

Homelessness Management Information System [HMIS] Data Quality Plan

NY-501 Regional Continuum of Care

*City of Elmira, Steuben, Allegany, Livingston, Chemung &
Schuyler Counties*



December 12, 2012

Developed by:

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Data Quality Standards Authorization Memorandum

I have carefully assessed the Data Quality Standards for the NY-501 Regional Continuum of Care, (Continuum).

As authorized representatives of the Continuum of Care and the Homeless Management Information System (HMIS), we accept the Data Quality Standards as reasonable expectations for data entry and management regarding the NY-501 Regional Continuum’s designated Homeless Management Information System (HMIS). Based on our authority and judgment, the adoption of this Standard and its inclusion in the Continuum’s policies and procedures is authorized.

_____	_____
James E. Cantrill	DATE
HMIS Project Manager	

_____	_____
Chuck Nocera	DATE
HMIS Lead Agency Director	

_____	_____
Patrick Thrush	DATE
CoC Administrator	

_____	_____
Paul Marx	DATE
2012 CoC Chair	

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General Information

This document is the data quality plan for the Homeless Management Information System (HMIS) of the NY-501 Regional Continuum of Care, hereafter Continuum, developed in compliance with the guidance and proposed regulations from HUD.

What is a Data Quality Plan?

A Data Quality Plan is a set of standards, guidelines, responsibilities, and procedures that will help our Continuum's programs enter high quality data into our HMIS. This Data Quality Plan documents and standardizes the expectations of our communities for the reliability and validity of the data about the homeless and people at risk at homelessness in our area. It will also provide guidance to our HMIS participating programs in improving the quality of the data they enter into our HMIS.

Our Data Quality Plan will:

- Establish specific data quality standards and benchmarks for timeliness, completeness, accuracy, and consistency of the data entered into our HMIS.
- Identify the responsibilities for data quality of all parties within our Continuum.
- Describe how the HMIS Lead Agency will implement the plan and monitor data quality progress
- Establish a timeframe for implementing the plan and monitoring the data quality regularly.

Development Process

This Data Quality Plan for the Continuum's HMIS was developed through a collaborative effort of our Continuum. The draft document was prepared by the HMIS Administrator and circulated for review and comment to all COC members. The draft was revised in light of their comments. The review and comment and revision process was repeated until a consensus was obtained and the final Data Quality Plan was approved by the Continuum's leaders.

Definition of Data Quality

HMIS data quality refers to the extent that data recorded in the STEPS HMIS accurately reflects the same information in the real world. We set forth in this data quality plan the standards, benchmarks, measures, and activities required to meet our Continuum's goal of presenting accurate and consistent information on homelessness. Specifically, our goal is to record the most accurate, consistent and timely information in order to draw reasonable conclusions about the extent of homelessness, the risk of homelessness, and the impact of our services for the homeless and those at risk of homelessness.

Why Data Quality Is Important

Quality data is data that is accurate and complete. We rely on quality data to make accurate statements and conclusions about the people we serve and our program's outcomes. We use such statements and conclusions to make important decisions about our programs and

community needs. Without quality data we can make the wrong decisions and fail to serve people in need.

Running our programs depend on reports displaying accurate and complete information. Our funding sources need these reports to evaluate our performance, plan for program improvement, set future funding levels, and find needs not being met. Our management needs these reports to assess the performance of each program, to set the future funds needed for existing and new programs, to highlight service process improvements, and to determine training needs. Our communities need these reports to understand the overall needs of homeless and other needy people, to find people who need help, and to add community resources where they are needed. With accurate and complete data we can better serve our community; without it, we can fail.

Tolerating missing or wrong identifiers make unduplicated counts unreliable, causing us to misstate our performance, to under or over count the people we serve, and to make mistakes in our funding applications.

Entering inaccurate or incomplete client profiles give a false picture of our client's demographics, causing us to misdirect resources, to set wrong priorities and to miss people who need services.

