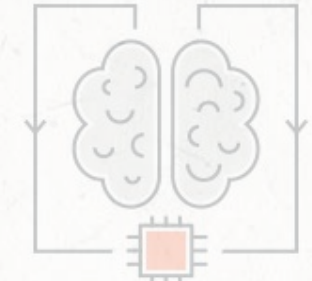


# ***WELCOME!***

## Data Done Right Data Quality vs. Data Accuracy

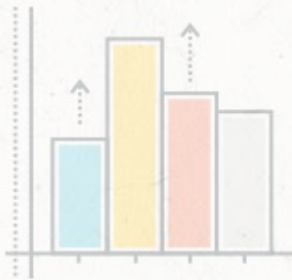
**Thursday, October 17th, 2019**



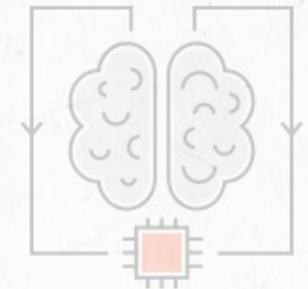
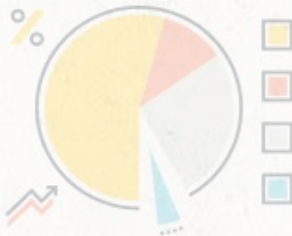
# Getting to Know You!

**If you could only eat one meal for the rest of your life, what would it be?**



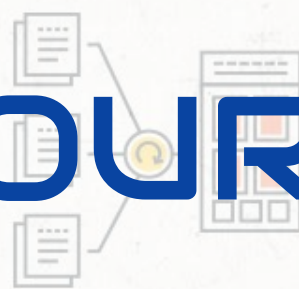
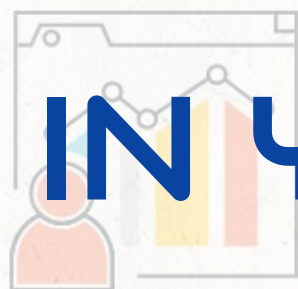


# AGENDA

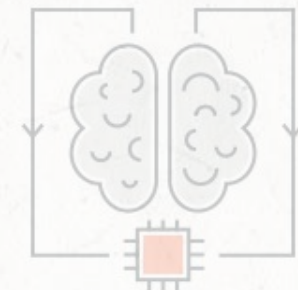


# AGENDA

- In Your Opinion
- Defining Data Quality
- Defining Data Accuracy
- How Do We Evaluate Bad Data
- Assess Your Data-*Know What You Need to Focus On*
- **Activity Time**
- Why Bad Data Happens
- How to Avoid Bad Data: Clean Up Efforts and Recommendations
- Helpful Reports for Data Quality
- **Activity Time**
- Tips
- Resources
- Contact Information



IN YOUR OPINION





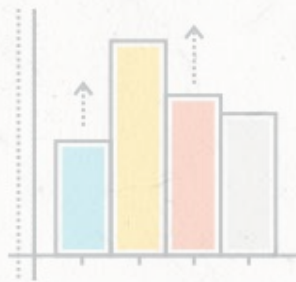
# In Your Opinion

*What is Data Quality?*

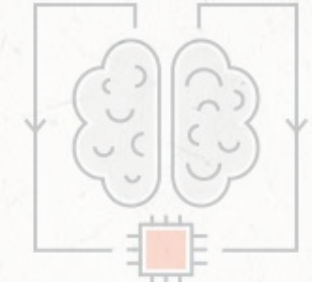
*What is Data Accuracy?*

*What do you think are the most common Data Entry Errors that you have noticed?*





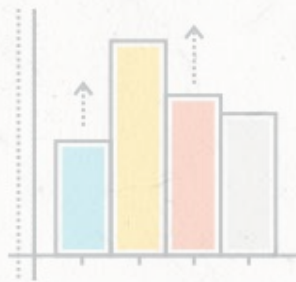
# DEFINING DATA QUALITY



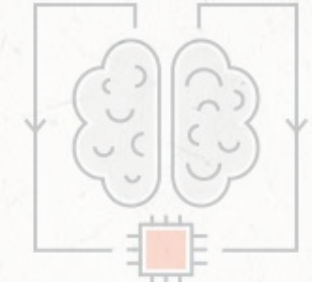
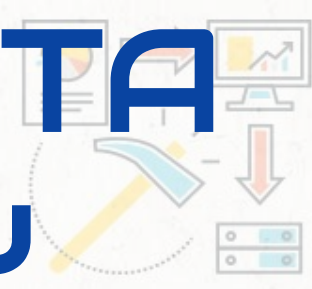
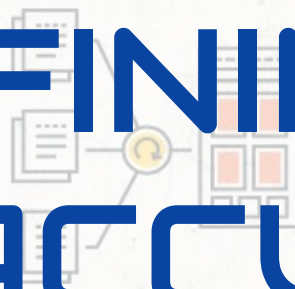


# Defining Data Quality

- Data quality looks at the ability of data to be ***reliable enough to serve a specific purpose***
- Data quality possesses certain characteristics that determine whether the quality is sufficient (we will be looking at these shortly)
- There can be numerous ways to measure data quality but typically certain categories are used (we will be looking at these shortly)



# DEFINING DATA ACCURACY



# Defining Data Accuracy

- Data has to be **accurate** to be high quality
- Accuracy means the **data reflects the reality**
- It's important to note that data could be complete, yet remain inaccurate (*e.g., you might have the addresses of your entire clientele, but some of these addresses might be incorrectly spelled*)
- Accuracy is evident when the data in HMIS reflects the actual characteristics and experiences of clients
- Aggregate reporting hinges on accuracy of data that is consistently formatted and entered



The background is a light gray textured surface with a collage of various data-related icons. These include a bar chart with an upward arrow, a document labeled 'LOG' with a code symbol, a gear connected to an open book, a network diagram with nodes and arrows, a person icon next to a line graph, a pie chart with a legend, a laptop, an atom symbol, a folder, a paintbrush, a brain in a circuit, and a server rack.

