

HMIS@NCCEH Data Quality Plan Draft

v.1.2023



NC COALITION to
HOMELESSNESS end



Data Quality Plan

Why a Data Quality Plan?

System Improvement

HMIS@NCCEH is an implementation driven by a desire to improve services for clients. Our HMIS data is only as good as the data maintained.

Funding and Resources

Data contributes to larger portions of CoC and ESG funding competitions and other private sources. We must demonstrate the value of our system for our clients.

HUD Requirement

The [2004 Data and Technical Standards](#) that established HMIS require that “PPI (protected personal information) collected ... should be accurate, complete, and timely.” More recently, the



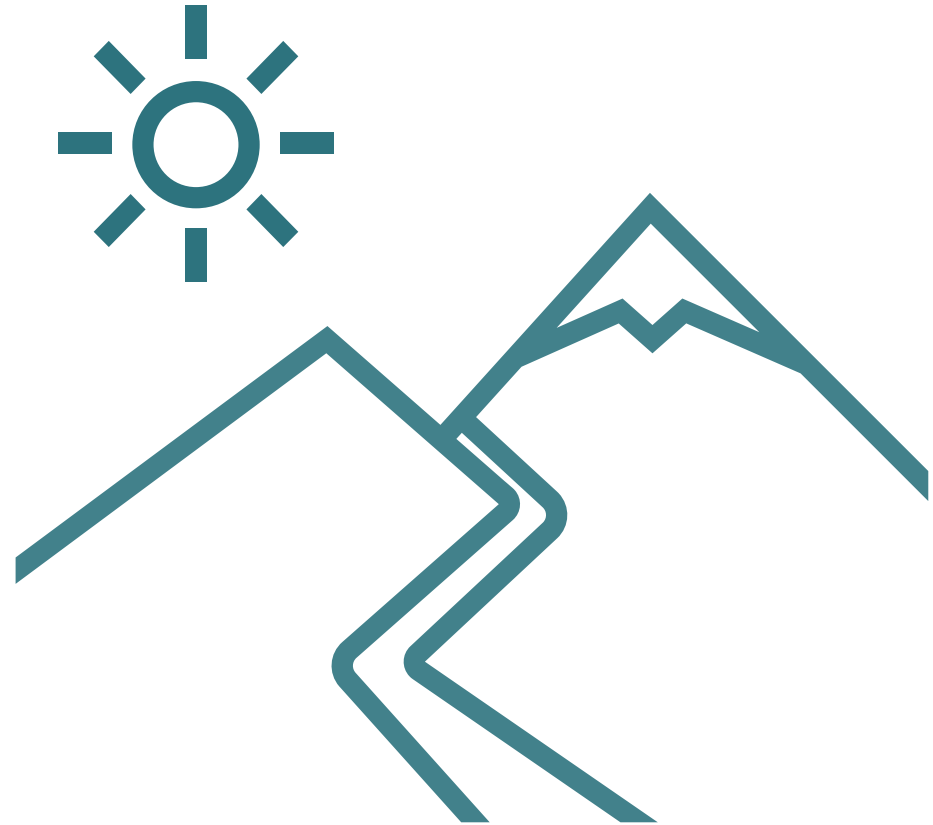
What is Data Quality?

Data quality refers to the reliability and validity of client-level data collected in HMIS.

Completeness	Timeliness	Accuracy	Consistency
<p>The degree to which all required data is known and documented.</p> <p>Client Record- the completeness of a person's HMIS record for a given project enrollment</p> <p>Bed Coverage- the completeness of HMIS participation by bed units, with the total number of enrollments divided by the total number of homeless beds.</p>	<p>The length of time that elapses between the participant data collection and HMIS data entry stages.</p>	<p>The degree to which data reflects the best representation of the client's real-world situation and the programs that provide housing and services.</p>	<p>The degree to which all data is collected, entered, stored, and reflective of the use of HMIS as a standard operating procedure. Representative of how well data quality standards have been operationalized across data collection and entry.</p>

Data Quality is a journey, not a destination

- Ralph Waldo Emerson (kind of)



Data Quality Standards

Completeness looks at what is known (July 2021)

- Client doesn't know, client refused, and data not collected responses do not contribute to completeness (even if accurate)
- Different standards for types of incomplete data have not been set yet

Data Quality: Personally Identifiable Information (6a)	Overall % error rate
Name (3.1)	5% or less
Social Security Number (3.2)	10% or less
Date of Birth (3.3)	5% or less
Race (3.4)	5% or less
Ethnicity (3.5)	5% or less
Gender (3.6)	5% or less



Data Quality Standards

Completeness looks at what is known (July 2021)

Data Quality: Universal Data Elements (6b)	Overall % error rate
Veteran Status (3.7)	5% or less
Relationship to Head of Household (3.15)	5% or less
Client Location (3.16)	5% or less
Disabling Condition (3.8)	5% or less



Data Quality Standards

Completeness looks at what is known (July 2021)

Data Quality: Income and Housing Data Quality (6c)	Overall % error rate
Destination (3.12)	15% or less (For SO and ES) 10% or less (For TH, RRH, & PSH) 5% or less (For HP)
Income and Sources at Start (4.2)	5% or less
Income and Sources at Annual Assessment (4.2)	5% or less
Income and Sources at Exit (4.2)	5% or less



Data Quality Standards

Completeness looks at what is known (July 2021)

