

Nashville-Davidson County
HMIS Data Quality and Monitoring Plan

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Section 1: Introduction

The HMIS Lead Agency, with input from the Data and HMIS Oversight Committee, the Performance Evaluation Committee and HUD technical assistance has created this Data Quality Plan (DQP) and Data Quality Monitoring Plan (DQMP) to address data quality within the Homeless Management Information System (HMIS) of the Nashville-Davidson County Continuum of Care (CoC). Data provides important insight into program effectiveness and system-level performance for the CoC. This data affects all the work the CoC does to prevent and end homelessness, and its importance cannot be overstated. With an increasing emphasis on HMIS data quality for funding opportunities, strategic planning, and system-wide collaboration, adopting a consistent set of expectations for data collection and data quality for all participating agencies is imperative.

Any agency that enters data into HMIS contributes to the overall picture of homelessness within the community and is therefore expected to participate in this Data Quality Plan. The HMIS Participating Agency Agreement requires each organization to abide by the baseline data quality requirements, as laid out in this Data Quality Plan.

This DQP and DQMP should be reviewed annually and updated if necessary, by the Data and HMIS Oversight Committee and the HMIS Lead Agency so that it continues to meet the evolving needs of the community.

What is Data Quality?

Data quality is the reliability and validity of client-level data. Good data quality accurately reflects actual client information in the real world and can tell a client's story. It also aids case management in assessing client needs and determining appropriate referrals and services. Data quality is determined by several factors such as timeliness, completeness, consistency, accuracy, and coverage. Client-level data quality is essential because it is the building block to understanding the effectiveness of projects, agencies, and the system as a whole.

Why is Data Quality Important?

Improving HMIS data quality has been determined as a top priority in the Strategic Plan of the Homelessness Planning Council. Quality data is essential for Nashville's CoC to function effectively for the following reasons:

- Provides the community accurate information to tell the story of homelessness as realistically and completely as possible
- Meets requirements of centralized data collection based on federal, state, and local funding
- Allows for accurate reporting to federal, state, and local funders
- Positively impacts the funding opportunities available in Nashville and to specific providers
- Increases access for people experiencing homelessness or at imminent risk of homelessness and help determine which services they may or may not appear to be eligible for
- Gives greater capacity for agencies to collaborate on behalf of people experiencing homelessness

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- Informs strategic planning processes to address homelessness
- Allows the community to assess gaps in services and take appropriate steps to fill those gaps
- Assesses patterns within the system, including but not limited to racial disparities and geographic gaps
- Streamlines case management efforts by reducing duplication of efforts, including duplication of resource applications and vital documents purchased

What is a Data Quality Plan?

A data quality plan is a community-level document that assists the CoC in achieving statistically valid and reliable data. The plan sets expectations for both the community and the HMIS users to capture reliable and valid data on persons experiencing a housing crisis in Nashville.

The HMIS Lead Agency will work in conjunction with the CoC to ensure that all participating agencies have access to the tools they need to guarantee high data quality, including training, data quality reports, incentives to maintain a high level of data quality, and enforcements for non-responsiveness to data quality concerns. While the HMIS Lead Agency is responsible for a large part of the overall Data Quality Plan, the CoC will maintain a high level of involvement to ensure providers respond to data quality concerns and that the data quality within HMIS is both acknowledged and addressed on an ongoing, iterative, continual basis and in an objective, data-driven manner.

This plan addresses how the HMIS Lead Agency will implement the Data Quality Plan, with transparency about how a provider's data quality can bring about both incentives and enforcements. The Data Quality Plan is broken out into the various components of data quality –timeliness, completeness, consistency, accuracy, and coverage. The sections will address the baseline minimum requirements to maintain a sufficient level of data quality, and depending on the section, the baseline minimum requirement may be broken out by project type. Throughout this document the roles and responsibilities for HMIS users, HMIS participating agencies, Agency Points of Contact, the HMIS Lead Agency, and the CoC at large is outlined to ensure that all aspects of the DQP are carried out.

