



Watsonville/Santa Cruz City & County Continuum of Care (CoC) Homeless Management Information System (HMIS) Data Quality Improvement Process and Plan

I. Data Quality Defined

Data quality is a term that refers to the reliability and validity of consumer-level data in HMIS. It is measured by the extent to which data in the system represents authentic characteristics within a community. With good data quality, the Watsonville/Santa Cruz City & County Continuum of Care (CoC) can accurately provide a full picture of the individuals and families accessing local homelessness response system resources. HMIS data is used to: improve housing and services quality; identify patterns and monitor trends over time; conduct needs assessments and prioritize services for subpopulations experiencing or at-risk of homelessness or living with very low incomes; enhance inter-agency coordination; and monitor and report on the delivery, impact, and quality of housing and services.

II. Data Quality Standards

Data quality can be measured by data completeness, the extent to which all expected data elements are entered for all consumers; data timeliness, the amount of time that passes between data collection and entry into HMIS; data consistency, the degree to which users enter data consistently and without contradiction across all programs in HMIS; and data accuracy, the extent to which data are entered accurately and consistently.

III. Data Completeness

Complete HMIS data is necessary to fully understand the demographic characteristics and service use of persons with information in HMIS and to identify ways to improve services. Complete data facilitates confident reporting and analysis of the experience of homelessness in the CoC region. Data is considered complete if ALL consumers are entered into HMIS and all required data elements are captured.

The CoC's goal is to collect 100% of all data elements; however, it recognizes that this may not be possible in all cases. HUD HMIS data standards expect no null (missing) data for required data elements, and "Don't Know" or "Refused" or "Other" responses should not exceed the percentages listed in the table below.¹

A missing rate of below 5 percent represents an ideal goal, and the CoC should work toward accomplishing this level of data completeness for all programs. For large-scale night-by-night shelters, alternate targets for data completeness will be considered based on past performance.

Data Element	Applies to:	Don't Know/ Refused Should Not Exceed
First Name*	All Consumers	5%
Last Name*	All Consumers	5%
SSN*	All Consumers	5%
Date of Birth*	All Consumers	5%
Race	All Consumers	5%
Ethnicity	All Consumers	5%
Gender	All Consumers	5%
Veteran Status	Adults Only	5%
Disabling Condition	All Consumers	5%
Living Situation	Adults & Heads of Households (HoH)	5%
Zip Code of Last Permanent Address	All Consumers	5%
Income and Sources (at entry)	Adults & HoH	5%
Income and Sources (at annual update)	Adults & HoH enrolled in program 365 days or more	5%
Income and Sources (at exit)	Leavers - Adults & HoH	5%
Non-Cash Benefits (at entry)	Adults & HoH	5%
Non-Cash Benefits (at annual update)	Adults & HoH enrolled in program 365 days or more	5%
Non-Cash Benefits (at exit)	Leavers - Adults & HoH	5%
Physical Disability	All Consumers	5%
Developmental Disability	All Consumers	5%
Chronic Health Condition	All Consumers	5%
Mental Health	All Consumers	5%
Substance Abuse	All Consumers	5%
Domestic Violence	Adults & HoH	5%
Destination	Leavers - Adults & HoH	5%
Move-in Date	Adults & HoH enrolled in PH with move-in date	5%

*For anonymized consumers the following data elements will be exempted from the 95% completeness standard: (1) Social Security Number; (2) first name; (3) last name; (4) date of birth. However, all "canned" (pre-programmed) reports in Clarity Human Services software will still show those elements as "missing" for anonymized consumers.

IV. Data Accuracy

Data should be entered accurately into HMIS. Accuracy depends on the consumer's ability to provide the data and staff's ability to document and accurately enter it. Although HMIS data accuracy can be hard to assess, Covered Homeless Organizations (CHO) should audit approximately 5% of active consumer records monthly. The audit should check that data recorded in the consumer file matches data recorded in HMIS (e.g., entry and exit dates, household type, demographic characteristics, history of homelessness, etc.) and that consumer data is in alignment with project characteristics (e.g., a family is not entered in a program for single adult men).

V. Data Consistency

Data consistency refers to all data entry staff understanding, collecting, and entering data consistently across all programs in HMIS. Data consistency requires data entry staff to have a common understanding of each data element, its response categories, and meaning. To facilitate data consistency, County of Santa Cruz Human Services Department Housing for Health Division (H4H), as the HMIS lead, will ensure the availability of training procedures and materials that outline basic data elements, response categories, rationale, and definitions.

VI. Data Timeliness

Entering data into HMIS in a timely manner is important for several reasons: it facilitates up-to-date information for resource availability, allows data to be accessible when needed (service planning for people experiencing homelessness, monitoring or funding purposes, or for responding to requests for information), and reduces human error that occurs when too much time elapses between the provision of a service (data collection) and data entry. To ensure that system-wide data is as accurate as possible, all Universal Data Elements and Program-specific Data Elements should be entered according to the following timeliness standards.

