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ADDRESSING THE HEALTHCARE NEEDS OF PATIENTS EXPERIENCING HOMELESSNESS:

**A Policy Analysis for Continuity of Care in
Huntington, West Virginia**

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EXECUTIVE SUMMARY

Homelessness across America has reached record levels, with over 771,000 individuals counted in 2024. In West Virginia, new statewide data revealed homelessness rates nearly three times higher than federal Point-in-Time (PIT) estimates, highlighting persistent undercounts and unmet needs. Relative to other regions in the state, the high prevalence of physical, mental, and behavioral health conditions among individuals experiencing homelessness underscores the need for focused analysis at the intersection of housing and healthcare.

Housing instability remains a key driver of poor health outcomes. The analysis and recommendations of this are intended to support the Cabell Huntington Health Department in identifying interventions to strengthen care continuity and improve health outcomes for this subpopulation: patients experiencing homelessness.

Too many, between 278 and 671, patients experiencing homelessness are released from care into unstable conditions in the Huntington region without stable housing or medical continuity each year, perpetuating unmet health needs and recurring system contact.

In response, regional hospitals have implemented a “warm handoff” protocol, where providers refer patients who identify as homelessness to community resources at discharge. While a valuable step, gaps remain in ensuring stability and care continuity beyond this referral process.

The report identifies key structural, legislative, and service delivery barriers to coordinated care, and evaluates three potential interventions to the status quo warm hand off protocol:

- 1. Community Health Workers to continuously bridge clinical and community services,**
- 2. Co-Location Models to physically integrate health and housing services, and**
- 3. Medical Respite Care Units to offer short-term stabilization and social services.**

Each alternative is evaluated against the five criteria, patient health outcomes, protected health information justice, cost analysis, and scalability, across a five year time horizon.

The report recommends a phased implementation of **Community Health Workers**, providing consistent follow-up, resource navigation, and coordination with housing and healthcare providers. This model offers a scalable foundation to strengthen care continuity, mitigate negative health consequences, stabilize patients, build workforce capacity, and reduce preventative costs to healthcare providers. To advance the recommended **Community Health Worker** model, the report outlines public, private, and blended financial opportunities, alongside a phased strategy and stakeholder analysis. Together, these components are intended to guide the Cabell Huntington Health Department leadership and the Huntington community in making an informed, locally determined decision to strengthen medical continuity for patients experiencing homelessness.

Forward

Acknowledgements

With the guidance of Professor Rorem and the vision of Dr. Mahoney, I experienced the support that shapes not only the work, but the person behind it. Thank you both for your generous investment in my leadership and the examples you set.

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To any reader, thank you for your attention and interest in this work. I hope that, someday, this report will be irrelevant to you because our healthcare and housing systems will seamlessly serve all. Until then, may it inform, challenge, or inspire your own pursuit of policy solutions that advance health, opportunity, and justice.

Dedication

This work is dedicated to Huntington, West Virginia, a city too often defined by its struggles, but more truthfully known by its spirit, strength, and solutions. May your promise never be overlooked, and may your people never be underestimated.

Disclaimers

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other agency.

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Honor Statement

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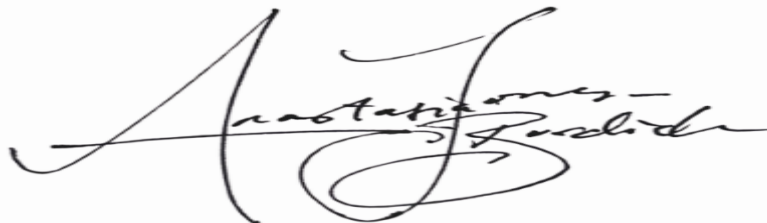


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Introduction: Defining the Problem

In Huntington, housing instability severely disrupts continuity of care for 278 to 671 patients experiencing homelessness (PEH), who face a 3x higher all-cause mortality rate when sheltered and a 10x rate when unsheltered, compared to housing-secure individuals (HUD, 2024; Lui et al., 2024; Roncarati et al., 2018). High rates of substance use disorders, mental health conditions, and Huntington's HIV cluster compound these risks, while limited access to stable housing and essential health services leave many with unmanaged comorbidities (Biederman et al., 2022; McClung et al., 2019). This gap drives preventable hospital admissions, an unsustainable burden on public emergency services and healthcare systems, and exacerbates health disparities (Khatana et al., 2020; Lebrun-Harris et al., 2012).

Problem Definition

In Huntington, West Virginia, between 278 to 671 patients experiencing homelessness are released from care into unstable conditions without stable housing or medical continuity each year, perpetuating unmet health needs and recurring system contact (HUD, 2024; BBH, 2024; Khatana et al., 2020; McClung et al., 2019).

Client Orientation

This analysis is being conducted for the Cabell Huntington Health Department (CHHD) in Huntington, West Virginia, a nationally accredited public health entity serving Cabell County and the surrounding region with essential health services and community health programs. Guided by the mission to “[work] together to improve, promote, and protect the health and well-being of our community, the CHHD has played a key role in addressing Huntington’s complex public health challenges, such as the opioid crisis, the HIV cluster, and health disparities (CHHD, 2024). As the first and only health department in West Virginia to achieve accreditation through the Public Health Accreditation Board (PHAB), CHHD has demonstrated a commitment to high-quality standards and, as such, has the authority to research and implement evidence-based public health practices. The Cabell Huntington Health Department is a partnering agency of the Cabell-Huntington-Wayne Continuum of Care (CHWCoC). To fulfill the CHHD’s leadership, the work engages two interrelated aims: decreasing the percentage of unsheltered PEH and integrating healthcare services within shelter facilities. These goals align with CHHD’s vision of bridging gaps between healthcare and housing services to mitigate the negative impacts of homelessness on health outcomes.

Project Purpose

This report evaluates and recommends actionable interventions to improve healthcare access and outcomes for patients experiencing homelessness in Huntington, West Virginia. It explores system-level barriers and opportunities for implementing more coordinated, proactive, and sustainable responses to the intersection of housing instability and health. The findings will be shared with the CHHD leadership and partnering entities for consideration.

Background: Measuring Homelessness, Missing the Crisis

The 771,480 people recorded as homeless on a single night in January 2024 mark the highest number ever reported by the Department of Housing and Urban Development's (HUD) Annual Homelessness Assessment Report (AHAR) to Congress (HUD, 2024). This figure comes from the Point-in-Time (PIT) count, a nationwide snapshot census of people experiencing homelessness conducted since 2007 on a single night each January (HUD, 2024). The 2024 data reflect both scale and severity. 152,585 individuals reported experiencing chronic homelessness, which represents a 27% increase since the count was mandated in 2007 (HUD, 2024).

Local Continuums of Care (CoCs), coalitions of service providers and government entities, coordinate the counts using structured surveys, shelter records, and field-based outreach. CoCs operate under the Homeless Emergency Assistance and Rapid Transition to Housing (HEARTH) Act with HUD-administered funding. The PIT count offers a consistent year-over-year snapshot, but it is widely considered a conservative estimate due to limitations in timing, geographic reach, and the visibility of unsheltered individuals. Despite these imperfections, PIT data play a central role in federal funding decisions.

Beyond the PIT Count: West Virginia's Statewide Homelessness Assessment

While PIT count data suggested relatively low numbers of individuals experiencing homelessness in West Virginia (WV), frontline service providers and state agencies reported far higher levels of engagement from individuals requiring housing, healthcare, and other social services. This gap highlights the limitations of existing metrics in accurately capturing the scope, needs, and nuances of individuals experiencing homelessness in the state. The passage of West Virginia State Senate Bill 239 in February 2023 mandated the Department of Health and Human Service's (DHHS) Bureau of Behavioral Health's (BBH) to conduct the first statewide comprehensive study of homelessness (West Virginia Legislature, SB 239, 2023).

The BBH's publication of the Assessment of West Virginia Homeless Population (AWVHP) in July of 2024 represents research conducted between January 1st, 2018 and December 31st (BBH, 2024). In this six-year period, the state recorded an average of 21,741 individuals experiencing literal homelessness through its Homeless Management Information System (HMIS) (BBH, 2024). While the state and federal definitions of literal homelessness are aligned, this broader scope confirmed what many frontline service providers had long reported; the average annual of 3,624 nearly triples HUD's PIT average of 1,318 annually over the same period for the same area (BBH, 2024). The year-round HMIS tracks client-level data that continuously captures individuals who seek services intermittently, while the PIT count offers a snapshot taken in January (HUD, 2024). The discrepancy reflects differences in data collection methods and continues to compound at a more local level.

The Cabell-Huntington-Wayne Continuum of Care (CHWCoC), one of four CoCs in WV, provides a coordinated response for individuals experiencing homelessness through more than 60 partner agencies. The CHWCoC recorded assisting 4,021 individuals experiencing some level of

homelessness, equating to approximately 671 per year and, again exceeding the 278 PIT-reported count (BBH, 2024; HUD, 2024). This is shown in Table 1.

| Continuum of Care | HMIS Clients | Av. Clients per year | PIT 2023 | Undercount Ratio |
|---------------------------|--------------|----------------------|----------|------------------|
| All WV | 21,741 | 3623.5 | 1416 | 2.56 |
| Balance of State | 9,951 | 1,658.50 | 766 | 2.17 |
| Cabell-Huntington-Wayne | 4,021 | 670.17 | 224 | 2.99 |
| Kanawha Valley Collective | 6,509 | 1,084.83 | 293 | 3.70 |
| Northern Panhandle | 1,260 | 210.00 | 113 | 1.86 |

Table 1: Comparing Continuum of Care to PIT Count through Undercount Ratio (BBH, 2024; HUD, 2023). *Note: 2023 PIT count data were used to align with the AWWHP HMIS client data, which ends in 2023.*

HUD allocates resources through the Continuum of Care Program using a competitive funding formula that weighs PIT data heavily, alongside system performance metrics. As a result, communities with undercounts may receive fewer funds than their actual need warrants. Inaccurate or incomplete data not only obscure the scale of homelessness, but may also constrain local capacity to respond, particularly in rural or resource-limited areas. Despite being the second smallest service area, according to the 2023 metro area population, the CHWCoC ranks 2nd for per capita rates of homelessness and meaning a much higher intensity of need, as shown in Table 2.

| Continuum of Care | Metro Area Pop. | HMIS Clients | % Share of Clients | Per Capita % | Clients Per 1,000 Residents |
|---------------------------|-----------------|--------------|--------------------|--------------|-----------------------------|
| All WV CoCs | 4745663 | 21,741 | 100% | 100% | 4.58 |
| Balance of State | 3902505 | 9,951 | 45.77 | 0.82 | 2.55 |
| Cabell-Huntington-Wayne | 376141 | 4,021 | 18.50 | 7.93 | 10.69 |
| Kanawha Valley Collective | 210605 | 6,509 | 29.94 | 4.44 | 30.91 |
| Northern Panhandle | 256412 | 1,260 | 5.80 | 5.40 | 4.91 |

Table 2: HMIS Client and Distribution Across Continuum of Care Organizations (BBH, 2024; U.S. Census Bureau, 2023).