# HOW DO WE EVALUATE BAD DATA

# How Do We Evaluate Bad Data?

*Data dimensions that assist in making these decisions*

<b>Completeness</b>	Are all the data sets and data items recorded
<b>Consistency</b>	Can we match the data set across data entered
<b>Timeliness</b>	Determines how up-to-date the data is in terms of the current task
<b>Availability</b>	Data shouldn't be hard to access, but be readily available to everyone that requires it

# How this Applies to HMIS Data

## Data Completeness

- ▶ HMIS records that do not include partial or missing data (*e.g., partial date of birth, SS# etc.*)
- ▶ Lack of data completeness can include data from projects not participating in HMIS
- ▶ Missing information can negatively affect the ability to provide comprehensive care to clients



# How this Applies to HMIS Data

- *No Null (missing) data for required data elements.*
- *Don't Know or Refused responses should not exceed the allowed percentage of 5% with the exception of SSN (N/A)*

<b>Name</b>	<b>DOB</b>	<b>SSN</b>
<b>Race</b>	<b>Ethnicity</b>	<b>Gender</b>
<b>Veteran Status</b>	<b>Disabling Conditions</b>	<b>Living Situation</b>
<b>Prior Living Situation</b>	<b>Program Start Date</b>	<b>Program Exit Date</b>
<b>Destination *</b>	<b>Relationship to Head of Household (HoH)</b>	

*\* Don't know/Refused responses for Destination for outreach and shelter projects should not exceed 30%*

# How this Applies to HMIS Data

## Data Consistency

- ▶ Data is stored in a uniform manner, across all users of HMIS
- ▶ Users should have an understanding of when, how and why data should be collected in HMIS, otherwise the data may not be accurate
- ▶ Any field where a user can type in the data directly is at high risk (e.g., *names|dates|SS#, etc.*)

# How this Applies to HMIS Data

## Data Timeliness

- ▶ Timeliness reflects the period between when client data is collected/known and when that information is entered into HMIS
- ▶ If data is not entered into HMIS shortly after it is known, there is a likely increase in the potential for inaccuracies and/or errors in the data once it is entered into HMIS



# How this Applies to HMIS Data

## Data Timeliness

- ▶ **Transitional and Permanent Housing Programs:** Entry/Exit data within three (3) workdays
- ▶ **Emergency Shelters and Non-HUD:** Enter check-in/check-out with one (1) workday
- ▶ **Outreach:** Create client profile, if necessary, within three (3) workdays. Record outreach services within one (1) workday

*Whenever possible, consider entering data during client visits so that clients may help identify potential inaccuracies*

The background is a light gray textured surface with a collage of various icons related to data, technology, and business. These include a bar chart with an upward arrow, a document labeled 'LOG' with a code symbol, a gear connected to an open book, a network diagram with nodes and arrows, a pie chart with a legend, a laptop, an atom symbol, a folder, a paintbrush, a brain connected to a microchip, and several other smaller icons representing documents, charts, and people.

**ASSESS YOUR DATA  
KNOW WHAT YOU  
NEED TO FOCUS ON**

# Assess Your Data: (Know What you Need to Focus On)

## Universal Data Elements (UDE)

- ▶ Must be collected by all providers in HMIS from all clients.
- ▶ The universal data elements are needed to understand the extent of homelessness, the characteristics of homeless clients, and the patterns of service use for the entire homeless population and subpopulations.

## Project Descriptor Data Elements (PDDE's)

- ▶ Must be collected from all clients served by programs that report this information to HUD and other organizations and are strongly encouraged for all providers.
- ▶ Providers that have HMIS can use the program-specific data elements to complete their APRs.



# Assess Your Data: (Know What you Need to Focus On)

## Universal Data Elements (UDE)

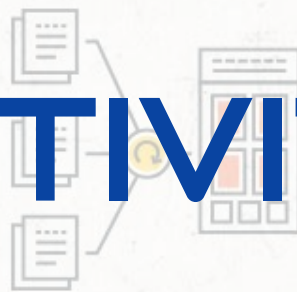
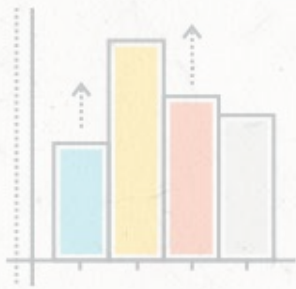
- ▶ Name
- ▶ SS#
- ▶ DOB
- ▶ Race
- ▶ Ethnicity
- ▶ Gender
- ▶ Veteran Status
- ▶ Disabling Condition
- ▶ Project Start Date
- ▶ Project Exit Date
- ▶ Destination
- ▶ Relationship to HoH
- ▶ Client Location
- ▶ Housing Move-in Date
- ▶ Prior Living Situation

## Project Descriptor Data Elements (PDDE's)

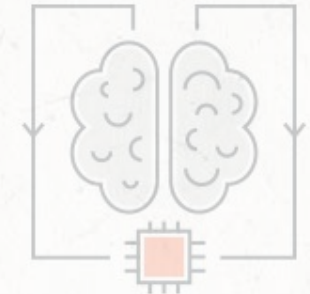
- ▶ Income and Sources
- ▶ Non-Cash Benefits
- ▶ Health Insurance
- ▶ Physical Disability
- ▶ Developmental Disability
- ▶ Chronic Health Condition
- ▶ HIV/AIDS
- ▶ Mental Health Problems
- ▶ Substance Abuse
- ▶ Domestic Violence
- ▶ Current Living Situations
- ▶ Date of Engagement
- ▶ Bed-night date
- ▶ Coordinated Entry Assessment
- ▶ Coordinated Entry Event

# Data Timeliness

<b>Rationale of Timeliness</b>	Entering data in a timely manner can <b>reduce human error</b> that occurs when too much time has elapsed between the data collection (or service transaction) and the data entry	Staff doing the data entry may be <b>relying on handwritten notes or their own recall of a case management session, a service transaction, or a program exit date</b> ; therefore, the sooner the data is entered, the better chance the data will be correct	<b>Timely data entry also ensures the data is accessible</b> 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)
<b>Factors to Address</b>	Include Timelines & Expectations (when data entry will occur)	Cater to Specific Project Types (e.g., Emergency Shelter, TH, PH, Safe Haven etc.)	For example “All data shall be entered into HMIS in a timely manner” then set forth the days/weeks etc.
<b>Establishing Timelines</b>	Should be specific to CoC’s needs	Can be configured to coincide with Federal and/or Local Reporting requirements	Set specific due dates that are reasonable and attainable



