

Data Quality Standards

Overview

The Ohio Balance of State Continuum of Care (BOSCO) 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 BOSCO 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 (BOSCO). This document was developed by the Coalition on Homelessness and Housing in Ohio (COHHIO) for the Ohio Development Services Agency (ODSA) (HMIS Lead Agency), 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 BOSCO 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 BOSCO, regardless of funding source. No Ohio BOSCO 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, or is in the process of preparing to accommodate, the following programs:

- The Supportive Services for Veteran Families (SSVF) program
- Projects for Assistance in Transition from Homelessness (PATH) program

¹ The Ohio BOSCO Performance Management Plan can be found at http://www.cohhio.org/information_resource/training_materials#BoS%20CoC.

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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 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). HUD is currently in the process of revising the 2010 Data Standards. The new revision has removed references to HPRP. The current HMIS Data and Technical Standards can be found at <https://www.onecpd.info/resource/1220/final-hmis-data-standards/>.

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.

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II. Data Quality Standards

All Ohio BOSCOG 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 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	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

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birth, missing information on disability or veteran status) can negatively affect the ability to provide comprehensive care to clients. Missing data could prevent the client from receiving needed services – services that could help them become permanently housed and end their episode of homelessness.

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 BOSCOG 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.

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Data Elements*	Applicability of Standard by Project Type	Missing – Max Allowed	Client Doesn't Know/ Refused – Max Allowed
Demographics (name, SSN, Date of Birth (DOB), gender, race, and ethnicity.)	All Projects	0%	2%
Housing Status at Entry	All Projects	0%	0%
Disabling Condition (Adults)	All Projects	0%	5%
Type of Living Situation	All Projects	0%	1%
Veteran Status	All Projects	0%	1%
Zip of Last Permanent Address	All Projects	0%	1%
Housing Status at Exit	All Projects except ES	0%	2%
Income & Benefits at Entry	All Projects	0%	2%
Income & Benefits at Exit	All Projects	0%	2%
Destination	ES Projects Only	10%	2%
Destination	All Projects except ES	2%	2%

Table 2

*Users can find their Data Quality Measurements for Completeness in the Data Quality: Assessments report.

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.

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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: Accurate Data*	Data Quality Report Name	Applicability of Standard by Project Type	Max Allowed
Questionable Housing Status at Exit	Data Quality: Assessments	All Projects	1%
Questionable Housing Data	Data Quality: Assessments	All Projects	1%
Missing Entry Exits	Data Quality: Entry Exits	All Projects	0%
Non-Domestic Violence (DV) Anonymous Clients	Data Quality: Entry Exits	All Projects	1%
Incorrect Entry Type	Data Quality: Entry Exits	All Projects	0%
Duplicate Entry Exits	Data Quality: Entry Exits	All Projects	0%
Future Entry Exits	Data Quality: Entry Exits	All Projects	0%
Questionable Destinations	Data Quality: Entry Exits	All Projects	3%
Mismatched Household IDs	Data Quality: Households	All Projects	0%
Children Only Households	Data Quality: Households	All Projects	0%
Missing Head of Household	Data Quality: Households	All Projects	0%

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Multiple Households in Services	Data Quality: Households	SSVF and HCRP projects only	0%
Missing Services	HPRP Data Quality Report 0230, column C	SSVF and HCRP projects only	0%
Service Dates fall outside of Entry and Exit Dates	HPRP Data Quality Report 0234, column R	SSVF and HCRP projects only	0%

Table 3

*Please see Appendix B for samples of the Data Quality Reports referenced in the table above, including detailed descriptions of each Data Quality Measurement for Accuracy.

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, PSH, RRH, 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 because of serving fewer clients, for example, should notify COHHIO HMIS staff of the reasons for the variation and the appropriate action will be determined.

III. Data Quality Monitoring Plan

The following section outlines how Ohio BOSH MIS 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 Users**: 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 and Users with ART licenses**: 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- Entry Exits
 2. Data Quality- Households
 3. Data Quality- Assessments
 4. HPRP Data Quality Report 0230, column C
 5. HPRP Data Quality Report 0234, column R
 6. Bed Utilization by Provider
- **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.
- **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.
- **Grant Managers at ODSA**: grant managers monitor ODSA grantees periodically. Grant managers are to fill out their monitoring tool using grant applications and HMIS data. Site visits will include comparing paper files to the data entered into HMIS to check for data accuracy and completeness.

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B. Data Quality Monitoring

Data Entry Staff/HMIS Users

Data entry staff/HMIS 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 users must be responsive to COHHIO HMIS staff when data quality issues are identified, and engage in any needed corrective action.

COHHIO HMIS Staff

The COHHIO HMIS Staff will conduct periodic reviews of data quality reports and report any findings to the contact person at the agency responsible for HMIS data entry. Reports will include recommended corrective actions as needed.

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 the agency's grant manager, if applicable, and Executive Director about non-compliance with the required HMIS participation.

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 BOSCOQ Quality Improvement Planning and Process document (available at http://www.cohhio.org/information_resource/training_materials#BoS%20CoC). 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.

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Appendix A: Terms and Definitions

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

HMIS Data Quality Standards – A national framework for ensuring that every Continuum of Care can achieve good quality HMIS data. It is anticipated that HUD will propose Data Quality Standards that 1) establishes administrative requirements and, 2) sets baseline data quality benchmarks for timeliness, completeness, and accuracy.

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.

Ohio Development Services Agency (ODSA) – the lead agency for the Ohio BOSCO implementation of HMIS. They are the grant administrators for HUD funding.

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

Program Types and Corresponding Funding Sources

- **Emergency Shelter (ES):** ODSA Homeless Crisis Response Program, HUD Emergency Solutions Grant Program (ESG), Veterans Administration (VA) Community Contract, Other/Private funding
- **Transitional Housing (TH):** ODSA Supportive Housing Program, HUD CoC Program, VA Grant Per Diem (GPD), Other/Private funding
- **Permanent Supportive Housing (PSH):** ODSA Supportive Housing Program, HUD CoC Program, Section 8 Single Room Occupancy (SRO), Veterans Administration Supportive Housing (VASH), Other/Private funding,

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- **Rapid Re-Housing (RRH):** ODSA Homeless Crisis Response Program, HUD ESG, VA Supportive Services for Veterans Families (SSVF) RRH, HUD CoC Program, Other/Private funding
- **Homelessness Prevention (HP):** ODSA Homeless Crisis Response Program, HUD ESG, SSVF HP, Projects for Assistance in Transition from Homelessness (PATH), Other/Private funding
- **Outreach:** ESG Outreach, SHP Supportive Services Only (SSO) with Outreach, PATH, Other/Private funding
- **Supportive Services Only Programs (SSO):** SSO without Outreach, Other/Private funding

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Appendix B: Data Quality Reports