

DATA-DRIVEN STRATEGIES FOR CLIENT IDENTIFICATION, ENROLLMENT AND CROSS-SYSTEMS CARE COORDINATION

The information in this document is intended to present housing, healthcare, and social service providers with data-driven strategies for identifying homeless individuals across multiple systems and effectively linking them to the range of health, housing, and supportive services they need.

The following topics are covered in this worksheet:

- Coordinated Entry
- Data-Driven Targeting Tools and Vulnerability Assessments
- Cross-Systems Data Matching
- Data Warehousing
- Frequent User Programs
- Frequent User Systems Engagement (FUSE) Model

Homeless Management Information System (HMIS)¹

A Homeless Management Information System (HMIS) is a local information technology system used to collect client-level data and data on the provision of housing and services to homeless individuals and families and persons at risk of homelessness. Each CoC is responsible for selecting an HMIS software solution that complies with HUD's data collection, management, and reporting standards.

Coordinated Entry²

Background

- Under the HUD CoC Program interim rule, grant recipients and sub-recipients are required to use a coordinated system to initially assess the eligibility and needs of each individual or family who seeks homeless assistance, and to coordinate the entry and provision of referrals.
- A coordinated entry system will be developed and implemented by each Continuum of Care in accordance with minimum requirements established by HUD, including coverage of the geographic area, easy accessibility and entry by individuals and families seeking housing or services, good advertising, and a comprehensive and standardized assessment tool.

About Coordinated Entry

- Process for people to receive prevention, housing, and/or other related services.
- Increases likelihood families and individuals will be quickly served by the right intervention.
- Each system entry point uses the same assessment tool and makes decisions on which programs families and individuals are referred to based on a comprehensive understanding of each program's specific requirements, target population, and available beds and services.
- Coordinated entry paves the way for more efficient systems by:
 - Helping people move through the system faster (by reducing the amount of time people spend moving from program to program before finding the right match);
 - Reducing new entries into homelessness (by consistently offering prevention and diversion resources upfront, reducing the number of people entering the system unnecessarily); and
 - Improving data collection and quality and providing accurate information on what kind

¹ HUD Exchange, "Homeless Management Information System," <https://www.hudexchange.info/programs/hmis/>

² U.S. Department of Housing and Urban Development, "24 CFR Part 578: Interim Rule," *Federal Register*, July 31, 2012: 10, 15-16, 53. https://www.hudexchange.info/resources/documents/CoCProgramInterimRule_FormattedVersion.pdf

Data-Driven Targeting Tools and Vulnerability Assessments³

Data-driven triage tools or evidence-based vulnerability assessments can help identify and prioritize individuals or families for supportive housing. The most sophisticated tools are based on statistical models or predictive algorithms that use information (demographics, homelessness, child welfare involvement) collected at the time of screening to identify families at highest risk for chronic child welfare involvement and long-term homelessness. Vulnerability assessments work in a similar fashion in that they collect information from respondents across a number of different domains (health/mental health, homelessness, child welfare involvement, etc.) to produce an aggregate vulnerability score or rating that is then used to prioritize families for services.

Case Study: Veterans Homeless Risk Assessment⁴

To improve the Department of Veterans Affairs (VA)'s ability to identify veterans who are at risk of homelessness—or experiencing homelessness but not accessing services—the VA National Center on Homelessness Among Veterans, in collaboration with the VA National Clinical Reminders Committee, developed a two stage **Homelessness Screening Clinical Reminder (HSCR)** to conduct an ongoing, universal screen for homelessness and risk among veterans accessing healthcare services. The objective of this national, health system-based screening instrument is to enhance the rapid identification of veterans who have very recently become homeless or are at imminent risk of homelessness, and to ensure that they are referred for the appropriate assistance to stabilize their housing crisis or to rapidly rehouse them if they have fallen into homelessness. The HSCR is comprised of two primary questions intended to assess current housing instability and imminent risk of housing instability:

1. In the past 2 months, have you been living in stable housing that you own, rent, or stay in as part of a household? (“No” response indicates veteran is positive for homelessness.)
2. Are you worried or concerned that in the next 2 months you may NOT have stable housing that you own, rent, or stay in as part of a household? (“Yes” response indicates Veteran is positive for risk.)

Veterans who screen positive are asked two additional questions: (1) Where they have lived for most of the previous two months, and (2) Whether they want to be referred to social work or homeless services to address their housing instability. Veterans' responses to the HSCR are stored in the VA's Corporate Data Warehouse along with additional information captured through their medical records, such as demographics, diagnoses, and services utilization.