# ACTIVITY TIME



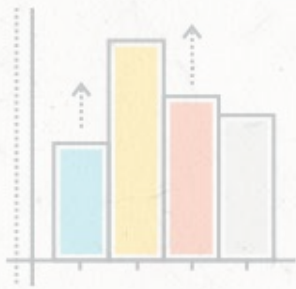


# Activity #1

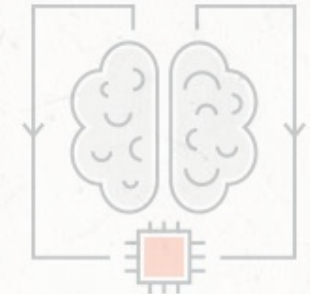
<b>Guidelines</b> <i>Create a timeline of when data should be entered into HMIS for a project at your agency</i>		Review Process	Review date	Communication	Update Period	Review Updates	Communicate Results
		How will you review each data quality item	Set a recurring date (e.g. 2nd Tuesday of the month)	Set a recurring date to send out the results of the review (e.g. 3rd Thursday of the month)	Set a recurring due date for data corrections (e.g. 4th Thursday of the month)	Follow up after corrections were made	Provide a recurring update to the contributing users about the program's data quality
Timeliness	CDQI plan recommends: TH/PH/RRH 3 days ES- beds 1 day SO- CLS 1 day						
Completeness	Are all the data sets and data items recorded						
Accuracy	Data reflects the reality of the clients in the program						
Consistency	Understanding of when, how and why data should be collected in HMIS						
Availability	Data shouldn't be hard to access, but be readily available to everyone that requires it						

# Activity #1

<b>Guidelines</b>  <i>Create a timeline of when data should be entered into HMIS for a project at your agency</i>		Review Process	Review date	Communication	Update Period	Review Updates	Communicate Results
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<b>Timeliness</b>	CDQI plan recommends: TH/PH/RRH 3 days ES- beds 1 day SO- CLS 1 day	Review apr and monthly staff report	Every Tuesday	Every wednesday	Update within 1 day	Review Friday	Reach out to cm on outstanding issues
<b>Completeness</b>	Are all the data sets and data items recorded	Run HMIS DQ report	1st Thursday of the month	2nd Thursday of the month	Corrections due 3rd Thursday of the month	Review Friday	Reach out to cm on outstanding issues
<b>Accuracy</b>	Data reflects the reality of the clients in the program	Run Program Roster, Program Details, Utilization reports	1st Thursday of the month	2nd Thursday of the month	Corrections due 3rd Thursday of the month	Review Friday	Reach out to cm on outstanding issues
<b>Consistency</b>	Understanding of when, how and why data should be collected in HMIS	Ongoing. Consider conversations and emails where language is inconsistent. Consider common data quality mistakes	Every Tuesday	1st Tuesday of the month	Update list every Tuesday	1 week before training	Quarterly training
<b>Availability</b>	Data shouldn't be hard to access, but be readily available to everyone that requires it	Store reports and data quality reviews on a shared drive	First week of the quarter	Remind staff where to find the information 2nd week of the quarter. Ask what is working/not working	Update processes 2nd week of the quarter	1 week before training	Quarterly Training



# WHY BAD DATA HAPPENS





# Why Bad Data Happens



**Employees are not trained  
in the importance of data &  
workflow**



**Sometimes the work  
environment isn't optimal  
and prevents focus**



**Overloading  
employees with too  
much work**




**Prioritizing speed over  
accuracy**



**Not entering data into  
HMIS correctly or in a  
timely manner**



**Failing to double-check  
all data entries for  
accuracy**

The background features a collage of various icons related to data, technology, and business. These include bar charts, line graphs, a document labeled 'LOG', gears, a network diagram, a person icon, a pie chart, a computer monitor, a server rack, a cloud with a chip, a folder, a paintbrush, and a circuit board.

# HOW TO AVOID BAD DATA; *CLEAN-UP EFFORTS* & *RECOMMENDATIONS*

# How To Avoid Bad Data

## Clean Up Efforts and Recommendations

- ▶ **Understand Workflow Process**
- ▶ **Ongoing Monitoring**-ensure data entered is correct and as accurate as possible by checking
  - ROI (Release of Information)
  - Client profile
  - Enrollments
  - Assessments
  - Services
- ▶ Try to **identify primary sources of inaccuracies** and entry errors
  - **Transcription errors**: typing too fast, accidentally hitting the wrong keys (etc.)
  - **Transposition errors**: inputting information in the wrong order (e.g., 2019 is entered as 2091 etc.)
- ▶ **Enter client data as soon as possible**
- ▶ **Review Data Quality** using HMIS Data Quality Report at least once a month
- ▶ **Correct “null” values** as soon as possible
- ▶ **Double check and re-read your entries**
- ▶ Ongoing or as needed training (refresher trainings)



# How To Avoid Bad Data

## Clean Up Efforts and Recommendations

In general, you should evaluate and correct data quality quarterly using the following schedule

<b>First Month of Quarter</b>	<ul style="list-style-type: none"><li>● Begin data quality review, focused on ensuring the correct number of clients are enrolled and there are no null values</li><li>● Make corrections as needed</li></ul> <p><i>(e.g., ensure that no required information, such as veteran status, is missing)</i></p>
<b>Second Month of Quarter</b>	<ul style="list-style-type: none"><li>● Review data with relevant program managers and/or staff to verify accuracy of data compared to other records</li></ul> <p><i>(e.g., ensure that veteran status data entered into HMIS is correct)</i></p>
<b>Third Month of Quarter</b>	<ul style="list-style-type: none"><li>● Assess agency workflow to identify process improvements that may help ensure high quality data is consistently entered into HMIS</li></ul>

“

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

The background features a collage of various icons related to data, technology, and business. These include bar charts, line graphs, a document labeled 'LOG', a book with gears, a network diagram, a pie chart, a laptop with an atom symbol, a folder with a brush, and a brain with a microchip.