Section 2: Components of Data Quality and Benchmarks

Data Timeliness

Entering data in a timely manner can reduce human error that occurs when substantial time has elapsed between the data collection (or service transaction) and data entry. Timely data entry also ensures that the data is accessible when it is needed, either proactively (e.g. monitoring purposes, increasing awareness, meeting funding requirements), or reactively (e.g. responding to requests for information, addressing inaccurate information).

Timeliness is measured by comparing the enrollment entry/exit/service date to when the assessment entry/exit/service record was created. Timeliness cannot be edited, only improved going forward.

Best practices indicate that real-time data entry is always the preferred standard as it leads to better data quality and a higher level of accuracy. However, in the provision of homelessness services, real time data entry is not always possible. Regardless, entry deadlines must exist to ensure the system's integrity. The DQP outlines both a starting point as the community transitions to a standard for timeliness, as well as a

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best practice and goal for future years. The nature and reality of different project types were taken into consideration to determine a baseline for timeliness. Below is a chart outlining by project type the reasonable length of time established between data collection and data entry into HMIS.

	Year 1 (starting point)	Goal (best practice)
Emergency Shelter (ES)	Within 5 days	Real time or within 24 hours
Transitional Housing (TH)	Within 7 days of entry-exit	Within 3 days of entry/exit
Permanent Supportive Housing (PSH)	Within 7 days of entry-exit	Within 3 days of entry/exit
Rapid Rehousing (RRH)	Within 7 days of entry-exit	Within 3 days of entry/exit
Street Outreach (SO)	Within 5 days	Real time or within 24 hours
Coordinated Entry	Within 5 days	Real time or within 24 hours
Support Services Only (SSO)	Within 5 days	Real time or within 24 hours

Data Completeness

Completeness answers the question: “Is the required client data being entered completely for each project?” Complete data is the key to assisting clients in connecting them to the right services and benefits. Incomplete data may hinder an organization’s ability to provide comprehensive care to the clients it aims to serve. Incomplete data can also negatively impact the CoC’s ability to track and report patterns in client information and changes within the homeless population so that it can adapt strategies appropriately. All required data elements in a given workflow should not exceed 5% of missing information (“Data not collected” or “null”). In addition, more than 5% of questions answered “Client doesn’t know” or “client refused” will be further investigated to determine if there is a potential user error to be addressed with additional data collection training for the user.

*Due to the nature of Street Outreach projects, sometimes complete data is not possible until a relationship has been built with a case manager. To account for this reality, Street outreach projects are not responsible for completeness of client information until there is a “date of engagement” listed in HMIS.

Data Accuracy and Consistency

Because of the interconnected nature of accuracy and consistency, they will be addressed together in this DQP. Data accuracy answers the question, “Does HMIS data accurately reflect information about the people experiencing a housing crisis in Nashville?” Consistency ensures that data is understood, collected, and entered into HMIS in the same manner regardless of the person handling the data. Consistency is the means through which data accuracy can be achieved.

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Accuracy: Information entered into HMIS needs to be valid. All data entered into HMIS shall be a reflection of information provided by the client (“client report”). 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 (or preferably "don't know" or "refused") than to enter inaccurate information.

It is recommended that agencies, particularly the Agency Point of Contact, create a regular plan to run data quality reports to spot check for accuracy concerns. These accuracy concerns should be corrected in a timely manner once they have been discovered.

Data accuracy is not unchallenging to manage or monitor and requires a high level of agency and user diligence to ensure data entered is accurate. The HMIS Lead Agency will run reports to determine potential accuracy concerns, spot checking for places where data within HMIS does not appear to be accurate.

Consistency: In order to have consistency in data it is necessary for all HMIS users across all agencies to have the same understanding of what information should be collected, the interpretation of this information, and the way in which it should be collected and entered in HMIS. Having consistency in the way the data is entered in the system is very important as it directly affects the accuracy of the clients’ information. Different interpretations of how questions for data collection should be asked, or what answers to those questions mean, can lead to aggregate information that cannot be correctly interpreted and presented. Every project must enter data on clients in the same way over time, regardless of which staff person is recording the data in HMIS.