Complete entry and exit data are important; incomplete data causes us to misunderstand how people move in and out of the homeless system and other programs, and to fail to see what combinations of services are most effective in helping our people.

Homeless Management Information System (HMIS)

An HMIS is a locally administered, electronic data collection system that stores longitudinal person-level information about the men, women, and children who access homeless and other human services in a community. Each Continuum receiving HUD funding is required to implement an HMIS to capture standardized data about all persons accessing the homeless assistance system. This requirement is set forth in 24 CFR Parts 91, 576, 580, and 583.

The Continuum designates a single software system as the HMIS for its geographic area from among those systems complying with the requirements and standards for an HMIS. The Continuum has designated the AWARDS system supplied by Foothold Technology and all modules, assessments, and reporting functionality contained therein.

All HMIS data are entered using the AWARDS software; there are no legacy systems providing data for importing into the AWARDS system.

[INSERT]

HMIS Lead

The HMIS Lead is an entity designated by the Continuum to operate the HMIS. Its duties include:

- Ensuring the consistent operation of the HMIS system in compliance with all applicable requirements
- Ensuring that each Contributing HMIS Organization (CHO) complies with all requirements and standards established for the HMIS

- Develop and review annually written policies, standards, and procedures for all CHOs and their programs. These include a data quality plan, a security plan, and a privacy policy.
- Develop and conduct periodic training on the proper use of the HMIS and complying with the standards and procedures
- Submitting reports to HUD as required

The HMIS Lead designates an HMIS Administrator to be the primary person responsible for carrying out its specified duties. Additional personnel are designated as needed. The HMIS Administrator and other personnel are referred to as the HMIS administration.

The Continuum has designated Catholic Charities of Chemung and Schuyler Counties as its HMIS Lead.

Key Documents

Key documents needed as supporting references to this document are listed below:

- Homeless Management Information System (HMIS) Data Standards, U.S. Department of Housing and Urban Development, Office of Community Planning and Development, March, 2010
- e-snaps CoC APR Guidebook, U.S. Department of Housing and Urban Development, April, 2012, Version 3
- e-snaps APR Guidebook For HMIS Dedicated Projects, U.S. Department of Housing and Urban Development, November 2011, Version 4
- HUD Supportive Housing Program (SHP) Notice of Funding Availability (NOFA)

Definitions

Continuum of Care

The group composed of representatives from organizations involved in sheltering, housing, or serving homeless people or people at risk of homelessness which is organized with the express purpose of performing the duties designated for a continuum of care as defined by the HEARTH Act of 2009 (P.L. 111-22) and subsequent regulation, expansions, and amendments..

Contributing HMIS Organization (CHO)

An organization that operates a project contributing data to an HMIS.

Homeless Management Information System (HMIS)

The information system designated by a Continuums of Care to record, analyze, and transmit all data about providing shelter, housing, and services to homeless people or people at risk of homelessness.

HMIS Committee

HMIS Lead

An entity designated by a continuum of Care to operate its HMIS

HMIS Administrator

The primary person designated by the HMIS Lead to carry out its duties

User

A person who uses or enters data into the HMIS

Points of Contact

Below is a list of Point of Contacts relevant to this Standard:

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Data Quality Standards

The data quality standards for the Continuum are defined by four dimensions, Timeliness, Completeness, Accuracy, and Consistency. The general standard outlined for each dimension is applicable to all HMIS participating programs with exceptions noted by specific program type. Unless otherwise noted, all participating programs, including those transferring data from legacy and supporting systems, are expected to achieve and maintain the defined standards.

Timeliness

If data isn't entered in a timely manner it won't be there when needed for measuring performance, analyzing problems, or reporting. The longer the time between collecting the data and entering it into the HMIS the greater is the likelihood of data entry errors. To minimize errors and have the data available when needed we define these timeliness standards and benchmarks.