# HELPFUL REPORTS FOR DATA QUALITY



“

At a minimum, you should begin correcting data quality issues at least two (2) months before a report is submitted to the agency requesting the report

# Helpful Reports: [HUDX-227] APR

## Q5a. Report Validations Table

Program Applicability: All Projects

Total number of persons served	2,079
Number of adults (age 18 or over)	1,500
Number of children (under age 18)	579
Number of persons with unknown age	0
Number of leavers	49
Number of adult leavers	27
Number of adult and head of household leavers	27
Number of stayers	2,030
Number of adult stayers	1,473
Number of veterans	120
Number of chronically homeless persons	922
Number of youth under age 25	47

## Q6a. Data Quality: Personally Identifiable Information

Program Applicability: All Projects

Data Element	Client Doesn't Know/Refused	Information Missing	Data Issues	Total	% of Error Rate
Name (3.1)	2	3	21	26	1.25%
Social Security Number (3.2)	117	2	30	149	7.17%
Date of Birth (3.3)	0	0	20	20	0.96%
Race (3.4)	34	7		41	1.97%
Ethnicity (3.5)	1	2		3	0.14%
Gender (3.6)	0	1		1	0.05%
Overall Score				189	9.09%

## Q6b. Data Quality: Universal Data Elements

Program Applicability: All Projects

Data Element	Error Count	% of Error Rate
Veteran Status (3.7)	2	0.13%
Project Start Date (3.10)	0	0.00%
Relationship to Head of Household (3.15)	3	0.14%
Client Location (3.16)	0	0.00%
Disabling Condition (3.8)	23	1.11%

## Q6c. Data Quality: Income and Housing Data Quality

Program Applicability: All Projects

Data Element	Error Count	% of Error Rate
Destination (3.12)	1	2.04%
Income and Sources (4.2) at Start	58	3.87%
Income and Sources (4.2) at Annual Assessment	211	27.58%
Income and Sources (4.2) at Exit	1	3.70%

## Q6d. Data Quality: Chronic Homelessness

Program Applicability: ES, SH, Street Outreach, TH & PH(All)

Entering into project type	Count of total records	Missing time in institution (3.9.17.2)	Missing time in housing (3.9.17.2)	Approximate Date started (3.9.17.3)	Number of times (3.9.17.4)	Number of months (3.9.17.5)	% of records unable to calculate
				DK/R/missing	DK/R/missing	DK/R/missing	
				0	0	0	0.00%
0	0	0	0	0	0	0	0.00%
0	27	0	10	28			4.63%
							4.27%

**Report that tracks program progress and accomplishments in HUD's competitive **homeless** assistance programs. The APR provides the grantee and HUD with information necessary to assess each grantee's **performance**.**

# Helpful Reports: [HUDX-227] APR

## Q19a1. Client Cash Income Change - Income Source - by Start and Latest Status

Program Applicability: All Projects

2

Income Change by Income Category (Universe: Adult Stayers with Income Information at Start and Annual Assessment)	Had Income Category at Start and Did Not Have It at Annual Assessment	Retained Income Category But Had Less \$ at Annual Assessment Than at Start	Retained Income Category and Same \$ at Annual Assessment as at Start	Retained Income Category and Increased \$ at Annual Assessment	Did Not Have the Income Category at Start and Gained the Income Category at Annual Assessment	Did Not Have the Income Category at Start or at Annual Assessment	Total Adults (including those with No Income)	Performance Measure: Adults who Gained or Increased Income from Start to Annual Assessment, Average Gain	Performance Measure: Percent of persons who accomplished this measure
Number of Adults with Earned Income (i.e., Employment Income)	14	9	14	13	19	407	483	32	6.63%
Average Change in Earned Income	-1,211.32	-175.29		1,022.30	1,477.90			1,292.81	

1

Report Date Range

10/01/2019



10/17/2019

Report Output Format

☒ Web Page ☐ PDF ☐ Excel ☐ CSV-Details

Drilldown Output Format

☐ Web Page ☒ CSV

SUBMIT

3

### HUD Annual Performance Report (FY 2020)

#### Q19a1. Client Cash Income Change - Income Source - by Start and Latest Status

Number of Adults with Earned Income (i.e., Employment Income) - Performance Measure: Adult who Gained or Increased Income from

Leaver/Stayer	Program Stage	Program Stage Date	Cash Income Range	Cash Income Category	Income Cash	Income Cash Amount
	Start	12/09/2009	No Income	Adults with No Income	No	\$0.00
Stayer	Having the required annual assessment	12/04/2018	\$2,001+	Adults with Only Earned Income (i.e., Employment Income)	Yes	\$2,200.00
	Start	03/01/2010	\$501 - \$1,000	Adults with Only Other Income	Yes	\$584.00
Stayer	Having the required annual assessment	03/01/2019	\$251 - \$500	Adults with Only Earned Income (i.e., Employment Income)	Yes	\$500.00
	Start	05/17/2011	\$501 - \$1,000	Adults with Only Other Income	Yes	\$638.00
Stayer	Having the required annual assessment	05/17/2019	\$1,501 - \$2,000	Adults with Only Earned Income (i.e., Employment Income)	Yes	\$2,000.00

