

Data Quality Standards

Overview

The Ohio Balance of State Continuum of Care (BoSCoC) for its Homeless Management Information System (HMIS) Implementation develops these policy standards and subsequent procedures of data usage for all Balance of State HMIS (BoSHMIS) users and user agencies. These data quality standards serve to maintain or improve the data quality of the data entered into the Homeless Management Information System. All BoSCoC agencies are responsible for maintaining their own compliance with federal regulations as well as any outside applicable regulations such as the Health Insurance Portability and Accountability Act (HIPAA) standards.

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I. Introduction

This document describes the Homeless Management Information System (HMIS) data quality standards and the data quality monitoring plan for the Ohio Balance of State Continuum of Care (BoSCoC). This document was developed by the Coalition on Homelessness and Housing in Ohio (COHHIO), in coordination with the HMIS participating agencies and community service providers. These HMIS Data Quality Standards and the related data quality monitoring plan will be updated annually, considering the latest HMIS data standards and the Ohio BoSCoC Performance Management Plan¹.

A. Applicability of the HMIS Data Quality Standards

This HMIS Data Quality Standards document applies to all HMIS participating agencies located within the Ohio BoSCoC, regardless of funding source. No Ohio BoSCoC HMIS participating provider is exempt from the standards or process laid out in this document.

B. What is an HMIS

An HMIS is a locally administered, electronic data collection system that stores longitudinal person-level information about the individuals who access homeless and other human services in a community. Each CoC receiving Housing and Urban Development (HUD) funding is required to implement an HMIS to capture standardized data about all persons accessing the homeless and at-risk of homelessness assistance system. Furthermore, elements of HUD's annual CoC Program competition are directly related to a CoC's progress in implementing its HMIS.

In addition to CoC Programs and state-funded homeless programs, HMIS accommodates the following programs:

- The Supportive Services for Veteran Families (SSVF) program
- The Grant Per Diem (GPD) program
- The Health Care for Homeless Veterans (HCHV) program
- Projects for Assistance in Transition from Homelessness (PATH) program
- Runaway Homeless Youth (RHY) program
- Housing Opportunities for Persons with AIDS (HOPWA) program

C. HMIS Data and Technical Standards

In 2004, HUD published HMIS Data and Technical Standards in the Federal Register. The Standards defined the requirements for data collection, privacy safeguards, and security

¹ The Ohio BOSCO Performance Management Plan can be found at <http://cohio.org/wp-content/uploads/2016/09/Ohio-BoSCoC-2017-PMP-FINAL.pdf>.

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controls for all local HMIS. In March 2010, HUD published changes in the HMIS Data Standards Revised Notice incorporating additional data collection requirements for the Homelessness Prevention and Rapid Re-Housing Program (HPRP) funded under the American Recovery and Reinvestment Act (ARRA). In 2014, HUD published the 2014 Data and Technical Standards², which accommodates more programs, like SSVF, RHY, PATH, and HOPWA, as well as removed references to HPRP.

D. What is Data Quality?

Data quality is a term that refers to the reliability and validity of client-level data collected in HMIS. It is measured by the extent to which the client data in the system reflects actual information in the real world. With good data quality, the CoC can “tell the story” of the population experiencing homelessness. The quality of data is determined by assessing certain characteristics about the data such as timeliness, completeness, and accuracy. In order to assess data quality, a community must first think about what data quality means and document this understanding in a data quality plan.

E. What are Data Quality Standards?

Data quality standards set expectations for the quality of data entered into the HMIS and provide guidance to HMIS participating providers on how to capture and enter reliable and valid data for persons accessing the homeless assistance system.

F. What is a Data Quality Monitoring Plan?

A data quality monitoring plan is a set of procedures that outlines a regular, on-going process for analyzing and reporting on the reliability and validity of the data entered into the HMIS at both the program and aggregate system levels. A data quality monitoring plan is the primary tool for tracking and generating information necessary to identify areas for data quality improvement.

II. Data Quality Standards

All Ohio BoSCoC HMIS participating providers must strive to adhere to the following data quality standards. These standards are in addition to those identified by HUD in the HMIS Data and Technical Standards. HMIS Users and program staff should be familiar with both sets of requirements.

