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KnoxHMIS Data Quality & Monitoring Plan

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Section 1: Introduction

The Knoxville Homeless Management Information System (KnoxHMIS) is a project funded through Department of Housing and Urban Development (HUD), Knox County Community Development Block Grant, and the City of Knoxville and the University of Tennessee, Social Work Office of Research and Public Service. The KnoxHMIS Project is designated by the Knoxville-Knox County Continuum of Care (CoC) to serve as the Lead HMIS for the Knoxville-Knox County, Tennessee Geographic area.

This document describes the KnoxHMIS data quality plan for Knoxville-Knox County CoC, TN-502. The document includes data quality plan and protocols for ongoing data quality monitoring that meets requirements set forth.

The Data Quality and Monitoring Plan (The Plan) is developed by the KnoxHMIS Data WorkGroup for the Homeless of Knoxville-Knox County (local CoC/KnoxHMIS), in coordination with KnoxHMIS participating agencies and community service providers. This Plan is to be reviewed annually, considering the latest HUD HMIS data standards and locally developed performance plans.

What is Data Quality?

HMIS data quality refers to the extent to which data recorded in KnoxHMIS accurately reflects the same information in the real world. However, to meet KnoxHMIS's goal of presenting accurate and consistent information on homelessness, it is critical that the HMIS system has the best possible representation of reality as it relates to persons experiencing homelessness and the projects that serve them.

Specifically, it is our goal to record the most accurate, consistent, and timely information in order to draw reasonable conclusions about the extent of homelessness and the impact of homeless services. 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. HUD continues to update HMIS data standards, which can be found on the HUD Exchange Website, https://www.hudexchange.info/resource/3824/hmis-data-dictionary/.

What is a Data Quality Plan?

A data quality plan is a community-level document that facilitates the ability of the CoC to achieve statistically valid and reliable data. A data quality plan is generally developed by the Lead HMIS Agency (KnoxHMIS) with input from community stakeholders and is formally adopted by the CoC. In short, a data quality plan sets expectations for both the community and the end users to capture reliable and valid data on persons accessing the homeless assistance system.

The plan:

- Establishes specific data quality benchmarks for timeliness, completeness, accuracy, and consistency;
- Identifies the responsibilities of all parties within the CoC regarding data quality;
- Establishes a timeframe for monitoring data quality on a regular basis.

What is a Data Quality Monitoring Plan?

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

Section 2: Terms You Should Know to Get Started

HMIS Data Elements

Universal Data Elements (UDEs): baseline data collection that is required for all programs reporting data into HMIS.

Program Descriptor Data Elements (PDDE): data elements recorded about each project in the CoC, regardless of whether the project participates in KnoxHMIS. PDDEs are updated at least annually.

Program Specific Data Elements (PSDEs): data provided about the characteristics of clients, the services that are provided, and client outcomes. These data elements must be collected from all clients served by programs that are required to report this information to HUD.

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

HMIS Reports

Annual Performance Report (APR): a reporting tool that HUD uses to track program progress and accomplishments of HUD homeless assistance programs on an annual basis.

Longitudinal Systems Analysis (LSA): HUD's annual report to Congress on the nature and extent of homelessness nationwide.

System Performance Measures (SPM): HUD's annual system-wide performance measures report including system wide data quality analysis.

Universal Data Quality: a KnoxHMIS software report that returns a list of clients enrolled in a particular program with universal data answers and includes flags for missing answers.

Section 3: Data Quality Standards

Data quality standards: a national framework for ensuring that every Continuum of Care can achieve high quality HMIS data.

Data quality standards:

1. Establish administrative requirements, and

2. Set baseline data quality benchmarks for timeliness, completeness, and accuracy.

Data quality standards are clearly defined in the most recent HUD Data Standards. All KnoxHMIS participating programs, regardless of their funding source, are to abide by the expectations detailed in the HUD Data Standards:
https://www.hudexchange.info/resource/3824/hmis-data-dictionary/.

Universal Data Elements

The Universal Data Elements (UDEs) are baseline data collection elements required for all projects reporting data into KnoxHMIS.

In alphabetical order, the UDEs are:

- Approximate Date Homelessness Started
- CoC Code for Client Location
- Date of Birth
- Date of Birth Data Quality
- Dependency Fields for Prior Living Situation
- Disabling Condition
- Ethnicity
- Exit Destination
- Full Name (First, Last)
- Gender
- Housing Move-In Date
- Housing Status (CoC-Specific* required)
- Name Data Quality
- Number of Times the Client Has Been on the Streets/in ES/or SH in the Past Three Years
- Primary Race
- Primary Reason for Homelessness (CoC-Specific* required)
- Project End/Exit Date
- Project Start/Entry Date
- Relationship to Head of Household
- Release of Information
- Residence Prior to Project Start/Entry
- Social Security Data Quality
- Social Security Number (full or partial)
- Total Number of Months homeless on the street/in ES/or SH in the past three years
- Veteran Status
- Zip Code (CoC-Specific* required)

***denotes data elements that are uniquely specific to our continuum of care and required by all partner programs**

Program Specific Data Elements

Partner agencies are expected to maintain current knowledge of and adhere to the data collection requirements identified by the federal partner(s) funding their projects.