Housing Status as a Determinant of Health: Patients Experiencing Homelessness

In the CHWCoC alone, approximately 671 individuals per year face homelessness and use HMIS services (BBH, 2024). Among them are individuals with significant unmet health needs, many of whom face chronic conditions, mental health challenges, and substance use disorders (BBH, 2024). Despite these vulnerabilities, individuals experiencing homelessness often have lower healthcare utilization compared to the general population, largely due to barriers accessing care (Richards et al., 2023).

Beginning in the early 2000s, public health systems increasingly recognized the role of social drivers of health (SDOH), such as housing, food security, and the income required to provide for physiological needs, in shaping health outcomes. This shift in finding the “causes of

causes” marked a growing acknowledgment that non-clinical factors drive the majority of health-related risks (Braveman and Gottlieb, 2014). Within this framework, housing status has emerged as one of the most powerful predictors of health, deeply influencing care access, adherence, and outcomes.

Housing is widely acknowledged as a social driver of health (SDOH) and as a physiological need, directly influencing the physical and mental well-being of individuals (Garcia et al., 2024; Freitas and Leonard, 2011). Homelessness exacerbates health disparities, creating a cycle where poor health contributes to housing instability, and homelessness, in turn, deteriorates health outcomes (Garcia et al., 2024). Health crises, such as hospitalization or chronic illness often deplete resources, leading to housing loss (Garcia et al., 2024). Nationally, housing insecurity is associated with increased rates of mental health challenges, death from any cause, high rates of injurious health conditions, such as HIV infection, alcohol and other substance use disorders, and untreated mental illness (Lui et al., 2024; Roncarati et al., 2018; Ribeiro et al., 2020; Spinelli et al., 2019).

The realities of experiencing homelessness, where the absence of stable housing contributes to higher morbidity and mortality, call for recognizing these individuals as PEH, whose health-related needs demand targeted and integrated care solutions (Lui et al., 2024; Roncarati et al., 2018). Interventions addressing SDOH can improve health outcomes and reduce health care costs (Tsega et al., 2019; Whitman et al., 2022).

However, the current status of healthcare delivery for patients experiencing homelessness (PEH) in Huntington reflects a healthcare system still beginning to operationalize these practices around Health Equity (HE) and Social Drivers of Health (SDOH). While local hospital systems have started making strides to comply with these new standards, many are still in the early stages of fully integrating SDOH data reporting, leaving PEH under-recognized and inconsistently monitored. As a result, the care of PEH is often fragmented, reactive, and limited to emergency encounters. This disconnection runs counter to foundational public health frameworks, including Maslow’s hierarchy of needs, which place safe and stable shelter as a prerequisite to health and well-being (Freitas and Leonard, 2011).

The service area of the CHWCoC is relatively well-resourced in terms of healthcare, offering more than twice the availability of primary care physicians compared to other counties in the state and national averages. The region is a vital access point for both primary and specialty care for its own residents and surrounding areas, with Huntington serving as the nexus for healthcare delivery in the broader Appalachian region (BBH, 2024). However, these services are primarily concentrated in the City of Huntington and may be inaccessible to low-income individuals due to financial or systemic barriers. The county is classified as a Health Professional Shortage Area (HPSA) for primary care for low-income population, yet substance use disorder (SUD) resources are concentrated in Cabell and Kanawha counties, as are mental health services (CHHD, 2024; BBH, 2024). This concentration aligns with the high prevalence of individuals experiencing homelessness who self-report physical health, mental health, or substance use conditions, as shown in Figure 1.

Prevalence of Health Conditions Among Continuum of Care Clients

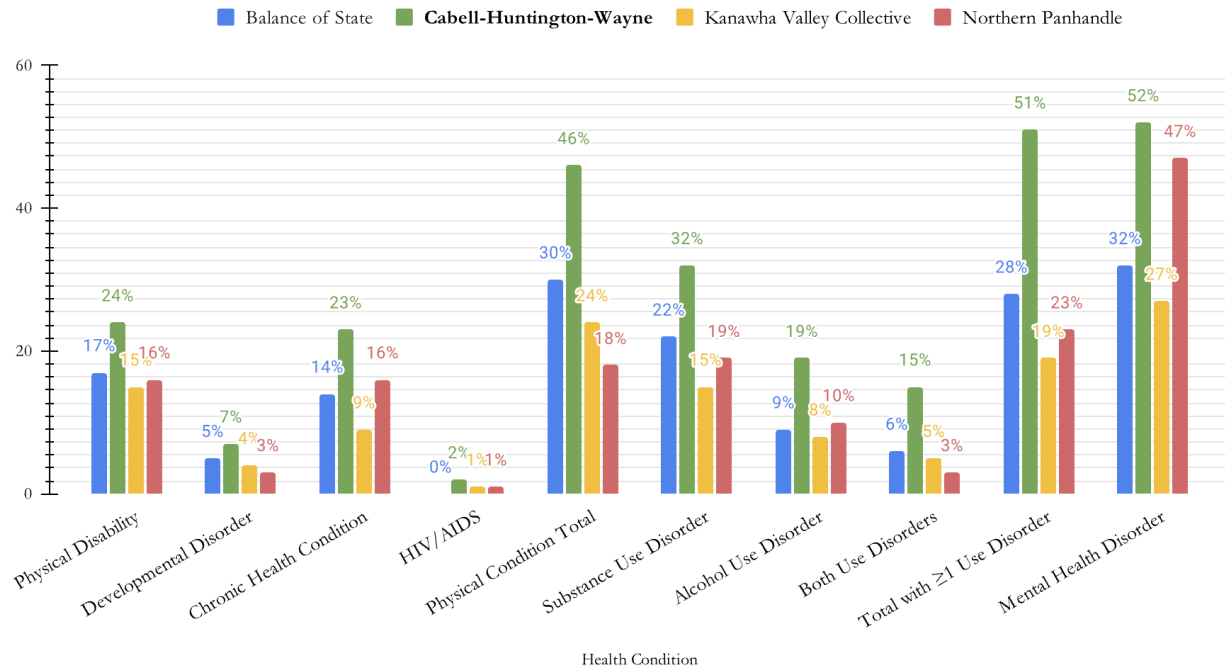


Figure 1: Self-Reported Prevalence of Health Conditions Among WV Continuum of Care Clients (BBH, 2024).

Policy Alternatives

Before introducing the alternatives, this section describes the status quo of PEH trends with emergency department (ED) costs or readmissions and discharge protocols for patients that screen positive for SDOH insecurity.

A WV regional hospital system reported that an ED visit is associated with costs, ranging from \$719.55 to \$5803.15, with a rough average of \$3,200.

Because of the costs the hospital incurs with uninsured or publicly insured ED stays, discharge protocols Hospitals in Huntington have implemented a referral process for positive SDOH screenings, aimed at connecting patients to the necessary resources post-discharge. The status quo process, called the “warm handoff,” is initiated by primary physicians and other medical care team members for patients who screen positive for an SDOH instability (Brigone, 2020; . This flow and timing of these services is demonstrated in Table 3 (AHRQ, 2017).

| Referral Process for Positive Screens | | |
|---|-------------------------|---|
| Care teams will not be able to address identified needs overnight, nor should that be the expectation. However, they play an important role in connecting patients and families to the resources they need. | | |
| Stage | Step | Description |
| At-Discharge | Resource flyer only | Patients and families are provided with a list of general or curated resources, leaving follow up to the patient and family. |
| At-Discharge | A “warm handoff.” | The care team makes a phone call or an introduction between a resource provider and the patient and family. |
| At-Discharge | Care management. | The care team goes beyond making the connection and they schedule the appointment for a patient and family with the resource provider. |
| Post-Discharge | Closed-loop connection. | There is ongoing communication between the care team and the resource provider to “close the loop” and ensure patients and families receive needed resources. |

Table 3: Status Quo “Warm Handoff” Discharge Protocol (AHRQ, 2017)

Medical Respite Care Units

Medical recuperative care units (MRCU) offer short-term residential, formal post-discharge medical care for homeless patients recovering from acute illnesses or surgeries, providing stability and a space for continued healthcare engagement. By offering a supportive environment for recovery for PEH “who are too sick to be on the streets or in a traditional shelter, but not sick enough to warrant inpatient hospitalization,” these programs improve health outcomes, particularly for those with chronic illnesses, mental health conditions, or substance use disorders (Doran et al., 2013). The impact of these programs extends beyond healthcare outputs, resulting in improved housing stability, a critical factor in breaking the cycle of homelessness and poor health (Doran et al., 2013). By incorporating services like assistance with social welfare entitlement applications and housing placement, this model intervenes at the, or delays, the discharge phase of PEH care in healthcare setting

Co-Location Models

The co-location, or “one-stop campus,” model, where multiple services are in close proximity offers significant social benefits, including improved access to care, enhanced coordination among service providers, increased patient engagement, and reduced stigma. This model is particularly valuable for individuals with complex needs, such as those experiencing homelessness or co-occurring mental health and substance use disorders. Research shows that one-stop campuses reduce logistical barriers, like multiple facilities and the transportation or coordination between them by consolidating (Bachman et al., 2016).

Community Health Workers

Community Health Workers (CHW) are an innovative solution to connecting PEH to healthcare and other social services by providing community-based care outside of traditional healthcare facilities (Garcia et al., 2024). The skills and speciality of a CHW lies between primary care physician and case worker, both of which are needed to improve healthcare access

(HRSA, 2023). This intervention has been implemented in post-discharge and preventative contexts.

Evidence Review

This evidence review summarizes solutions now implemented in different contexts that could address homelessness-related healthcare needs in Huntington, WV. With high poverty rates, limited healthcare infrastructure, and distinct comorbid health issues, including an HIV cluster, high prevalence of substance use disorders (SUDs), and poor mental health (MH) outcomes, CHW's homeless population requires a tailored approach not fully explored in current research. While national frameworks, like Housing First and Harm Reduction Models, offer foundational strategies for addressing homelessness and health, the practical implementation of such frameworks is particularly tied to the strength of local partnerships and sustained operations (Huber et al., 2024). This analysis evaluates the patient health impacts and associated financial costs and returns, of Community Health Workers (CHWs), Co-Location Care Models, and Medical Respite Care Units (MRCUs) as alternatives to address the healthcare gaps of PEH.

