

REGIONAL & STATEWIDE DATA WAREHOUSING

WHAT is SHADoW?

The Statewide Homeless Assistance Data online Warehouse (SHADoW) collaboratively creates and maintains an inter-organizational data warehouse enabling direct analysis of de-identified client-level information regarding homeless persons and families from both state/public sector and private/non-profit services. The technology supports the merging of homeless assistance data from the Michigan Statewide Homeless Management Information System (MSHMIS) and State of Michigan human service databases (DHS and DCH) enabling both policy and practice professionals to create analytical queries and reports on homeless populations, services delivery, and homeless needs.



About Michigan's Statewide HMIS:

Based on a strong culture of collaboration and two years of planning, 59 Continuums of Care (CoCs) from across Michigan elected to come together on a single database platform - **Michigan's Statewide HMIS (MSHMIS)**. Over 500 agencies participate on MSHMIS. Organized through local CoCs and Regional Councils, these agencies provide a safety net for individuals and families when other forms of support (either public or private) fail to meet critical needs. The statewide implementation supports cross-jurisdictional counting and tracking. Participants include: emergency housing and shelter programs, community action and other emergency services agencies, health care providers, mental health & drug treatment providers, youth programs, churches, food pantries, and even a Laundromat.

Overall Vision

While powerful, HMIS tools collect data primarily from community-based not-for-profit organizations, which leaves a substantial gap in our ability to track and/or understand the experience of these populations vis-à-vis the use of mainstream entitlements, benefits, and services. Understanding the needs of homeless households – and promoting greater responsiveness, accountability, and impact of homeless services – is enhanced by our ability to explore the role played by other state departments (e.g., Michigan's Departments of Human Services, Community Health, Corrections, and Labor and Economic Growth / Housing Development).

In creating this vision, two critical issues had to be addressed: privacy and control. For HMIS participating agencies to buy-in, it was important to assure that the uses of the database would be

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This document was prepared by the Cloudburst Group under cooperative agreement MDMV00107 with the Department of Housing and Urban Development's (HUD's) Office of Community Planning and Development. This document was developed by Ray Allen, Tony Gardner and Barb Ritter under contract with the Cloudburst Group.

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restricted to planning and research and that the data set would not be used for either case management or agency evaluation. The goal of the project was to evaluate systems of care. While many agencies contribute data to the warehouse, each individual agency maintains “control” over their data. HMIS participating agencies are given the option of “opting-out” of the study with each build of the data set. Each partner in SHADoW signs a Data Use agreement specifying general/specific parameters for how their data may be used. Agreements and policies are structured to allow the state data sets to evolve based on information needs.

An executive-level board provides oversight and governance of SHADoW and determines and approves the various uses and views of the data. Partners Include:

- Michigan State Housing Development Authority (MSHDA)
- Michigan Department of Information Technology (MDIT)
- Michigan Department of Human Services (MDHS)
- Michigan Department of Community Health (MDCH)
- Michigan Department of Corrections (MDOC)
- Michigan Coalition Against Homelessness (MCAH)

How does it work?

A subset of information from the HMIS and other state human services departments including basic identifiers is downloaded into a tool developed by Michigan’s Data Warehouse to match and de-identify records from multiple sources. The tool matches records from the various systems, assigns a single random number and strip all identifiers from the records. After the match is completed, no identifying information is retained in the dataset. The download dataset from the HMIS does not include agency names or locations and sits as an “instance” on Michigan State’s Data Warehouse.

The tool has also been designed to not allow re-identification once the random number has been assigned. The project uses a “kill and fill” method to rebuild the dataset – that is no data from the previous build is retained in the instance. More specific geographic data sets may be created through an IRB process. The tool is operated by MSHDA consultants/staff to prevent any risk of release outside the signatories of the Administrative HMIS privacy agreements negotiated as part of the Statewide HMIS.

While protecting the privacy of individuals and agencies, a variety of questions may be answered through the intersection of state data and HMIS data.

1. What is the cost of homelessness on State systems?
2. How do changes in state programs and allocations impact the numbers of persons served, the characteristics of those served, or the type of services provided by safety-net organizations in the private sector?
3. Are there patterns of service usage (both state and private) that relate to patterns of homelessness?
4. Are homeless persons generally benefiting from state services design to help those in need?