To foster a standard of consistency, any HMIS user will be required to complete trainings based on the access they will need including but not limited to: HMIS new user trainings, project type trainings, funding type trainings. Agency Points of Contact will also be required to attend Point of Contact trainings. Additional training participation may be required or encouraged based on potential data entry concerns that arise over time. Along with training, the HMIS help desk will be managed by the HMIS Lead Agency to provide ongoing technical support to HMIS users as needed.

Coverage

Coverage refers to the degree in which all homeless service providers within the CoC’s geographic area enter all homeless clients’ information into HMIS. Comprehensive coverage is essential for a community, as it allows it to understand the complete scope of efforts that have been deployed to house the homeless population in the community. Coverage also allows the CoC to calculate an unduplicated number of individuals experiencing a housing crisis in Nashville. Additionally, coverage allows the community to align efforts and work collectively towards the same strategies and goals.

Partial participation of provider agencies in HMIS affects the ability of the CoC to accurately evaluate how the community is performing towards the goal of ending homelessness. Complete coverage is achieved

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when all homeless service providers in the community, regardless of their funding source, participate in HMIS and enter all the information for all clients served.

The HMIS Lead Agency recognizes that prior to the implementation of HMIS data sharing between participating agencies, there were serious limitations for the community to achieve proper coverage. Data sharing opens the door for new growth in HMIS, as it makes it realistic to enter clients into the correct project type and also Coordinated Entry without duplication of data entry. At this time there are two major gaps that prevent HMIS data to be used effectively to understand homelessness in Nashville: Street Outreach programs and Emergency Shelter programs. As long as there is low coverage from agencies that provide these services, HMIS data will remain unreliable for determining an unduplicated number of people experiencing homelessness, as well as a wealth of other system level insights that could be available. More information regarding HMIS data coverage is posted on the HMIS Lead Agency's website. Annually when the DQP is updated, this information will be referenced to measure progress and set updated goals for engagement. Available information about coverage includes, the names of all HMIS participating agencies, number of active HMIS users, HMIS projects that are set up to collect programmatic data, Housing Inventory Count information, and any other relevant information that identifies known data, and gaps in data.

Section 3: Data Quality Monitoring Plan

A Data Quality Monitoring Plan contains the actionable steps to ensure that the Data Quality Plan is carried out. It 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 in HMIS at both the program and aggregate system levels. Monitoring will ensure that all HMIS participating agencies are complying with the Data Quality Plan, HMIS policies and procedures, agency agreements, user agreements, and any other documents governing the use of HMIS. A Data Quality Monitoring Plan is the primary tool for tracking and generating information necessary to identify areas for data quality improvement.

Annually, the HMIS Lead Agency will monitor all agencies that participate in HMIS data entry, regardless of their funding type. 30 days prior to the monitoring timeframe, the HMIS Lead Agency will make a calendar available for agencies to schedule their monitoring visit. 24 hours prior to the monitoring visit, the agency will receive notice of the randomly selected client ID's in HMIS that will be reviewed for portions of the monitoring visit. A monitoring score card will be utilized to document the findings and outcomes of the monitoring visit. Pre-built data quality reports will be utilized to check timeliness and completeness, while randomly selected client files will be used to check for accuracy issues and compliance with privacy and security requirements. This visit will also include a conversation about coverage to identify if there is relevant work done by the agency that is not represented in HMIS data, so that gaps can be identified and considered in system wide evaluation through HMIS data.

All monitoring visits are tentatively set to occur in May and June annually. Regardless of when the monitoring visit occurs, the monitoring period will review data collected from October 1 through September 30 of the prior year. Following the monitoring visit, the agency will receive their score card and feedback meant to address and areas that the agency fell below the standards identified in the DQP.