Each of the federal partner programs using HMIS has a specific manual describing project set up in HMIS and what data elements are required to be collected. Partner Agencies must review the most current Program-Specific Data Manual for their respective federal partners—as a companion reference to HUD's HMIS Data Dictionary and the HMIS Data Standards Manual—to ensure that all required Program-Specific Data Elements (PSDEs) designated by their funding stream(s) are being collected. Federal partners post these companion manuals on their program websites, and they can also be accessed on HUD Exchange.

Project Descriptor Data Elements

Project Descriptor Data Elements (PDDEs) contain basic information about projects participating in a CoC's HMIS and help ensure that HMIS is the central repository of information about homelessness. The PDDE's are the building blocks of KnoxHMIS.

They enable KnoxHMIS to:

1. Associate client-level records with the various projects that client will enroll in across CoC projects;
2. Clearly define the type of project the client is associated with the entire time they received housing or services;
3. Identify which federal partner programs are providing funding to the project; and
4. Track bed and unit inventory and other information, by project, which is relevant for the Longitudinal Systems Analysis (LSA), System Performance Measures (SPMs), Housing Inventory Counts (HIC), Point In Time (PIT) counts, and bed utilization reporting.

Project descriptor data are generally entered and managed by the HMIS Lead Agency (KnoxHMIS), not a project end user. They are created at initial project setup within KnoxHMIS and shall be reviewed at least once annually and updated as needed.

The required Project Descriptor Data Elements include the following:

1. Organization Identifiers;
2. Project Identifiers (including Project Type, Method for Tracking Emergency Shelter, Housing Type, and Target Population);
3. Continuum of Care Information;
4. Federal Partner Funding Sources (Including Grant Identifiers); and
5. Bed and Unit Inventory Information (Including Operating Dates, Household Type, Bed Type, Availability, Unit/Bed Count).

Section 4: Roles & Responsibilities

You are responsible for data quality. **All KnoxHMIS participating partners and KnoxHMIS staff are responsible for working together towards high levels of data quality**. Define your role and know your responsibilities.

Data Quality Roles and Responsibilities

Title	Role	Responsibilities
HMIS Participating Partners	Intake, case management, support staff, volunteers, and administrative level staff at participating partner agencies that have an individual license to access KnoxHMIS.	• Enter data into KnoxHMIS that is timely, complete, and accurate (All staff levels) • Notify KnoxHMIS of data discrepancies (All staff levels) • Review data quality reports each month and throughout the year to make internal agency/program action plans that address data quality issues (Administrator Level) • Notify KnoxHMIS of training needs for new staff (Administrator Level) • Request additional—as needed—review trainings (Administrator Level)
HMIS Lead Agency Staff	Staff members of Lead HMIS (KnoxHMIS)	• Build data quality reports and make them available to the CoC and KnoxHMIS Participating Partners • Send a minimum of monthly data quality reports to KnoxHMIS Participating Partners • Conduct agency site visits annually for sampling and review of overall data quality status • Coordinate with Participating Partners, CoC Lead, and CoC Governance to prepare and submit Federal Reports (i.e., LSA, SPMs, HIC, PIT) • Provide ongoing maintenance of existing reports, which includes changes in reports as updates are made to the system • Notify agencies of updated HMIS data standards and required trainings • Ensure that all end-users are properly trained on KnoxHMIS system use and data quality review
CoC Lead	Entity designated by CoC Governance as the “CoC Lead” (City of Knoxville	• Ensure that KnoxHMIS is administered in compliance with requirements prescribed by HUD

Title	Role	Responsibilities
	Community Development, Office on Homelessness)	• Ensure consistent participation in KnoxHMIS of all HUD CoC recipients and subrecipients • Review and approve KnoxHMIS privacy, security, and data quality plans • Review system-wide data quality reports annually (Housing Inventory Count, Point in Time Count, Bed/Unit Utilization, HDX Competition, SPMs, LSA, Stella) • Work with KnoxHMIS staff to enforce unresolved agency data quality corrective action plans • Assemble and facilitate annual review of CoC data quality through the CoC Rank and Review Panel • Monitor CoC benchmarks to ensure that the CoC is on target to meet HUD benchmarks
CoC Governance	Knoxville-Knox County Homeless Coalition	• Set CoC benchmarks annually • Review system-wide data quality reports annually (Housing Inventory Count, Point in Time Count, Bed/Unit Utilization, HDX Competition, SPMs, LSA, Stella)
CoC Governance Data Workgroup Committee	CoC Governance members that volunteer to participate on the “KnoxHMIS Data WorkGroup”	• Identify KnoxHMIS data reports to determine trends, gaps, and best practice in service delivery • Review and recommend the adoption of KnoxHMIS data quality plan annually • Maintain an ongoing relationship with the KnoxHMIS Administrator to identify training needs for the continuum based on findings from data quality reports • Review system-wide data quality reports quarterly (Bed/Unit Utilization, SPMs, LSA, Stella) and work with KnoxHMIS staff and providers to correct data that does not comply with community-wide standards as established in the Data Quality Plan

