, but not every day), or None in each Barthel domain as well as indicate whether the need is chronic (necessary level of support is relatively consistent) or episodic (necessary level of support varies over time).

Key Findings

- PDs identified five people in the past year who were placed in Nursing Home/Assisted Living because they could not be accepted back at Safe Havens after hospital discharge. However, the PDs indicated that 80% of these clients could have returned to the Safe Haven with additional support from HHA or assistance with ADLs.
- All PDs indicated that staff have provided clean-up services for clients unable to care for themselves.
    - This occurs at least once a month at all sites.
    - Toileting, wound issues, general room care issues, and pest infestation were indicated as most common issues that necessitate clean-up services for clients
    - One PD noted: "Housekeeping staff must complete weekly deep cleaning for clients who do not manage their ADLs properly. We have also experienced a dramatic increase in rat, mice and roach infestations. Our extermination costs have increased as a result."
- All PDs reported that some of their clients use hospital emergency departments to address an ADL or other medical issue created by an inability to care for oneself.
    - This occurs more than once per month at one site and more than once per week at two other sites
    - Common reasons for these visits include GI issues, wound care, difficulty breathing, incontinence, difficulty ambulating/falls, and infestation

A total of 69 clients were individually identified as potentially benefiting from additional support with their ADLs, which accounts for approximately 18% of the total census at those programs. Below are some key findings from those assessments:

- Age Breakdown
    - Average Age (for those with available DOBs; n=67/69): 55.7
    - Median Age (for those with available DOBs; n=67/69): 59.8
    - Age Range: 25-81
- Documentation Status: 19% (n=13) of those identified are undocumented
- Vulnerability: 29% (n=20) are on a vulnerability list, developed and maintained by Breaking Ground, of clients at highest risk of death or serious harm to self or others
- Impacts on Housing: PDs said that frequent hospital trips and/or other issues created by challenges in caring for oneself interrupted the person's progress toward housing for 42% (n=29) of clients on the list.
- Housing Readiness: Nearly 25% (n=17) have an active housing package to facilitate placement in permanent housing.
- Substance use: 56.5% (n=39) have an active substance use disorder, with a plurality of these indicating alcohol use
- Willingness to engage in services: Of the 34 individuals who responded to the question, only 15% (n=5) had refused additional support. This indicates there is room for engagement around cluster care.

As mentioned previously, the Barthel Scale/Index measures performance in ten mobility and self-care ADL domains which are scored on scales of 0-5, 0-10, or 0-15. A higher number reflects a greater ability to function independently and a score of zero reflects complete dependence. Time taken and physical assistance required to perform each item are used in determining the assigned value of each item (Nedea, 2020).

Since the ranges of scores vary from one ADL domain to another, we have calculated a score percentage in order to compare consistently across domains. A lower score percentage reflects a higher level of assistance needed. Figure 2 provides the average scores and percentages for each ADL/IADL activity. Below are some highlights:

- Average Barthel Index (BI) score: 88.9/100 (88.9%)
- Average BI plus laundry and housekeeping (Breaking Ground categories): 103.2/125 (82.6%)
- Housekeeping, laundry, chair transfers, grooming, dressing, and bathing emerged as the activities with which Safe Haven clients require the most assistance. Housekeeping in particular was highly needed:
    - 88% of clients (n=61) require regular housekeeping assistance, including 15 clients who have a high need for this assistance
    - An additional four clients only require occasional assistance

Figure 2. *Barthel Index Scores for Breaking Ground Safe Haven Clients. Safe Haven Needs Assessment, 2021.*

Activity Type	Domain	Average Score (Domain Max)	Average Score Percentage (as % of Domain Max)
IADL	Housekeeping*	7.97 (15)	53.1%
IADL	Laundry*	6.45 (10)	64.5%
ADL	Chair Transfers	10.46 (15)	69.7%
ADL	Grooming	3.78 (5)	75.6%
ADL	Dressing	8.55 (10)	85.5%
ADL	Bathing	4.28 (5)	85.6%
ADL	Bladder Control	8.93 (10)	89.3%
ADL	Stairs	8.97 (10)	89.7%
ADL	Feeding	9.65 (10)	96.5%
ADL	Bowel Control	9.75 (10)	97.5%
ADL	Ambulation	14.72 (15)	98.1%
ADL	Toilet Transfers	9.97 (10)	99.7%

*=added by Breaking Ground

Case Studies

The following are brief case studies of two clients in Breaking Ground's Safe Havens who have been identified as potential clients of a cluster care program. These clients illustrate the needs identified in the needs assessment what this program aims to address.

> Mr. V is a 69-year-old Hispanic male who has resided at a Breaking Ground Safe Haven for nearly 2 years (since May 2020). He has diagnoses of PTSD, severe alcohol use disorder, major neurocognitive disorder, depressive disorder, and tobacco use disorder. Mr. V presents with a profound cognitive deficit, has very limited communication skills, and therefore does not ask for help or share how he is feeling. He has a sprained ankle and has difficulty walking. He was given a walker but does not use it regularly. He has difficulty with ADLs: he does not change his clothes, shower, or groom his hair regularly. He is also frequently covered in urine, causing him to be malodorous. Mr. V also struggles to keep his room clean, his bed is frequently without sheets, and he does not turn in laundry on laundry days without prompting. Mr. V drinks alcohol, often to the point of severe intoxication such that he is on the ground, unable to get up or walk. In these instances, he is transported by EMS to the hospital or assisted to his bed by Residential Aide staff.
>
> Potential benefits of cluster care: Mr. V would benefit from assistance maintaining his ADLs, including coaching and prompting for showering, toileting, changing his clothes, making his bed, obtaining clothing, using his walker, grooming his hair, taking his medication, and cleaning his unit. He would also benefit from socialization prompts to address his isolation and depression. Cluster care services could also provide additional opportunities for harm reduction interventions to encourage Mr. V to modify his drinking habits to remain in his room when intoxicated to avoid activation of EMS.

