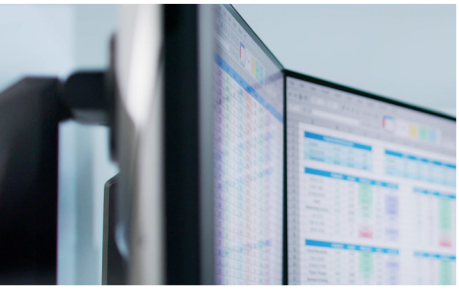
Health and Housing:

A Guide to Key Outcomes and Data Tracking



CSH

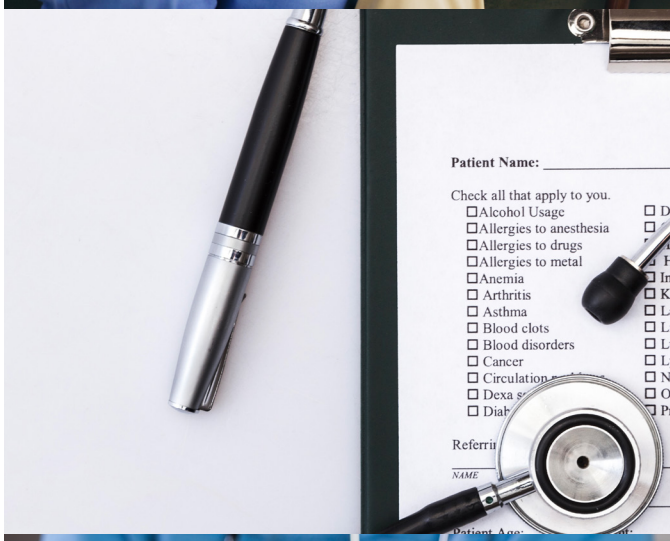
Introduction

Partnerships between health centers and supportive housing providers have demonstrated reductions in emergency department utilization, inpatient hospital stays and corresponding decreases in health system costs. These partnerships also show increased use of preventative primary and behavioral health care, as well as high rates of housing retention.[1] Clinical outcomes assessing changes in mental health status and a reduction in substance use are linked to homeless services programs[2], yet few studies or reports have addressed the impact of these programs on physical health outcomes such as diabetes, blood pressure and asthma.

From the housing side, improved health outcomes enhance the quality of life for tenants in supportive housing, increase their housing stability and improve their future well-being.

As more health centers look to establish partnerships with housing providers or even begin delivering services to residents in supportive housing[3], they are starting to look at which physical health outcomes to track. This quick guide will help communities understand the key health conditions experienced by homeless individuals, who may be positively impacted by stable, supportive housing, and the data elements generally tracked within the homeless health and housing sectors. This guide is designed to increase familiarity with measures already being tracked, enabling health and housing partnerships to leverage existing data and reduce the administrative burden associated with developing new mechanisms to track and report data.

Demonstrating improved health outcomes through health and housing partnerships not only builds interest and champions within the health center but also provides an evidence base to engage additional partners, including hospitals and managed care organizations. These entities already have a vested interest in improved health outcomes and shifting to primary and preventive care, as appropriate. From the housing side, improved health outcomes enhance the quality of life for tenants in supportive housing, increase their housing stability, and improve their future well-being. Demonstrating the impact of housing on health outcomes also highlights the value of supportive housing, which can lead to increased community support and investment in this type of housing.



Impact Areas

There are broad categories of health concerns linked to a lack of stable housing that can help inform outcome tracking aimed at understanding the impact of housing on health. Below is a list of common health issues experienced by homeless individuals.

Chronic Health Conditions

Those experiencing homelessness have added barriers to maintaining their treatment plans and may be dealing with complications from unmanaged conditions. Those experiencing chronic homelessness[4] are also more likely to experience multiple chronic conditions that would need to be addressed both before and after the individual moves into housing.

Acute Conditions

Experiences of homelessness increase the likelihood of circumstances such as poor management of chronic diseases, exposure to communicable diseases in shelters, exposure to harmful weather, violence, infections, and falls.[5] Communities are increasingly looking to bridge individuals from medical respite programs into permanent housing for maximum impact.

Insurance Coverage

Insurance coverage can improve access to regular primary care and, in some states, can serve as a source of funding for services in supportive housing.[6] Individuals experiencing homelessness may not have applied for coverage and/or may meet categorical eligibility but lack the necessary documentation. Supportive housing programs can help track an increase in insurance coverage and assist with insurance applications, including Medicaid, Medicare, and private insurance.