A. Data Timeliness

Entering data in a timely manner can reduce human error that occurs when too much time has elapsed between the data collection, or service transaction, and the data entry. Ideally, the data is entered during intake, but that is not always possible. The individual doing the data entry may be

² The HMIS Data and Technical Standards can be found at <https://www.hudexchange.info/news/federal-partners-release-final-2014-hmis-data-standards/>

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relying on handwritten notes or their own recall of a case management session, a service transaction, or a program exit date; therefore, the sooner the data is entered, the better chance the data will be correct. Timely data entry also ensures that the data is accessible when it is needed, either proactively (e.g. monitoring purposes, increasing awareness, meeting funded requirements), or reactively (e.g. responding to requests for information, responding to inaccurate information).

1. Data Timeliness Standard

All required data elements for each program type must be entered within five days (including weekends and holidays) of the client entering the program. Any client updates that occur during the program stay should be entered into HMIS within five days of data collection. Client records must be closed within five days of the client exiting the program.

Stage of Data Entry	Number of Days to Enter Data (including weekends and holidays)
Program Entry ³	5
Update data during program stay	5
Program Exit	5

Table 1

B. Data Completeness

All data entered into the HMIS must be complete. Missing or incomplete data (e.g., missing digit(s) in a Social Security Number (SSN), missing the year of birth, missing information on disability or veteran status) can negatively affect the ability to provide comprehensive care to clients.

1. Data Completeness Standard

The percentage of required data elements identified as 'missing' or 'client doesn't know/client refused' should be no more than 0% to 10%, depending on project type and data element. (See Table 2 for details.)

The BoSCoC has established an acceptable range of 'missing' and 'client doesn't know/client refused' responses, depending on the data element and the type of project entering data. The percentages listed in the last two columns represent the maximum percentages allowed.

³ End Users can find their timeliness measure in the Desk Time report.

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Data Elements*	Applicability of Standard by Project Type	Missing – Max Allowed	Client Doesn't Know/ Refused – Max Allowed
All Data Elements Except those listed below	All Projects except HOPWA and RHY ⁴	0%	2%
All Data Elements Except those listed below	HOPWA and RHY	0%	5%
Veteran Status	All Projects	0%	0%
Relation to HoH	All Projects	0%	0%
Client Location	All Projects	0%	0%
Disabling Condition (Adults)	All Projects	0%	5%
Social Security Number	SSVF Projects	0%	0%
Social Security Number	HOPWA Projects	0%	20%
Income as a Percent of AMI	SSVF Projects	0%	0%
VAMC Station Code	SSVF Projects	0%	0%
In Permanent Housing	All RRH Projects	0%	0%
Move-In Date at Exit	All RRH Projects	0%	0%
Destination	ES Projects Only	10%	2%
	All Projects except ES	2%	2%
Housing Assessment at Exit	HOPWA and Prevention Only	2%	2%

Table 2

*End Users can find their Data Completeness measures in the Data Quality: Entry Exits and Assessments report.

2. **Anonymous Clients**

Entering clients anonymously is permitted when the client requests this. However, it is advised that case managers be able to explain to their clients how HMIS client data is secured so that the client feels comfortable with their data being entered into the HMIS. The general advice if a client is uncomfortable and wants to be entered as anonymous is: “Inform, don’t pressure.”

Anonymous data undoubtedly hurts overall data quality for the CoC and the project itself, however, the client’s safety and feeling of security is of great concern as well. Having the

⁴ For PATH data, standards are only applicable to clients at exit.

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personally identifying data is important because it is the only way we have of distinguishing that client from other client records in the database. Having identifying information also allows us to match people across systems for the purposes of studying delivery of services via the Ohio Data Warehouse. A client being entered as anonymous can wind up with as many duplicate Client IDs as they have Entry Exits, depending on the circumstances.

For all anonymous clients, paper files should contain their HMIS Client ID so if the client returns the same number can be used.

The Max Allowed data quality measurement for Completeness (2%) includes Anonymous clients.

C. Data Accuracy

Information entered into the HMIS needs to be valid, i.e. it needs to accurately represent information on the people that enter any of the homeless service programs contributing data to HMIS. Inaccurate data may be intentional or unintentional. In general, false or inaccurate information is worse than incomplete information, since with the latter, it is at least possible to acknowledge the gap. Thus, it should be emphasized to clients and staff that it is better to enter nothing than to enter inaccurate information. To ensure the most up-to-date and complete data, data correction should be performed once the error(s) is detected.