Select CSV on the Drilldown Output Format to export details for APR categories



# Helpful Reports: [DQXX-110] Duplicate Clients

Duplicated Client List

	Unique ID	Name	SSN	DOB	Added Date	Staff	Agency Name
			xxx-xx-3788	07/11/1979	02/12/2015		Abode Services
			xxx-xx-3788	07/11/1979	03/02/2017		Catholic Charities
Y			xxx-xx-3949	12/02/1994	04/02/2012		Bill Wilson Center
			xxx-xx-3949	12/02/1994	08/30/2019		Abode Services
			xxx-xx-0392	02/22/1980	02/07/2008		Abode Services
			xxx-xx-0392	02/22/1980	05/21/2012		City Team Ministries
Y			xxx-xx-0000	01/28/1997	05/23/2011		Bill Wilson Center
			xxx-xx-0000	02/28/1997	03/31/2010		Abode Services
			xxx-xx-5384	07/21/1952	08/17/2007		HomeFirst
			xxx-xx-5384	07/21/1952	09/27/2019		Abode Services
			xxx-xx-0000	09/23/2015	01/19/2016		Abode Services
			xxx-xx-0000	09/23/2015	01/19/2016		Abode Services
			xxx-xx-2934	03/20/2012	05/26/2016		Abode Services
			xxx-xx-2934	03/20/2012	12/11/2017		HomeFirst
			xxx-xx-0000	02/10/1969	06/05/2017		Abode Services
			xxx-xx-0000	03/21/1969	09/17/2019		County: SCVHHS - Ambulatory
			xxx-xx-0935	12/17/1980	10/26/2017		HomeFirst
			xxx-xx-0935	12/17/1980	10/19/2018		Abode Services
			xxx-xx-0613	02/03/2011	11/06/2017		Bill Wilson Center
			xxx-xx-0613	02/03/2011	11/17/2017		Abode Services
			xxx-xx-8036	02/14/2014	11/06/2017		Bill Wilson Center
			xxx-xx-8036	02/14/2014	11/17/2017		Abode Services
			xxx-xx-0538	04/27/2016	12/12/2017		Abode Services
			xxx-xx-0538	04/27/2016	01/31/2017		Bill Wilson Center
			xxx-xx-3203	06/20/1987	02/22/2018		Abode Services
			xxx-xx-3203	06/20/1987	03/28/2018		Family and Children Services
			xxx-xx-3702	10/03/1999	06/22/2018		Abode Services
			xxx-xx-3702	10/03/1999	11/13/2018		Center for Employment Training (CET)

This report is designed to provide a list of suggested duplicate clients who are receiving services across different agencies (includes UID, Name, SSN, DOB, Added date, Staff and Agency Name)

If you confirm that these clients are duplicated, reach out to the Bitfocus Help Desk to request a merge. No program enrollment data will be lost.



# Helpful Reports: [DQXX-103] Monthly Staff Report

## Monthly Staff Report

This report is an automated monthly review of your staff participation in Clarity.

Please note, this is a courtesy email report. All data held within is viewable at any time by accessing the Reports Library within Clarity.

Your Agency Average Data Entry Timeliness (in days)	7
Your Refused DQ Score	1.0%
Your Don't Know DQ Score	1.0%
Your Not Collected DQ Score	6.0%
Your Unique Client Count	2,180

Report Period : 09/15/2019 through 10/15/2019

Informations about the following table :

<b>Unique Clients:</b>	Unique number of clients currently receiving service within the report date range
<b>New Clients:</b>	Unique number of clients newly enrolled in a service or program within the report date range
<b>Average Timeliness (in Days):</b>	Average number of days from program/service start date to the time the service/program was recorded in Clarity
<b>DQ Don't Know:</b>	Average percentage of Program Specific Data Elements answered Don't Know.
<b>DQ Refused:</b>	Average percentage of Program Specific Data Elements answered Refused.
<b>DQ Not Collected:</b>	Average percentage of Program Specific Data Elements answered Not Collected.

### Active Staff

Name	Unique Clients	New Clients	AVG Timeliness (in days)	DQ % Don't Know	DQ % Refused	DQ % Not Collected
	23	0	0	0%	0%	2.2%
	21	9	1	0.5%	0.2%	7.4%
	15	14	8	1.0%	0%	4.9%

This report is designed to provides the following:

- General Data Quality
- User Activity (including the number of clients, [both existing and new] that each staff member worked with during the time frame of report.)
- Data quality by data element (e.g. Date of Birth, Race, Ethnicity, Veteran Status, etc.) for all clients served

### Active Staff - No Activity

Name	Last Login	Days Inactive
	10/12/2019	3
	09/24/2019	21
	10/14/2019	1

### Disabled Users with Activity

Name	Unique Clients	New Clients	AVG Timeliness (in days)	DQ % Don't Know	DQ % Refused	DQ % Not Collected
	4	0	0	0%	0%	4.6%
	1	0	0	0%	5.0%	0%
	8	0	0	0%	0%	5.1%
	1	0	0	0%	0%	0%
	2	0	0	0%	0%	4.6%

### Locked Users with Activity

Name	Unique Clients	New Clients	AVG Timeliness (in days)	DQ % Don't Know	DQ % Refused	DQ % Not Collected
	10	8	8	0%	0%	5.7%
	1	0	0	0%	0%	0%
	38	26	2	0.1%	0%	2.3%

Informations about the following table:

The chart below is based on Program based enrollment data for HUD funded CoC projects. If your project type is not required to collect all of the elements listed below, clients will be counted as "Data Not Collected". This applies to specific elements not required for Federal Partner projects such as PATH, RHY and SSVF or any custom enrollments for non-HUD funded projects.

Data Element	Total Don't Know	% Don't Know	Total Refused	% Refused	Not Collected	% Not Collected
<b>Profile Statistics</b>						
SSN	92	4.4%	25	1.2%	2	0.1%
DOB	0	0.0%	0	0.0%	0	0.0%
Race	29	1.4%	5	0.2%	7	0.3%

# Helpful Reports: [DQXX-102] Program Data Review

## Program Data Review

Program:

Eligibility Category: PH - Rapid Re-Housing

Program Contract: N/A

Status: Active

Name	Unique Identifier	Entry Date	Exit Date	Days active in program	Missing Entry Data	Missing Exit Data
		05/08/2018		525	0	0
		05/08/2018		525	0	0
		05/08/2018		525	0	0
		05/08/2018		525	0	0
		05/08/2018		525	0	0
		05/08/2018		525	0	0
		05/08/2018		525	0	0
		07/12/2018		460	0	0
		07/12/2018		460	0	0
		08/17/2018		424	0	0
		08/17/2018		424	0	0
		08/17/2018		424	0	0
		08/17/2018		424	0	0
		08/17/2018		424	0	0
		09/06/2018		404	0	0
		09/06/2018		404	1	0
		09/06/2018		404	2	0
		09/06/2018		404	0	0

This is a program-based report that provides information on program participation duration for active and inactive clients, while also reporting data quality scores for the chosen program.