Section 5: Data Quality Plan

1. Training

Standardized training is provided by KnoxHMIS and is vital to attaining quality data entry. Software training is performed using a standardized curriculum, presented in a consistent manner by the KnoxHMIS team.

a) User training will cover how to collect data; how to pass data from front-line staff to data entry staff; how to log questions about the data and how to resolve those questions; and how to give feedback and expectations for participating in user meetings. Some of these issues may be project specific, so they may need to be addressed by custom or specialized training rather than as part of the system-wide software training.

b) All users must attend a minimum of one training session annually.

c) Training includes: New User training, KnoxHMIS Security & Privacy Training, Management Training, Report Training, and Refresher Training (groups or one-on-one sessions).

d) In addition, KnoxHMIS staff is available to provide technical assistance to users who need help correcting data entry errors.

e) **Training should be facilitated by KnoxHMIS staff and not agency staff in order to ensure consistent and current standards.**

f) Training can be scheduled by e-mailing hmissupport@utk.edu.

2. Policies and Procedures

All staff who use KnoxHMIS must abide by the Policies and Procedures for Data Quality, which are detailed in the most recent KnoxHMIS Policies and Procedures Manual: https://knoxhmis.sworpswebapp.sworps.utk.edu/wp-content/uploads/sites/16/2019/07/KnoxHMIS-Policies-and-Procedures-Manual-Version-6-2019.pdf.

Specific KnoxHMIS Policies & Procedures for Data Quality
Policy 10.1, Accuracy of Data
Policy 10.1.1, Acceptable Sources of Data
Policy 10.1.2, Consistency of Data
Policy 10.1.3, Avoiding Discrepancies in Client Data
Policy 10.2, Completeness of Data
Policy 10.2.1, HUD Mandated Data Quality Standards
Policy 10.2.2, Blank Client Data
Policy 10.2.3, Data Quality Fields

Specific KnoxHMIS Policies & Procedures for Data Quality
Policy 10.3, Evaluation of Data Quality
Policy 10.3.1, Removal of Duplicate Client Records
Policy 10.3.2, Capitalization Guidelines for Client Data
Policy 10.4, Timeliness
Policy 10.4.1, Entering Real-time Client Data
Policy 10.4.2, Backdating Client Data
Policy 10.5, Collaboration on Data Between KnoxHMIS Staff and Partner Agencies
Policy 10.5.1, Responding to Staff Inquiries
Policy 10.5.2, Correcting Data Errors
Policy 10.6, Ensuring Accuracy of Reporting
Policy 10.6.1, Provision of Customized Reports

3. Data Consistency

Every project must enter data on clients in the same way over time, regardless of the staff person who is recording the data in KnoxHMIS.

Data consistency will ensure that data is understood, collected, and entered consistently across all projects in KnoxHMIS. Consistency directly affects the accuracy of data; if an end user collects all the data, but they do not collect it in a consistent manner, then the data may not be accurate. All data in KnoxHMIS should be collected and entered in a common and consistent manner across all projects. To that end, all intake and data entry workers will complete an initial training before accessing the live KnoxHMIS system.

4. Timeliness of Data

Timeliness answers the question: *"Is the client information current?"*

To be most useful for reporting, KnoxHMIS should include the most current information on the clients served by participating homeless projects. To ensure the most up to date data, information should be entered as soon as it is collected. Live data entry is highly recommended.

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).

Therefore, it should be understood that:

a) Client information is entered within 24 hours of entry/intake into a project, and

b) Client information is updated regularly as information changes and at exit or annual assessment — per requirements relative to each universal and project specific data elements.

5. Data Completeness

For accurate reporting purposes by the KnoxHMIS Project, data needs to be as complete as possible, and should contain all required information on all clients served in a project during a specified time period.

The goal of achieving HUD-defined, required KnoxHMIS coverage and participation by all local projects is essential for ensuring that the records are representative of all the clients served by these projects. All data entered into KnoxHMIS shall be complete. Partially complete or missing data (e.g., missing digit(s) in a Social Security Number, missing the year of birth, missing information on disability or veteran status) can negatively affect the ability to provide comprehensive care to clients. Missing data could mean the client does not receive needed services that could help them become permanently housed and end their episode of homelessness. The CoC's goal is to collect 100% of all data elements. However, the CoC recognizes that this may not be possible in all cases. Therefore, the CoC has established an acceptable range of null/missing and unknown/don't know/refused responses, depending on the data element and the type of project entering data (see Appendix A).

6. Data Accuracy

Information entered into KnoxHMIS needs to be valid. It needs to accurately represent information on the people that enter any of the homeless service projects contributing data to KnoxHMIS.

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.

Therefore, to ensure the most up-to-date and accurate data:

a) Data errors should be corrected on a monthly basis;

b) Recording inaccurate information is strictly prohibited, unless in cases when a client refuses to provide correct personal information; and

c) Staff entering information into KnoxHMIS must enter information as stated by the client.

7. Agency Self Review

Agencies should self-review their data quality without being prompted by KnoxHMIS staff. Any KnoxHMIS participating partner can be proactive and request data quality reports to review and correct data quality areas. Reports can be requested by e-mailing hmissupport@utk.edu.