General Standard

All programs will enter data into the HMIS as soon as possible after intake and admission, providing a service, reviewing a client, discharging a client from a program, or any other data generating event. Separate benchmarks are defined for each program group specifying the maximum time between collection and data entry.

In addition all participating programs will complete all data entry for any given month no later than the third working day of the following month.

Specific Benchmarks

Emergency Shelters

All emergency shelter programs shall enter all data, including intake, admission, service, and discharge data, within 24 hours of the data collection event.

Transitional Housing

All transitional housing programs shall complete entering all intake, admission, and discharge data within two days after the data collection event. They shall complete entering all service and progress note data within 24 hours after providing the service. For those programs using the HMIS for service planning and recording services all admission notes, service plans, and service plan reviews will be completed on or before the required due date.

Permanent Supportive Housing

All permanent supportive housing, shelter plus care and other permanent housing programs shall complete entering all intake, admission, and discharge data within two days after the data collection event. They shall complete entering all service and progress note data within 24 hours after providing the service. For those programs using the HMIS for service planning and recording services all admission notes,

service plans, and service plan reviews will be completed on or before the required due date.

Emergency Services and Other Services Only Program

All emergency services and other services only programs shall complete entering all intake, admission, service, and discharge data within five working days after the data collection event.

HPRP, ESG, and STEHP Programs

All HPRP, ESG, and STEHP programs shall complete entering all intake, admission, service, and discharge data within five working days after the data collection event.

All required data for a given quarter for HPRP, ESG, and STEHP programs must be entered into the HMIS no later than the close of business on the first business day of the following quarter. Quarterly reports for these program types must be completed on a very tight schedule, and we must require immediate data completion at each quarter's end.

Measuring Timeliness

The timeliness of each data generating event will be measured by the time elapsed between the completion of a data generating event and the time the data was completely entered into the HMIS including any needed corrections.

The timeliness of all events in each event type will be measured by the maximum time elapsed during each reporting period.

The overall timeliness performance of a program, group of programs, or an agency is measured by the percent of event types whose maximum time elapsed is equal to or less than the benchmarks defined above.

These timeliness measures (maximum time elapsed and percent of events within the guidelines) will be monitored monthly using a set of data quality reports. On these reports we will also report the minimum, average, and median time elapsed for each data generating event type.

Completeness

When our data on clients, their demographic characteristics, and service use is incomplete it can lead to misleading information and misdirected or insufficient services. Without all relevant data we can't measure client needs and program outcomes accurately. Therefore we are defining the following completeness standard.

General Standard:

All programs must collect all the universal data elements defined by HUD as well as all the program specific data elements required for the program type or for outcome reporting as defined by our various funding agencies. We expect that there will be no missing data and a minimum of "Don't Know" or "Refused" responses. We expect that all programs will follow procedures in interviewing clients to encourage the client to provide all needed data. It is especially important that we do not tolerate any missing first and last names, social security numbers, or date of births

since we need this to provide unduplicated client counts. We recognize that clients can be reluctant to give their social security numbers, but all programs must reassure the clients that we keep this data confidential and must explain why we need this data.

Benchmark applies to all program types

We expect that all programs will have no more than 3% of all required data elements missing, and that there will be no more than 5% “Don’t Know” or “Refused” entries for any required data element.

Measuring Completeness

The basic measure of completeness of a data field is the number of missing entries (nulls) as a percent of the number of clients who should have an entry. We also measure the completeness of a data field by the number of “Don’t Know” and “Refused” entries as a percent of the number of clients who should have an entry.

We will measure the overall completeness of a program, a group of programs, or an agency by the percent of the required data fields whose missing and don’t know/refused measures meet the benchmarks defined above.

These measures along with the numbers of clients participating in or served by a program or agency will be monitored monthly using a set of data quality reports.

Accuracy

The purpose of accuracy is to ensure that the data housed in the Continuum’s HMIS is the best possible representation of reality as it relates to the homeless and people at risk of homelessness and the programs that serve them.

