



Rhode Island Coalition for the Homeless

RI HMIS DATA QUALITY PLAN

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Rhode Island HMIS Data Quality Plan

What is Data Quality?

Data quality (DQ) is a measurement of the reliability and validity of client-level data collected into the Homeless Management Information System (HMIS). Several factors influence good data quality: accurate, complete, consistent and timely data entry. Adhering to a strong data quality plan will ensure better outcome reporting, easier submissions of grant performance reports such as the HUD Annual Performance Report (APR), and supports the submission of the Longitudinal System Analysis (LSA) and System Performance Measures Report (SPMs). With good data quality, the CoC can “tell the story” of the population experiencing homelessness. Any reports generated from a system are only as good as the data that is entered into the system; establishing benchmarks for data quality and implementing ongoing monitoring protocols is critical to ensuring communities have valid and reliable data to make sound informed decisions.

What is a Data Quality Plan?

A data quality (DQ) plan is a community-level document that helps guide the Continuum of Care (CoC) facilitates the ability of the CoC to achieve statistically valid and reliable data. A DQ plan is developed by the HMIS Lead Agency, with input from community stakeholders. The DQ plan should (at minimum): identify the responsibilities of all parties within the CoC that affect data quality, establish specific data quality benchmarks of accuracy, completeness and timeliness, describe the procedures that the HMIS Lead Agency will take to implement and monitor progress to meet data quality benchmarks, and establish a timeframe for implementing the plan to monitor the quality of the data on a regular basis. 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 program.

Why do we need a DQ Plan?

Data quality is critical to the work of ending homelessness in Rhode Island. Along with the mandate that federally funded projects must enter data into HMIS, the database allows for much more than just meeting a requirement. Good data quality helps agencies, the CoC, The Coordinated Entry System (CES), and the State report on performance outcomes, allows for case managers to have all of the information necessary to help their clients, and provides a way to view system performance overall. When data quality is not accurate, complete and timely, it affects the entire system. It can impact clients who may have to spend time correcting inaccurate information with a case manager. It can negatively impact overall data quality scores for the CoC which will affect competitiveness in the HUD Notice of Funding Availability (NOFA) competitions. It could also impact an agency’s ability to continue receiving funds from federal sources if consistently poor data goes to HUD in required reports. Data is a driving force in being able to end homelessness and having a strong data quality plan can help the entire state improve.

It is understood that collecting data in the human service field can be challenging; clients presenting for services are often distraught, scared, or confused. It may be difficult to obtain accurate information from them, but case managers and other working with these clients need to understand the importance of obtaining accurate information from all clients they serve. Without good information, it is difficult to assess a client’s needs and determine the appropriate level of services for each homeless individual or family.

A good data quality plan helps case managers better understand the importance of working with their clients to gather accurate, complete and timely data. Looking at a particular data element and assessing how many client records have blank or missing data helps analyze how reliable the data is. The more clients with missing or incomplete information, the less valid the data is to make generalizations about the population served.

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Roles & Responsibilities

Participating Agencies and HMIS End Users

Every participating agency and each HMIS end user is at the front line of good data quality. Fostering a culture that uses data to make programmatic decisions will also encourage staff to enter data accurately, completely, and timely. Each agency and individual end-user have responsibilities that include (but are not limited to): setting the tone for the agency's commitment to data quality, monitor projects' data quality, prepare for Annual Performance Report requirements, and resolve any data quality findings as quickly as possible.

- Project staff should run the canned "CoC APR" for their project(s) to quickly identify any necessary corrections.
- Agency HMIS Administrators should run the "HUD Data Quality Framework Report" on all of their HMIS projects to see the agency's data quality.
 - The Agency HMIS Administrators should run the report as often as possible to identify issues before they become problematic, with the recommendation that the report is ran and reviewed at least once per month. This includes doing client file spot checks to ensure the data in a client file matches what was entered into HMIS.
 - When agencies determine staff is struggling to maintain good data quality, they should strongly consider sending the staff person(s) for additional training.