Treatment and Medication Management

Issues in managing chronic conditions can arise from a lack of storage or refrigeration for medications, unsanitary environments, inadequate transportation for follow-up appointments and difficulty keeping current with treatment plans. Once an individual is in housing, they have more accessible resources to help them manage their medications and are in a better position to prioritize their health and wellness. Measures of treatment management, including medication adherence and regular attendance at appointments, are important indicators of health management and stability.

Impact Areas
(continued)

Emergency Room Utilizations & Hospital Inpatient Stays

Emergency room stays are often, by volume, the most expensive intervention for hospital systems. Studies have shown that when people are housed and shift into preventative care, many avoidable ER visits are reduced. Hospitals and managed care organizations (MCOs) are particularly focused on the length of inpatient stays and the frequency of readmissions to hospitals after discharge.

Outpatient Mental Health Screenings

Conducting mental health screenings helps to ensure that the needs of individuals in supportive housing programs are addressed. This includes building a network of behavioral health providers to refer patients and potentially establishing data-sharing partnerships. Measures would consist of the number of referrals made and completed in collaboration with partner agencies, as well as improvement of health outcomes and reductions in inpatient care.

Substance Use Screening & Treatment

Quality supportive housing can reduce substance use among tenants, especially when paired with a person-centered[7] approach, which focuses on mitigating adverse effects of behavior and individualizing treatment goals. Measures would include reductions in inpatient treatment for SUD and connections and stability in SUD treatment services.

Quality of Life

Those living unhoused are living in high-stress, dangerous environments. Health centers can assess this measure through standardized tools (such as the PRAPARE tool), which can be added to a health center's Electronic Health Record system. This can enable health centers to have a more holistic view of patients' health.

What are Health Centers Reporting?

Health centers already collect a wealth of data for their patient populations. This information is reported through various channels depending on funding streams, accreditation or certification programs, and various local- and state-level initiatives. For example, health centers report health-related patient encounter information to health plans, which are then reported to one or more managed care organizations, which in turn report to one or more state Medicaid agencies. Health centers also report specific patient-level measures in aggregate form through the Uniform Data System (UDS)[8] to the Health Resources and Services Administration (HRSA), the federal agency that administers the Health Center program.

Unlike Medicaid data, UDS data includes information about all patients who receive services at a health center. More information about the types of data reported to various payers and administrators is below.

UDS:

Uniform Data System

While UDS measures are reported in aggregate, ensuring high-quality data collection on housing status and the prevalence of health conditions can enable the health center to evaluate these aggregate outcomes and make connections between these measures at the patient level. For instance, at the aggregate level, identifying which health conditions are more prevalent among patients experiencing homelessness can serve as a starting point for determining which health outcome measures health centers may consider tracking as patients transition into housing.

UDS measures that health centers report at the population level (e.g., homeless and migrant) include, but are not limited to:

- **Infectious and parasitic diseases:** *HIV, Tuberculosis, Sexually Transmitted Infections, Hepatitis B and C*
- **Respiratory diseases:** *Asthma, Chronic Obstructive Pulmonary Disease*
- **Selected medical conditions:** *Includes Diabetes Mellitus, Heart Disease, Hypertension, Contact Dermatitis, and other Eczema, Dehydration, Exposure to Heat or Cold, Overweight and Obesity*
- **Mental health and substance abuse conditions:** *Alcohol Related Disorders, Other Substance Related Disorders, Tobacco Use Disorder, Depression and Other Mood Disorders, Anxiety Disorders including PTSD, Attention Deficit and Disruptive Behavior Disorders, Other Mental Disorders*
- Diagnostic Tests/Screening/Preventive Services

Health centers may also be reporting some of the services they provide as part of a homeless services program as "Enabling Services" in the UDS, including case management and housing navigation activities. **Enabling services include:**

- Case Management
- Eligibility Assistance Workers
- Outreach
- Transportation
- Language Interpretation
- Patient and Communication Education
- Patient Support Staff
- Non-statutory Enabling Services: Food, Clothing, Housing, Laundry, Shower, Mailbox, Telephone, GED/Education, Employment, Assistance Managing Money, Medical Respite Services, Daycare/Childcare

IDC:

International Classification of Diseases

There are thousands of ICD codes (International Classification of Diseases) that cover everything from wound care to tuberculosis to housing status. The health industry uses these codes to capture and communicate health data nationally and internationally. ICD codes are also used for billing purposes. This information is already being tracked and could serve as a source of insight into the impact of housing on physical health conditions within health and housing partnerships. Additionally, since these codes are typically entered for each visit, they may be useful for tracking the incidence of housing-related health conditions over time. In the ICD-10 codes related to housing status, so-called "z-codes," are under Z59.[9] Specifically, Z59.0- (homelessness) and Z59.1- (Inadequate housing).