All data entered into the CoC's HMIS shall be a reflection of information provided by the client, as documented by the intake worker or otherwise updated by the client and documented for reference. Recording inaccurate information is strictly prohibited, except in cases where a client refuses to provide correct personal information (see Anonymous Clients section below).

1. Data Accuracy Standard:

The percentage of clients showing in each of the Data Quality Measurements for Accuracy should be no more than 0-3%, depending on project type and the measurement. (See Table 3 for details.)

Data Quality Measurements for Accuracy*	Applicability of Standard by Project Type	Max Allowed
All Data Accuracy measures in the Data Quality reports not listed below	All Projects	3%
Duplicate Entry Exits	All Projects	0%
Future Entry Exits	All Projects	0%
Incorrect Entry Type	All Projects	0%
Mismatched Household IDs	All Projects	0%
Children Only Households	All Projects except RHY	0%

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Data Quality Measurements for Accuracy*	Applicability of Standard by Project Type	Max Allowed
Missing Head of Household	All Projects	0%
Needs without Services	SSVF, PATH, RHY, HOPWA, and Housing Stabilization projects only	0%
Service Dates fall outside of Entry and Exit Dates	SSVF, PATH, RHY, HOPWA, and Housing Stabilization projects only	0%
Open Services	SSVF, PATH, RHY, HOPWA, and Housing Stabilization projects only	0%
Missing Entry Exits	SSVF, PATH, RHY, HOPWA, and Housing Stabilization projects	0%

Table 3

D. Bed/Unit Utilization Rates

One of the primary features of an HMIS is the ability to record the number of client stays or bed nights at a homeless assistance project. The count of clients in a project on a given night is compared to the number of beds reported in the Housing Inventory Chart (HIC) to return the agency’s Bed Utilization percentage. The generally acceptable range of bed utilization rates for established projects is 65% - 105%.

Project Types	Lowest Acceptable Bed Utilization Rate	Highest Acceptable Bed Utilization Rate
ES, TH, PH (all types), Safe Haven	65%	105%

Table 4

The CoC recognizes that new projects may require time to reach the projected occupancy numbers and will not expect them to meet the utilization rate requirement during the first operating year. Additionally, projects that are accurately showing bed utilization rates outside of the acceptable range, should notify COHHIO HMIS staff of the reasons for the variation and the appropriate action will be determined.

III. Data Quality Monitoring Plan

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The following section outlines how Ohio BoSHMIS data quality will be monitored, including adherence to the data quality standards referenced above. Any questions about data entry or policies regarding HMIS should be directed to hmis@cohhio.org.

A. Roles and Responsibilities

- **HMIS End Users:** Attend all required and relevant training. Read listserv emails and/or System News to stay abreast of system updates. Enter quality data following the relevant workflow issued at HMIS trainings, and adhere to data quality standards outlined in the previous section of this document.
- **Agency Administrators:** In addition to the responsibilities assigned to HMIS Users, Agency administrators will run all required reports monthly and compare the results to the data quality standards. The monthly reports agency administrators should run include but are not limited to:
 1. Data Quality – All Workflows
 2. Data Quality - Services
 3. Bed Utilization by Provider
 4. Desk TimePATH, SSVF, and RHY projects should use the Data Quality reports listed above, but may also have program-specific Data Quality reports that check data elements not included in the reports listed above. Check with an HMIS administrator for more information.
- **Region Leads:** Often Region Leads do not have access to HMIS, but receive Bed Utilization reports from ODSA regarding the projects in their region. It is recommended that the Region Lead consider, at minimum, bed utilization data at regional planning meetings, as an indicator of what projects are running at, below, or above capacity.
- **COHHIO HMIS Staff:** Train users on how to correctly enter data into HMIS and how to run reports as necessary, support current users, create and maintain documentation, keeping users informed about any changes, maintain provider data, assist in submitting reports to HUD, and monitor and report on data quality.