> Mr. J is a 74-year-old white male who has lived at a Breaking Ground Safe Haven for approximately 2.5 years (since November 2019). Mr. J is a Vietnam Veteran living with PTSD. He is blind in one eye with repairable cataract conditions. He has a chronic Venous Stasis with areas of the lower legs and feet presenting weeping ulcers, necrosis, and other aromatic signs of infection. Due to his constant level of pain, he refuses to use the bathroom regularly or is unable to. As a result, Mr. J leaves cups filled with urine throughout his room.
>
> Potential benefits of cluster care: With ADL support, Mr. J would receive additional assistance managing wound care—coaching and reminders about changing the dressing himself and/or reminders and escorts to attend outpatient appointments for wound care and coaching to address grooming and toileting issues. Increased support and socialization prompts could also address signs of potential self-isolation and social withdrawal.

These case studies highlight the complicated nature of providing supportive housing. Needs, wants, and capabilities vary tremendously and would benefit from adaptable and flexible social services. Breaking Ground's proposed cluster care initiative would provide the clients referenced in the case studies with the ADL support needed to improve their quality of life, safety, as well as the safety of those around them. It is important to note that ADL services are not intended to replace additional services, including mental health and medical interventions, which are coordinated through the main Safe Haven program for all clients.

Insights for Program Design

The results of the needs assessments provided helpful insight for how we can design a Cluster Care program to best meet the needs of Safe Haven clients and address some of the challenges hospitals face in safely discharging patients to Safe Havens. The top two needs overall were the categories added by Breaking Ground related to IADLs: housekeeping and laundry. Following these two domains, the top needs identified through the Barthel Index were chair transfers, grooming, dressing, and bathing.

Through the needs assessments, some medical conditions were identified as reasons for EMS engagement at the Safe Haven and as barriers to safe hospital discharge back to a Safe Haven program. The Cluster Care program proposed here does not seek to eliminate the need for necessary emergency medical care. For instance, if someone has difficulty breathing, emergency medical care is likely indicated. As conceptualized, the program will seek to proactively address underlying causes and lacking supports such that the need for emergency care becomes less likely. In the instance of difficulty breathing, additional support around reminders to take medication for respiratory conditions—if that is what is causing the issue—could potentially reduce the need for emergency intervention.

The cluster care program originally conceived as a potential way to embed home health aide services at the Safe Haven. However, the needs assessment pointed us in a different direction for several reasons:

1. The goal for transitional housing settings such as Safe Havens is to prepare clients for independent living.
2. Provision of Home Health Aide services would be dependent on Medicaid coverage. This is a potential barrier to services for the following reasons:
    a. Undocumented clients (19% of those identified) would not qualify for services.
    b. Clients in transitional housing often have lapses in Medicaid coverage due to challenges or barriers in the application/recertification processes.
3. Breaking Ground does not provide medical services directly. Long-term HHA services at DHS facilities would be classified as Reasonable Accommodations that require formal approval by DHS. This creates an administrative and procedural hurdle that could interfere with timely connection to services.
4. Many of the services of a Home Health Aide cross a line of client privacy (e.g., dressing and undressing a client, showering, or bathing a client) that Breaking Ground does not otherwise cross in our service provision.
5. While not explicitly captured in the needs assessment, program staff have anecdotally indicated that a significant portion of ADL/IADL issues are worsened by substance use (more than half of identified clients use substances). Frequently, clients are capable of ADLs during periods of forced sobriety (i.e., hospitalization) and are therefore discharged but then require more support once they return to the Safe Haven and start using substances again. Home Health Aide services are not designed to address substance use through a harm reduction model that is consistent with the Safe Haven model.
6. The two domains identified as highest need (housekeeping and laundry) can be addressed through non-medical supports.

The results of the assessments provide data to back up what practice experience has shown consistently: time-intensive, client-centered engagements are a key to increasing client health and well-being and promoting the transition to permanent housing. More than anything, the biggest need to be able to fill this service gap is additional staff time. While current staffing levels satisfy OTDA and DHS requirements, they do not allow for the kind of intensive one-on-one service provision that, as the needs assessment demonstrated, nearly one-fifth of Safe Haven clients need (a number that is expected to grow as the population continues to age).

Thus, we set out to design a program that was based on a coaching and direct support model rather than a home health aide model. As conceived, the program centers coaching and reminders through intensive psychosocial support as opposed to direct medical support such as that provided by a Home Health Aide.

Breaking Ground Cluster Care Program Design

Based on what we have learned through our literature review and needs assessments, we have designed a Cluster Care pilot program that will fill a significant gap in care and services available to homeless individuals in Breaking Ground's Safe Haven programs.

Program Goals

Some of our goals for the program are to:

- Improve clients' ability to live independently
- Promote improved sense of self-efficacy
- Reduce ER visits and longer than necessary inpatient stays for ADL-related issues
- Reduce time to placement in permanent housing
- Decrease site facility damage caused by clients' ADL issues
- Reduce strain on staff who are unable to provide increased level of support

Program Principles

The program will be rooted in the following principles:

- Client Self-Determination
- Harm Reduction
- Trauma-Informed Care
- Housing First
- Non-Medical Intervention

Admission

Number of Clients Served

Based on our needs assessment and the staffing plan outlined in the following section, Breaking Ground anticipates initially enrolling 10 clients in the Cluster Care program and estimates that the program may serve 25 clients in its first year.

Eligibility Criteria

- Breaking Ground Safe Haven resident at a site where Cluster Care services are available
- Identified need for ADL support or coaching, based on completed Barthel Index and overall clinical picture)

Eligibility Exclusions

- Upcoming program discharge
- Assistance or support required would compromise client privacy (e.g., need assistance with cleaning self after toileting).