# Helpful Reports: [HUDX-225] HMIS Data Quality

## HMIS Data Quality Report [FY 2020]

Santa Clara County CoC:

Report period 09/15/2019 - 10/15/2019

### Q1. Report Validation Table

Program Applicability: All Projects

Total number of persons served	2,071
Number of adults (age 18 or over)	1,492
Number of children (under age 18)	579
Number of persons with unknown age	0
Number of leavers	49
Number of adult leavers	27
Number of adult and head of household leavers	27
Number of stayers	2,022

### Q2. Personally Identifiable Information (PII)

Program Applicability: All Projects

Data Element	Client Doesn't Know/Refused	Information Missing	Data Issues	Total	% of Error Rate
Name (3.1)	2	3	21	26	1.26%
Social Security Number (3.2)	115	2	28	145	7%
Date of Birth (3.3)	0	0	20	20	0.97%
Race (3.4)	27	7			
Ethnicity (3.5)	1	2			
Gender (3.6)	0	1			
Overall Score					

### Q2. Personally Identifiable Information (PII)

Program Applicability: All Projects

Data Element	Client Doesn't Know/Refused	Information Missing	Data Issues	Total	% of Error Rate
Name (3.1)	2	3	21	26	1.26%
Social Security Number (3.2)	115	2	28	145	7%
Date of Birth (3.3)	0	0	20	20	0.97%
Race (3.4)	27	7		34	1.64%
Ethnicity (3.5)	1	2		3	0.14%
Gender (3.6)	0	1		1	0.05%
Overall Score				179	8.64%

### Q3. Universal Data Elements

Program Applicability: All Projects

Data Element	Error Count	% of Error Rate
Veteran Status (3.7)	2	0.13%
Project Start Date (3.10)	0	0%
Relationship to Head of Household (3.15)	3	0.14%
Client Location (3.16)	0	0%
Disabling Condition (3.8)	23	1.11%

### Q3. Universal Data Elements

Program Applicability: All Projects

Data Element
Veteran Status (3.7)
Project Start Date (3.10)
Relationship to Head of Household (3.15)
Client Location (3.16)
Disabling Condition (3.8)

### Q4. Income and Housing Data Quality

Program Applicability: All Projects

Data Element	Error Count	% of Error Rate
Destination (3.12)	1	2.04%
Income and Sources (4.2) at Start	58	3.89%
Income and Sources (4.2) at Annual Assessment	206	26.96%
Income and Sources (4.2) at Exit	1	3.7%
Non-Cash Benefits (4.3) at Start	35	2.35%
Non-Cash Benefits (4.3) at Annual Assessment	214	28.23%
Non-Cash Benefits (4.3) at Exit	0	0%

### Q5. Chronic Homeless

Program Applicability: ES, SH, Street Outreach, TH & PH(All)

Starting into project type	Count of total records	Missing time in institution (3.917.2)	Missing time in housing (3.917.2)	Approximate Date started (3.9.17.3)	Number of times (3.9.17.4)	Number of months (3.9.17.5)	% of records unable to calculate
ES, SH, Street Outreach	94			0	0	0	0%
TH	0	0	0	0	0	0	0%
PH (all)	1,208	0	27	0	10	28	4.64%
Total	1,302						4.3%

### Q6. Timeliness

Program Applicability: All Projects

Time for Record Entry	Number of Project Start Records	Number of Project Exit Records
0 days	21	13
1-3 days	33	24
4-6 days	7	0
7-10 days	3	0
11+ days	2	12

The [HUDX-225] HMIS Data Quality Report is a HUD report that reviews data quality across a number of HMIS data elements



# Helpful Reports: [GNRL-220] PROGRAM DETAILS REPORT

A	B	C	D	E	F	G	H	I	J
Unique ID	First Name	Last Name	Agency	Assigned Staff	Staff Created	Enrollment Start Date	Enrollment Exit Date	Chronic Homeless	Housing Service
1F567D9F3						07/16/2018		Y	[[CCP Housing Maintenance] Continuum of Care Program 5022] PSH Housing: Scattered Site - Board & Care
1F567D9F3						07/16/2018		Y	[[CCP Housing Maintenance] Continuum of Care Program 5022] PSH Housing: Scattered Site - Board & Care
1BA32A410						07/01/2017		Y	[[CCP Housing Maintenance] Continuum of Care Program 5022] PSH Housing: Households without Children
1BA32A410						07/01/2017		Y	[[CCP Housing Maintenance] Continuum of Care Program 5022] PSH Housing: Households without Children
ECF91F5B8									
ECF91F5B8									
ECF91F5B8									
BF0B4AB14									
ES2178FA6									
AS5FF7507									
A7AE1CD1B									
A7AE1CD1B									
940D153FE									
9ED4A248D									
0CBA272E0									
CF3A43ED0									
CF3A43ED0									
CF3A43ED0									
9DE686513									
6F5735B12									
6F5735B12									
1D0326CE5									
1D0326CE5									

Housing Service End Date	DOB	SSN	Personal ID	Household ID	Gender	Race	Ethnicity	Veteran Status	Project Status Date
			04/24/2017						
11/09/2023	01/19/1962		05/23/2018		Male	White	Non-Hispanic/Non-Latino	Yes	09/10/2019
11/09/2023	01/19/1962		11/01/2017		Male	White	Non-Hispanic/Non-Latino	Yes	07/16/2019
09/08/2027	04/03/1965		06/25/2018		Male	American Indian or Alaskan Native	Hispanic/Latino	No	07/22/2019
09/08/2027	04/03/1965		07/11/2017		Male	American Indian or Alaskan Native	Hispanic/Latino	No	07/01/2018
	09/19/1984		07/11/2017		Female	White	Hispanic/Latino	No	04/24/2019
	09/19/1984		09/19/1984		Female	White	Hispanic/Latino	No	04/24/2018
	09/19/1984		02/27/2018		Female	White	Hispanic/Latino	No	04/24/2017
	02/03/2018				Female	White	Hispanic/Latino	No	04/24/2017

BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN
Income from Any Source	Earned Income	Amount	Unemployment Insurance	Amount	Supplemental Security Income (SSI)	Amount	Social Security Disability Insurance (SSDI)	Amount	VA Service-Connected Disability Compensation	Amount
Yes	N		N		N		N		N	
Yes	N		N		N		N		N	
Yes	N		N		Y	1,123.8	N		N	
Yes	N		N		Y	1,123.8	N		N	
Yes	N		N		N		N		N	
Yes	N		N		N		N		N	
Yes	N		N		N		N		N	
Yes	N		N		N		N		N	
Yes	N		N		N		N		N	
No	N		N		N		N		N	
Yes	N		N		Y	910.	N		N	
Yes	N		N		N		N		N	
Yes	N		N		N		N		N	
Yes	N		N		Y	815.15	N		N	
Yes	Y	1,452.	N		N		N		N	
Yes	N		N		N		Y	876.06	N	
Yes	N		N		N		Y	895.72	N	
Yes	N		N		N		Y	895.72	N	
Yes	N		N		N		Y	895.72	N	
Yes	N		N		Y	1,084.	N		N	
Yes	N		N		Y	876.	N		N	
Yes	N		N		Y	876.	N		N	
Yes	N		N		N		N		N	
Yes	N		N		N		N		N	