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Timeliness and completeness will be monitored through prebuilt reports available in HMIS. Agencies that provide services through a variety of project types will be held to the different timeliness standards outlined for each project type separately, a cumulative score will be established from the separate project types. Accuracy will be monitored by reviewing specific client files as well as through other pre-built reports available through HMIS.

The number of client records reviewed will depend on the number of clients served by an agency in the monitored year. For agencies that serve less than 100 clients in the year, 5 client records, at random will be reviewed. For agencies that serve more than 100 clients, 5% of random client records will be reviewed with a maximum of 20 total records.

Quarterly, the HMIS Lead Agency will run and review reports for each participating agency. Feedback will be provided in conjunction with the report that highlights any potential areas for concern, or in any instance that the agency falls below the benchmarks set in the DQP. The monitoring scoring tool that will be utilized by the HMIS Lead Agency in the annual monitoring visit will be made available to all agencies and can be utilized at any point to self-check for any potential data quality concerns. Agency Points of Contact will be strongly encouraged to complete the self-monitoring tool on a quarterly basis and send it for review to the HMIS Lead Agency.

Data quality monitoring may be performed outside of the regularly scheduled reviews, if requested by program funders or other interested parties (e.g. the agency itself, the HMIS Lead Agency, CoC, HUD, other federal and local government agencies).

Corrective action plan: Reports from the HMIS Lead Agency will include any findings and recommended corrective actions. If the agency fails to make corrections within two weeks, or if there are repeated or egregious data quality errors, a series of steps will be considered and implemented based on the severity of the situation. As a first step, agencies or specific HMIS users will be required to take either refresher trainings or an intensive training. If this does not solve the problem more serious actions will be considered which could include the loss of HMIS access at the user or agency level.

Section 4: Incentives and Enforcements

The HMIS Lead Agency will work with the CoC to ensure providers have access to all the training, support and tools they need to ensure a high level of data quality within HMIS. The following incentives and enforcements will be in place to ensure providers understand the importance of data quality within HMIS.

Incentives:

- HMIS data and data quality will become a monthly agenda item at the Homelessness Planning Council meeting and CoC General Membership meetings
 - The HMIS Lead Agency will create and share data visuals to demonstrate what HMIS data currently says about homelessness in Nashville
 - Agencies that perform well will be recognized for their efforts

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- Data reports will be distributed to the community on a quarterly basis to demonstrate agency and system-wide effectiveness and data participation
- Following the annual monitoring visits, the HMIS Lead Agency will facilitate a community wide presentation to review data in HMIS to better understand what data says about the system.
 - The outcomes of this presentation will also be reviewed by the Data and HMIS Oversight Committee.
- Accessing specific funding sources and community resources is based on HMIS participation and data quality.
- Improving data quality supplies the HMIS Lead Agency with the ability to provide accurate reports when requested by agencies, funders, HUD TA etc.
 - System level data and outcomes of annual monitoring will be available upon request by other committees as necessary to meet the goals of the community
- Works to fulfill the goals of the Strategic Plan to end homelessness

Enforcements:

- The HMIS Lead Agency will monitor each participating agency on an annual basis for compliance to the HMIS Policies and Procedures Manual as well as adherence to the data benchmarks set in the Data Quality Plan. Findings will be reported to the CoC including the Data and HMIS Oversight Committee, the Homelessness Planning Council and MDHA.
- Quarterly data reports by agency and project type will be made available to the CoC; on the <https://www.nashville.gov/departments/office-homeless-services/homeless-management-information-system> website, in Homelessness Planning Council meetings, and the CoC general membership meetings. These reports will reflect each agency's participation and data quality.
- Individuals who do not meet minimum thresholds for data quality will be required to attend remedial training sessions and may risk losing HMIS access.
- Agencies that do not meet the minimum thresholds for data quality may risk losing access to HMIS
- Outcomes will be evaluated in an annual monitoring visit. Results will become increasingly utilized to rank agencies for available and future funding opportunities