Alternative I: Community Health Workers

CHWs receive various levels of healthcare and social work training to serve within their community provider-network to promote continuity of care. The Community Health Worker Access Act, only introduced during the legislative session, aims to support CHWs through Medicaid reimbursement, which could enhance their sustainability and reduce overall healthcare spending by diverting care from emergency departments to primary care settings (S.3892, 2023; PIH, 2024). A 2018 study suggests CHWs can reduce healthcare costs by preventing hospital readmissions and facilitating primary care access, especially when integrated with Medicaid services (Currie et al., 2018). One study even found that, for every dollar invested in CHW programs, Medicaid payers, for example, see a return of approximately \$2.47 through reduced hospitalizations and emergency care usage (Kangovi et al., 2020). This cost savings is primarily driven by improved health management and reduced acute care needs (Kangovi et al., 2020).

Relevant Case: CHW in Williamson, WV

In rural regions, such as Williamson, WV, a CHW model has shown promise in bridging healthcare access gaps for underserved populations (HRSA, 2023). CHWs, which operate under a newly patented Medical Model, play a central role in Williamson's care coordination model, assisting patients in navigating the healthcare system, managing chronic conditions, and connecting to social services (HRSA, 2023). This model ensures patient's protected health information to be integrated into HIPAA-compliant technologies and physicians comprise a significant portion of the CHW labor force. The care coordination program in Williamson, WV, demonstrated significant cost savings, with a reduction in the overall average healthcare spending per patient from \$20,056 to \$15,152. This decrease translates to approximately \$5,000 saved per patient, resulting in \$100,000 in total savings for 20 patients (HRSA, 2023). These figures highlight the program's effectiveness in reducing healthcare costs, particularly by decreasing ED readmissions through coordinated, preventive care. By integrating CHWs, employing telehealth, and fostering multi-agency collaboration, the initiative has provided

accessible, coordinated, and continuous care. The funding for the program is not yet promised under state allocation, instead pulled from diverse grant funding (HRSA, 2023). However, cost-effectiveness varies based on integration within healthcare systems and this model is not currently reliant on grant funding, which makes the record inaccessible.

Relevant Case: CHW in Neighboring States

In 2023, Virginia allocated \$6.4 million of state grant funding to support CHW positions across local health districts over two years. However, the state has not yet achieved Medicaid reimbursement for CHW services, despite bipartisan legislative attempts. This limitation restricts the financial sustainability of CHW programs, particularly in rural and underserved areas. Virginia's CHWs primarily operate within roles for preventive care, chronic disease management, and healthcare navigation. Virginia has taken significant steps to formalize and expand the role of CHWs, introducing a voluntary certification program managed by the Virginia Department of Health (VDH) and the Virginia Certification Board (VCB). This program ensures that CHWs receive standardized training, enabling them to provide high-quality, community-based care without imposing licensing barriers. Despite these achievements, the reliance on state funding leaves CHW programs vulnerable to budgetary constraints.

In Virginia, even with inconsistent funding support, implementation of CHW has yielded measurable benefits, as demonstrated by a study conducted by Ballard Health in southwestern Virginia. The *Individualized Management for Patient-Centered Targets* (IMPACT) project measured Community Health Workers (CHWs) influence on healthcare for patients in low-income neighborhoods with chronic health conditions. By expanding a standardized CHW program to five healthcare organizations, the project combined core elements like hiring, training, and workflows with local adaptations, including virtual care during the COVID-19 pandemic. Across these sites, CHWs supported 4,695 patients, connecting them to critical resources, fostering trust, and bridging gaps in healthcare access (PICORI, 2019). At three sites, patients enrolled in IMPACT experienced fewer hospital stays, reduced emergency department visits, and improved primary care attendance. One site reported a 52% reduction in hospital readmissions and nearly double the odds of attending primary care visits, while another site saw a 29% drop in hospitalizations within nine months (PICORI, 2019). These successes show the power of CHWs to address medical needs amongst social determinants of health. One site, despite high program fidelity, discontinued the IMPACT program due to budget constraints (PICORI, 2019).

In contrast, Kentucky has taken a Medicaid-integrated approach to CHW funding, ensuring long-term sustainability for these programs. The state leverages Medicaid waivers and State Plan Amendments (SPAs) to reimburse CHW services, making Kentucky one of the leaders in integrating CHWs into its healthcare delivery system (Kentucky General Assembly, HB525, 2022). This approach allows CHWs to provide services such as care coordination, health education, and community outreach for Medicaid-eligible patients (Kentucky General Assembly, HB525, 2023). Kentucky's focus on Medicaid reimbursement has enabled the state to expand CHW programs in both urban and rural areas, with a particular emphasis on addressing social

determinants of health. Kentucky has achieved significant cost savings and improved health outcomes, including reduced emergency room visits and hospital readmissions.

Alternative II: Co-Location Models

Co-located service models foster collaboration among healthcare and social service providers, leading to more cohesive and efficient care. This integration is linked to higher patient retention rates and increased use of preventive and primary care services. This coordination helps address the multifaceted needs of patients, allowing providers to share information and jointly develop treatment plans, which reduces gaps in care and improves health outcomes (Stuart et al., 2018).

The one-stop model has also been shown to increase patient engagement by creating a supportive and familiar environment, encouraging patients to attend appointments and adhere to treatment plans when services are conveniently located and when trust with staff is established (Kertesz et al., 2013). Additionally, one-stop campuses can normalize seeking care for mental health and addiction services within a broader multi-service environment, reducing stigma and enhancing patient satisfaction through agency.

The systematic review by Glover-Wright et al. (2023) examines the health outcomes and service utilization patterns associated with co-located outpatient mental health and alcohol and other drug (AOD) specialist treatment services. The study evaluates whether integrating these services in a single location improves patient outcomes and healthcare efficiency. Findings suggest that co-located care is associated with better health outcomes, including reduced substance use and improved mental health, as well as decreased reliance on emergency services. Patients receiving co-located care demonstrated higher engagement in treatment programs and increased use of preventive services, indicating that co-located models may offer a more accessible and effective approach to managing co-occurring mental health and substance use disorders. Higher satisfaction rates are reported when patients feel supported and accepted, which can lead to long-term engagement and positive health behaviors (Glover-Wright et al., 2023).

Arguments Against: Supporting Decentralized Service Model

On the other hand, decentralized service models, which distribute healthcare and social support services across multiple community locations, also yield substantial social benefits. These facilities improve accessibility and reduce transportation barriers, allowing individuals to access care closer to home, particularly in rural or underserved areas. Coughlin et al. found that such community-based service locations significantly increase patient engagement and adherence by mitigating logistical obstacles (2017). Furthermore, by embedding services in existing community settings, decentralized models enhance community integration and reduce stigma, resulting in higher participation rates. Kertesz et al. (2019) demonstrated that distributing mental health and addiction services across multiple sites leads to improved retention and mental health outcomes.

Like co-locations, studies have also argued that decentralized models support continuity of care, allowing patients to maintain relationships with local providers and receive integrated care in familiar or preferred settings. This necessitates coordination among healthcare providers and social workers, but does not ensure its quality, which can disproportionately impact individuals with complex needs (Peterson et al., 2019). Decentralized service models provide the flexibility to tailor services to meet specific community needs, promoting culturally competent care that resonates with the unique characteristics of local populations (Glover-Wright et al., 2023). Overall, both co-located and decentralized service models demonstrate a strong potential to improve health outcomes and enhance the quality of care for vulnerable populations.

Relevant Case: The Current Hybrid Approach of Huntington, WV

Huntington currently has a hybrid approach to service delivery, combining elements of co-located and decentralized care models to address the diverse needs of its population. Co-located care hubs, which provide centralized access to critical services, fostering coordination among providers and improving outcomes for PEH. These hubs reduce logistical barriers and enhance patient engagement, creating a supportive environment for sustained care, however attract unfavorable political attention due to the location relative to businesses in the City of Huntington, WV.

While this approach balances the benefits of integration and accessibility, it is not without its challenges. Co-located hubs require substantial resources and inter-agency collaboration, and decentralized services risk fragmentation without strong coordination mechanisms. Moreover, the politicization of homelessness and assistance programs often turns co-located care hubs into points of contention. This was evident during a Board of Zoning Appeals (BZA) meeting concerning a conditional use permit for the development of a low-barrier shelter (Dingess, 2024). The proposed shelter drew significant public scrutiny and opposition, particularly from stakeholders concerned about its placement in areas of business activity and economic development projects (Dingess, 2024). Such opposition highlights the tension between addressing urgent social needs and managing public perception, emphasizing the importance of proactive community engagement and thoughtful site selection.

Alternative III: Medical Respite Care Units

Medical recuperative care units (MRCU) offer short-term residential medical care for homeless patients recovering from acute illnesses or surgeries, providing stability and a space for continued healthcare engagement. By offering a supportive environment for recovery, these programs improve health outcomes, particularly for those with chronic illnesses, mental health conditions, or substance use disorders. One cost-effectiveness analysis from California's CalAIM project suggests that MRCUs can reduce Medicaid expenditures by up to 25% by preventing costly emergency room visits and hospital stays (State of California Health and Human Services Agency, 2021).

In a 2013 systematic review of 13 studies on the use of MCRU amongst PEH, research found that these programs reduce hospital admissions, inpatient days, and readmissions,

addressing one of the healthcare system's most glaring inefficiencies (Doran et al.). Homeless patients often face hospital stays that are unnecessarily extended due to their lack of a safe discharge destination, costing an average of \$2,559 more per hospitalization than housed patients (Doran et al., 2013). MRCU models provide a cost-effective alternative by offering post-acute care in a supportive environment, allowing patients to heal while accessing case management and housing services. These programs ensure PEH a form of dignified, effective care without burdening already stretched hospital systems. In a 2013 systematic review of 13 studies on the use of MRCU amongst PEH, research found that these programs reduce hospital admissions, inpatient days, and readmissions, addressing one of the healthcare system's most glaring inefficiencies (Doran et al.). Homeless patients often face hospital stays that are unnecessarily extended due to their lack of a safe discharge destination, costing an average of \$2,559 more per hospitalization than housed patients (Doran et al., 2013). MRCU models provide a cost-effective alternative by offering post-acute care in a supportive environment, allowing patients to heal while accessing case management and housing services. These programs ensure PEH a form of dignified, effective care without burdening already stretched hospital systems. The results on emergency department use and overall cost savings remain mixed, highlighting the need for more robust, standardized research (Doran et al., 2013).

Relevant Case: MRCUs with Medicaid Patients of Boston, Massachusetts

An analysis of Medicaid members in Massachusetts demonstrated that patients discharged to medical respite care had notably lower hospital readmission rates, particularly among those with a history of frequent admissions (Racine et al., 2020). In a comparative study on readmission outcomes, patients discharged to a community-based medical respite provider showed a 51% reduction in the likelihood of readmission, specifically among those with frequent prior admissions (Racine et al., 2020). This significant association persisted even when accounting for variables such as age, sex, race, and the presence of three or more chronic conditions. While medical respite care did not affect the overall readmission rate for the entire study cohort, having an assigned primary care provider at Boston Health Care for the Homeless Program (BHCHP) was also linked to reduced readmission likelihood, highlighting the additional impact of continuous primary care in decreasing hospital returns for PEH (Racine et al., 2020).