Data Quality: Chronic Homelessness (6d)	Overall % error rate
% of records unable to calculate	10% or less
Data Quality: Domestic Violence History (14a)	Overall % error rate
% of records “Data Not Collected”	5% or less
Data Quality: North Carolina County of Service (not in APR)	Overall % error rate
% of records missing data	5% or less
Data Quality: Housing Assessment at Exit (Homeless Prevention only (24 of ESG CAPER))	Overall % error rate
% or records “Data Not Collected”	10% or less



Data Quality Standards

Accuracy for internal logic (new)

Accuracy Measure	Data Element(s) Involved	Accuracy Test
Date of Birth <> Project Start Date	3.03 Date of Birth 3.10 Project Start Date	3.03 is not the same date as 3.10 for Heads of Household
Household Error	3.15 Relationship to Head of Household (HoH)	At least one, and only one, Head of Household per household (no HoH is an error, multiple HoH is an error) No infant or young child Heads of Household



Data Quality Standards

Accuracy for internal logic (new)

Accuracy Measure	Data Element(s) Involved	Accuracy Test
Disability, Health Insurance, Income, and Non-Cash Benefits Sub-Assessments are Congruent	3.08 Disabling Condition and Types 4.02 Income and Sources 4.03 Non-Cash Benefits and Sources 4.04 Health Insurance and Sources	If Yes to gateway, then Yes to at least one type/source
Domestic Violence and Dependencies are Congruent	4.11 Domestic Violence - When experience occurred - Are you currently fleeing	If Yes to 4.11, dependencies (When and Fleeing) are answered



Data Quality Standards

Accuracy for internal logic (new)

Accuracy Measure	Data Element(s) Involved	Accuracy Test
Veterans are not minors	3.07 Veteran Status 3.03 Date of Birth	3.07 is not Yes for clients under 18 years of age
Housing Move In Date is accurate	3.20 Housing Move In Date 3.10 Project Start Date	3.20 does not predate 3.10



Data Quality Standards

Timeliness for all Project Types (July 2021)

- As adopted for Street Outreach, Emergency Shelter, Transitional Housing, Rapid Re-Housing, Permanent Supportive Housing, Homeless Prevention in July 2021
- Recommend expand to all project types (including Coordinated Entry)

Client Event	Timeliness Standard
Entry	100% within 6 days
Exit	100% within 6 days

Data Quality Standards

Consistency for all HMIS Users

- New User Training: Users must pass training, sign a User Agreement, and sign in within 30 days of receiving login info
- New Agency Orientation: Agencies must attend orientation with Data Center to review and confirm policies, procedures, and data quality requirements
- Monthly Activity (new): End users must log into HMIS at least once every 30 days





Monitoring and Reporting

Monitoring and Reporting

Method

HMIS Participating Agencies run and submit Data Quality Monitoring Reports for HMIS Lead and CoC review.

- Encouragements (competition in funding, public acknowledgment)
- Enforcements (Agency Participation Agreements, Performance Improvement Plans)

Frequency

Quarterly for year-to-date data (on the Federal Fiscal Year).

- 15th of October, January, April, July



Monitoring and Reporting

Which report to use and submit?

Report Options	Dashboard APR or CAPER	ICA Developed Report (D003 LSA Client Clean Up)
Breaks out results by project	No	Yes
Breaks out results by organization	No	Yes
Measures Completeness	Yes	Yes
Measures Accuracy and Consistency	Minimal	Yes
Measures Timeliness	Yes	Yes
Has Client-level detail for easy corrections	Minimal	Yes



Monitoring and Reporting

Expectations for all

All HMIS-participating organizations, regardless of project type and funding source, are expected to adhere to the data quality standards as laid out in this Data Quality Plan for completeness, timeliness, accuracy, and consistency.



Monitoring and Reporting

HMIS Participating Organizations

Maintain high levels of Data Quality, meeting minimum benchmarks

Submit data for data quality monitoring

Be responsive to HMIS Lead Agency and CoC to questions and requests for HMIS data quality

Inform HMIS Lead Agency when changes occur

Continuums of Care

Identify the CoC entity that will review providers performance

Work collaboratively with HMIS lead to develop Data Quality Improvement Plans, when necessary

Determine consequences should organizations fail to fulfill Data Quality Improvement Plan



Monitoring and Reporting

HMIS Lead Agency

Provide oversight for monitoring

Provide resources, training, and tools for organizations to monitor their own data

Be responsive to organization's questions and concerns for HMIS

Work collaboratively with HMIS lead to develop Data Quality Improvement Plans, when necessary

Implement consequences should organizations fail to fulfill Data Quality Improvement Plan

HMIS@NCCEH Advisory Board

Ensure implementation has enforceable agreements

Ensure the HMIS Lead has resources to monitor

Ensure Data Quality Plan is reviewed annually by CoCs



Discussion

- Decision points on:
 - Data Quality Standards (across implementation, for all projects)
 - Should back-end items that the Data Center manages also be included? (Such as bed and unit inventory, project address)
 - Roles and expectations
 - Data Quality Monitoring Method (submitting a report for each project)
 - New robust report (modified from D003 LSA Client Clean Up or regular APR/CAPER Dashboard)
 - Data Quality Monitoring Frequency (quarterly)
 - Calendar Year or Federal Fiscal year?
- What are your other comments or questions?

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