General Standard and Benchmark

There are two parts to the general standards for accuracy, the first is agreement with the paper intake forms and supporting documents, and the second is checking the validity of the entered data.

For all Continuum programs there will be no disagreement between the supporting documentation and the entered data (100% accuracy). This standard will be monitored by periodic examining selected supporting documents and comparing their data to the data in the HMIS. For example, if on admission an employer documents that the client makes a certain income, the income entered at admission for that client is the same as that documented.

All data entered for the Continuum’s programs will be valid and there will be no conflicts among the fields, or between the fields and a program’s requirements. For example there will be no child veterans, no 125 year olds, no infant head of households, no pregnant men, etc. in our data.

Exceptions

There are no exceptions to the general standard; it applies to all programs.

Measuring Accuracy

The first measure of accuracy is the agreement of the HMIS data with the supporting documentation. Periodically reviewing this agreement by comparing the HMIS data with the documents is the responsibility of each agency and program.

The second accuracy measure, its validity and lack of conflicts, will be reported monthly in a set of reports covering the following comparisons.

- Client age is not negative or over 100
- Client's date of birth is the same as their admission date
- Client's veteran status is inconsistent with their age
- Client's pregnancy status is inconsistent with their gender
- Client's pregnancy status is inconsistent with their age
- Client's head of household designation is inconsistent with their age
- Client's relationship to the head of household is inconsistent with their gender
- Client's relationship to the head of household is inconsistent with their age
- Client's receiving SSI or SSDI is inconsistent with their "no" answer to "Disabling Condition"
- Client's designation as having a specific disability is inconsistent with their "no" answer to "Disabling Condition"
- Client's "yes" answer to "Disabling Condition" is inconsistent with all "no" answers or nulls to the specific disability questions
- Client's first name is "Husband," "Wife," "Man," "Woman," "Boy," "Girl," "Child", "Baby," "Baby Girl," or "Baby Boy"
- Client's name fields have numbers in them
- Client's last name field has the suffix in it
- Client's social security number is invalid as defined by the Social Security Administration

Additional comparisons will be added as needed.

Consistency

Consistency means that all users of the HMIS have a common understanding of the meaning of all fields and of which fields need completion.

General Standard:

All users of the Continuum's HMIS understand and interpret the required fields the same way.

Exceptions:

There are no exceptions to the general standard; it applies to all programs

Consistency Measures

We measure consistency by significant differences in the characteristics of data entered by different users or for different programs or agencies. Our client populations share many of the same characteristics and significant differences in these characteristics indicate possible inconsistency in interpreting the meaning of the data fields.

We will monitor consistency monthly using a set of data quality reports.

Monitoring

We monitor the data quality to ensure that the standards defined in this document are met to the greatest possible extent and that data quality issues are quickly identified and resolved. The quality of data in the Continuum's HMIS will be monitored at least monthly.

Monitoring Responsibilities

The management of the programs and agencies are primarily responsible for monitoring the quality of their data. They should request or run (if they can) the data quality reports needed to monitor their programs monthly. They are also responsible for ensuring that data quality errors are promptly corrected. They look to the HMIS staff for the availability of the reports they need, for training on data standards, and for configuring their programs data entry screens to minimize errors.

The users entering the data are responsible for entering the data accurately and for correcting errors when discovered. They should constantly monitor their data entry performance so that they can catch data entry errors immediately. They should understand the data quality standards and the meaning of all data entry fields. They should understand in depth and detail how to use the AWARDS HMIS system. They look to their program and agency managers to see that they receive the training they need

The Continuum and its HMIS sub-committee are responsible for monitoring the overall data quality of the HMIS and of each contributing agency. They should review data quality reports at the agency and continuum level to ensure that overall data quality performance meets our standards. They look to the HMIS Administrator to provide the needed data quality reports and to develop and administer data quality training as needed.