B. Data Quality Monitoring

Data Entry Staff/HMIS End Users

Data entry staff/HMIS End users are responsible for checking all relevant Data Quality reports as outlined in this document on a monthly basis, and making corrections or developing corrective action plans to address errors as needed. Additionally, data entry staff/HMIS End users must be responsive to COHHIO HMIS staff when data quality issues are identified, and engage in any needed corrective action.

COHHIO HMIS Staff

HMIS staff will run data quality and desk time reports monthly. The COHHIO HMIS team will contact the End Users for the projects with the highest percentage of errors. If the End Users do not respond, COHHIO staff will reach out to the HMIS Agency Administrator and/or Executive

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Director of the agency. If an agency does not adequately respond to the request for improvement, the issue will be raised with the Ohio BoSCoC HMIS Management Committee at the next monthly meeting and an action plan determined. If the agency still does not adequately respond to the request for improvement, the CoC Director may contact the appropriate funding agency regarding the issue and continued access to the Ohio BoSCoC HMIS may be jeopardized.

C. Compliance

If the agency fails to make corrections when COHHIO HMIS staff has informed them of needed corrective action, or if there are repeated or serious data quality errors, the COHHIO HMIS Staff will notify CoC Staff, ODSA (if applicable) and the agency's Executive Director about specific plans to address non-compliance with the required HMIS participation and consequences for failing to follow the proposed plan of action.

Non-compliance with the standards laid out in this document may result in the grantee being placed on a Quality Improvement Plan (QIP) as described in the Ohio BoSCoC Quality Improvement Planning and Process document⁵. Ongoing non-compliance after being placed on a QIP could result in loss of federal or state funding. Moreover, several funding sources now consider HMIS data quality when making funding decisions, including ODSA's Supportive Housing Program, HCRP, and HUD's CoC Program. Low HMIS data quality performance, regardless of participation in a QIP, may result in denial or reductions of this funding.

⁵ The Ohio BOSCO C Quality Improvement Planning and Process document is available at http://www.cohhio.org/information_resource/training_materials#BoS%20CoC

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Appendix A: Terms and Definitions

Client: a person receiving services or housing from the homeless system.

Homeless Management Information Systems (HMIS) – An HMIS is a locally administered, electronic data collection system that stores longitudinal person-level information about the individuals who access homeless and other human services in a community.

HMIS Data Quality – Refers to the reliability and validity of client-level data. HMIS data quality can be measured by the extent to which the client data in the system reflects actual information in the real world.

COHHIO HMIS Staff – Coalition on Housing and Homelessness in Ohio (COHHIO) staff members who provide user training, user support, reporting, analysis, and quality improvement of the HMIS data.

Housing Stabilization projects: The ODSA Homeless Crisis Response Program (HCRP) covers 3 different program types: Emergency Shelter, Rapid Rehousing, and Homelessness Prevention. ODSA uses the term “Housing Stabilization” to refer only to the Rapid Rehousing and Homelessness Prevention programs within the ODSA Homeless Crisis Response Program.

Project Types and Corresponding Funding Sources

- **Emergency Shelter (ES):** ODSA Homeless Crisis Response Program (HCRP), HUD Emergency Solutions Grant Program (ESG), Veterans Administration (VA) Community Contract, Runaway Homeless Youth (RHY), Other/Private funding
- **Transitional Housing (TH):** ODSA Supportive Housing Program(OSHP), HUD CoC Program, VA Grant Per Diem (GPD), Other/Private funding, Housing Opportunities for People With AIDS (HOPWA)
- **PH - Permanent Supportive Housing (PSH):** OSHP, HUD CoC Program, Section 8 Single Room Occupancy (SRO), Veterans Administration Supportive Housing (VASH), Other/Private funding, HOPWA
- **PH - Rapid Re-Housing (RRH):** ODSA HCRP, HUD ESG, VA Supportive Services for Veterans Families (SSVF), HUD CoC Program, Other/Private funding
- **Homelessness Prevention (HP):** ODSA HCRP, HUD ESG, SSVF, RHY, Other/Private funding, HOPWA
- **Street Outreach:** ESG Outreach, SHP Supportive Services Only (SSO) with Outreach, Projects for Assistance in Transition from Homelessness (PATH), Other/Private funding
- **Services Only Programs:** SSO without Outreach, PATH, Other/Private funding