Common KnoxHMIS errors and a KnoxHMIS Data Quality Monitoring, Agency Self Review tool is offered in Appendix B of this document.

Section 6: Monitoring Plan

Reporting to KnoxHMIS Participating Partners

KnoxHMIS Staff will send data quality monitoring reports to the designated partner agency contact(s). Reports may include recommendations for corrective actions. If the agency fails to make corrections, or if there are repeated or egregious data quality errors, KnoxHMIS Staff will notify partner agency executive administration and the CoC Lead with data quality details and recommendations for further action. The "KnoxHMIS Annual Agency Site Visit Checklist" is listed in Appendix C of this document.

HMIS data quality certification is now part of several funding applications, including HUD, VA SSVF, FYSBE RHY, SAMHSA PATH, and ESG programs. Low HMIS data quality scores may result in denial of this and other funding.

Report Monitoring Frequency

Report Type	Frequency	Reporting Responsibility
Universal Data Quality Elements (UDEs)	Monthly	All KnoxHMIS Partners
Program Specific Data Elements (PSDEs)	Monthly	All KnoxHMIS Partners
Data Timeliness	Monthly	All KnoxHMIS Partners
SSVF Export	Monthly	Veterans Administration SSVF Sub-Grantees Only
Community Dashboard on Homelessness	Quarterly	All KnoxHMIS Partners
Bed Utilization Rate	Bi-Annual*	All Housing Programs in KnoxHMIS
Project Descriptor Data Elements (PDDEs)	Bi-Annual*	All KnoxHMIS Partners
Longitudinal Systems Analysis (LSA)	Bi-Annual*	All KnoxHMIS Partners
System Performance Measures (SPMs)	Bi-Annual*	All KnoxHMIS Partners
RHYMIS Export	Bi-Annual*	Runaway Homeless Youth (RHY) Sub-Grantees Only

Report Type	Frequency	Reporting Responsibility
HUD Annual Performance Review	Annual**	HUD Continuum of Care Sub-Grantees Only
ESG CAPER	Annual**	City of Knoxville Homeless Grantee & Emergency Solutions Grant (ESG) Sub-Grantees Only
PATH Export	Annual**	Substance Abuse Mental Health and Substance Use Association (SAMHSA) Sub-Grantees Only
(*) Bi-Annual in October and June (**) Annual as mandated by funding entity		

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, HMIS Lead Agency, CoC, HUD, other Federal and local government agencies).

Monitoring Methods

KnoxHMIS will monitor agencies annually at minimum, which may include desk monitoring and/or on-site monitoring. **Desk monitoring** means that KnoxHMIS staff will review compliance and agency data timeliness, completeness, and accuracy by reviewing agency/program level data input into KnoxHMIS. **On-site Monitoring** means that KnoxHMIS will schedule an in-person visit at an agency/program to review facility, computer workstations, paper-based files, and/or data input into KnoxHMIS to review compliance and agency data timeliness, completeness, and accuracy.

Data Consistency Checks

KnoxHMIS staff will check data accuracy and consistency by running project pre-enrollment, co-enrollment, or post-enrollment data analysis to ensure that the data “flows” in a consistent and accurate manner. For example, the following instances will be flagged and reported as errors:

- Mismatch between exit/entry data in subsequent enrollment cases,
- Co-enrollment or overlapping enrollment in the same project type,
- Conflicting assessments, and
- Household composition error.

Sampling

Unless a more accurate method is available (e.g., client interview, third party verification), a sampling of client source documentation can be performed to measure the data accuracy rate. KnoxHMIS support staff will

request a number of client files or intake forms during the annual quality improvement site visit and compare the source information to that entered in KnoxHMIS. Only those parts of the client file that contain the required information will be reviewed, excluding any non-relevant, personal, or agency specific information.

Monitoring Incentives and Enforcement

To ensure that KnoxHMIS partner agencies meet the minimum data entry standards set forth herein, a copy of this Data Quality Plan will be posted to the KnoxHMIS website. KnoxHMIS will provide data quality reports to KnoxHMIS partner agencies in accordance with the monitoring schedule described in the Monitoring section to facilitate compliance with the minimum data entry standards.

Data quality thresholds and accomplishments will be reviewed at a minimum annually and considered for scoring as part of the HUD CoC Notice of Funding Availability (NOFA) Application Ranking and Review Process. Additionally, agencies that meet the data quality benchmarks will be periodically recognized by the CoC at the Knoxville-Knox County Coalition for the Homeless general meetings.

KnoxHMIS partner agencies that do not adhere to the minimum data entry standards set forth herein will be notified of their errors and provided with specific information regarding the nature of the inaccuracies and methods by which to correct them.

- KnoxHMIS partner agencies will be given five business days to correct any identified data quality issues as detailed in the KnoxHMIS Policies and Procedures.
- Training will be offered to agencies that remain noncompliant with the minimum data entry standards.
- KnoxHMIS partner agencies continuing in default may have access to KnoxHMIS suspended until such time as agencies demonstrate that compliance with minimum data entry standards can be reached.
- Data quality is considered in Annual HUD Collaborative Application Ranking and will be reported to the CoC Lead for that purpose.