This report is designed to provide a full list of program participation including details of start date, status updates and exit date. Additionally, this report details all of the responses for the UDE's/PDDE's as well as include assigned staff and staff who created the client. *\*Please note this report will only be available in zip file that can be viewed with Excel.*



# Helpful Reports: [SCC-107] ES/TH Utilization Report

## Emergency Shelter/Safe Haven, Transitional Housing, and Cold Weather Shelter Utilization Report

Santa Clara County CoC:

Report period 10/01/2019 - 10/16/2019

Cold Weather period 10/01/2019 - 10/16/2019

### Overview

#### Point-In Time Utilization

ES SH & TH 10/16/2019  
ES CW 10/16/2019

Type	Capacity (Total Units)	PIT Households Served	% Utilized
Emergency Shelter/Safe Haven	420	49	11.67%
Transitional Housing	52	15	28.85%
Cold Weather/Seasonal Shelters	0	1	0.00%
<b>TOTALS:</b>	<b>472</b>	<b>65</b>	<b>13.77%</b>

#### Utilization Over Reporting Period

ES SH & TH 10/01/2019 to 10/16/2019  
ES CW 10/01/2019 to 10/16/2019

Type	# of Programs	Total Clients Served	Capacity		Period Capacity		PSD Utilization		% Utilization	
			Beds	Units	Beds	Units	Beds	Units	Beds	Units
Emergency Shelter/Safe Haven	17	514	420	420	6,720	6,720	5,538	5,092	82.41%	75.77%
Transitional Housing	5	57	172	52	2,752	832	912	240	33.14%	28.85%
Cold Weather/Seasonal Shelters	5	216	0	0	0	0	2,153	1,659	0.00%	0.00%
<b>TOTALS:</b>	<b>27</b>	<b>787</b>	<b>592</b>	<b>472</b>	<b>9,472</b>	<b>7,552</b>	<b>8,603</b>	<b>6,991</b>	<b>90.83%</b>	<b>92.57%</b>

This report is designed to provide details of the number of beds and units available (capacity) and how they are occupied (utilization) over a period of time.

# Helpful Reports: [SCC-107-AD] ES/TH Utilization Report

Individual Program Information		Capacity		Period Capacity		PSD Utilization		% Utilization	
Site	Total Clients Served	Beds	Units	Beds	Units	Beds	Units	Beds	Units
	106	45	45	2,115	2,115	2,917	2,917	137.92%	137.92%
	3	6	6	282	282	51	51	18.09%	18.09%
	0	28	28	1,316	1,316	0	0	0.00%	0.00%
	8	8	8	376	376	34	34	9.04%	9.04%
	39	18	18	846	846	618	618	73.05%	73.05%
	0	5	5	235	235	0	0	0.00%	0.00%
	216	5	5	235	235	476	476	202.55%	202.55%
	20	20	20	940	940	807	807	85.85%	85.85%
	41	20	20	940	940	839	839	89.26%	89.26%
	100	40	40	1,880	1,880	2,438	2,438	129.68%	129.68%
	21	20	20	940	940	514	514	54.68%	54.68%
	1	17	17	799	799	7	7	0.88%	0.88%
	14	8	8	376	376	290	290	77.13%	77.13%
	21	10	10	470	470	750	750	159.57%	159.57%
	32	30	30	1,410	1,410	932	932	66.10%	66.10%
	208	125	125	5,875	5,875	5,806	4,659	98.83%	79.30%
	17	15	15	705	705	442	243	62.70%	34.47%
TOTALS:	847	420	420	19,740	19,740	16,921	15,575	85.72%	78.90%

# Helpful Reports

Report Name and Number	Report Description
<b>[HUDX-227] Annual Performance Report (APR)</b>	<ul style="list-style-type: none"><li>• Q5a Total persons served, total persons served by subpopulation-youth, vets, total leavers and stayers, total number of chronically homeless persons in a program</li><li>• Q6a PII error drill downs for Client Doesn't know/information missing</li><li>• Q6b error drill downs for relationship to HoH, disabling conditions</li><li>• Q6c errors for income at start, annual assessment, and exit</li><li>• Q6e Timeliness of data entered at start and exit</li><li>• 19a1 income change</li></ul>
<b>[DQXX-110] Duplicate Clients</b>	This report is designed to provide a list of suggested duplicate clients who are receiving services across different agencies (includes UID, Name, SSN, DOB, Added date, Staff and Agency Name)
<b>[DQXX-103] Monthly Staff Report</b>	<p>This report is designed to provides the following:</p> <ul style="list-style-type: none"><li>• General Data Quality</li><li>• User Activity (including the number of clients, [both existing and new] that each staff member worked with during the time frame of report.)</li><li>• Data quality by data element (e.g. Date of Birth, Race, Ethnicity, Veteran Status, etc.) for all clients served</li></ul>



# Helpful Reports

Report Name and Number	Report Description
<b>[DQXX-102] Program Data Review</b>	This is a program-based report that provides information on program participation duration for active and inactive clients, while also reporting data quality scores for the chosen program.
<b>[HUDX-225] HMIS Data Quality</b>	The [HUDX-225] HMIS Data Quality Report is a HUD report that reviews data quality across a number of HMIS data elements <ul style="list-style-type: none"><li>• Provides the error report for data elements that should be corrected prior to submitting an APR</li></ul>
<b>[GNRL-220] Program Details Report</b>	This report is designed to provide a full list of program participation including details of start date, status updates and exit date. Additionally, this report details all of the responses for the UDE's/PDDE's as well as include assigned staff and staff who created the client. <i>*Please note this report will only be available in zip file that can be viewed with Excel.</i>
<b>[SCC-107] ES/TH Utilization Report</b>	This report is designed to provide details of the number of beds and units available (capacity) and how they are occupied (utilization) over a period of time.