Documents Required for Admission:

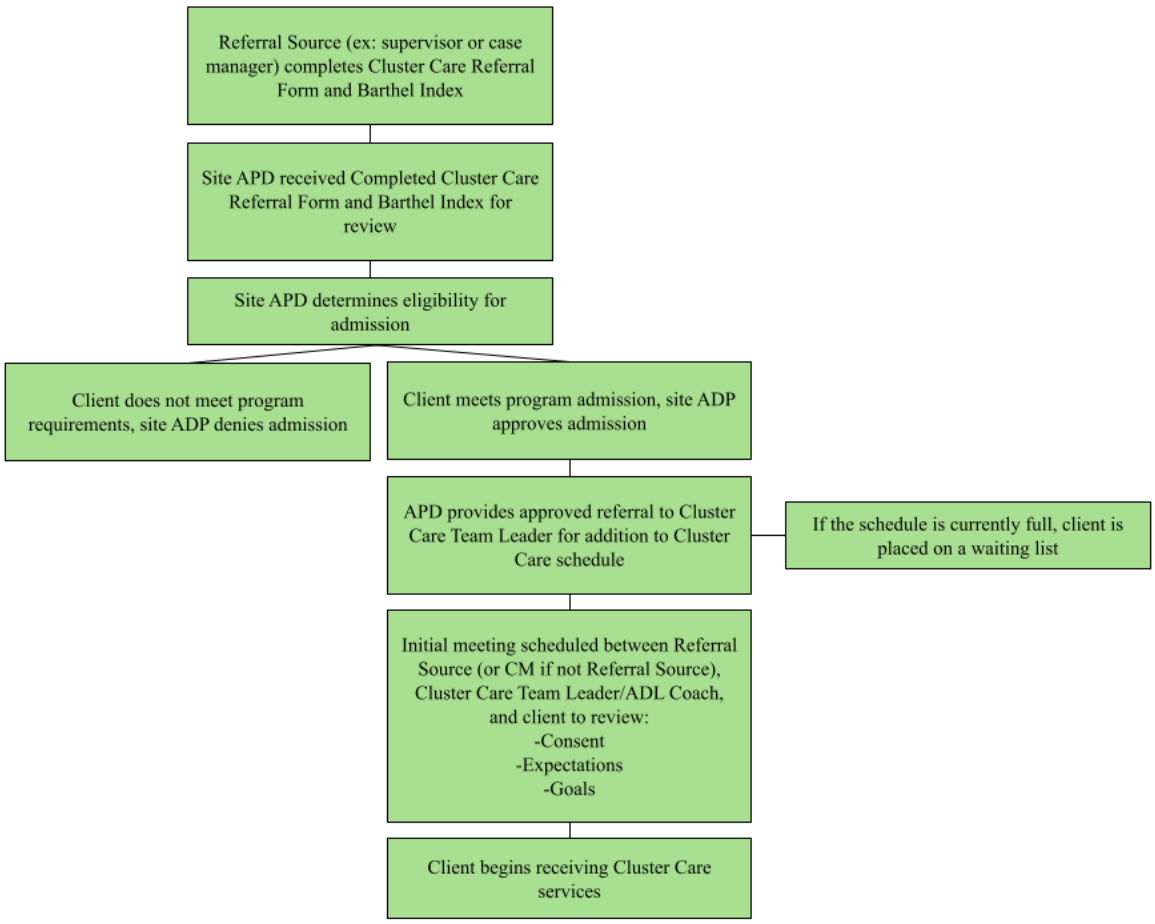
- Cluster Care Referral Form

- Completed Barthel Index
- Client consents to participate in Cluster Care program

Admission Workflow

The workflow in Figure 3 illustrates the referral and admissions process for the Cluster Care Program. A sample Cluster Care Referral Form is included in Appendix B.

Figure 3. *Admissions Workflow for Breaking Ground Cluster Care Program.*



Services and Staffing

Examples of Services Provided

- Reminders, Guidance and Coaching on ADLs/IADLs:
  - Showering
  - Grooming
  - Housekeeping
  - Medication adherence
  - Eating/grocery shopping
  - Laundry
  - Delousing

    - Bed bug protocol support
    - Toileting
    - Preparing for independent living/move into housing
- Reminders about case management/onsite medical/psych/other appointments
- Providing escort to appointments when needed
- General psychosocial support
- General advocacy (e.g., at appointments)
- Encouraging participation in groups/other activities
- Transition planning and skills practice
    - Depending on need and plan for housing permanency, staff may also work to set up Home Health Aide services and/or referral to Managed Long-Term Care (MLTC) at time of move-out)

Service Documentation

Breaking Ground uses the AWARDS system from Foothold Technology to document and maintain client records in our Safe Haven program. The cluster care program would also use AWARDS to document client assessments, service provision, engagement, and progress notes so that there is continuity and coordination across all staff engaged with the client. Similarly, the cluster care program staff would have regular case conferences with the case management staff, with and without the client, in order to ensure everyone is on the same page and working toward the same goals. To assess client progress and need for continued or different ADL support services, the staff will complete a Barthel assessment every three months.

Staffing

The following staff will be essential to the Cluster Care program. With the exception of the ADL Coaches and Team Leader, all staff are already currently employed by Breaking Ground. Full prospective job descriptions are included in Appendix C. With the proposed staffing plan below, the program would be able to provide at least one 8-hour shift of cluster care services, 7 days/week.

- Assistant Vice President (0.02 FTE): provides high-level administrative oversight of program development, implementation, and integration into existing Safe Haven service delivery models and coordinates appropriate leveraging of resources to support high quality service delivery consistent with organizational priorities and mission
- Director, Aging Services (0.10 FTE): supports training of cluster care (and related Safe Haven) staff in working with older populations and supports service connection to resources designed for older adults, including preparation for transition to permanent housing and subsequent aging in place

- Assistant Program Director: reviews and approves or rejects referrals to the program and provides general oversight of the intersection of the cluster care program and the Safe Haven program as a whole.