Linking patients to these codes requires a shift within health care settings to ensure that point-of-care providers and practitioners attach these codes to patients' records. Some providers see little point in attaching codes that are not directly related to the care they are providing individually, especially if they cannot treat the condition at that time. Moreover, these codes often do not have an immediate impact on billing. That may not always be the case, as in some states with Medicaid waivers related to housing and tenancy support services, these codes have critical importance in tracking care and billing appropriately.

HEDIS:

Healthcare Effectiveness Data and Information Set

Additionally, health plans and preferred providers[10] around the country report Healthcare Effectiveness Data and Information Set[11] (HEDIS) measures to the National Committee for Quality Improvement (NCQA). These measures are used to evaluate the quality of care provided, including comparisons on a national scale and self-monitoring over time. In a health and housing partnership, evaluating these measures concerning housing status can demonstrate high-quality care across subpopulations, including those experiencing homelessness and those who have moved into permanent housing. In 2017, HEDIS included seven domains of care with a total of 88 measures.[12] These included:

- Effectiveness of Care
- Access/Availability of Care
- Experience of Care
- Utilization and Risk Adjusted Utilization
- Relative Resource Use
- Health Plan Description Information
- Measures Collected Using Electronic Clinical Data Systems

What Can Housing Providers Track?

Overview of HMIS and CoC Data Collection

Housing providers who are part of their local Continuum of Care (CoC)[13]collect patient-level data in their local Homeless Management Information System (HMIS).[14] HMIS is governed by the U.S. Department of Housing and Urban Development (HUD), which outlines a set of "Universal Data Elements" that all projects are required to collect. In addition to these measures, some projects are required to collect "Program-Specific Data Elements".[15] many of which are health care related.

The HMIS Data Standards Manual[16] includes a list of data that is collected by other federal partners, including the Department of Health and Human Services. HUD-funded agencies have the option to include these in their data collection efforts. HMIS data elements are self-reported, meaning that participants verbally confirm their responses to intake and other questions, without requiring any backup documentation. The list is program-specific (e.g., PATH program, ESG program) but is intended to serve as a starting point for housing providers to align their data with that collected by providers funded through other federal agencies. **These measures include:**

Health Insurance

Information about the client's health insurance coverage to assess access to medical care

Physical Disability and Developmental Disability

Cognitive or physical conditions that may impact functionality. Can help assess the person's acuity and determine eligibility for services.

HIV/AIDS

Required for HOPWA[17]-funded programs to address related needs.

Mental Health Conditions

Diagnosed issues impacting housing stability.

Substance Use Disorders

Records issues related to drug or alcohol use that may affect health and housing.

Chronic Health Conditions

Long-term illnesses like diabetes or heart disease.

Housing Status

Describes current housing situation (homeless, housed, etc.).

Leveraging HMIS Data for Service Delivery

HMIS enables providers to report basic information about each of the measures listed above, including type of insurance, duration or severity of health conditions, documentation of disability or severity, and whether the patient is currently receiving services or treatment for the condition. Having this information in HMIS enables housing and service providers to identify special considerations for service delivery, particularly for individuals with a disability status. It also helps providers to identify potential gaps in care for those who are not receiving treatment for health conditions, and is an opportunity to connect patients to care. Moreover, housing providers may track additional information, depending on the HMIS software provider in use, or may maintain a separate case management software system with additional fields that are uploaded to HMIS at the CoC level. Accessing HMIS can also provide an opportunity for health centers to identify which services their patients are already connected to, as well as their housing status, including supportive housing, transitional housing, shelter and outreach contacts, which can assist in care plan development. Health centers can also include a note, in systems that allow it, indicating that an individual is an established patient, making referrals between service providers more streamlined.

Examples of Data Collected by Health & Housing Partnerships

Communities around the country are working across sectors to implement homeless services programs with an emphasis on health care, including Frequently Used Systems Engagement (FUSE) programs that use cross-systems data sharing to identify patterns of high-cost systems utilization of emergency health services and connect patients experiencing cycles of homelessness and institutionalization with supportive housing. These programs have come up with community-driven performance measures that they are tracking based on program goals.