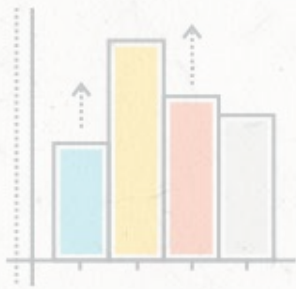


# Helpful Reports: Useful Report for Program Managers

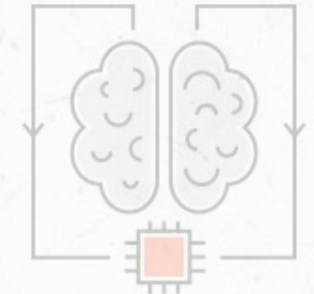


## Useful Reports for Shelter & Outreach Program Managers

	SECTION	AD?	TITLE	CONTENT
<b>WHO'S ENROLLED?</b>	Program-Based	N	<b>[GNRL-106] Program Roster</b>	Who's enrolled or exited with dates and LOS
	Program-Based	Y	<b>[GNRL-220] Program Details Report</b>	All data from enrollment/update/exit screens + housing service dates
	Program-Based	Y	<b>[OUTS-106] Client Demographics</b>	Demographic breakdown charts for all enrolled clients
<b>WHO'S BEEN SERVED?</b>	Service-Based	N	<b>[GNRL-104] Service Summary</b>	Counts of services provided and unique clients
	Service-Based	N	<b>[GNRL-103] Service Census</b>	Counts of services provided by day, plus service summary
	Service-Based	N	<b>[OUTS-105] Client Demographics</b>	Demographic breakdown charts for all served clients
	Program-Based	N	<b>[EXIT-101] Potential Exits</b>	Clients who haven't received a service since specified date
<b>WHERE'D WE SPEND MONEY?</b>	Program-Based	N	<b>[EXPS-103] Program Funding Source Financial Detail</b>	Lists all funds spent as part of services, plus totals by service and program
<b>STAFF DATA QUALITY</b>	Email	N	<b>[DQXX-103] Monthly Staff Report</b>	Data completeness and timeliness for all staff
	HUD	Y	<b>[HUDX-225] HMIS Data Quality Report</b>	Comprehensive report on data quality
<b>STAFF ACTIVITY</b>	Agency Management	N	<b>[STFF-104] Staff Client Data Activity Report</b>	Staff activity in the system
	Agency Management	N	<b>[STFF-101] User Activity Report</b>	Staff login times and time logged in



# ACTIVITY TIME



# Activity #2

**Why is regular reporting of client's income changes (updates) in HMIS important to your agency and the client?**

*(Choose all that apply)*

- A.** Accurately demonstrates community progress and success
- B.** It is not common practice to enter this in HMIS for our Agency
- C.** Demonstrate an increase in the percent of homeless adults who gain or increase employment or non-employment cash income over time
- D.** Maintaining timely and accurate HMIS data related to employment outcomes is not my responsibility
- E.** Brings more federal dollars to Santa Clara County

# Activity #3

**You run the HMIS Data Quality Report for a local Emergency Shelter, and you notice that your results for the Personally Identifiable Information (PII) table include high rates (80% or more) of “Client Doesn’t Know/Client Refused” for the following data elements: social security, name, date of birth, and gender.**

- Why do you think there is a data quality/accuracy issue?
- If so, how might it impact your data overall?
- What would your next steps be to address this data quality/accuracy issue?



# Activity #4

**You run a bed utilization report for a local Emergency Shelter and you notice that your result is less than 65% utilization for the first month of the quarter, and then 125% utilization for the last month of the quarter.**

- Why do you think there is a data quality/accuracy issue?
- If so, how might it impact your data overall?
- What would your next steps be to address this data quality/accuracy issue?

# Tips

Setting data entry deadlines of one or two days after intake ensures timeliness and avoids rushed, sloppy, burdensome data entry at the end of a reporting period.

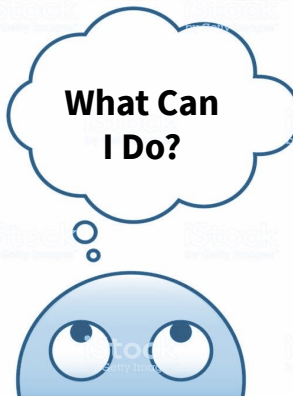
The likelihood of data entry error increases when data are collected and entered by different staff.

Data processes should include procedures for entering new clients, updating existing client information, handling exit data, and re-enrolling returning clients.

Data for active clients should be reviewed and updated at least monthly.

**What Can I Do?**

The highest standards should be applied toward achieving data completeness for the identifying fields: name, social security number, date of birth, and gender.



# RESOURCES

[Continuous Data Quality Improvement  
Process Santa Clara Continuum of Care](#)

[HMIS Guides and Tools](#)

[SNAPS Data TA Strategy to  
Improve Data and Performance](#)



# CONTACT INFORMATION

**Janel Fletcher**  
**Senior Project Administrator**  
**Santa Clara County**  
**[Janelf@Bltfocus.com](mailto:Janelf@Bltfocus.com)**



**Allson Wilson**  
**System Analyst**  
**[allsonw@Bltfocus.com](mailto:allsonw@Bltfocus.com)**



**SCC Helpdesk Support**  
**[sccsupport@Bltfocus.com](mailto:sccsupport@Bltfocus.com)**

**SCC Admin. Team**  
**[scc-admin@Bltfocus.com](mailto:scc-admin@Bltfocus.com)**



**Lesly Soto Bright**  
**System Analyst**  
**[leslys@Bltfocus.com](mailto:leslys@Bltfocus.com)**



An abstract graphic featuring several overlapping circles in various shades of blue. A dotted line connects four of these circles, forming a path that loops around the central text. The central circle is the darkest blue and contains the text "THANK YOU" in white, uppercase letters.

THANK YOU

# SOURCES

[Data Quality 201 Strategies to Check the Accuracy of Your System](#)

[Reviewing and Improving Data Quality -King County HMIS Training](#)

[HMIS Guides and Tools](#)

[Continuous Data Quality Improvement Process Santa Clara Continuum of Care](#)