Relevant Case: FEMA Funded MRCUs for PEH During COVID in Huntington, WV

The Cabell-Huntington Health Department's (CHHD) success in securing \$1,960,121.88 in federal COVID-19 relief reimbursement from FEMA highlights the vital role of financial support in establishing medical respite and isolation facilities for PEH (CHHD, 2023). Within the context of a public health emergency, this funding, obtained by CHHD on behalf of itself and community partners, was critical in providing COVID-19 testing, vaccinations, and, most notably, isolation and quarantine facilities tailored for regional PEH (CHHD, 2023).

During the COVID-19 pandemic, PEH faced disproportionate risks due to the lack of stable housing, which is essential for effective quarantine and recovery. With this federal funding, CHHD and its partners, including the CHWCoC, were able to create isolation and

quarantine spaces specifically for PEH, ensuring that they could recover in safe, supportive environments (CHHD, 2023). While not formally, these facilities served as a crucial MRCU model, allowing PEH not only to isolate but also to access medical care, nutritional support, and behavioral health services tailored to their needs.

Takeaways: Analysis & Applicability

The existing body of research on healthcare for homeless populations has underscored critical gaps in preventive and follow-up care, particularly for individuals experiencing chronic health issues and unstable housing. While substantial evidence highlights effective healthcare models like Community Health Workers (CHWs), Co-Location Models, and Medical Respite Care Units (MRCU), there remains a need to contextualize these strategies within specific regional environments (Alan et al., 2024; Baggett et al., 2013; Garcia, Doran, & Kushel, 2024).

Huntington, WV, presents funding challenges and demographic factors that differ significantly from urban centers where most studies are concentrated, such as Boston and Miami (Baggett et al., 2013; Alan et al., 2024). CHHD's success in securing FEMA funding for medical respite units exemplifies how local health departments can collaborate with community partners to address housing and healthcare needs for PEH during emergencies. This case study highlights the importance of flexible mechanisms to support MRCUs, not only in crises, but also for offering a sustainable model of care that addresses the ongoing health challenges of PEH. By integrating health and housing solutions, CHHD's approach provides a replicable framework for the modern PEH care gap challenge (CHHD, 2023). Existing studies often lack a focus on integrating these healthcare models into smaller, resource-limited cities, where Medicaid and local funding constraints shape the feasibility of implementing comprehensive care models.

Evaluative Criteria: Approach to Alternative Analysis

This work utilizes a multi-criteria analysis (MCA), deploying three criteria: patient health reimbursements, cost, and scalability. MCA is widely used in public health policy by evaluating policies through diverse dimensions of interest, integrating economic, geographic, cultural, and ethical considerations to measure outcomes across multiple, often contrasting, objectives (Baltussen et al., 2006). In high-conflict public health contexts, such as those involving resource allocation or prioritizing interventions for underserved populations, MCA is particularly valuable for the associated qualitative, quantitative, and mixed metrics (Baltussen et al., 2006). By applying these three evaluation criteria, a comparative analysis can determine which intervention offers the financial viability, is most feasible for implementation, and provides the most substantial improvements in patient health outcomes.

Criterion: Patient Health Reimbursement

The effectiveness of each intervention will be measured through the quantitative metric for the medicaid savings associated with the reduced emergency department (ED) visits. For the purposes of this work, hospital readmission is defined as a patient being discharged from the hospital and subsequently readmitted within 30 days, aligning with the Medicare and Medicaid definition used in the Hospital Readmission Reduction Program (HRRP) (CMS, 2024). High

readmission rates indicate gaps in care coordination, inadequate patient education, and challenges in transitioning from hospital to home (Dhaliwal et al., 2024). High ED utilization often reflects insufficient access to primary care, inadequate chronic disease management, and broader systemic health disparities. A decrease in ED visits suggests improved outpatient care, better patient education, and enhanced preventive health measures, while an increase signals systemic gaps requiring intervention. A measurable decrease in ED visits and readmission will result in “improvement” rating, whereas a maintenance of the status quo will be marked as “neutral” rating and an increase will result in a “worsened” rating. This scoring system is inversely for preventative care adherence.

Criterion: Cost

The total cost of a policy is the estimate of accounting and opportunity costs with implementing and maintaining the intervention.

Criterion: Scalability

The scalability criterion is defined by the ability to adapt social and capital investments over time to changing demographic demands, as well as a variety of political, cultural, and health-related contexts. To assess each level of scalability, the alternatives will be evaluated by the degree of flexibility required for the program to adapt to different community contexts, the costs associated with scaling, and the extent of integration with existing systems. This criterion is inspired by the Adaptability, Scalability, and Sustainability (ASaS) framework (Sun et al., 2024). Comparative evaluations through the included research of case studies or pilot programs, resource and infrastructure analyses, stakeholder engagement assessments, and outcome measurements will provide a rigorous approach to determining where an falls on the scalability spectrum. Health models that are highly scalable integrate well into existing healthcare and social service systems, fostering collaboration among leading entities and community engagement.

Analysis of Alternatives: Contextualizing Outcomes

Alternative: Community Health Workers

Community Health Workers (CHWs) are community-based health professionals who provide care outside traditional healthcare settings. This alternative has gained attention for its ability to reduce healthcare costs by preventing hospital readmissions and improving long-term health outcomes for high-risk populations (Kangovi et al., 2020).

Patient Health Outcomes: Improvement

The Williamson, WV, Community Health Worker (CHW) model has demonstrated significant improvements in patient health outcomes for a total of 729 rural patients over a 2-year period (Crespo et al., 2020). A sample of 37 patients in the treatment group experienced reductions in hospital and emergency room visits for chronic conditions. From this pilot program, data from between October 2018 and September 2019, patients enrolled in the CHW program saw a reduction by 9 average ER visits per month (from 11.2 in the first 6-month period to 2.2 in the second 6-month period) and a reduction by 10.5 average unplanned hospital visits

per month (from 11.7 in the first 6-month period to 1.2 in the second 6-month period) (Crespo et al., 2020; HRSA, 2020). As there were 67 total ED visits amongst the sample, this reflects a rough individual average of 1.81 ED visits per person, which, in the second 6-month period, this average became 0.35 (HRSA, 2020).

Preliminary actuarial data from The Health Plan for the Community Health Worker (CHW) model, based on a 4-month enrollment period with a sample of 20 Williamson Health patients, shows a slight reduction in emergency department (ED) visits. The individual average decreased from 2.86 visits per month to 2.64 visits per month, indicating a reduction of 0.22 visits per month (Crespo et al., 2020).

Because the CHW Medical model identifies high-risk individuals, the PEH can be identified as a subpopulation for the program's adoption. The sample of 729 rural patients in the pilot could be adapted to determine the need of CHW per patient, ranging between the PIT-identified 244 Huntingtonians and the 671 average annual HMIS clients in the CHWCoC. Additionally, if the political will, ushered by the Mayor's Office, seeks to address the 36 veterans experiencing homelessness those results directly translate with the available data, due to the similar sample size. The Medical model successfully identified high-risk individuals, and this same approach can be adapted for the patients experiencing homelessness (PEH) population in Huntington (HRSA, 2020).

Based on the findings from the Williamson pilot, it can be projected that, for a community of 244 homeless individuals, around 60% would remain in the program long enough to see measurable health outcomes (HRSA, 2020). This would result in approximately 146 individuals actively participating in the CHW program. If this is expanded to include the 671 average annual HMIS clients, around 400 individuals would be expected to retain treatment long enough to yield measurable health outcomes, as shown in Table 5.

| Projected Impact of CHW on Huntington's Patients Experiencing Homelessness (PEH) | | | | | | | |
|--|----------|------------------------------------|------------|-------------------------------|------|------|-----------------|
| Data Type | # of PEH | Healthcare Savings per Person (\$) | Medicaid % | Medicaid Savings per PEH (\$) | Rate | NPER | PV Over 5 Years |
| Veterans (36 individuals per year) | 36 | 13,400 | 35 | 16884 | 2.5 | 5 | \$6,741.00 |
| PIT (244 individuals) | 244 | 13,400 | 35 | 114436 | 2.5 | 5 | \$45,687.00 |
| HMIS (670 individuals) | 671 | 13,400 | 35 | 314699 | 2.5 | 5 | \$125,640.00 |

Table 5. Projected Medicaid Savings from Reduction in ED visits for CHW-enrolled patients (BBH, 2024).

Cost Analysis

Based on recent findings from The Health Plan (THP), CHWs have been shown to save approximately \$5,000 per patient over a 4-month period, primarily by reducing unnecessary emergency room visits and hospitalizations (CDC, 2020; Crespo et al., 2020). If we assume a cohort of 300 patients and a 6-member CHW team, the average caseload per CHW would be about 55 patients (Kangovi et al., 2020). As enrolled patients stabilize and require fewer visits, CHWs can reduce the frequency of home visits to once or twice per month (Kangovi et al., 2020). This allows CHWs to take on additional patients, with a typical caseload growing to 40–50 patients per each CHW. Because of the prevalence of comorbid behavioral health and SUDS diagnosis, as well as the increased frequency and duration of patient care, this work recommends the hiring and training of 8 CHWs for quality, post-discharge care for at least the

244 patients experiencing homelessness, as recorded by the PIT count (HUD, 2023). This is shown in Table 6.

| Cost Calculation- CHW over 5 Year Time Horizon | |
|---|---|
| Cost per CHW (Annual) | \$45,000 |
| Total CHWs | 5 |
| Annual Cost for CHW Salaries | \$360,000 |
| Total Salary Cost (5 Years) | \$1,800,000 |
| Initial Training Cost | \$600 |
| Ongoing Training Cost per Year | \$325 |
| Total Training Cost (Initial + Ongoing) | \$1,900 |
| TOTAL (1 Year) | \$2,162,825 |
| RATE | 2.5 |
| NPER | 5 |
| PMT (Total of 5 Year Sustainment) | \$1,800,000 (annual CHW salary costs) + \$1,900 (trainings) = \$1,801,900 |
| PV Cost over 5 Years | \$719,388 |

Table 6: Costs Associated with Community Health Worker Implementation Over 5 Years

Scalability

The Scalability of the Community Health Worker (CHW) model in Huntington is strong, particularly when considering the existing technological infrastructure in place to support continuity of care in the post-discharge protocol. The Williamson Health and Wellness Center's CHW program demonstrated that the integration of CHWs into the healthcare system can be done efficiently, with relatively low administrative burden.. Specifically given the CDC's enhanced SDOH screening and data analytics, healthcare providers, social service agencies, and local health departments already have the infrastructure in place for data tracking, patient referrals, and case management. This reduces the need for substantial new investments in technology and personnel, making the implementation of CHWs both cost-effective and efficient, especially for patients experiencing homelessness (PEH) or those coded with housing instability.