  Note: As an existing part of the management team at Breaking Ground Safe Havens, the Assistant Program Director has responsibility for oversight of social services, which would include the Cluster Care program. As the position is required to be fully carried on the Safe Haven program budget, the position is not allocated in the preliminary Cluster Care program budget provided in Appendix D.
- Team Leader (1.0 FTE): provides direct supervision of ADL coaches, coordinates and manages schedule and service allocations, and performs ADL Coach work
- ADL Coaches (2.0 FTE): manages the day-to-day needs of Cluster Care clients, including providing psychosocial support, reminders and coaching around health management, personal hygiene, and housekeeping. As necessary, provides escorts to appointments.
- The work of the following staff will intersect with the Cluster Care program and collaboration will be vital to ensure high quality service delivery:
  - Residential Aides
  - Housekeepers
  - Shift Supervisors
  - Maintenance Supervisors
  - Case Managers
  - Clinical Coordinators
  - Onsite Medical Providers
  - Contract Security

Interdisciplinary team meetings will be organized between the ADL Coaches, Team Leader, on-site medical staff, and clinical staff to ensure consistent communication and collaboration across the spectrum of care.

It is expected that cluster care program staff will receive specific training in the following areas:

- Motivational Interviewing
- Harm reduction
- Basic housekeeping/operations functions
- De-escalation and Crisis Intervention (using Crisis Prevention Institute's Nonviolent Crisis Intervention curriculum)
- Maintaining appropriate client/staff boundaries
- Universal precautions/blood-borne pathogens
- EMS activation and working with hospitals

Breaking Ground may also explore formal primary caregiver or caregiver support trainings for ADL coaches through a third-party course.

Discharge

Clients are permitted to remain at the Safe Haven until they are placed in permanent housing, provided they do not engage in violent or egregious behaviors. Clients may be discharged from the Cluster Care program but remain in the Safe Haven program or be discharged from the Cluster Care program *and* from the Safe Haven. Since the Cluster Care program will be physically based within the Safe Haven site, discharge from the Safe Haven will result in discharge from the Cluster Care program. Figure 5 describes various reasons a client may be discharged from the Cluster Care program; actions the program staff might take to mitigate that discharge, as appropriate; and how the program will help the client transition out of the program.

Figure 4. *Program Discharge/Referral Protocol*

Reason for Discharge	Mitigation to Avoid Discharge	Transition of Care Plan
Discharge from Cluster Care program due to decreased need/increased skills mastery	N/A	– Development of appropriate transition of care plan to support long-term skills retention. – Discharge case conference to review and sign off on plan. – Complete a discharge case conference (with client and appropriate staff) to document plan for skills retention and resources to use in the event of a crisis. Client and staff sign off on plan and include in chart.
Discharge from Cluster Care program due to lack of engagement and/or client refuses services or AWOL status	– Staff will work to re-engage the client and find ways to provide support consistent with the client's wishes. – The program is voluntary, and clients are free to refuse services/disenroll from the program	– Cluster Care staff will communicate with Safe Haven case management staff on what support had been provided and what the client's current support needs are – Write a Close Out Note to include next steps to transition
Discharge from Cluster Care program and/or Safe Haven program due to behavioral issue (e.g., aggressive or violent behavior toward other clients or staff, etc.)	– 1st Step: Warning – 2nd Step: Behavior Contract for Continued Engagement (e.g., staffing change, detox, taking medication, offering voluntary disenrollment) – 3rd Step: Services suspended for a certain time. Continued clinical intervention. – Final Step: Discharge from Cluster Care program and/or Safe Haven	– Document progressive engagements in case record – Consult with onsite psychiatric and/or medical provider for guidance around contingency planning post-discharge. – Complete Breaking Ground standard transition of care planning process. – If applicable, brief new program/Safe Haven on suggested additional supports – Write a Close Out Note to include next steps to transition, including documenting sign-out to new program/provider.
Discharge from Safe Haven due to client requiring higher level of care (e.g., Level II housing, Nursing Home, or Assisted Living)	N/A	– Complete Breaking Ground standard transition of care planning process – Write a Close Out Note to include next steps to transition or set up the client's care needs in their new living arrangement
Discharge from Safe Haven due to client moving into permanent housing or another housing program.	N/A	– Explore potential eligibility for home health and/or managed long-term care (MLTC) services – Connect to a Health Home – Prepare medications in blister packs – Make a referral to APS if needed (e.g., people who need deep cleans) – Complete Breaking Ground standard transition of care planning process – Write a Close Out Note to include next steps to transition and provide transition of care plan to housing provider.

Expected Outcomes

The items listed below represent potential metrics by which success or positive outcomes could be demonstrated. Data in all of these areas is not currently available, but, as Breaking Ground continues to move toward data-driven services, we continue to explore unique and innovative ways to capture measures of programmatic success. Upon implementation of the program, we would identify an appropriate number of metrics which would be measured during the implementation period.

Client Experience

- Increased engagement in community
- Decreased sense of social isolation
- Increased sense of self-efficacy/sense of personal health
- Improvement in self-rated wellbeing
- Fewer incidents caused/exacerbated by interpersonal conflict about neglect of ADLs
- Increased "inside time"/Decreased "outside/street time"
- Overall improvement of Quality of Life (e.g., using World Health Organization's Quality of Life Scale-Brief, which assesses "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals") (World Health Organization, n.d.).
- Increased functionality score (Barthel or similar)
- Increased health literacy

Facility

- Decreased work orders related to issues caused by neglect of ADLs
- Decreased spending on damage caused by neglect of ADLs
- Reduced burden on maintenance and housekeeping staff
- Decreased spending on cleaning supplies
- Fewer odor-related complaints
- Fewer inspection findings related to room cleanliness

Housing

- Shorter shelter stays
- Better able to succeed in permanent placement
- Increased length of tenancy in permanent housing without requiring transition to higher level of care
- Earlier identification of ongoing service needs in permanent housing

Healthcare Utilization

- Increased engagement in primary medical care and/or psychiatry
- Increased engagement in harm reduction practices
- Potential reduction in "avoidable" EMS calls, ED visits, and inpatient stays

- Potential reduction in lengths of inpatient stay

Recommendations and Next Steps

Recommendations

Increase funding

Without funding, the gaps in service identified and discussed here either remain unfilled or result in further stretching of existing limited resources and staff time. Contracting agencies that fund services for people experiencing homelessness should––for service providers interested in providing these kinds of services––allow additional staff lines (such as ADL coaches) to provide these kinds of supports.