Entry/Exit Data

Program Type	Data Timeliness Standard: At Entry	Data Timeliness Standard: At Exit
Emergency Shelter	Within two business days of intake	Night by Night: at or before 30 calendar days after the last service date. Exit date backdated to last service Entry/Exit: Within two business days of exit
Transitional Housing/ Permanent Supportive Housing/ Homelessness Prevention Services Only	Within two business days of intake	Within two business days of exit
Outreach	Within two business days of intake	At or before 30 calendar days since last service date. Exit date to be backdated to last service
Day Shelter	Within two business days of intake	At or before 90 calendar days since last service date. Exit date to be backdated to last service

Service Data

All participating programs should enter services into HMIS within **two business days** as described in the chart below.

Program Type	Service Requirement
Night-by-night Emergency Shelters	Services to track bed nights and others as required by local funders
Street Outreach	Services required by local funders, where applicable
Day Shelters	Services required by local funders, where applicable
RHY-funded Programs	Additional data elements and services (see RHY HMIS Manual)
PATH-funded Programs	Additional data elements and services (see PATH HMIS Manual)

Current Living Situation Assessments

Current Living Situation assessments are used to document the housing status during the first interaction with each consumer, as well as any subsequent consumer interactions if the housing situation has changed. At a minimum, the Current Living Situation Assessment must be completed every 90 days even if there are no status changes.

Status Update Assessments

All consumers with an active/open HMIS enrollment that experience a significant status change in income, employment, non-cash benefits, living situation, or other key characteristics require an Update Assessment within 30 days of learning of the status change. At a minimum, the Update Assessment must be completed every 90 days even if there are no status changes.

Annual Assessments

All HMIS enrollments that are active/open require an annual assessment within the 30-day period either before or after participants' project start anniversary date each year (a 60-day window).

Continuous Data Quality Improvement Process

A continuous data quality monitoring and improvement process facilitates the ability of the CoC to achieve valid and reliable data. It sets expectations for both the community and end users to capture accurate data on persons accessing agency programs and services.

Roles & Responsibilities

The HMIS System Administrator, with input from H4H, will provide the following services to assist CHOs in correctly entering data into HMIS and addressing data quality issues:

- Work with CHO management to identify at least one CHO employee as an HMIS agency lead.
- Provide end user trainings and workflow documents.
- Produce data quality reports and information on how to correct identified data quality issues.
- Work to identify and, in conjunction with CHOs, resolve data quality issues that will impact local or federal reporting.
- Provide technical assistance to CHOs requesting assistance in correcting data quality issues.

- Provide other services as directed by the HMIS Agency Lead and H4H.

Working with their HMIS lead, CHOs will take primary responsibility for entering, verifying, and correcting data entry

- CHO staff will measure completeness by running recommended data quality reports and distributing those reports to staff tasked with improving data quality and completeness.
- It is the responsibility of CHO management to ensure staff tasked with correcting data quality issues do so in a timely manner.

Data Quality Review

At the CoC level, data are reviewed regularly, and issues are identified for follow-up. Follow-up on system wide issues will include a discussion at the monthly HMIS Provider Meeting. Other CHO-specific follow up will also be done by the HMIS vendor and H4H.

Monthly

Data quality dashboards, listing records with missing data or other data quality issues, are provided in the HMIS Data Analysis Tab or sent in scheduled emails monthly to assist CHO in identifying data errors. Staff reports are emailed monthly to all CHO leads to assist in monitoring CHO staff usage of the system.

Quarterly

On a quarterly basis, the HMIS vendor will review staff HMIS utilization and data quality statistics and inform CHOs of compliance issues.

Reporting Preparation

Approximately two months before any significant local or federal reporting deadlines, data impacting the reports are thoroughly reviewed by the HMIS vendor, with CHO follow up and technical assistance as needed.

Participating CHOs should run data quality reports (HUDX-225, described below) monthly. In the weeks prior to submitting a significant federal report (e.g., APR), data quality reports may need to be run daily to ensure any issues identified by the CHO or the HMIS vendor are addressed.

CHOs that review data regularly tend to have higher levels of data quality and do not have significant data quality issues to address when trying to meet federal reporting deadlines.

Minimizing Data Quality Issues

To minimize data quality issues:

- Enter consumer data as soon as possible. The more time between collecting data and entering it into HMIS, the more likely there will be data quality issues (see section above for data timeliness standards).
- Whenever possible, enter data during consumer visits so that consumers may help identify potential inaccuracies.
- Review Data Quality monthly and address any issues as soon as possible.
- Problem-solve with Program and HMIS staff around any ongoing issues.

VII. Support for CHOs and HMIS Users

To ensure that agencies and HMIS users have the tools necessary to address data quality issues efficiently, H4H and the HMIS vendor provide a range of support resources.