The ability to connect CHWs with healthcare providers in this way minimizes the need for additional resources to establish a referral system, as these referral mechanisms and technological systems for tracking patient care and social determinants of health (SDOH) are already operational in local systems. Furthermore, the Williamson pilot showed that as patients' health stabilized, the frequency of visits could be reduced, allowing CHWs to manage a larger caseload (40 to 50 patients per CHW). As demonstrated by the Williamson model, CHWs capacity for increasing caseloads over time as patients stabilize and require fewer visits reduces the need for substantial investments in new personnel. Although the program is relatively low in terms of administrative overhead, some ongoing administrative costs will be needed for financially sustaining the program. Specifically, securing funding through legislative advocacy for Medicare reimbursement, as well as pursuing other financial aid options and advocating for education, will be necessary. These efforts will help ensure that the program is financially sustainable over the long term, even though the setup costs are low. Training for CHWs will need to be periodically refreshed.

Alternative: Co-Located Models

Co-location care models integrate multiple health and social services under one roof or within a small geographic distance, which is particularly beneficial for individuals with complex health needs, like substance use disorders (SUDs) and mental health issues. Co-located services enhance coordination, streamline care, and reduce logistical barriers for patients. These models often combine mental health services, addiction treatment, and healthcare in a single facility, increasing access to care and patient engagement (Glover-Wright et al., 2023). Huntington's existing hybrid approach already utilizes co-located care hubs, but further integration could offer enhanced coordination and improved health outcomes (Bachman et al., 2016).

Patient Health Outcomes

The available evidence on integrated care that combines co-located mental health services and addiction treatment is still limited but shows promising results. Studies suggest that having these services in the same location can lead to fewer mental health symptoms and fewer trips to the emergency room (ER) or hospitalizations. Additionally, integrated care with co-located mental health and addiction treatment tends to improve engagement in treatment and increase chances of recovery from substance use. These findings do not separate the specific effects of co-location (having services in one facility) from other parts of integrated care, meaning the results are more about the overall benefits of having multiple services together rather than the physical co-location itself.

While the research shows some limitations and bias, particularly because most of the studies are from the United States, the bias might actually be helpful for PEH (patients experiencing homelessness) in Huntington. These patients, who regularly opt-in to social services, are often more familiar with these services and are more likely to use them for the purposes of the co-location model. There is a clear connection between co-located care and improved patient outcomes, particularly in terms of medical trust, preventative care, and engagement. These benefits could translate into fewer emergency visits and a reduction in overall hospitalizations for Huntington's PEH population, as shown in Table 7.

| Data Type | # of PEH | Cost-Savings Table for Co-Location Model (5-Year Projection) | | | | | Rate | NPER | PV Over 5 Years |
|-------------------|----------|--|-------------------------|--|-----|---|------|------|-----------------|
| | | Savings per Person (\$) | Percent on Medicaid (%) | Total Medicaid Cost Savings per PEH (\$) | | | | | |
| Veterans (36 PEH) | 36 | 1,113 | 35 | 1,402 | 2.5 | 5 | | | \$506.00 |
| PIT (244 PEH) | 244 | 1,113 | 35 | 9,505 | 2.5 | 5 | | | \$3,795.00 |
| HMIS (670 PEH) | 670 | 1,113 | 35 | 26,100 | 2.5 | 5 | | | \$10,420.00 |

Table 7: Projected Medicaid Savings from Reduction in ED visits for Co-Located patients (BBH, 2024).

Cost

The current operating costs, only expected to grow, for the current co-location in Huntington total \$3,000,000, according to de-identified leadership and stakeholders.

Scalability

The Scalability of implementing a co-located model for PEH in Huntington hinges on several factors, primarily the integration of healthcare and social services within a single facility

or within several blocks. The City of Huntington annual budget review cut roughly 766 thousand from municipal grants to social services, increasing reliance on private donations. While the model has strong potential in terms of improving patient outcomes and reducing healthcare costs, its Scalability is contingent upon securing stable, long-term funding and advocacy for broader health equity and social service reimbursements.

Alternative: Medical Respite Care Units

Medical Respite Care Units (MRCUs) provide a stable, medically monitored environment for individuals experiencing homelessness to recover from acute health conditions and manage chronic illnesses. Unlike traditional emergency care, MRCUs offer ongoing medical attention, medication management, and case management, which helps stabilize patients' health and prevent repeat hospitalizations. This comprehensive approach not only addresses immediate healthcare needs but also supports long-term recovery, reducing the strain on emergency services. MRCUs are vital in helping patients regain stability, transition to permanent housing, and engage in continuous healthcare, ultimately improving long-term health outcomes and breaking the cycle of homelessness and hospital readmissions (Doran et al., 2013).

Patient Health Reimbursement

| Medical Respite Care Units Cost Analysis | | | | | | | |
|--|----------|----------------|---------------|----------------|------|-----|----------------------------|
| Data Type | # of PEH | Healthcare Sav | Percentage on | Total Medicaid | RATE | NPR | PV of Savings Over 5 Years |
| Veterans (36 individuals per year) | 36 | 13,400 | 35 | \$154,368 | 2.5 | 5 | \$61,630.00 |
| PIT (244 individuals) | 244 | 13,400 | 35 | \$1,046,272 | 2.5 | 5 | \$417,712.00 |
| HMIS (670 individuals) | 670 | 13,400 | 35 | \$2,872,960 | 2.5 | 5 | \$1,146,996.00 |

Table 8: Understanding ED readmission through Medicaid Cost-savings (Finn et al., 2018; BBH, 2024).

Cost

According to the National Health Care for the Homeless Council's *Medical respite budget tool*, the costs associated with a 17 bed unit would total \$255,602,378 (NHCHC; See Appendix). See Appendix. Because of the limited capacity to scale the MRCU model to suit the regional demographic, the The maintenance costs for the proposed Medical Respite Care Unit (MRCU) model are projected to align with those of the COVID-19-funded \$1.9 million MCRU in Huntington, which was operational for two years. The MCRU demonstrated the feasibility of sustaining operations on a modest budget, albeit for a limited time. This projection assumes consistent annual operating costs, accounting for inflation, staffing, and facility maintenance. Considering the strength of existing partnerships with healthcare providers for a decentralized MRCU model, which regularly allocate beds and staffing capacity to respite care, some of the substantial upfront costs required for the establishment and ongoing operation of the MRCU may be overestimated in this work.

Scalability

Medical respite care units require significant infrastructure, including staffing, healthcare facilities, and secure housing. The administrative burden of establishing and maintaining these units is high, as is the need for ongoing funding and collaboration between healthcare providers

and housing organizations. Coordination between hospital systems, social services, and Medicaid reimbursement programs adds complexity, requiring formal agreements, compliance with healthcare regulations, and case management services to ensure continuity of care. Additionally, securing sustainable funding, whether through Medicaid waivers, grants, or philanthropic contributions, is critical but is challenging. While these units offer long-term cost savings by reducing emergency department visits and hospital readmissions, the initial investment in facilities, staffing, and operations can be a barrier to widespread implementation. The costs are especially higher for a centralized unit, compared to a decentralized model that may utilize more cost-sharing methods.

Recommendation

Based on a thorough evaluation of the alternative, this report argues in favor of the Community Health Workers (CHW) model to be implemented for the purpose of enhancing continuity of care for Huntington's patients experiencing homelessness (PEH). This recommendation is firmly anchored in a thorough analysis of the trade-offs among the alternatives, assessing their performance relative to the established evaluative criteria, as shown in Table X (Outcomes Matrix).

| Criterion / Alternative | Community Health Workers | Co-Location Model | Medical Respite Care Units |
|-------------------------------------|---------------------------------|--------------------------|-----------------------------------|
| Patient Health Reimbursement | \$125,640 | \$10,420 | \$417,712 |
| Cost | \$719,388 | \$3,000,000 | \$2,189,606 |
| Scalability | High | Moderate | Moderate |

Table X: Outcomes Matrix

The current momentum within the state, independent of the political complexities and facilitated through private funding, creates a window of opportunity to simultaneously secure policy support for the program's expansion and leverage existing funding streams (Worth, 2020). Investing in this privately driven recommendation, especially amidst the uncertain beginnings of recent federal, state, and local administrations, offers the Cabell-Huntington Health Department (CHHD) and its partners a strategic pathway to quickly establish a solid foundation in the context of shifting political administrations and swiftly demonstrate tangible results to be used in future advocacy (Worth, 2020).

Trade-offs

The MRCU model, while highly effective for short-term recovery after hospitalization, does not offer the same breadth or duration of intervention, which is all the more important for patient populations with SUDs and behavioral health comorbidities. MRCUs address a gap in post-acute care, but it falls short when it comes to the long-term management of chronic

conditions or the prevention of hospitalization in the first place. Additionally, while specific screening protocols for housing instability are in early adoption stages, the implementation question of PEH prioritization for qualifying for MRCU placement remains underdeveloped and inconsistently applied. Thus, while the MRCU is beneficial for patients requiring immediate, post-hospitalization recovery, it is not as comprehensive or sustainable in improving health outcomes across the broader PEH population over time. CHW models, throughout the duration of implementation, would have a broader health promotion reach due to the common placement strategies, whereas MRCU models are more limited in availability and access.

When evaluating cost-effectiveness and Scalability, the CHW model requires significantly less capital investment than the MRCU model, which involves substantial infrastructure, medical equipment, and staffing costs. The projected cost savings from the CHW model, primarily derived from retraining an existing peer-educating workforce embedding in PEH-services, is substantial. From an administrative perspective, the CHW model is also more feasible. The model leverages existing healthcare infrastructure and can be easily integrated into public health systems, requiring minimal additional administrative burden. Since CHWs work within established healthcare facilities and utilize existing data-sharing platforms, the administrative costs associated with implementation and operation are relatively low. The MRCU model, however, involves complex logistical challenges, including the creation or adaptation of physical facilities, continuous management of medical staff, additional transportation and staffing reallocations, and compliance with healthcare regulations, all of which contribute to its higher operational costs. Simply, the costs for the lowest-skill caliber of MRCUs almost double the costs of CHWs over the 5 year horizon.

While both models present clear benefits, the CHW model emerges as the superior choice due to its scalability, cost-effectiveness, and ability to address the root causes of healthcare utilization among PEH. The MRCU model, despite being effective in certain high-acuity cases, is limited in its capacity to scale to a finite bed or service capacity and provide long-term solutions for the broader population. It offers targeted relief for individuals recovering from hospitalization, but does not address the broader public health needs of the homeless population, especially in the realm of chronic disease prevention and management.