Promote systemic collaboration at transitions of care

Despite many years of advocacy and collaboration, health care and homeless services remain extremely siloed. Health care and homeless services providers must be partners in the care of mutual patients/clients, not two opposing parties passing the patient/client back and forth between their respective systems. Homeless service providers often have vital information that can change the course of a treatment plan, but disconnection or administrative red tape prevents the timely sharing of this information. In February 2022, BronxWorks and the Center for Urban Community Services released a paper highlighting the importance of coordination between housing providers, mental health providers, and hospitals. Their white paper suggests that by working together on "patient admissions, discharges, and care plans," homeless New Yorkers experiencing severe mental illness can receive more supportive and appropriate care (Auwarter, p. 19). Mutual education—mechanisms or avenues through which hospitals and homeless services providers can share information about the realities of their system and mutually problem-solve solutions are key to overcoming this siloed care model. Organizations such as the Health & Housing Consortium––which brings together stakeholders from across the healthcare, housing, and homeless services sectors––are vital in this effort. Contracting agencies should consider incentivizing or promoting provider engagement in these conversations and spaces.

Permit Wet Safe Havens

Initial outcomes from the newly opened Overdose Prevention Centers in New York City are overwhelmingly positive and serve as case studies for the possibilities of safe consumption spaces. The needs assessment results included here demonstrate the connection between increased need for supports and substance use, particularly alcohol use.

At present, DHS contracts forbid clients from bringing alcohol onsite. A loosening of this prohibition (one that is not expressly prohibited in OTDA Regulations), would allow for implementation of evidence-based models of Harm Reduction around alcohol use, such as Harm Reduction for Treatment of Alcohol (HaRT-A), Contingency Management, and/or Managed Alcohol Programs that have demonstrated promise elsewhere.

Improve physical plant accommodations to allow for HHA placement

As explained by Coalition for the Homeless (2017), under the terms of the Butler v. City of New York Settlement, DHS is obligated to continue to work toward making their emergency shelter settings more accommodating for those with disabilities. This should include a review of the use of congregate settings as a model. A small study of clients relocated to hotels during the height of the COVID pandemic demonstrated positive outcomes in health and well-being (Gozo, personal communication, 2021). One benefit of the increased privacy and non-congregate rooming is that such arrangements make the placement of a HHA more feasible. DHS should consider prioritizing single (or very small congregate) room arrangements for future shelter development.

Allow ongoing HHA care in shelter

As per the current DHS Institutional Referral Process from Health Care Facilities, clients may not be returned to shelter if they "need for home care or visiting nurse services beyond wound care of IM/IV medication administration and beyond 2 weeks." Particularly as the average age of people experiencing homelessness continues to climb, this restriction will put emergency shelter––which is intended as a housing option of last resort––out of reach for many who need it. Without alternatives, many individuals end up on the street where their health is subject to an even steeper decline. DHS should evaluate the feasibility of long-term HHA placement as routine additional support for clients. rather than one subject to the arduous Reasonable Accommodation process.

Next Steps

Implementation Funding

Breaking Ground intends to seek funding for at least a two-year pilot-scale implementation of the program discussed here. In the outyears, we expect that we will be able to use the positive outcomes demonstrated through pilot implementation to advocate for existing government funders to cover at least some of the expenses associated with these services.

Engage consumer stakeholders

Service delivery models rooted in trauma-informed care and harm reduction models must seek out and incorporate consumer stakeholder input. Time constraints and logistical considerations did not allow engagement with consumer stakeholders prior to the close of this planning period.

Prior to implementation, Breaking Ground would assess prospective cluster care clients' interest in participating. Additionally, Breaking Ground would solicit feedback on the proposed model and make appropriate adjustments prior to implementation.

References

Artiga, S., Diaz, M. (2019). *Health coverage and care of undocumented immigrants*. KFF. Retrieved March 31, 2022, from https://www.kff.org/racial-equity-and-health-policy/issue-brief/health-coverage-and-care-of-undocumented-immigrants/

Auwarter, S., Concepcion, N., Morrissey, A., Rivera, J., Zammiello, S., DeGenova, J., & Carino, A. (2022, February). *Improving Care Coordination for Homeless Individuals with Severe Mental Illness in NYC* [PDF]. New York: BronxWorks and Center for Urban Community Services.

Baggett, T. P., O'Connell, J. J., Singer, D. E., & Rigotti, N. A. (2010). The Unmet Health Care Needs of Homeless Adults: A National Study. American Journal of Public Health, 100(7), 1326–1333. https://doi-org.proxy.wexler.hunter.cuny.edu/10.2105/AJPH.2009.180109

Centers for Medicare & Medicaid Services. (n.d.). *Activities of Daily Living (adls): Activities of ... - cms.gov*. Retrieved December 18, 2021, from https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/MCBS/Downloads/2007_Appendix_B.pdf

Chhabra, M., Spector, E., Demuynck, S., Wiest, D., Buckley, L., & Shea, J. A. (2019). Assessing the relationship between housing and health among medically complex, chronically homeless individuals experiencing frequent hospital use in the United States. *Health & Social Care in the Community*, *28*(1), 91–99. https://doi.org/10.1111/hsc.12843

Coalition for the Homeless. (2017). *Notice of proposed settlement of class action concerning access to shelter for individuals with disabilities in the New York City department of homeless services (DHS) shelter system.* Retrieved March 31, 2022, from https://www.coalitionforthehomeless.org/get-help/disability-accommodation-2/butler-notice-en/

Culhane, D., Treglia, D., Byrne, T., Metraux, S., Kuhn, R., Doran, K., Johns, E., & Schretzman, M. (2019). The Emerging Crisis of Aged Homelessness: Could Housing Solutions Be Funded by Avoidance of Excess Shelter, Hospital, and Nursing Home Costs? University of Pennsylvania.