Rhode Island Continuum of Care

The Rhode Island Continuum of Care (RICOc) should regularly review the "HUD Data Quality Framework Report" report for the CoC's projects. Because data quality is critical to the operation of the entire system, all projects in the CoC should be included in the reporting, not just HUD Funded projects. HUD ties data quality to overall CoC competitiveness for funding. The CoC Leadership has responsibilities that include (but are not limited to): reviewing and approving the data quality plan, setting data quality benchmarks, reviewing data quality reports, determining the expectations for monitoring and compliance, work with providers and the HMIS lead to develop and implement solutions for improving data quality and consider data quality in the rating and ranking process for funding decisions. In order to maintain and increase their HUD funding, CoC's are responsible for ensuring accurate and timely reporting of all required reports including (but not limited to) the Point-in-Time (PIT) Count, the Housing Inventory Count (HIC), the Annual Performance Report (APR), the System Performance Measures (SysPM) and the Longitudinal System Analysis (LSA) (formerly known as the 'AHAR,' or the Annual Homeless Assessment Reports).

HMIS Lead

The HMIS Lead ensures HMIS is operational and able to meet the specifications outlined by HUD and other federal partners. Additionally, the HMIS lead ensures that all required reports are available and functional in the system. In an effort to help make the Data Quality reporting more user friendly, the HMIS Lead will also develop and implement a data dashboard that will be updated quarterly. The HMIS lead has responsibilities that include (but are not limited to): working with the HMIS vendor to ensure access to data quality reports, understand the data quality elements to be submitted with the System Performance Measures and Annual Performance Report, systematically monitor data, and communicate regularly with the CoC and individual providers to ensure stakeholders are informed and have the resources to address data quality concerns.

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Data Quality Benchmarks and Goals

5 main components of the RI-HMIS Data Quality Plan:

1. Accuracy and Consistency
2. Completeness
3. Timeliness
4. Monitoring
5. Incentives and Compliance

1. Component 1.1: Accuracy

i. Rationale:

To ensure that the data that is collected and entered accurately. Accuracy of data in an HMIS can be difficult to assess. It depends on the client's ability to provide the correct data and the intake worker's ability to document and enter the data accurately. Accuracy of HMIS data is also critical in being able to provide the best possible services to clients. This means that the data entered in HMIS matches the data in the client's case file. This standard is the most difficult to monitor as it requires comparisons between the HMIS record and corresponding evidence in a file. Having accurate data ensures that HMIS will provide the most realistic representation of our homeless system at any given time.

a. Component 1.2: Accuracy -Consistency

i. Rationale:

To ensure that data is understood, collected, and entered consistently across all programs in the HMIS. Consistency directly affects the accuracy of data; if an end user collects all of the data, but they don't collect it in a consistent manner, then the data may not be accurate. All data in HMIS shall be collected and entered in a common and consistent manner across all programs. To that end, all intake and data entry workers will complete an initial training before accessing the live HMIS system. A basic intake form that collects data in a consistent manner will be available to all programs, which they can alter to meet their additional needs, provided the base document does not change.

ii. Benchmark:

Data entered into HMIS needs to be valid and consistent. It needs to represent information on the people experiencing homelessness in the state accurately. Inaccurate data is worse than missing data as it can potentially change our understanding of a person's homeless experience and their level of need. For example, if a program serves only men, a female client record would likely be an inaccuracy. Agency HMIS Agency Administrators should spot check the HMIS data against data in client files at least once per month as a means of ensuring accurate data was entered into the system. Standard forms for paper data collection are available on the HMIS Lead's website and should be utilized to ensure that data is collected on a consistent basis,

2. Component 2.1: Completeness

i. Rationale:

In order to provide the best possible service to people experiencing homelessness, complete and consistent data is critical. The goal is to have 100% consistent completion in HMIS whenever possible. Consistent data refers to agencies using the same definitions and

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entering data that has no contradictions. Lastly, consistent data has no values that are impossible: child veterans and pregnant males, as some examples.

ii. Benchmark:

Data Element		CES	ES	RRH	SO	SSO	TH	PH/ PSH
3.1	NAME	1%	1%	1%	1%	1%	1%	1%
3.2	SSN	5%	5%	5%	5%	5%	5%	5%
3.3	DOB	5%	5%	5%	5%	5%	5%	5%
3.4	RACE	5%	5%	5%	5%	5%	5%	5%
3.5	ETHNICITY	5%	5%	5%	5%	5%	5%	5%
3.6	GENDER	5%	5%	5%	5%	5%	5%	5%
3.7	VETERAN	5%	5%	5%	5%	5%	5%	5%
3.8	DISABILITY	5%	5%	5%	5%	5%	5%	5%
3.10	PROJECT START	5%	5%	5%	5%	5%	5%	5%
3.11	PROJECT EXIT DATE	5%	5%	5%	5%	5%	5%	5%
3.12	DESTINATION	5%	5%	5%	5%	5%	5%	5%
3.15	RELATION HOH	5%	5%	5%	5%	5%	5%	5%
3.16	CLIENT LOCATION	5%	5%	5%	5%	5%	5%	5%
3.20	HOUSING MOVE-IN DATE	N/A	N/A	5%	N/A	N/A	N/A	5%
3.917	LIVING SITUATION	5%	5%	5%	5%	5%	5%	5%

a. Component 2.2: Completeness - All Clients Served

i. Rationale:

In general, it is a HUD expectation that all clients receiving homeless assistance. If a program only enters data on a few of their clients, it is difficult to determine whether the data accurately reflects what is happening with all of the clients in the program. Data completeness includes entering thorough information for all clients served.

ii. Benchmark:

100% of clients served should be entered into HMIS. If programs do not enter all of the data on the clients they serve, the HMIS data reports will not accurately reflect the reality of our homeless population size and the potential needs of our clients.

b. Component 2.3: Completeness – Bed Utilization Rates

i. Rationale:

One of the primary features of an HMIS is the ability to record the number of client stays or bed nights at a homeless residential facility. Case managers or shelter staff enter a client into the HMIS, assign them to a bed or unit, and the client remains there until they exit the program. When the client exits the program, they are also exited from the bed or unit in the HMIS. The formula for calculating bed utilization is:

$$\frac{\text{Number of Beds Occupied}}{\text{Total Number of Beds}}$$

Total Number of Beds

Low utilization rates could indicate that the residential facility was not very full, but it could also mean the HMIS data is not being entered for every client served. High utilization rates could mean the bed provider was over capacity, but it could also mean the program has not properly exited clients from the system.

ii. Benchmark:

Utilization benchmarks are updated annually and reflected in the monitoring plan by project type. Bed utilization for shelter programs measures the rate of beds used for shelter clients. Low utilization rates can indicate a program operating

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under capacity or it could be a sign that 100% of clients served were not entered into HMIS.

3. Component 3.1: Timeliness

i. **Rationale:**

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. 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). determined by type of program and client contact.

ii. **Additional Timeliness Considerations:**

Timely data entry also includes correcting any data quality issues if notified by a representative of the CoC, the HMIS Lead Organization, or the HMIS System Administrator. In the event that an Agency Administrator receives notification of data issues, the corrections must be made within 2 business days. If the issue is extensive and will take more than 2 days, the Agency HMIS Administrator must provide a reasonable estimate of the time necessary to correct the data. To that end, the Agency HMIS Administrator must respond to the CoC and/or the HMIS Lead within 2 business days to provide that information. If an Agency HMIS Administrator is out of the office due to vacation, illness, etc., there must be an alternate contact person at the organization who can respond to the request or let the requestor know when a response will be received.

iii. **Benchmark:**

Best practices indicate that real-time data entry is 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, but entry deadlines must exist to ensure the system's integrity. To that end, the chart below are our timeliness standards listed by project type. Data entry should be current within the scheduled number of days from intake, exit, service provision, or any other client interaction which necessitates any form of data entry.