While the MRCU model may be an appropriate solution for a small subset of the PEH population requiring intensive post-hospitalization care, the CHW model is the more strategic choice for addressing the systemic health needs of the larger PEH population. The CHW model aligns with the goals of sustainable cost reduction, improved long-term health outcomes, and Scalability, making it the most appropriate recommendation for the Cabell Huntington Health Department (CHHD) to pursue. By prioritizing the CHW model, the CHHD can deliver a cost-effective, scalable, and sustainable solution that improves the health of patients experiencing homelessness while providing a significant return on investment for healthcare-providing partners.

| Stage | Status Quo Process | Key Risks Without CHW | With CHW Intervention | CHW Impact |
|-------------------------------------|---|--|--|---|
| Discharge Planning | Warm Handoff Protocol | Patient discharged to street/shelter with no follow-up | CHW involved pre-discharge to assess needs and begin planning | Personalized discharge plan includes shelter, transportation, medication access, & healthcare follow-up |
| Immediate Next 24-48 hrs | Patient left to self-navigate shelter, social service, and medical follow-up | Lost to follow-up, missed medication, high ED return | CHW ensures safe transport, navigates shelter entry | Reduces risk of immediate readmission or exposure |
| First 30 Days Post-Discharge | No continuity; reliance on self-navigation, social services, & emergency care | Increased ED use, health decline, missed appointments | CHW provides case management, connects to clinics, checks on medication & appointments | Boosts preventive care adherence and trust in providers |
| Long-Term Linkage | No consistent point of contact, fragmented services | Re-enters crisis cycle | CHW maintains long-term touchpoint, bridges housing & care | Longitudinal engagement, improved health outcomes, stability |

Table 9: Assessing CHW Model Against Warm Handoff Protocol

Implementation

The implementation of the Community Health Worker (CHW) model for Huntington's patients experiencing homelessness (PEH) presents three potential pathways: one leveraging Medicaid/Medicare 1115 waivers, another based on private funding through the Medical Model of Williamson, West Virginia, and a third exploring differently trained CHWs based on available funding levels.

Client Governance: System Level Stakeholder Analysis

With any path, the implementation of CHWs in Huntington will require careful planning, coordination, and collaboration among various stakeholders. To ensure the sustainability and success of the recommendation, the following section analyzes the needs, roles, and potential challenges and capacities of the stakeholders, including local healthcare providers, government agencies, and community-based organizations. The CHHS operates within the larger framework of West Virginia's Department of Health and Human Resources (WV DHHR), as shown in Figure 1.

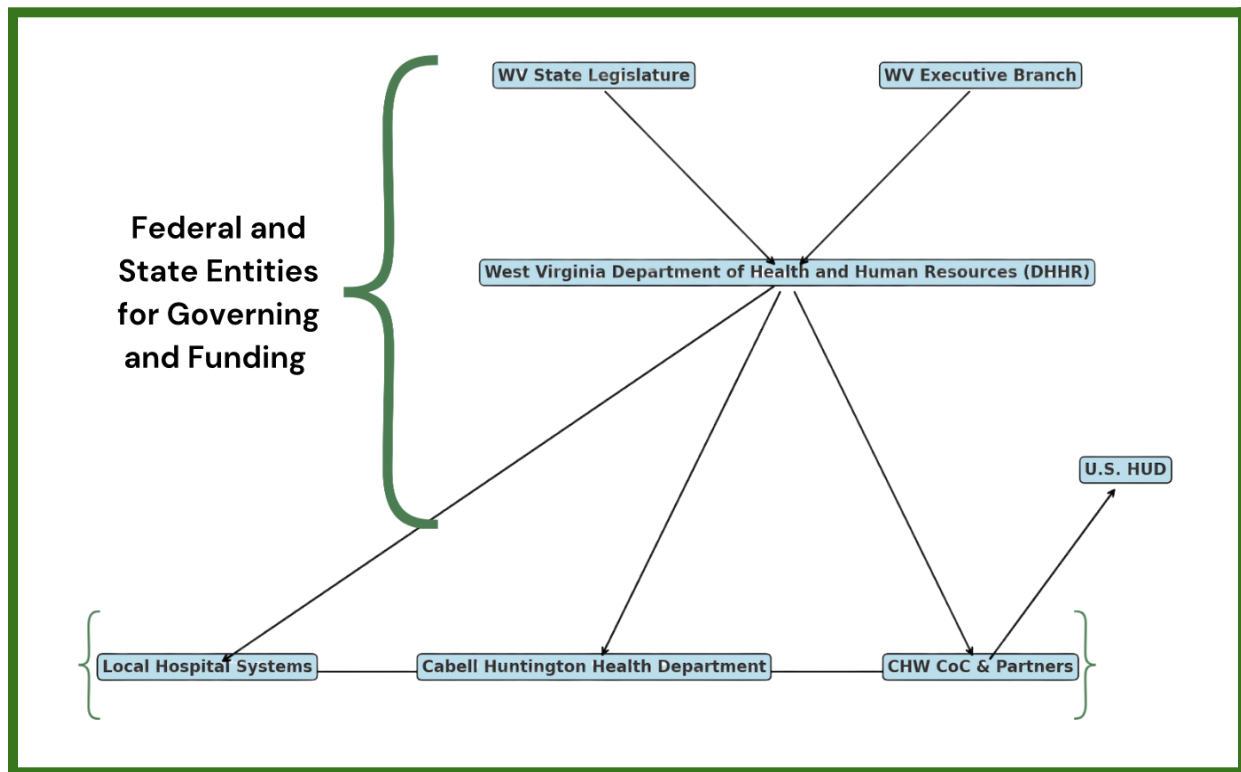


Figure 2: Federal and State Entities for Governing and Funding

1. Cabell-Huntington Health Department (CHHD): As the lead public health agency, CHHD role includes securing funding, overseeing training, and ensuring that CHWs are integrated into the existing healthcare system.
2. Healthcare Providers (Hospitals, Primary Care Clinics, etc.): Local healthcare providers will collaborate with CHWs to ensure seamless care coordination. They will refer PEH to CHWs for follow-up care, chronic disease management, and health education. Partnerships with local hospitals are key to ensuring that CHWs are integrated into discharge protocols.
3. CHWCoC Partners and Community-Based Organizations (CBOs): CBOs, especially those focused on homelessness, will be key partners in outreach and identifying individuals in need of services. CBOs will help raise awareness about the CHW model and assist with community engagement efforts to ensure PEH access care.
4. Funding Entities: The financial sustainability of the CHW model will depend on both public and private funding sources.

Path 1: Medicaid/Medicare 1115 Waivers for CHWs

The first implementation path explores utilizing Medicaid/Medicare 1115 waivers, which provide states with the flexibility to test innovative healthcare delivery approaches. Through these waivers, states can include CHWs in Medicaid reimbursement, offering a sustainable funding stream for the program. By seeking approval for the inclusion of CHWs in the state's

Medicaid program, particularly for high-needs populations like PEH, the CHHD could secure long-term funding from state healthcare programs.

While this path offers a traditional potential for a substantial and recurring source of funding, it is dependent on navigating the complexities of the waiver approval process. The timing can be uncertain, and the program would need to align with evolving state Medicaid priorities, which can change with political shifts and new administrative agendas.

Path 2: Privately Funded Medical Model of Williamson, WV

The second pathway involves advocating for the adoption and expansion of the privately funded Medical Model of Williamson, West Virginia, in Huntington. This model has successfully operated for the past three years using private financial support. This model has demonstrated effectiveness in improving health outcomes without the reliance on public funding streams, but public social and financial support. The primary advantage of this approach lies in its agility and expedited implementation, as it bypasses the often slow and bureaucratically complex processes associated with public funding and policy. This can significantly shorten the time required to begin providing services to the community and allow for quicker interventions in response to urgent healthcare needs.

However, pursuing this path requires advancing on the priority expansion list within the current funding model, meaning that it will be necessary to secure a partnership with the private entities that are currently financing the Williamson model. Given the competitive nature of private funding, particularly for initiatives addressing public health challenges, securing this partnership may require navigating a highly competitive funding landscape. Additionally, to ensure the long-term viability and sustainability of the initiative, a financial match to the private investment will likely be required. This demonstrates the commitment of the local stakeholders to scaling the model and reinforces the financial sustainability of the expansion. While this path holds promise for rapid expansion, the speed at which the initiative can grow is inherently tied to securing these competitive investments and maintaining strong alignment with the funding entities' objectives. Therefore, this model's scalability will ultimately depend on the effectiveness of partnership negotiations and the strategic use of available financial resources.

Path 3: Mixed Training Levels for CHWs Based on Available Funding

The third implementation path involves the use of differently trained CHWs based on the available funding levels of the CHHD's public and private partners. This approach would involve employing CHWs with varying levels of training and expertise, from basic to advanced, depending on the resources available. For example, less-trained CHWs could handle community outreach, education, and basic health screenings, while more highly trained CHWs could take on roles requiring clinical expertise, such as assisting with chronic disease management or medical care for comorbid cases.

This approach provides flexibility in terms of staffing, allowing the CHHD to scale up or down based on funding availability. If private or public funding is limited, the program could start with a smaller cohort of less-trained CHWs, gradually increasing training levels as additional funding becomes available. This path offers scalability within financial constraints,

ensuring that even with limited resources, the program can still provide essential services. However, the challenge lies in balancing the different training levels of CHWs, as mismatches between the skills of the workers and the needs of the population could impact the effectiveness of the program.

Strategic Steps

To implement the CHW model effectively in Huntington, this work recommends the following strategic elements of program delivery.

1. **Program Design and Stakeholder Coordination:** CHHD will take the lead in designing the program, using the Williamson medical model as a blueprint. Key stakeholders, including healthcare providers, social service agencies, and CBOs, will be brought together to form a coalition to ensure coordination and integration.
2. **Recruitment and Training of CHWs:** Recruitment of CHWs should prioritize individuals with lived experience in homelessness, as they will have valuable insights into the challenges faced by the population. Peer-to-peer aid has been proven effective, specifically for substance use disorders and in emergency department discharge contexts (Zubritsky et al., 2023). The training process will be comprehensive, focusing on healthcare navigation, chronic disease management, cultural competency, and case management. Training will also include ethical considerations, ensuring that CHWs understand the importance of patient privacy and confidentiality.
 1. **Certifications:** A tiered certification program, modeled after Virginia's established standards, will provide CHWs with foundational training in medical advocacy, harm reduction, and healthcare navigation. To ensure a sustainable workforce pipeline, these training sessions will be conducted in collaboration with Marshall University's Schools of Medicine, Public Health, and Social Work, as well as the CHHD.
 2. **Tailoring to Population Demands:** Given Huntington's high incidence, 7,093 behavioral health-related emergency department (ED) visits in only a three-month period in 2023, CHWs must also receive specialized training in behavioral health interventions (CHHD, 2024). Behavioral health conditions are most effectively managed outside of acute care settings, yet systemic shortages in community-based services often leave individuals with mental health and substance use disorders reliant on EDs (CHHD, 2024). To address this gap, at least 50% of CHWs should be trained in behavioral health intervention techniques, equipping them to provide psychosocial support, health coaching, and care coordination. This specialized training will incorporate evidence-based methodologies, including motivational interviewing, structured goal-setting frameworks, and behavioral modification strategies (Kangovi et al., 2020).
3. **Recruitment & Workforce Flow:** The first two phases, as progress on Path 3, of the can be implemented while Path 1 and Path 2 are considered by stakeholders.
 1. **Phase I, Build Workforce Capacity:** The initial phase of CHW implementation requires a structured recruitment and training framework to build a workforce that effectively serves PEH. Importantly, peer support

specialists are already integrated within many CHWCoC partner agencies, providing an existing workforce that can be upskilled through structured behavioral health training programs. Recruitment should prioritize individuals with lived experience and backgrounds in social or healthcare services, ensuring a workforce that is both culturally competent and adept at navigating complex SDOH. By formalizing this training pathway, CHWs will be better positioned to bridge the gap between social services and clinical care, ultimately improving health outcomes, care continuity, and crisis prevention for individuals with mental health and substance use disorders.