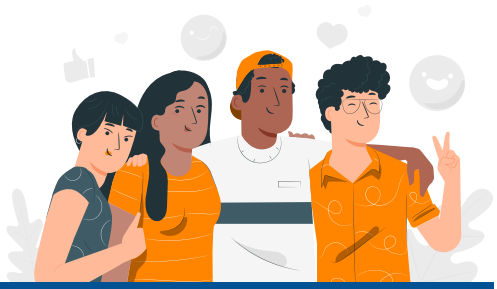
Community-Driven Performance Measures

- Length of time from first program engagement to the date of permanent housing move-in
- Length of time in supportive housing, with no negative exit
- Returns to systems such as homelessness, justice systems or in patient health stays
- Preventative health care engagement (e.g., doctor appointments, insurance coverage)

Notes on Housing Process Milestones

In the process of housing someone, programs have a series of milestones that health care partners should be aware of to better track outcomes. Terms such as “enrolled,” “project start,” and “move-in date,” among others, may appear interchangeable. In housing services programs, they can often be terms of art and distinctive.

Housing move-in dates may differ from the project start or enrollment date. Some housing service programs can provide pre-tenancy support to assist individuals in obtaining housing, sometimes referred to as “housing navigation.” In understanding a pre- and post-housing scenario for health outcomes, it is crucial that health care providers understand these milestones, as the analysis should focus on pre/post- of housing move-in and not necessarily project start or enrollment.



Recommendations

1

Assess what other communities are doing.

There is an array of resources that describe Housing First initiatives, including the tools and outcome measures that are used to demonstrate impact. Many communities are willing to share lessons learned and promising practices. Do not be afraid to reach out to other communities or CSH for guidance.

2

Utilize data that is already being collected locally.

Partnering with agencies already collecting relevant data could reduce the undue burden on patients and staff.

3

Encourage hospitals to use the ICD-10 code for homelessness (Z59.0).[20]

In addition to tracking health outcomes, it is also essential to collect information on housing status. This allows hospital reports to be generated specifically for patients who have experienced homelessness. Hospitals may need support to help their staff understand the value of tracking housing status as well as best practices for sensitively soliciting this information from their patients.

4

Use existing tools to connect health and housing data points.

In addition to housing status, ICD-10 Z- codes are available for many factors such as employment, literacy and incarceration. Additionally, the National Association of Community Health Centers (NACHC) developed the PRAPARE tool[21] to screen patient needs in and out of health center settings. Collecting accurate information about patients' activities and needs provides a clearer understanding of the challenges that need to be addressed in housing, enabling improvements in health outcomes and sustaining overall quality of life.

5

Include people's experiences to tell your story and success.

Not every health victory can be quantified, and anecdotal evidence can also be an indicator of success. We hear stories of patients who move into housing and are more engaged in their care, they are better at managing their medications, they are learning to prepare healthy meals, they open up to their case manager or report feeling better today. These stories demonstrate progress that may not yet be quantifiable, but they are still valuable to tell the excellent work that health and housing partnerships can achieve.

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Measure	HMIS	ICD-10 †	UDS	Measures & Screening Tools
Housing Status	3.917	Z59	Table 4 Lines 17 - 23	
Health Insurance	4.04		Table 4 Lines 7 – 12	Insured, Medicaid, Medicare
Physical Disability	4.05	Z736, R532		
Developmental Disability	4.06	F70-F89		
Chronic Conditions	4.07		Tables 6A & 6B	Blood Pressure, BMI, Pulmonary Function
Heart Disease		IO981-I132	Table 6A Line 10	
Severe Asthma		J4550-J45909	Table 6A Line 5	
Diabetes		O24012 - O2493	Table 6A Line 9	HbA1c <8%
Arthritis-related conditions		A0104, A0223, A1802, A3983 – A3984, A5422, A6923, B0682, B2685, B4282, E7881, G980, L4052, M0000 – M009, M0510 – M0609, M0680 – M069, M0800 – M0899, M130 – M1389, M150, M153 –M1993, M7720 – M7722		
Adult-onset cognitive impairments		G3184, I6901, I6911, I6921, I6931, I6981, I6991, R4181, R41841, R4189, R419		
Severe headache/migraine		G43001 - G4489		
Cancer		C000 - D499	Table 6B Lines 11, 19	
Chronic bronchitis		J410 – J42		
Liver condition		K700 - K77		
Stroke		G463 – G464		
Emphysema		J430 – J439		
HIV/AIDS	4.08	O98711 – O9873, R75	Table 6A Line 1 – 2	Viral Load
Mental Health	4.09	0150 – F09, F200 – F99	Table 6A Lines 20a – 20d	PHQ-9, GAD-7, PC-PTSD[18]
Substance Abuse	4.10	F1010 – 1999	Table 6A Lines 18 – 19a	SBIRT, CAGE, AUDIT, DAST16
Treatment Adherence				Attend Appointments, Medication Adherence
Acute Conditions				Episodes, Types of Diagnoses, Reduction in Preventable Conditions – Matched or Pre-Post Housing Comparison
Emergency Room Utilizations & Hospital Inpatient Stays				Hospital Data, Medicaid Data; ER Visits, Inpatient Days
Quality of Life				CDC Health Related QOL, RAND-36 (SF-36)[19]