Dapkins, I., & Blecker, S. B. (2021). Homelessness and Medicaid Churn. Ethnicity & disease, 31(1), 89–96. https://doi.org/10.18865/ed.31.1.89

De Pietro, M. A. (2020, June 9). *Medicare and Home Health Aide Services: Coverage and exclusions*. Medical News Today. Retrieved December 18, 2021, from https://www.medicalnewstoday.com/articles/does-medicare-cover-home-health-aide-services

Dey, J. G., Johnson, M., Pajerowski, W., Tanamor, M., & Ward, A. (2011). Home health study report. Washington, DC: L&M Policy Research.

Fazel, S., Geddes, J. R., & Kushel, M. (2014). The health of homeless people in high-income countries: Descriptive Epidemiology, Health Consequences, and clinical and policy recommendations. The Lancet, 384(9953), 1529–1540. https://doi.org/10.1016/s0140-6736(14)61132-6

Golant. (2008). Affordable Clustered Housing-Care: A Category of Long-Term Care Options for the Elderly Poor. Journal of Housing for the Elderly, 22(1-2), 3–44. https://doi.org/10.1080/02763890802096906

Golant, S. (2000). *Housing the poor and vulnerable elderly*. Shelterforce. Retrieved January 28, 2022, from https://shelterforce.org/2000/01/01/housing-the-poor-and-vulnerable-elderly/

Han, S. J., Kim, H. K., Storfjell, J., & Kim, M. J. (2013). Clinical outcomes and quality of life of Home Health Care Patients. Asian Nursing Research, 7(2), 53–60. https://doi.org/10.1016/j.anr.2013.03.002

Henwood, B.F., Lahey, J., Rhoades, H. et al. Geriatric Conditions Among Formerly Homeless Older Adults Living in Permanent Supportive Housing. J GEN INTERN MED 34, 802–803 (2019). https://doi.org/10.1007/s11606-018-4793-z

National Healthcare for the Homeless Council. (2019, February). *Homelessness & Health: What's the Connection?* Retrieved December 21, 2021, from https://nhchc.org/wp-content/uploads/2019/08/homelessness-and-health.pdf

Nedea, D. (2020, April 7). *Modified Barthel Index for Activities of Daily Living Calculator*. MDApp. Retrieved March 30, 2022, from https://www.mdapp.co/modified-barthel-index-for-activities-of-daily-living-calculator-362/

NYC Department of Homeless Services. (n.d.). *Hospital Referral Process*. Retrieved January 27, 2022, from https://www1.nyc.gov/site/dhs/shelter/singleadults/single-adults-hospital.page

NYC Department of Homeless Services. (n.d.). *Street Outreach*. Retrieved December 21, 2021, from https://www1.nyc.gov/site/dhs/outreach/street-outreach.page

NYC Human Resources Administration. (n.d.). *Immigrants*. Immigrants - OCHIA. Retrieved December 17, 2021, from https://www1.nyc.gov/site/ochia/find-what-fits/immigrants.page

Pauley, T. , Gargaro, J. , Falode, A. , Beben, N. , Sikharulidze, L. & Mekinda, B. (2016). Evaluation of an Integrated Cluster Care and Supportive Housing Model for Unstably Housed

Persons Using the Shelter System. Professional Case Management, 21 (1), 34-42. doi: 10.1097/NCM.0000000000000128.

Routhier, G. (2020, March). State of the Homeless 2020. Coalition for the Homeless. Retrieved January 25, 2022, from https://www.coalitionforthehomeless.org/wp-content/uploads/2020/03/StateofTheHomeless2020.pdf

Ruff Institute of Global Homelessness. (n.d.). *Illness & disease: Igh hub*. Illness & Disease | IGH Hub. Retrieved December 17, 2021, from https://ighhub.org/understanding-homelessness/physical-health/illness-disease

Sadick, B. (n.d.). *Home health aides: Professional caregiving help at home*. AARP. Retrieved October 2021, from https://www.aarp.org/caregiving/home-care/info-2019/home-health-aides.html

Spinelli, M. A., Ponath, C., Tieu, L., Hurstak, E. E., Guzman, D., & Kushel, M. (2017). Factors associated with substance use in older homeless adults: Results from the HOPE HOME study. Substance Abuse, 38(1), 88–94. https://doi-org.proxy.wexler.hunter.cuny.edu/10.1080/08897077.2016.1264534

The Substance Abuse and Mental Health Services Administration. (2011, July). *Current statistics on the prevalence and characteristics ...* Retrieved December 17, 2021, from https://www.samhsa.gov/sites/default/files/programs_campaigns/homelessness_programs_resources/hrc-factsheet-current-statistics-prevalence-characteristics-homelessness.pdf

World Health Organization. (n.d.). *WHOQOL-BREF| The World Health Organization*. World Health Organization. Retrieved March 31, 2022, from https://www.who.int/tools/whoqol/whoqol-bref

Yang, K., Chao, Y. Y., Zha, P., Wang, W., & Lee, Y. S. (2021). Caregiving and Care Receiving Experiences Among Older Chinese Immigrants and Their Home Health Aide. Journal of transcultural nursing: official journal of the Transcultural Nursing Society, 10436596211050668. Advance online publication. https://doi.org/10.1177/10436596211050668