2. Phase II, Ongoing Training: Regularly train CHW on HIPAA regulations, ethical handling of sensitive information, and how to handle instances where information sharing might conflict with patient privacy.
3. Funding Strategy: CHHD should pursue a blended funding model that includes public funds (state and federal grants), private donations, and contributions from local businesses. The Williamson model demonstrates that such a model can work effectively without Medicaid dependence, allowing for a more resilient program that is less vulnerable to shifts in public policy.
4. Integration with Healthcare System: CHWs will be integrated into the local healthcare system through partnerships with hospitals and clinics. This will involve establishing referral pathways, where healthcare providers refer patients experiencing homelessness to CHWs for follow-up care, social services, and health education. CHWs will also work closely with local hospitals to ensure that discharged patients who are homeless are connected to appropriate care.
5. Public Policy and Political Advocacy: For West Virginia, which faces significant healthcare disparities and high rates of homelessness, a hybrid approach combining elements of both Virginia and Kentucky's models could be effective. By adopting Medicaid reimbursement mechanisms akin to that of Kentucky, West Virginia could ensure the financial sustainability of CHW programs. Simultaneously, implementing a certification program modeled after Virginia's could standardize CHW training and enhance the quality of care. This dual strategy would allow West Virginia to leverage the strengths of CHWs in addressing the health needs of patients experiencing homelessness while creating a scalable, sustainable framework for CHW workforce development.
6. Monitoring and Evaluation: To measure the success of the program, CHHD will develop performance metrics to track the impact of CHWs on healthcare outcomes, such as reduced hospital readmissions, improved chronic disease management, and increased use of preventive care. Data will be collected from healthcare providers, social service agencies, and CHWs themselves to provide a comprehensive picture of the program's effectiveness.
 1. Clear Data Sharing Protocols: Develop and implement strict guidelines for sharing health information between MRCUs, law enforcement, and other municipal entities. Ensure these protocols comply with HIPAA and establish transparency with patients about their rights to privacy.
 1. To optimize service coordination, a CHW referral system will be integrated into UniteUs technology, an established platform within

regional hospitals and the Cabell-Huntington-Wayne Continuum of Care (CHW CoC) partners. This service has proven effective, facilitating real-time case assignments and follow-up care. A comprehensive performance evaluation framework will be implemented to monitor CHW interventions, quantifying their impact on hospital readmissions, Medicaid expenditures, and patient health outcomes. Technological integration, while stakeholders report consistency, could be hindered by a lack of CHW training on appropriate uses of the portal. A centralized CHW program dashboard will aggregate and analyze key performance indicators (KPIs), with quarterly data reviews informing continuous program optimization.

2. **Accountability Mechanisms:** Establish an independent oversight committee that includes representatives from healthcare providers, legal experts, and community advocates to monitor the use of sensitive health data and address any concerns that arise. This body would also work to prevent any misuse of patient information by law enforcement or other governmental entities.
 1. **Incentives to Implement:** In addition to the goodwill associated with “do no harm” practice, many upcoming shifts to funding will drive compliance with SDOH tracking and intervention. In terms of finance, Medicare Advantage (MA) plans will be significantly impacted by CMS's expansion of the Health Equity Index (HEI), which is designed to reward plans that serve enrollees with social risk factors and demonstrate strong performance in addressing these healthcare needs. The SNS measure will track how well MA plans screen for and intervene in social needs such as food, housing, and transportation. This shift in CMS policies is likely to influence how Huntington’s healthcare providers approach care for PEH, especially as the HEI will replace the current reward factor for funding and recognition in 2027. Local hospital systems are still in the process of complying with the new CMS reporting requirements, meaning that many of the expected outcomes tied to these CMS changes, especially those related to preventative health, will not be fully reflected in data from Huntington’s PEH population until the coming years.
 2. This expanded dataset addresses gaps in understanding and enhances the political feasibility of proposed solutions by clarifying the scale and complexity of the issues at hand. It provides a compelling foundation for developing evidence-based policies to support patients experiencing homelessness (PEH) and drive systemic change. The BBH assessment strengthens CHHD’s capacity to design and implement programs that reduce homelessness and improve health outcomes, further positioning the organization as a leader in addressing the intersection of health and housing disparities (BBH, 2024).

3. Patient Consent Processes: Ensure that every patient admitted to an MRCU provides informed consent regarding the use of their health information, with clear explanations of who will have access and under what conditions. This can include consent forms that explain the protections of HIPAA and any exceptions to confidentiality.
4. HIPAA Compliance and Patient Information Vulnerability:
 1. Assessments should consider the strength of privacy protections, risk of law enforcement involvement, confidentiality of service settings, potential for criminalization, and feasibility of implementation.
 2. Privacy in service delivery is also key, as PEH often opt out of care or social services due to fears of surveillance or coercion. Models that provide low-visibility, confidential healthcare settings while minimizing data collection offer greater protection. Programs that operate independently of municipal enforcement, integrate legal advocacy, and prevent law enforcement tracking rank higher, while those requiring cooperation with shelters or social services pose a greater risk. Outside of clinical settings, the privacy of service delivery is an implementation challenge for all proposed alternatives, as the effectiveness of care is often tied to the ability of patients to access services without fear of exposure or surveillance. Each alternative will be examined for its ability to provide secure consultation spaces, maintain strict patient confidentiality policies, and ensure that service providers do not collect unnecessary identifying information that could later be accessed by external entities. The presence of explicit policies preventing law enforcement from using patient data for enforcement purposes will be a key metric in this evaluation.
 3. Following the U.S. Supreme Court ruling on *Johnson v. Grants Pass*, municipalities and state governments are increasingly enforcing anti-homelessness policies, including public space exclusions, anti-camping ordinances, and encampment sweeps (Supreme Court of the United States, 2024). Law enforcement may gain access to a person's medical status or homelessness status under certain circumstances, which could influence decisions about where and how homeless individuals are treated, or potentially expose them to legal consequences due to their health or housing statuses. This risk is heightened in settings where healthcare services are integrated with shelters, NGOs, or municipal programs. Alternatives must therefore be evaluated on their ability to limit law enforcement's access to patient data, whether through legal non-disclosure agreements (NDAs), strict adherence to HIPAA's minimum necessary disclosure rules, or staff training on how to respond to law enforcement requests.

Conclusion

The realities of experiencing homelessness, where the absence of stable housing contributes to higher morbidity and mortality, call for recognizing these individuals as patients experiencing homelessness whose health-related needs demand targeted and integrated care solutions (Lui et al., 2024; Roncarati et al., 2018). As demonstrated by the research and case studies outlined, interventions, such as the integration of Community Health Workers (CHWs), co-location models, and medical respite care units offer promising solutions for improving health outcomes. Furthermore, the implementation of CHW programs can significantly reduce hospital readmissions and improve health for PEH. To effectively mitigate the systemic barriers faced by PEH, it is essential to continue fostering cross-sector partnerships, leveraging federal and state funding, and advocating for policies that prioritize the health and housing stability of patients experiencing homelessness.

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Appendix

Associated Costs for Medical Respite Care Units

Table I: Coordinated Care over 5 Year Horizon Net Costs (Including Start-Up)

| | | Coordinated Care MULTI-YEAR BUDGET* (with Start-Up) | | | | | |
|--|---------------|---|-------------|-------------|-------------|-------------|-------------|
| | 3 Year Total | Start Up (Tab B if using) | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| A. PERSONNEL EXPENSES | | | | | | | |
| Wages and Salaries | \$919,612 | | \$299,000 | \$306,475 | \$314,137 | \$321,990 | \$314,137 |
| Employee Benefits | \$259,882 | | \$84,497 | \$86,610 | \$88,775 | \$90,994 | \$88,775 |
| Contract Personnel | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |
| Other Personnel | | | | | | | |
| Expenses | \$4,500 | \$4,500 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Staff Development & Training | \$13,794 | \$0 | \$4,485 | \$4,597 | \$4,712 | \$4,830 | \$4,712 |
| Sub-total Personnel | | | | | | | |
| Expenses | \$1,197,788 | \$4,500 | \$387,982 | \$397,682 | \$407,624 | \$417,815 | \$407,624 |
| B. OPERATING EXPENSES | | | | | | | |
| Rent | \$226,294 | \$11,000 | \$70,000 | \$71,750 | \$73,544 | \$75,382 | \$73,544 |
| Utilities | \$29,218 | \$0 | \$9,500 | \$9,738 | \$9,981 | \$10,230 | \$9,981 |
| Building Insurance | \$38,445 | \$0 | \$12,500 | \$12,813 | \$13,133 | \$13,461 | \$13,133 |
| Housekeeping | \$307,563 | | \$100,000 | \$102,500 | \$105,063 | \$107,689 | \$105,063 |
| Communications (Phone, Data) | \$29,526 | \$0 | \$9,600 | \$9,840 | \$10,086 | \$10,338 | \$10,086 |
| Office Supplies | \$15,378 | \$0 | \$5,000 | \$5,125 | \$5,253 | \$5,384 | \$5,253 |
| Professional Liability Insurance | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |
| Estimated Mileage | \$34,219 | | \$11,406 | \$11,406 | \$11,406 | \$11,406 | \$11,406 |
| Mileage Rate Est. Miles Per Day | \$0.63 | | \$0.625 | \$0.625 | \$0.63 | | \$0.63 |
| Per FTE | 20 | | 20 | 20 | 20 | 0 | 20 |
| Est. #FTE Traveling | 3 | | 3 | 3 | 3 | 3 | 3 |
| Vehicles | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Vehicle Insurance | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Vehicle Expenses (Upkeep) | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |
| Client Transportation | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Building Renovations | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Furnishing/Equipment (BHR or HIMS licenses, computers, desks, chairs, filing copier) | \$4,300 | \$4,300 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Nursing equipment (eg, scale, blood-pressure cuffs, stethoscopes, thermometers, injection supplies, etc) | \$1,500 | \$1,500 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Miscellaneous Expenses (Client supplies, Client Emergency Fund) | \$36,400 | \$36,400 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Sub-total Operating | | | | | | | |
| Expenses | \$722,912 | \$53,200 | \$218,029 | \$223,194 | \$228,489 | \$233,894 | \$228,489 |
| C. TOTAL DIRECT | \$1,920,701 | \$57,700 | \$606,012 | \$620,876 | \$636,113 | \$651,709 | \$636,113 |
| D. ADMINISTRATION (INDIRECT) | \$288,105 | \$8,655 | \$90,902 | \$93,131 | \$95,417 | \$0 | \$95,417 |
| E. TOTAL PROGRAM COSTS | \$2,208,806 | \$66,355 | \$696,914 | \$714,008 | \$731,529 | \$651,709 | \$731,529 |
| F. REVENUE | | | | | | | |
| In Kind /Community Partner Service | \$19,200 | \$0 | \$6,400 | \$6,400 | \$6,400 | \$6,400 | \$6,400 |
| Hospital Contracts | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Grants | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| MCO Contracts | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Program Service Fees | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Other Revenue | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| TOTAL REVENUE | \$19,200 | \$0 | \$6,400 | \$6,400 | \$6,400 | \$6,400 | \$6,400 |
| G. NET | (\$2,189,606) | (\$66,355) | (\$690,514) | (\$707,608) | (\$725,129) | (\$645,309) | (\$725,129) |
| Assumed annual inflation | 2.50% | | | | | | |