Section 7: Benchmarks

Data Quality Benchmarks

Quantitative measures used to assess the validity and reliability of the data. The goal of the benchmarks is to attain consistent data. Recommended thresholds and benchmarks are listed in Appendix A of this document.

The benchmarks in the following areas have been determined:

Timeliness
Is the client information, including intake data, program entry dates, services provided, and program exit dates entered into KnoxHMIS within a reasonable period of time?

Benchmark
Client information is entered within 24 hours of intake.

Method
Staff can enter live into KnoxHMIS when working with the client or within 24 hours of intake. Data that is not entered within 24 should be entered in backdate to the date and time of enrollment/service. It should be noted that backdated information is often considered in ranking and review by funding entities.

Completeness
Are all the clients receiving services being entered into KnoxHMIS? Are all the appropriate data elements being collected and entered into KnoxHMIS?

Benchmark
All programs using KnoxHMIS shall enter data on 100 percent of the clients they serve.

Method
Missing information does not exceed 5 percent for the HUD Universal and Program-Specific Data Elements for all clients served.

Accuracy
Does KnoxHMIS data accurately and consistently match information recorded on paper intake forms and in client files? Are KnoxHMIS data elements being collected in a consistent manner?

Benchmark
95 percent of data entered into KnoxHMIS must reflect what clients are reporting.

Method

KnoxHMIS users will record the full, legal name of the client (first, middle, last) into the system. Do not use nicknames or aliases.

Utilization

Does the agency have a current bed list that can readily demonstrate vacancy and availability? One of the primary features of KnoxHMIS is its ability to record the number of client stays (i.e., bed nights) at a homeless residential facility. A low utilization rate could reflect low occupancy, but it could also indicate that data is not being entered in KnoxHMIS for every client served. A high utilization rate could reflect that the project is over capacity, but it could also indicate that clients have not been properly discharged from the project in KnoxHMIS.

Benchmark

85% minimum bed utilization is required for all housing programs; if 85% is not met, programs will be asked to give detailed reasons for vacancies.

Method

A project's bed/unit utilization rate is the number of beds/units occupied as a percentage of the entire bed inventory. When a client is admitted into a residential project (emergency, transitional, or permanent supportive housing), s/he should also be entered into the bed list in addition to program entry/enrollment. The client remains in the bed list until s/he is discharged from the project. When the client has exited the project, s/he is also discharged from the bed list in KnoxHMIS.

Appendix A, KnoxHMIS Data Element Quality Thresholds

Universal Data Element	Target %	TH, PSH, HUD SSO, RRH, HP		ES, Non-HUD SSO		Outreach	
		Missing/Data Not Collected	Client Doesn't Knox/Refused	Missing/Data Not Collected	Client Doesn't Knox/Refused	Missing/Data Not Collected	Client Doesn't Knox/Refused
Name	100%	0%	0%	0%	0%	0%	0%
Social Security Number	100%	0%	0%	0%	5%	0%	5%
Date of Birth	100%	0%	0%	0%	5%	0%	5%
Race	100%	0%	0%	0%	5%	0%	5%
Ethnicity	100%	0%	0%	0%	5%	0%	5%
Gender	100%	0%	0%	0%	0%	0%	0%
Veteran Status	100%	0%	0%	0%	5%	0%	5%
Disabling Condition	100%	0%	0%	0%	5%	0%	5%
Residence Prior to Project Entry	100%	0%	0%	0%	0%	0%	0%
Project Entry Date	100%	0%	0%	0%	0%	0%	0%
Project Exit Date	100%	0%	0%	0%	0%	0%	0%
Destination	100%	5%	5%	5%	5%	15%	5%
Relationship to Head of Household	100%	0%	0%	0%	0%	0%	0%
Client Location	100%	0%	0%	0%	0%	0%	0%
Length of Time on Street or in an Emergency Shelter	100%	0%	0%	0%	0%	0%	0%

KnoxHMIS Project Descriptor Data Element Quality Thresholds

Universal Data Element	Target %	Acceptable Null/Missing %
2.1 Organization Identifiers	100%	0%
2.2 Project Identifiers	100%	0%
2.3 Continuum of Care Code	100%	0%
2.4 Project Type	100%	0%
2.5 Method for Tracking Emergency Shelter Utilization	100%	0%
2.6 Federal Partner Funding Sources	100%	0%
2.7 Bed and Unit Inventory Information	100%	0%
2.8 Site Information – Optional	100%	0%
2.9 Target Population	100%	0%

KnoxHMIS Bed Utilization Rate Thresholds

Housing Program Type	Target %
Emergency Shelter	100%
Transitional Housing	100%
Permanent Supportive Housing	100%