Appendices

Appendix A. Needs Assessment Questions

Healthcare Providers Cluster Care Needs Assessment

1. Have you ever referred a patient to a homeless shelter, but the shelter or the Department of Homeless Services said the patient was inappropriate for shelter due to medical needs?
2. If yes, what is your estimate of the average number of patients that you work with in any given month who are referred to shelter but not able to go/return due to their medical needs?
3. If yes, what are the most common reasons that are given for the person not being able to go to/return to shelter due to medical needs?
4. If the answer to question 2 is "ADLs" or something similar, which are the most common ADLs that prevent the person from going to/returning to shelter?
5. In your opinion, would long-term Home Health Aide services at the shelter have allowed some of these people to go to/return to shelter safely?
6. Have you ever had to refer someone to a SKILLED NURSING FACILITY simply because long-term home health aide or similar services were not available at the shelter where they were living?
7. Have you ever had to keep someone IN THE HOSPITAL simply because long-term home health aide or similar services were not available at the shelter where they were living?
8. If yes, what were the needs that required them to stay in the hospital?
9. Any other comments you would like to add?

Breaking Ground Safe Haven Programs Needs Assessment

1. Has the program ever had to discharge (or not accept back) someone because they were no longer appropriate for a Safe Haven level of care?
2. If yes, approximately how many times in the past year has this happened? Where did these people end up going (if you know) after discharge?
3. Of these individuals, how many might have been appropriate to remain at a Safe Haven if they had long-term home health aide support who could assist with bathing, toileting, and other ADLs?
4. In the past year, have staff ever had to clean up a condition created by someone who was unable to care for themselves on an ongoing basis (e.g., repeated incontinence, incontinence due to alcohol)
5. If yes, how frequently does this happen on average?
6. What are the most common issues that create this situation?

7. In the past year, has your program site sustained any physical plant damage requiring more than just simple housekeeping due to a condition created by someone who was unable to care for themselves?
8. If yes, how frequently does this happen on average?
9. If yes, what was the damage and what was/were the condition(s) that created it?
10. If you know approximately how much the repair cost, please indicate.
11. How frequently does a client go to an emergency room to address an ADL or other medical issue created by an inability to care for oneself?
12. What are the most common issues that create the need for these emergency room visits? How many clients could benefit from additional, regular support around ADLs?

Appendix B. Cluster Care Referral Form

Client Name:

Client DOB:

Room Number:

Safe Haven Admission Date:

Case Manager:

Describe reason for referral in 1-2 sentences:

Describe examples of assistance needed/suggested:

Is need episodic or chronic (e.g., only when intoxicated or every day)?

Current Housing Package Status: ( ) Active package ( ) Missing Documents ( ) Linked/Awaiting Move Out

( ) Undocumented/Ineligible ( ) Other_____

Current Housing Plan: ( ) Permanent Supportive Housing ( ) Gen Pop ( ) Subsidy/Voucher ( ) Assisted Living/Nursing Home ( ) Other_____

Barthel Scale Score (*Attach Barthel scale and/or other assessment instruments*)

Is client on Medication Monitoring?

Has client been engaged about Cluster Care and, if so, is client interested?

Is client actively using substances? If yes, what?

Has client completed a medical assessment with Janian or another provider? (*Conditions or assistance for strictly medical issues—e.g., wound care—are not appropriate for cluster care*)

Appendix C. Prospective Job Descriptions

ADL Team Leader

Reporting to Assistant Director of Operations the ADL Team Leader provides supervisory oversight of the ADL Coaches and the day-to-day operations of Cluster Care services and acts as ADL Coach for particularly complex clients and/or as needed. Cluster Care services provide staffing support and maintain program stability by providing client support, assistance, and monitoring through frequent, positive interactions to increase independence and self-sufficiency, improve client overall quality of life, and support clients in preparing to transition to permanent housing.
This position has a 35-hour work week, onsite.

ESSENTIAL DUTIES

- Supervise a staff of 2 ADL Coaches providing direct support services to clients.
- Provide training to ADL Coaches
- Develop and administer Cluster Care schedule, including development of work plans, schedules, and assignments.
- Collaborate with Clinical Supervisors onsite to ensure smooth, coordinated service delivery.
- Review ADL Coaches' service documentation and reports, make service adjustments as necessary, and provide reports about service delivery to onsite Clinical staff and/or others upon request.
- Act as ADL Coach for particularly complex clients and/or as needed, including:
    - Providing reminders, guidance, and coaching to clients to improve their daily living skills. (e.g., showering, grooming, housekeeping, medication adherence, eating/grocery shopping, laundry, decluttering, delousing, adhering to bed bug protocol, toileting).
    - Facilitating onsite laundry, housekeeping, and shower resources for clients
    - Supporting clients in transition planning and skills practice, including consultation with Clinical staff about potential supports needed upon move into independent housing (e.g., HHA or MLTC).
    - Providing engagement to increase participation in case management, medical and psychiatric appointments, and other housing-related appointments, including providing reminders and escorts to appointments as necessary.
    - Using company vehicle or mass transit to escort clients to and from appointments in the community and as necessary.
    - Documenting daily client interactions, progress towards goals (including use of short functional assessments), and case conferences.
    - Reporting and documenting incidents, crisis interventions, and communicate with on-call management team
- Perform other related duties as assigned

MINIMUM QUALIFICATIONS

- Minimum 5 yrs. experience working with homeless or disabled populations, and minimum 3 yrs. of supervisory or leadership experience
- Excellent clinical and assessment skills, creative, person-centered problem solving, ability to delegate and motivate. Ability to communicate and work with diverse populations. Detailed oriented and can manage team tasks
- Strong organizational skills
- Proficiency with Microsoft Office Suite
- Advanced training/experience in occupational therapy, home care, congregate care milieus, nursing home, etc. strongly preferred
- Preferred: Valid NY driver's license with driving record that is in good standing
- CPR and First Aid certifications a plus
- Experience or familiarity with Motivational Interviewing, Primary Caregiver Support Training, Harm Reduction, Housekeeping/Operations Training, Safe Transfers, and/or De-escalation is preferred.
- Bilingual or Multilingual preferred

ADL Coach

Reporting to the ADL Team Leader, the ADL Coach assists in enhancing client independent living skills. The ADL Coach provides staffing support and maintains program stability by providing client support, assistance, and monitoring through frequent, positive interactions to increase independence and self-sufficiency. The ADL Coach is expected to engage with individuals experiencing homelessness to improve their overall quality of life and support them in preparing to transition to permanent housing.
This position has a 35-hour work week, onsite.