HMIS Data Quality Timeliness Standard	
Project Type	Timeframe for Entry/Exits
Coordinated Entry System	24 Hours (1 Day)
Emergency Shelter	24 Hours (1 Day)
Rapid Re-Housing	48 Hours (2 Days)
Street Outreach	48 Hours (2 Days)
Supportive Services Only	48 Hours (2 Days)
Transitional Housing	24 Hours (1 Day)
Permanent Supportive Housing	48 Hours (2 Days)

4. Component 4.1: Monitoring

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It is important to ensure that the CoC's HMIS data quality plan is monitored. Monitoring data quality should be done at multiple levels. HMIS Agency Administrators should run the data quality report for all of their projects at least monthly to identify issues that need resolution. The CoC should also monitor data quality to be prepared for LSA, NOFA, HIC/PIT, SysPM, CoC APR, ESG CAPER and any other reporting that may be necessary. Finally, the HMIS Lead Organization will run and monitor data quality reports on a statewide level and produce dashboard reports quarterly.

- a. **Component 4.2 - Agency Monitoring:** There are several reports in HMIS to help agencies monitor their data quality. These reports include the "HUD Data Quality Framework" Report and the CoC APR or ESG CAPER (depending on funding sources). Each of these reports have functionality built in to allow for client detail that will help end users determine where their data errors are. Additionally, and important to note, the monitoring report for this years' competition has been built in the ART report gallery and can be used to track progress by any HMIS end-user. The HMIS Lead will consistently review the ART Report 0227 report to monitor the accuracy of all Project Descriptor Data Elements (PDDE) in HMIS.
- b. **Component 4.3 -CoC Monitoring:** CoC's monitor data quality as a part of their annual evaluations. These evaluations lead to the rating and ranking of projects for HUD funding; therefore, it is critical to have the best possible data quality to help ensure a project gets all of the review points associated with it.

5. Component 5.1: Incentives and Enforcement

Incentives and enforcement of the standards in this data quality Plan help encourage and reinforce the importance of data to the homelessness system in Rhode Island. Agencies should create internal policies to help staff recognize the importance of good data quality and provide recognition of improvements. When agencies identify a particular staff member having difficulty with their data entry and data quality, the staff person can receive an HMIS retraining. Overall, agencies should reinforce the importance of good data quality through incentives and enforcement. Possible incentives for meeting the data quality benchmarks could include, but are not limited to, recognition in newsletter articles or CoC meetings, certificates of achievement, or bonus point incentives for funding streams. The CoC may consider approaching funders who have the ability to impose sanctions or penalties, such as suspending the agency's ability to draw down grant funds for failing to meet the benchmarks.

- a. **Component 5.2 – Agencies:** Agencies should be creative to find ways of incentivizing excellent data quality. Actively monitoring data quality within the organization will lead to agencies being able to easily identify high performing staff, those who've shown great improvement and those who may still struggle with data entry. When an agency identifies a staff person continuing to struggle with their data quality, the option for retraining exists.
- b. **Component 5.2 - CoC:** CoC's incentivize data quality through their monitoring processes. The better the data quality, the better your data reflects the progress a program is making with their clients. This can lead to high monitoring scores which can lead to a higher rank for the HUD NOFA process.
- c. **Component 5.3 - HMIS Lead:** The HMIS Lead will provide reports to participating organizations in the state of Rhode Island, so that anyone can review data quality. The availability of this information should incentivize agencies to have the best possible data quality for public viewing

Training

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The HMIS Lead is responsible for providing training to all HMIS users; Agency HMIS Administrators are responsible for ensuring that their end-users are compliant. Each new end-user must not only attend a new-user training, but also a Homelessness 101 training, an HMIS Security Training and 2 group trainings annually. Trainings that are offered will cover all of the information a front-line staff person will need to ensure good data quality.

Along with training, the RI HMIS help desk is available at hmis@rihomeless.org to assist staff with any HMIS related technical support they may need. Each month, the HMIS Lead offers multiple group trainings. The topics of these trainings include (but are not limited to) Rapid Re-Housing/Support Services for Veteran Families/Homeless Prevention & Services Only, Emergency Shelter, Transitional Housing, Permanent Supportive Housing, PATH, Coordinated Entry, and Reporting in HMIS.

Revision History:

7/9/2019 – First Draft Released, SC

9/23/2020 – Revisions related to software change and report names updated. Edits to Benchmarks for utilization updated.