Universal Data Element	Target %	TH, PSH, HUD SSO, RRH, HP		ES, Non-HUD SSO		Outreach	
		Missing/Data Not Collected	Client Doesn't Knox/Refused	Missing/Data Not Collected	Client Doesn't Knox/Refused	Missing/Data Not Collected	Client Doesn't Knox/Refused
4.1 Housing Status	100%	0%	0%	0%	0%	0%	0%
4.2 Income and Sources	100%	0%	0%	0%	0%	0%	0%
4.3 Non-Cash Benefits	100%	0%	0%	0%	0%	0%	0%
4.4 Health Insurance	100%	0%	0%	0%	0%	0%	0%
4.5 Physical Disability	100%	0%	0%	0%	0%	0%	0%
4.6 Developmental Disability	100%	0%	0%	0%	0%	0%	0%
4.7 Chronic Health Condition	100%	0%	0%	0%	0%	0%	0%
4.8 HIV/AIDS	100%	0%	0%	0%	0%	0%	0%
4.9 Mental Health Problem	100%	0%	0%	0%	0%	0%	0%
4.10 Substance Abuse	100%	0%	0%	0%	0%	0%	0%
4.11 Domestic Violence	100%	0%	0%	0%	0%	0%	0%
4.12 Contact	100%					0%	0%

Appendix B, Common KnoxHMIS Errors

Aliases

Participating agencies will make their best effort to record accurate data. Only when a client refuses to provide his/her/their or a dependent's personal information and the project funder does not prohibit it, it is permissible to enter client data under a KnoxHMIS program alias. To do so, the agency must follow these steps:

1. DO NOT enter a client as "Anonymous." All anonymous clients are deleted from KnoxHMIS.
2. Instead, create the client record, including any family members, using the first initials of their first name and middle name. Their last name would become the program name. For example, John W Smith seeks services at Helpful Housing. He could be entered in KnoxHMIS as First Name: JW, Last name: HelpfulHousing.
3. Set the date of birth to the month of their birth, with the first day of the month (not their actual birth date), and the year of their birth. For example, May 19, 1978 would be listed as 5/01/1978. This helps us keep close to the persons age without inputting their identifiable birthdate.
    a. Answer the "Name Data Quality" as "partial, street name, or code name reported."
4. Skip any other identifiable elements or answer them as "refused."
5. Make a notation of the alias in the client file and include the corresponding KnoxHMIS Client ID number.

If a client's record already exists in KnoxHMIS, the agency must not create a new alias record. Client records entered under aliases may affect agency's overall data completeness and accuracy rates. The agency is responsible for any duplication of services that results from hiding the actual name under an alias.

Client Duplicates

If an end user notices a client listed in KnoxHMIS with duplicate information, please contact KnoxHMIS support and request that KnoxHMIS staff merge the duplicate client.

To do so:

- E-mail hmissupport@utk.edu.
- Indicate the client #s that need to be merged.

Date of Birth (DOB)

- "Date of Birth Data Quality" must be answered.
- DOB should not be earlier than current date.

- DOB should not be earlier than program entry date.
- DOB should not be later than 90 years from present.
- A minor (i.e., person under age 18) should not be input into an adult shelter (i.e., shelter for persons 18 years and older) and vice versa.

Disabling Condition

- Those receiving SSDI for themselves should be marked as having a disability and have their disability type recorded.
- Those indicating substance abuse, mental health, physical disability, developmental disability, chronic health condition, or HIV/AIDS should be marked as having disability and have their "HUD Verification" check-mark visible in the software sub-assessment.

Dual Enrollment in Residential Projects

- Clients can be enrolled in multiple projects at a time; however, clients should never be enrolled in multiple residential projects at the same time (e.g., ES, TH, PSH, RRH, TH-RRH).

Gender

- Men should not be listed as "pregnant."
- Persons who identify specifically as "Male" would not be input into a woman's shelter or vice versa a person who identifies specifically as "female" input into a men's shelter. Persons who identify as "Transgender Female" may be input into a women's shelter and vice versa persons who identify as "Transgender Male" may be input into a men's shelter.

Household ID

- No single person should be input in family shelter.
- No family should be input in individual shelter.
- There should be one active head of household per household association.
- In addition to the "Households tab" being completed in the KnoxHMIS software, the "Relationship to Head of Household" data element must be completed for each individual household member in the Project Start Assessment.

Housing Move-In Date

- "Housing Move-In Date" must be between the Project Start Date and Project Exit Date.
- It may be the same date as Project Start if the client moves into housing on the date they were accepted into the project.
- There can be no more than one "Housing Move-In Date" per enrollment.

- An old “Housing Move-In Date” from an old project will often populate in an assessment; if old project “Housing move-in date” is not removed from the current, active project start date assessment then negative days to housing will appear in data quality reports.

Name

- First and Last Name should not be the same.
- Suffixes should be properly formatted (e.g., Jr. for “Junior,” Sr. for “Senior”).
- No numerals should be in name fields (except Suffix).
- Suffixes should not be input in last name field.
- First name should not be input as “Husband,” ”Wife,” ”Woman,” ”Man,” ”Baby,” ”Girl,” ”Boy” or similar.
- “Name Data Quality” must be answered.

Project Start Date/Project Exit Date

- All clients should have a Project Start Date.
- The Project Start Date should be later than birth date.
- Project Start Date should be prior to the Exit date.
- Project Start and exit dates should not be the same in residential shelter.
- The length of program enrollment outliers is reasonable considering program type. Persons enrolled in support services only, emergency shelter, or rapid-rehousing should not typically have a duration served more than 365 days.
- If a project’s data quality reports reflect more clients than expected, this is typically a situation where the agency staff have not exited clients.
- If a project’s data quality reports reflect less clients than expected, this is typically a situation where the agency staff have not input client data into KnoxHMIS.