ESSENTIAL DUTIES

- Provide reminders, guidance, and coaching to clients to improve their daily living skills. (e.g., showering, grooming, housekeeping, medication adherence, eating/grocery shopping, laundry, decluttering, delousing, adhering to bed bug protocol, toileting).
- Facilitate onsite laundry, housekeeping, and shower resources for clients
- Support clients in transition planning and skills practice, including consultation with Clinical staff about potential supports needed upon move into independent housing (e.g., HHA or MLTC).
- Provide engagement to increase participation in case management, medical and psychiatric appointments, and other housing-related appointments, including providing reminders and escorts to appointments as necessary.
- Use company vehicle or mass transit to escort clients to and from appointments in the community and as necessary
- Document daily client interactions, progress towards goals (including use of short functional assessments), and case conferences.
- Report and document incidents, crisis interventions, and communicate with on-call management team
- Provide additional client support and advocacy as needed.

- Perform other related duties as assigned

MINIMUM QUALIFICATIONS

- One to two years of related experience
- Proficiency with Microsoft Office Suite
- High School Diploma or GED, Associates degree preferred
- CPR and First Aid certifications a plus
- Preferred: Valid driver's license with driving record that is in good standing
- Experience working with individuals experiencing homelessness and/or mental health or substance use issues is a plus
- Experience or familiarity with Motivational Interviewing, Primary Caregiver Support Training, Harm Reduction, Housekeeping/Operations Training, Safe Transfers, and/or De-escalation is preferred.

Appendix D. Preliminary Annual Budget for Pilot Implementation

Personnel Services (PS)			
Title	**Salary**	**FTE**	**Total**
Assistant Vice President		0.02	
Director, Aging Services		0.10	
Cluster Care Team Leader		1.0	
ADL Coach		2.0	
Salary Total		32.12	$136,340
Fringe (@35%)			$47,719
Total Personnel Services			**$184,059**
Other than Personnel Services (OTPS)			
Materials			$5,000
Client Supplies			$6,000
Client Incentives			$2,000
Staff Travel			$3,000
Client Travel			$6,000
Staff Training			$5,000
OTPS Total			$27,000
PS+OTPS Total			$211,059
Admin Overhead (@10%)			$21,106
TOTAL			**$232,165**

Appendix E. Additional Information Regarding the Barthel Index

Shah Version of the Barthel Index

The Barthel Index has been modified and adapted in different ways. For the purposes of our initial needs assessment, we used the Shah version of the Barthel Index. The full assessment with scoring metric and descriptions can be found here: http://functionalpathways.com/intranet-files/Modifiet_Barthel_Index.pdf

Interpreting Barthel Index Scores

There is very little guidance on how to interpret Barthel scores, but the following is one potential resource: https://www.elitelearning.com/resource-center/rehabilitation-therapy/the-original-barthel-index-of-adls/

Relevant excerpt on interpreting scores:

> "Several authors have proposed guidelines for interpreting Barthel scores. Shah et al. suggested that scores of 0-20 indicate “total” dependency, 21-60 indicate “severe” dependency, 61-90 indicate “moderate” dependency, and 91-99 indicates “slight” dependency. Most studies apply the 60/61 cutting point, with the stipulation that the Barthel Index should not be used alone for predicting outcomes.
>
> Modifications to the Barthel Index include a variation of the 10-item version by Collin and Wade, that reordered the original 10 items, clarified the rating instructions, and modified the scores for each item based on a three point scoring system with a total score range from 0 to 20.
>
> Generally speaking, a score of 14 indicates some disability, usually compatible with the level of support found in the home, a score of 10 is compatible with discharge home, provided there is maximum support and a caretaker in attendance."

Another option within Barthel is a different scoring method. The following is an example of Barthel using a 0–20-point scale, with instructions on how to score. This scoring method could be simpler for the staff completing it, though it does limit the sensitivity to capture more variation in ability.
https://www.albertahealthservices.ca/assets/about/scn/ahs-scn-bjh-hf-barthel-index-of-adls.pdf

Alternatives to the Barthel Index

One critique of the Barthel Index is that it doesn't lend itself well to demonstrating progress or change in ability. A possible alternative to Barthel is the Functional Impairment Measurement (FIM), which has a 0-7 score on 18 items related to ADLs as well as social cognition (total score 18-126). Here is another resource about it, which gives some helpful guidance on translating FIM scores into hours of assistance needed per day:

> "...according to the Uniform Data System for Medical Rehabilitation organization, a total FIM score of 60 can equate to approximately four hours daily of assistance needed while a score of 80 equates to about two hours daily. People with a total FIM score between 100 and 110 require minimal assistance with their day-to-day activities. Additionally, the difference between your initial FIM score and your score at discharge is also a good indicator of progress you've made during your rehabilitation period."

Considerations in Scoring Assessments

An excerpt from another resource that warns against using an aggregate score alone:

> "A final summed score is created and ranges from 18 – 126, where 18 represents complete dependence/total assistance and 126 represents complete independence. The single summed raw score may be misleading as it gives the appearance of a continuous scale. However, intervals between scores are not equal in terms of level of difficulty and cannot provide more than ordinal level information"

This is an important consideration regardless of which tool is used because someone may have an overall high score but score very low on one or two activities measured, indicating significant support is still needed.