Cross-Systems Data Matching⁵

Most public agencies have data collection systems and can identify families who have had contact with child welfare and homeless systems. However, these systems are largely uncoordinated. Cross-system administrative data matches (for example between child welfare agency data systems and Homeless Management Information Systems) may be used to identify families who overlap and have

³ Corporation for Supportive Housing (CSH), “Strategies for Identifying Families,” 2015, <http://www.csh.org/toolkit/keeping-families-together-a-guide-to-developing-supportive-housing-for-child-welfare-involved-families/targeting-high-need-families-for-supportive-housing/strategies-for-identifying-families/>.

⁴ Ann Montgomery, Ph.D. “Using a Universal Screener to Identify Veterans Experiencing Housing Instability,” VA National Center on Homelessness Among Veterans and U.S. Department of Veterans Affairs, March 2014: 1-2. http://www.endveteranhomelessness.org/sites/default/files/research/Universal%20Screener%20to%20Identify%20Veterans%20Experiencing%20Housing%20Instability_2014_03.04.pdf.

⁵ Corporation for Supportive Housing (CSH), “Strategies for Identifying Families,” 2015, <http://www.csh.org/toolkit/keeping-families-together-a-guide-to-developing-supportive-housing-for-child-welfare-involved-families/targeting-high-need-families-for-supportive-housing/strategies-for-identifying-families/>.

frequent contacts with multiple systems. Feasibility of a data match depends on the breadth of data collected, quality of the data, and the sophistication of data systems. In the most sophisticated data systems, a human services agency may be able to track families across multiple departments of the agency (e.g., child welfare, homeless, TANF, mental health, etc.). In this scenario, public agencies or departments have Memorandums of Understanding (MOUs) that allow staff from any of the partnering agencies to view all of the data pertaining to a family. If data and systems permit, this matching approach is particularly effective and efficient for identifying a community's highest-need/highest-cost families to target for intensive services.

Case Study: Utah Medicaid Data Match⁶

Following their H² Action Planning Session in March 2015, the Utah Department of Workforce Services (DWS) successfully conducted a match of the data available in the Homeless Management Information System (HMIS) and eREP (Medicaid eligibility system) for the state. Utah DWS is using this data match to create aggregate data to evaluate current performance, historical trends, and evaluate performance expectations at the time of contract renewals. This increase in Utah's cross-system integrated data capacity helps the state facilitate better understanding of system level operations, effectiveness, and efficiency, and supports their goal to engage in data-driven decision-making around homeless health and housing service provision.

Data Warehousing⁷

A data warehouse is a central database integrating information from more than one source of the same type of system (e.g., multiple Homeless Management Information Systems (HMIS)) and/or from more than one source of different systems (e.g., multiple mainstream systems such as healthcare, foster care, corrections, and education). A warehouse rearranges the data into a structure that allows for more effective and efficient reporting and analysis. Data warehouses have proven effective in the study of regional homelessness and the use of mainstream systems.

Case Study: Ohio Human Services Data Warehouse⁸

The Ohio Human Services Data Warehouse (OHSDW) involves the consolidation of multiple data sources into one centralized database to report a regional and statewide picture of homelessness. Ohio's data warehouse was initiated with the formation of a collaboration of homeless Continuums of Care and their respective Homeless Management Information Systems (HMIS). This HMIS Data Warehouse of consolidated statewide HMIS data will then be combined with data from other state agencies, including mental health providers, Medicaid, youth services, the foster care system, and TANF. The data warehouse will serve multiple purposes including, but not limited to, obtaining unduplicated regional counts of homeless persons, understanding client movement, and analyzing service usage.

Frequent User Programs⁹

"Frequent User" programs and partnerships use health service utilization data to identify the most frequent users of health services and engage them in more appropriate and cost-effective services, including primary and preventive health care, treatment services, social services and supports, and connections to stable housing (Similar programs also exist for individuals with frequent interaction

⁶ Utah H² Leadership Team, "Utah H² Action Plan," Draft 8, August 8, 2015.

⁷ U.S. Department of Housing and Urban Development, "HMIS Data Warehousing Curricula," October 2008, <https://www.hudexchange.info/resource/1696/hmis-data-warehousing-curricula/>.

⁸ Ohio Human Services Data Warehouse: <http://ohiodatawarehouse.org/index.html>.