Residence Prior to Program Entry

- The client’s self-report should not be contradicted by other simultaneous/open/active project enrollments in KnoxHMIS; in this case, KnoxHMIS partners should coordinate to clean up the respective client records to reflect the most accurate data.

Social Security Number (SSN)

- SSN has all nine numbers and no dashes.
- “Social Security Data Quality” must be answered.
- There should be no zeroing out of SSNs.
- All SSN digits should not be the same (e.g., 000000000, 55555555555, 9999999999).

- All SSN digits should not be sequential (e.g.,123456789).
- If an agency prohibits input of a complete social security number, then the last four digits of the SSN should be recorded and “Social Security Data Quality” should be answered as “Approximate or Partial SSN reported.”
- An Individual Taxpayer Identification Numbers (ITIN) cannot be entered in lieu of SSN. The SSN should be left blank and “Social Security Data Quality” should be listed as “Client Doesn’t Know.”

Veteran Status

- A client under the age of 18 is not a veteran.
- Only veterans should be input into veteran-specific or veteran-only residential programs.
- Those receiving veteran’s pension should be marked as veteran.

Zip Code of Last Permanent Address/Quality Code

- Zip code is complete if quality code marked as complete.
- Zip code has five or nine characters.
- Zip code is valid.
- Zip code has only numbers.

Appendix C, KnoxHMIS Data Quality Monitoring, Agency Self Review Tool

Purpose: Agencies can use this tool to manage and monitor their efforts to ensure high data quality levels. This tool is intended for persons designated to lead data quality for their agency or team (e.g., program managers, team leaders, agency grants management).

Blanks were intentionally included in this form in the "Date & Duration to Prepare Review" and "Benchmark" columns so agencies can modify the form to fit their needs.

Additional resources to help manage data quality can be found on the HUD Exchange, HMIS Guides and Tools: https://www.hudexchange.info/programs/hmis/hmis-guides/#hmis-data-quality.

Action Item	Associated Report(s) Impact	Lead Staff Assigned to Review	Frequency of Review	Date & Duration to Prepare to Review	Follow-up	Benchmark ("__" are intentional so staff will stay current on Policy & Procedure)	Results
Example Data Element	*This column will list additional reports that are impacted by the data element in the 'Action Item' column such as APR, LSA, SPMs, HIC, PIT, specific funding source, and/or internal managerial report.*	*e.g., Staff Name and Title*	*e.g., Monthly, Quarterly, Annually, or Bi-Annual*	*e.g., First business day of month/30 minutes*	*In this column relevant notes would be added such as which data elements need to be further addressed? Which staff need additional assistance to improve data quality?*	*e.g., ____% improvement, ____days to respond (blanks "___" are intentional so staff will stay current on Benchmarks & related Policy and Procedure)*	*This column can list the basic findings and/or whether the benchmark was met or unmet.*
Program Project Descriptor Elements	APR, LSA, SPMs, HIC		Annually	Annually in January or end of grant(s) fiscal year	Notify KnoxHMIS Program Manager of any changes to beds/units, new projects, closing projects, and grant identification numbers.	100% complete and accurate	
HUD Universal Data Elements	APR, LSA, SPMs, HIC, PIT, HUD Collaborative Application Ranking, and Community Dashboard		Monthly	First business day of	Communicate to all program staff at team meetings, set internal deadline to review progress on data clean-up,	Clean up data within 5 business days as detailed in HMIS policy ____; specific	

Action Item	Associated Report(s) Impact	Lead Staff Assigned to Review	Frequency of Review	Date & Duration to Prepare to Review	Follow-up	Benchmark ("__" are intentional so staff will stay current on Policy & Procedure)	Results
				month/30 minutes	and communicate any additional training needs to KnoxHMIS.	benchmarks are detailed in Appendix A of KnoxHMIS Data Quality Plan.	
Program Specific Data Elements	APR, ESG CAPER, PATH, RHY, SSVF, and HUD Collaborative Application Ranking		Monthly	First business day of month/30 minutes	Communicate to all program staff at team meetings, set internal deadline to review progress on data clean-up, and communicate any additional training needs to KnoxHMIS	Clean up data within 5 business days as detailed in KnoxHMIS policy ____; specific benchmarks are detailed in Appendix A of KnoxHMIS Data Quality Plan.	
Data Timeliness	HUD Collaborative Application Ranking		Monthly	First business day of month/30 minutes	Communicate to all program staff at team meetings, set internal deadline to review progress on data clean-up, and communicate any additional training needs to KnoxHMIS.	Goal is within 24 hours as detailed in KnoxHMIS policy___; can work each month to improve by ____hours or ____ days.	
Housing Move In Date	APR, LSA, SPMs, PIT, HUD Collaborative Application Ranking and Community Dashboard		Monthly	First business day of month/one hour	Review null and negative days to housing to ensure that housing move-in date is correct for all clients that have exited.	_____ days from program enrollment to move in OR ____% improvement by ____ date.	
Relationship to Head of Household	APR, LSA, SPMs		Monthly		Review null relationship to head of household to ensure that all members associated with the program enrollment/entry are complete and accurate.	Clean up data within 5 business days as detailed in KnoxHMIS policy ___; specific benchmarks are detailed in Appendix A	