Tabel II: Integrated Clinical Care over 5 Year Horizon Net Costs (Including Start-Up)

| Comprehensive Clinical Care MU 10-YEAR BUDGET* (with start-up) | | | | | | | |
|---|---------------|---------------------------|---------------|---------------|---------------|---------------|---------------|
| | Total | Start Up (Tab 8 if using) | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| A. PERSONNEL EXPENSES | | | | | | | |
| Wages and Salaries | \$2,119,106 | | \$689,000 | \$706,225 | \$723,881 | \$741,978 | \$760,527 |
| Employee Benefits | \$598,859 | | \$194,711 | \$199,579 | \$204,569 | \$209,683 | \$214,925 |
| Contract Personnel | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |
| Other Personnel Expenses | \$4,500 | \$4,500 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Staff Development & Training | \$31,287 | \$0 | \$10,335 | \$10,593 | \$10,858 | \$11,130 | \$11,408 |
| Sub-total Personnel Expenses | \$2,754,251 | \$4,500 | \$894,046 | \$916,398 | \$939,307 | \$962,790 | \$986,860 |
| B. OPERATING EXPENSES | | | | | | | |
| Rent | \$226,294 | \$11,000 | \$70,000 | \$71,750 | \$73,544 | \$75,382 | \$77,267 |
| Utilities | \$29,218 | \$0 | \$9,500 | \$9,738 | \$9,981 | \$10,230 | \$10,486 |
| Building Insurance | \$38,445 | \$0 | \$12,500 | \$12,813 | \$13,133 | \$13,461 | \$13,798 |
| Housekeeping | \$30,756 | \$0 | \$10,000 | \$10,250 | \$10,506 | \$10,769 | \$11,038 |
| Communications (Phone, Data) | \$29,526 | \$0 | \$9,600 | \$9,840 | \$10,086 | \$10,338 | \$10,597 |
| Office Supplies | \$15,378 | \$0 | \$5,000 | \$5,125 | \$5,253 | \$5,384 | \$5,519 |
| Professional Liability Insurance | \$36,908 | \$0 | \$12,000 | \$12,300 | \$12,608 | \$12,923 | \$13,246 |
| Transportation (Uber Health or staff mileage reimbursement) | \$27,375 | | \$9,125 | \$9,125 | \$9,125 | \$0 | \$0 |
| Mileage Rate | \$0.63 | | \$0.63 | \$0.63 | \$0.63 | \$0.00 | \$0.00 |
| Est. Miles Per Day Per FTE | 20 | | 20 | 20 | 20 | 20 | 20 |
| Est. # FTE Traveling | 2 | | 2 | 2 | 2 | 2 | 2 |
| Vehicles | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Vehicle Insurance | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Vehicle Expenses (Upkeep) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Client Transportation | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Building Renovations | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Furnishing/Equipment (BHR or HMIS licenses, computers, desks, chairs, filing, copier) | \$4,300 | \$4,300 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Minor Household Equipment | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Furniture/Equipment Repairs | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Miscellaneous Expenses (Client Emergency Fund, client supplies) | \$220,938 | \$36,400 | \$60,000 | \$61,500 | \$63,038 | \$64,613 | \$66,229 |
| Security Deposits | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Sub-total Operating Expenses | \$659,206 | \$51,700 | \$197,748 | \$202,463 | \$207,296 | \$203,124 | \$208,201 |
| C. TOTAL DIRECT | \$3,413,457 | \$56,200 | \$1,091,794 | \$1,118,860 | \$1,146,603 | \$1,165,914 | \$1,195,061 |
| D. ADMINISTRATION (INDIRECT) | \$512,019 | \$8,430 | \$163,769 | \$167,829 | \$171,990 | \$0 | \$0 |
| E. TOTAL PROGRAM COSTS | \$3,925,476 | \$64,630 | \$1,255,563 | \$1,286,689 | \$1,318,593 | \$1,165,914 | \$1,195,061 |
| F. REVENUE | | | | | | | |
| In Kind /Community Partner Service | \$285,000 | \$0 | \$95,000 | \$95,000 | \$95,000 | \$95,000 | \$95,000 |
| Hospital Contracts | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Grants | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| MCO Contracts | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Program Service Fees | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Other Revenue | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| TOTAL REVENUE | \$285,000 | \$0 | \$95,000 | \$95,000 | \$95,000 | \$95,000 | \$95,000 |
| H. NET | (\$3,640,476) | (\$64,630) | (\$1,160,563) | (\$1,191,689) | (\$1,223,593) | (\$1,070,914) | (\$1,100,061) |
| Assumed annual inflation | 2.50% | | | | | | |

Table III: Comprehensive Clinical Care over 5 Year Horizon Net Costs (Including Start-Up)

| Integrated Clinical Care MULTI-YEAR BUDGET* (w/1st start-up) | | | | | | | |
|--|------------------------|---------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | Total | Start Up (Tab 8 if using) | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| A. PERSONNEL EXPENSES | | | | | | | |
| Wages and Salaries | \$171,017,053 | | \$55,604,000 | \$56,994,100 | \$58,418,953 | \$59,879,426 | \$61,376,412 |
| Employee Benefits | \$48,329,419 | | \$15,713,690 | \$16,106,533 | \$16,509,196 | \$16,921,926 | \$17,344,974 |
| Contract Personnel | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |
| Other Personnel Expenses | \$4,500 | \$4,500 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Staff Development & Training | \$2,565,256 | \$0 | \$834,060 | \$854,912 | \$876,284 | \$898,191 | \$920,646 |
| Sub-total Personnel Expenses | \$221,916,227 | \$4,500 | \$72,151,750 | \$73,955,544 | \$75,804,433 | \$77,699,544 | \$79,642,032 |
| B. OPERATING EXPENSES | | | | | | | |
| Rent | \$226,294 | \$11,000 | \$70,000 | \$71,750 | \$73,544 | \$75,382 | \$77,267 |
| Utilities | \$29,218 | \$0 | \$9,500 | \$9,738 | \$9,981 | \$10,230 | \$10,486 |
| Building Insurance | \$38,445 | \$0 | \$12,500 | \$12,813 | \$13,133 | \$13,461 | \$13,798 |
| Housekeeping | \$30,756 | \$0 | \$10,000 | \$10,250 | \$10,506 | \$10,769 | \$11,038 |
| Communications (Phone, Data) | \$29,526 | \$0 | \$9,600 | \$9,840 | \$10,086 | \$10,338 | \$10,597 |
| Office Supplies | \$46,134 | \$0 | \$15,000 | \$15,375 | \$15,759 | \$16,153 | \$16,557 |
| Professional Liability Insurance | \$36,908 | | \$12,000 | \$12,300 | \$12,608 | \$12,923 | \$13,246 |
| Estimated Mileage | \$27,375 | | \$9,125 | \$9,125 | \$9,125 | \$0 | \$0 |
| Mileage Rate | \$0.63 | | \$0.63 | \$0.63 | \$0.63 | \$0.00 | \$0.00 |
| Est. Miles Per Day Per FTE | 20 | | 20 | 20 | 20 | 20 | 20 |
| Est. #FTE Traveling | 2 | | 2 | 2 | 2 | 2 | 2 |
| Vehicles | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Vehicle Insurance | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Vehicle Expenses (Upkeep) | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |
| Client Transportation | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |
| Building Renovations | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Furnishing/Equipment (BHR or HMS licenses, computers, desks, chairs, filing, copier) | \$4,300 | \$4,300 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Minor Household Equipment | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |
| Furniture/Equipment Repairs | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |
| Miscellaneous Expenses (Client Emergency Fund, Tenant supplies) | \$159,425 | \$36,400 | \$40,000 | \$41,000 | \$42,025 | \$43,076 | \$44,153 |
| Security Deposits | \$0 | | \$0 | \$0 | \$0 | \$0 | \$0 |
| Sub-total Operating Expenses | \$628,450 | \$51,700 | \$187,748 | \$192,213 | \$196,789 | \$192,355 | \$197,163 |
| C. TOTAL DIRECT | \$222,544,677 | \$56,200 | \$72,339,498 | \$74,147,757 | \$76,001,223 | \$77,891,898 | \$79,839,195 |
| D. ADMINISTRATION (INDIRECT) | \$33,381,702 | \$8,430 | \$10,850,925 | \$11,122,164 | \$11,400,183 | \$0 | \$0 |
| E. TOTAL PROGRAM COSTS | \$255,926,378 | \$64,630 | \$83,190,423 | \$85,269,920 | \$87,401,405 | \$77,891,898 | \$79,839,195 |
| F. REVENUE | | | | | | | |
| In Kind /Community Partner Service | \$324,000 | \$0 | \$108,000 | \$108,000 | \$108,000 | \$108,000 | \$108,000 |
| Hospital Contracts | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Grants | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| MCO Contracts | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Program Service Fees | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Other Revenue | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| TOTAL REVENUE | \$324,000 | \$0 | \$108,000 | \$108,000 | \$108,000 | \$108,000 | \$108,000 |
| H. NET | (\$255,602,378) | (\$64,630) | (\$83,082,423) | (\$85,161,920) | (\$87,293,405) | (\$77,783,898) | (\$79,731,195) |