Recommended Reports for Data Review

HMIS includes an extensive library of reports. The following reports are recommended as a starting place for reviewing data and identifying data quality issues:

- **[GNRL-16] Program Roster** (Program Based Reports) is used to check individuals enrolled in a program during a particular reporting period. The report summarizes data entered for each consumer including entry and exit dates and assigned staff. Run the report monthly to confirm high level data on program consumers during a reporting period accurately reflects the work done by the program.
- **[HUDX-225] HMIS Data Quality Report [FY 2022]** (HUD Reports) includes program or agency level data that highlights key HUD data quality issues. When run as a web output report, the report provides details on the source of errors. It is recommended to run the report at least once every quarter.
- **[DQXX-102] Program Data Review** (Data Quality Reports) includes program and client specific data quality issues; the web output report provides information on errors with specific consumers' data. It is recommended to run the report quarterly.
- **Data Analysis Report - Santa Cruz Clarity System Reports - Quarterly Status Update Report** is only available to HMIS manager level users. The report contains information at the agency and program level of all consumers who are due for a quarterly status, living situation, or annual update.

Technical Assistance

CHOs can request HMIS technical assistance as follows:

- The Watsonville/Santa Cruz CoC HMIS Helpdesk (831.713.2288 | santacruz@bitfocus.com) can provide initial troubleshooting assistance and escalate issues to the Watsonville/Santa Cruz CoC HMIS System Administration team as needed.
- The HMIS System Administration team may proactively contact CHOs directly or at the request of funders, H4H, the CHO itself, or as otherwise needed, to identify and address data quality issues.
- The System Administration team offers guides, trainings, dashboards, and other resources to help agencies proactively identify and resolve data quality issues (santacruz.bitfocus.com/general-training).

Key Reports and Processes that Rely on High Data Quality

The quality of the HMIS data impacts the ability of individual programs to provide accurate reports to funders and the CoC's use of the data for system improvement activities. Data quality issues such as high rates of missing consumer data and missing or inaccurate enrollment, exit and assessment data can impact program and CoC funding. Data quality issues challenge H4H in producing accurate reports for funders, elected officials, and other stakeholders. The Continuous Data Quality Improvement Process described above supports accurate HMIS information for these reports and processes, including but not limited to:

Annual Performance Review (APR) - Program

Recipients of HUD funding through the homeless CoC grant competition are required to submit an Annual Performance Report (APR) electronically to the federal Department of Housing and Urban Development (HUD) annually.

Annual CoC Competition Application to HUD

The CoC competes in an annual national competition for HUD CoC Program funds. System-wide data is required as part of the competition application, as is aggregate data for all projects receiving CoC funding.

Coordinated Entry (CE) APR

The CE program is required to submit a special CE Annual Performance Report (APR) electronically to HUD, annually. The CE APR includes data from the HMIS as well as narrative responses.

HMIS APR

Since the Watsonville/Santa Cruz CoC HMIS receives HUD funding through the annual CoC funding competition, H4H is required to submit a special HMIS Annual Performance Report (APR) annually. The HMIS APR includes data from the HMIS as well as narrative responses.

Point in Time Count (PIT)

The PIT count is an enumeration of persons experiencing sheltered and unsheltered homelessness typically on a single night in January. HUD requires the sheltered portion of the count be generated from HMIS data. **Approximate due date: April 30**

Housing Inventory Count (HIC)

The HIC is a comprehensive inventory of all housing, including all beds, units, or bed vouchers, dedicated to homeless and formerly homeless individuals and families within a CoC. **Approximate due date: April 30**

System Performance Measures (SysPM)

HUD SysPM are a tool used to measure the local homeless response as a coordinated system rather than individual programs and funding sources. HUD uses the system-level performance information in its annual CoC national funding competition award decisions and to gauge the state of the homeless response system nationally.

Approximate due date: Feb/March

Longitudinal Systems Analysis Report (LSA)

The LSA is used to produce HUD's Annual Homeless Assessment Report (AHAR) to the U.S. Congress. The AHAR provides nationwide estimates of homelessness, including information about the demographic characteristics of persons experiencing homelessness, service use patterns, and the capacity to house homeless persons. The LSA, produced from a CoC's HMIS, provides annual information on how people experiencing homelessness use the system of care. The LSA data is submitted in the form of CSV files uploaded to HUD's Homeless Data Exchange.

Stella is a strategy and analysis tool that helps CoCs understand how their system is performing and models an optimized system that fully addresses the area's homelessness. The extent of the tool's usefulness to a CoC for evaluation and planning purposes depends on the completeness and accuracy of the LSA data.

Approximate draft due date: Oct 31, Approximate final due date: Dec 31

In preparation for development of these reports, CHOs and the HMIS vendor employ the continuous data quality improvement practices described above. Specifically:

- Throughout the year:
 - HMIS Vendor:
 - Conduct data quality reviews based on feedback from H4H staff and CHOs including following up with CHOs as needed.
 - Provide CHOs with dashboards and other information about specific data quality issues that need to be addressed.
 - Provide trainings on data quality topics.
 - CHOS:
 - Follow up on data issues as identified by the HMIS vendor or H4H staff.
 - Ensure staff understand how to maintain high data quality through ongoing training and support.
- As a report deadline approaches:
 - CHOs: begin data quality reviews well in advance, focused on ensuring consumers are accurately enrolled in programs including all required information and no null values.
 - HMIS Vendor: help CHOs to resolve data quality issues upon request.