Action Item	Associated Report(s) Impact	Lead Staff Assigned to Review	Frequency of Review	Date & Duration to Prepare to Review	Follow-up	Benchmark ("__" are intentional so staff will stay current on Policy & Procedure)	Results
						of KnoxHMIS Data Quality Plan.	
Exit Destination	APR, LSA, SPMs		Monthly		Review all exits to make sure that unknown locations are within benchmarks AND that any exit destinations that are later known are updated in the client's KnoxHMIS record. If a client disappears and you later learn of their whereabouts, you need to update the client record in KnoxHMIS for your program.	Clean up data within 5 business days as detailed in KnoxHMIS policy ___; specific benchmarks are detailed in Appendix A of KnoxHMIS Data Quality Plan.	
Overlap	APR, LSA, SPMs		Quarterly		Look to see if your program entry/enrollment overlaps with another program of the same type to eliminate duplication and bad data.	Clean up data within 5 business days as detailed in KnoxHMIS policy ___; specific benchmarks are detailed in Appendix A of KnoxHMIS Data Quality Plan.	
Income Verification	APR, LSA, SPMs		Quarterly & Annually	10th business day of the month/1.5 hours	Annual review PER CLIENT documented in KnoxHMIS; some funders require additional proof of income to be on file with the agency program. Review all active enrolled client income in programs (required for HUD funded	0% error rate on HUD APR.	

Action Item	Associated Report(s) Impact	Lead Staff Assigned to Review	Frequency of Review	Date & Duration to Prepare to Review	Follow-up	Benchmark ("__" are intentional so staff will stay current on Policy & Procedure)	Results
					programs) to ensure client income is accurate and updated; income should reflect gain, loss, and/or maintenance.		
Open Exits	APR, LSA, SPMs		As needed and at the end of the fiscal year		Annual review at end of fiscal year. Review and close any clients that are no longer active in your program; be sure to backdate to accurately reflect the client's enrollment in your program.	0% inactive enrollments at the end of the fiscal year	
User Last Log-In	Internal Managerial Report		As needed & monthly	15 minutes	Managerial tool to see if or when staff are keeping up with data entry and accuracy.	Users who do not log-in within 30 days can lose their license; see HMIS Policy __	
Duplicate Client Merge	APR, LSA, SPMs, ESG CAPER, PATH, RHY, SSVF	KnoxHMIS Support	As needed & monthly	First business day of the month/30 minutes	Communicate duplicates to KnoxHMIS help-desk support. KnoxHMIS will notify each associated agency of the client merge.	0% duplicate clients within program	
Expired Release of Information	Internal Managerial Report		As needed & monthly		Ask clients to sign updated release of information for those that have expired in your program(s).	100% Signed Release of Information signed by client (unless in case of RHY where visibility is completely locked). 100% not expired for active enrolled clients.	

Appendix D, KnoxHMIS Site Visit Checklist

KnoxHMIS Annual Agency Site Visit Checklist

Agency/Program(s):_____

Agency Staff in Attendance:_____

	Item	Action	Response
1	Agency Agreement	The Agency Agreement is on file with KnoxHMIS and Agency and current to date	☐Met ☐Unmet
2	Business Agreement	The Business Associates Agreement is on file with KnoxHMIS and Agency and current to date	☐Met ☐Unmet
3	Contracts Receivable	Any contracts receivables are paid up to date and on file with KnoxHMIS and Agency and current to date	☐Met ☐Unmet
4	KnoxHMIS End User Agreement	All agency end user agreements are on file with KnoxHMIS or will be signed at agency site visit	☐Met ☐Unmet
5	KnoxHMIS Policy and Procedures Signature Page	Policy and procedure signature pages are on file with KnoxHMIS for all agency users, or will be signed at agency site visit	☐Met ☐Unmet
6	Notice to Clients of Uses and Disclosures	Posted in agency main lobby and program intake areas	☐Met ☐Unmet
7	KnoxHMIS Partners Poster	Posted in agency main lobby and program intake areas	☐Met ☐Unmet
8	Client Release of Information	Reviewed a sample of client release of information on file with agency	☐Met ☐Unmet
9	Privacy and Security Compliance	Use KnoxHMIS HIPAA Compliance Checklist to ensure computer, client record, and password security	☐Met ☐Unmet
10	Agency Data Quality & Completeness	Review of agency program-level data quality reports to discuss areas of data completeness, error, and/or future training needs	☐Met ☐Unmet
11	Agency Data Accuracy	Review of agency program-level data accuracy where client's digital KnoxHMIS record is compared to the record on file with agency (e.g. income sources, disability status, intake form information, etc.)	☐Met ☐Unmet
12	Bed-list Review (ES, TH, PH only)	Review units/beds listed in KnoxHMIS and make any notes on changes to the bed/unit #, dates when beds, target populations available.	☐Met ☐Unmet

Follow-Up/Recommendation Notes:

KnoxHMIS Staff & Date Conducted