⁹ United States Interagency Council on Homelessness, "Frequent Users of Health Services," 2015, http://usich.gov/usich_resources/solutions/explore/frequent_users_of_health_services.

with the criminal justice system). When care management and flexible services linked to stable housing are provided to “frequent users” who are experiencing homelessness, the results include housing stability, significant reductions in the utilization and costs of emergency health services, and better treatment for complex health issues.

Case Study: Community Care of North Carolina (CCNC) Priority Patients Program Medical Center Coordinated Care Clinic¹⁰

Community Care of North Carolina (CCNC) built a partnership between a large funder of health care (Medicaid), primary care physicians, and other local health care providers to achieve quality, utilization, and cost objectives in the management of care for Medicaid recipients across North Carolina. CCNC’s Priority Patient Program was initiated in 2011 and focuses on about 5% of the overall CCNC population who are considered “super-utilizers” based on potentially preventable inpatient admissions and/or Emergency Department visits. Priority patients are determined through the following data:

- Claims data to estimate expected spending for each beneficiary given his/her clinical history
- CCNC has an electronic data exchange that receives weekly updated statewide Medicaid claims data as well as real-time hospital admission data, laboratory results, and clinical data from the primary care medical record.
- Uses Clinical Risk Grouping software from 3M Health Information System to assign patients to a risk category, estimate average cost of care for patients in each category, and flag those with hospital spending at least \$1000 above the level expected for their category.

Priority patients are then connected with care managers who review their case histories and develop an individualized approach for outreach and intervention to prevent unnecessary hospital costs.

Frequent User Systems Engagement (FUSE) Model¹¹

FUSE identifies and works to engage and stabilize people who are high users of both the shelter system and the criminal justice system, using a Housing First model of permanent supportive housing. The program model focuses on providing housing stability and reducing the involvement of participants in the criminal justice system and other emergency service systems. A core component of the FUSE model is **Data-Driven Problem Solving**. Data is used to identify a specific target population of high-cost, high-need individuals who are shared clients of multiple systems, including jails, homeless shelters, and crisis health services. Data analysis is used to identify those individuals who are caught in a “revolving door” with repeated contacts with several systems. Cross system data is also used to track implementation progress and measure outcomes.

Case Study: FUSE 10th Decile Project, Los Angeles, CA¹²

Goal: To identify the 10% of homeless patients with the highest public and hospital costs, place them into permanent supportive housing (PSH), and surround them with supportive medical and mental health homes.

Data and Tools Used: A triage tool is used to screen for high cost, high need homeless individuals to differentiate homeless individuals with the highest public costs from other homeless individuals

¹⁰ HomeBase, “Breaking the Cycle: Data-Driven Interventions for Frequent Users of Public Systems; Community Care of North Carolina (CCNC) Priority Patients Program Medical Center Coordinated Care Clinic,” September 21, 2014.

¹¹ United States Interagency Council on Homelessness, “Frequent User Systems Engagement (FUSE),” 2015, http://usich.gov/usich_resources/solutions/explore/frequent_users_systems_engagement_fuse.

¹² HomeBase, “Breaking the Cycle: Data-Driven Interventions for Frequent Users of Public Systems: FUSE (Frequent Users Systems Engagement) 10th Decile Project, Los Angeles, CA,” September 21, 2014.

with less severe conditions. This cost spread is based on health conditions and history of using public services. The tool uses an array of variables (51 pieces of information are collected and combined) to determine the probability that the homeless individual is in the top cost-decile.

Intervention: Participating patients are enrolled with experienced community-based homeless service providers. The transition from the hospital or clinic to a navigator takes place through a warm handoff- health provider staff, usually a social worker, briefs the navigator on the patient's social and medical background, personal characteristics, history of hospital use, presenting issues, diagnoses, and underlying problems, and then personally introduces the navigator to the patient. The navigator assumes immediate responsibility for assisting the individual, including assessing what type of temporary housing is needed, providing transportation to the housing site, visiting a Federally Qualified Health Center to arrange immediate care, facilitating the process of obtaining the documentation and benefits needed to access PSH, linking those in PSH with a medical home, and providing post-housing follow-on support.

Outcomes:

- Total annual average public and hospital costs/person for those who obtained housing decreased from \$63,808 to \$16,913 (73%) – excluding housing subsidy costs.
- Total health care costs/person, including jail medical and mental health, for those housed declined from \$58,962 to \$16,474 (72%).
- Every \$1 spent on navigation, housing, and services produced a net savings of \$2 in the first year and \$6 in subsequent years through reduced public and hospital costs.