The HMIS Administrator is responsible for leading the adoption, review, and revision of data quality standards for the Continuum, for developing data quality reports and making them

available, preparing Continuum wide and agency wide data quality reports for review by the HMIS Sub-committee, for developing and conducting data quality training, and for configuring the programs to minimize data entry errors.

Data Quality Standard Reports

A well designed set of data quality reports is essential to monitoring and improving the quality of data in the Continuum's HMIS. The HMIS Administrator will develop the set of reports listed during the implementation of this plan, and we will continue to develop other data quality reports as our needs and activities change.

Data Quality Summary Reports

The heart of this set of data quality summary reports displays each required field along with the number and percent of its missing and don't know/refused values and whether or not these measures meet the benchmarks. In addition the report also displays the number of clients served broken down by client and household type, and an overall percent of fields meeting the benchmarks.

Each specific report will calculate the data quality over a time period selected by the user. They will be designed to be run monthly, but they can be run for any period. The specific reports to be developed are:

- An overall Continuum data quality summary that can provide the data quality data for the NOFA
- A report that can be run for a single agency selected by the user, monitoring all programs
- A report to be run for a group of programs selected by the user
- A report to be run for a single selected program and that can provide the data quality input for the APR

We also plan to develop other reports for specific program types as needed.

Detailed Data Quality Reports

The purpose of these detailed reports is to list the clients having data quality error so that the users can correct them. Each report displays the data quality errors entered over a time period selected by the user. The heart of the report lists all data quality errors by the unique client ID. We will develop the following reports:

- A report to be run for only one selected program
- A report that can be run for multiple programs but lists its results by program

Data Conflicts and Validity Reports

We will develop a set of data validity reports that report invalid data and conflicts in the data, such as those listed in the Accuracy section above. The purpose of these reports is to highlight conflicts for investigation and correction if they are errors. All these reports will find conflicts in the data entered over a time period selected by the user. The following reports will be developed:

- A report to be run for one or more programs summarizing the number and type of conflicts
- A detailed report to be run for one or more programs listing the conflicts to be investigated by the unique client ID.

Implementation Plan

Once this data quality plan has been authorized by the Continuum its implementation will begin immediately. The implementation steps are detailed below.

- All agencies contributing to the HMIS must accept this data quality plan within one month after authorization. A representative of each agency must sign the acceptance section of this plan.
- HMIS Administrator develops a basic data quality training to be scheduled for all participating agencies one week after authorization
- Agency heads and HMIS Administrator schedules data quality training for each agency within three weeks after authorization. All employees of the agencies using the HMIS are required to attend these data quality trainings.
- As part of the training all users are required to sign a statement that they have read this data quality plan and that they will follow its standards when using the HMIS
- All agencies complete data quality training within six weeks of authorization
- HMIS Administrator begins developing data quality reports immediately after authorization
- All data quality reports are completed, documented, and available six weeks after authorization
- Monthly data quality monitoring begins with the month beginning six weeks after authorization. The data quality reports are run, distributed, and reviewed within ten working days after the end of the month.
- The HMIS Administrator and HMIS Sub-committee review the improvement in data quality one year after authorization.

Continuing Activities

After plan implementation is complete many data quality activities will continue as ongoing or periodic activities. These activities are:

- Monthly monitoring of data quality by agency and program management and HMIS administration
- Quarterly review of the Continuum's data quality by the HMIS sub-committee
- Annual review of the Continuum's data quality performance and progress by the HMIS sub-committee

- Annual review and revision of the data quality plan if needed by the Continuum led by the HMIS Administrator
- Annual acceptance of the data quality standards by all agencies including a signed acceptance from all HMIS users
- Ongoing initial data quality training and acceptance of standards for new users of the HMIS by agency and program management
- Quarterly trainings for new HMIS users will be offered by the HMIS administration. These can be part of an overall HMIS system training for new users.
- Ongoing development and customization of data quality reports by HMIS administration.