References

[1] CSH. (2025, April). *Supportive Housing 101.* Csh.org. https://www.csh.org/supportive-housing-101/

[2] Peng, Y., Hahn, R. A., Finnie, R. K. C., Cobb, J., Williams, S. P., Fielding, J. E., Johnson, R. L., Montgomery, A. E., Schwartz, A. F., Muntaner, C., Garrison, V. H., Jean-Francois, B., Truman, B. I., & Fullilove, M. T. (2020). Permanent supportive housing with housing first to reduce homelessness and promote health among homeless populations with disability: A community guide systematic review. *Journal of Public Health Management and Practice,* 26(5), 404-411. https://doi.org/10.1097/PHH.0000000000001219

[3] Note that "permanent supportive housing" and "supportive housing" are used interchangeably in this publication.

[4] 24 CFR 578.3 Chronically homeless, (2015). https://www.ecfr.gov/current/title-24/part-578/section-578.3#p-578.3(Chronically%20homeless).

[5] NHCHC, (2025, April). *Medicaid & Permanent Supportive Housing: A Quick Guide for Health Centers.* Nhchc.org. https://nhchc.org/wp-content/uploads/2019/08/medicaid-psh-quick-guide4.pdf.

[6] Medicaid. *Home & Community Based Services.* Medicaid.gov. https://www.medicaid.gov/medicaid/home-community-based-services

[7] Information on *Harm Reduction* is available at: http://harmreduction.org/about-us/principles-of-harm-reduction/

[8] Information on *UDS* reporting is available at: http://www.bphc.hrsa.gov/datareporting/reporting/index.html

[9] ICD10Data. P*roblems related to housing and economic circumstances* Z59-. ICD19Data.com. https://www.icd10data.com/ICD10CM/Codes/Z00-Z99/Z55-Z65/Z59-.

[10] *Information on Preferred Providers* available at: https://www.healthcare.gov/glossary/preferred-provider.

[11] *Information on HEDIS measures* is available at: http://www.ncqa.org/hedis-quality-measurement/hedis-measures.

[12] *Information on HEDIS measures* is available at: http://www.ncqa.org/hedis-quality-measurement/hedis-measures.

[13] Information on the *Continuum of Care Program* is available at: https://www.hudexchange.info/programs/coc/.

[14] Information on *HMIS* is available at: https://www.hudexchange.info/programs/hmis/

[15] HMIS data standards HUD website: https://www.hudexchange.info/news/fy-2024-hmis-data-standards-effective-october-1-2023/.

[16] HMIS data standards HUD website: https://www.hudexchange.info/news/fy-2024-hmis-data-standards-effective-october-1-2023/.

[17] HMIS data standards HUD website: https://www.hudexchange.info/news/fy-2024-hmis-data-standards-effective-october-1-2023/.

[18] *Mental Health and Substance Use Screening tools* available at: https://www.samhsa.gov/resource/dbhis/screening-assessment-tools-chart.

[19] *CDC HRQOL* available at: https://archive.cdc.gov/www_cdc_gov/hrqol/index.htm.

[20] NHCHC, (2019, October 25). *Ask and Code: Documenting Homelessness Throughout the Health Care System.* https://www.nhchc.org/wp-content/uploads/2016/10/ask-code-policy-brief-final.pdf.

[21] Information on the *PRAPARE* tool is available at: https://prapare.org/

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