ART Gallery Report 0213
Universal Data Element Completeness
HMIS Data Quality
Version Based on Program Entries and Exits

EXECUTIVE SUMMARY:

This ART report is designed to assist administrators in monitoring data quality and identifying clients with null values in one or more of the eleven assessment based Universal Data Elements (UDEs) required by HUD for programs which serve homeless individuals. This report is based in part on the data quality measures required to complete section 2E of Exhibit 1 in the 2009 NOFA. The report provides the percentages of null responses and the percentages of refused/unknown responses for the eleven assessment based UDEs. In calculating these percentages, the report takes into consideration whether each client contained in the analysis is an adult, a child, or an unaccompanied youth since the required data elements for these three client subsets differ from one another. It should be noted that there are three versions of this report to accommodate three different work-flows:

- **0213:** For "Entry-Exit" based work-flows where program entries and exits are required for all clients. This report counts clients and not the number of entries/exits.
- **0215:** For "Open Service" based work-flows where service start dates and service end dates are required for all clients, and services without an end date indicate an on-going service in progress.
- **0214:** For "Closed Service" based work-flows where service start dates and service end dates are required for all clients, and services without an end date indicate a one-day completed service as opposed to an on-going service in progress.

AUDIENCE:

This report is intended for use by HMIS administrators with responsibility for monitoring and/or insuring data quality as well as for administrators charged with gathering this data to support preparation of the NOFA application.

FREQUENCY:

It is recommended that this report be run on a monthly basis so the clients with missing UDE values can be identified and the missing information can be supplied/backdated.

PUROPOSE:
The data quality issues identified in this report are critical for insuring complete and accurate client data, and for meeting funding requirements.

REPORT INSTRUCTIONS AND PROMPTS:

The easiest way to use this report is to navigate to the automapper. This folder has the reports automatically mapped to your site. Navigate to the automapper as shown in Figure 1, below:
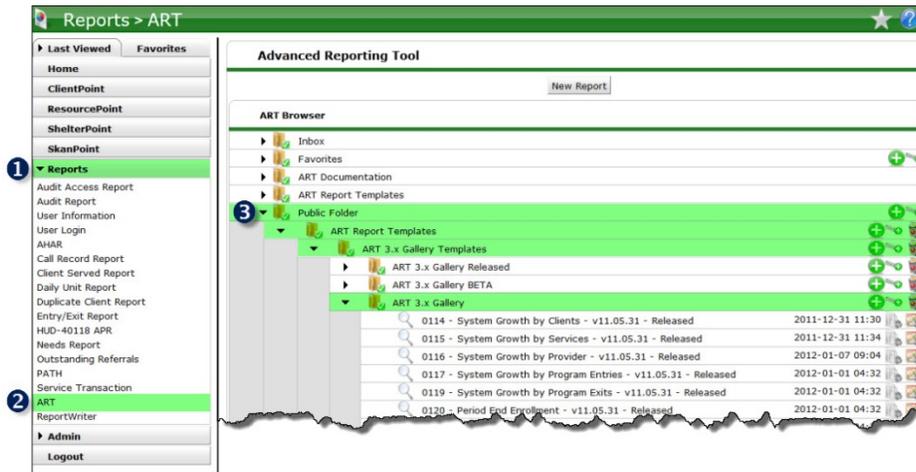

Figure 1

Requests for additional information concerning the report function/design should be directed to Bowman Systems' Customer Support Specialist (CSS) staff.

Before running the report: Prior to running the report the user must determine the providers to be included in the report and a date range on which to base the results.

How to run:

Upon opening the report, the user will be prompted (see Figure 2) to supply the parameters that they have selected which control the data returned by the report. Once the user has provided these by responding to the user prompts, a green check-mark will appear next to each field to indicate that a valid selection has been made. The user should then single-click the "Run Query" button to generate the report.
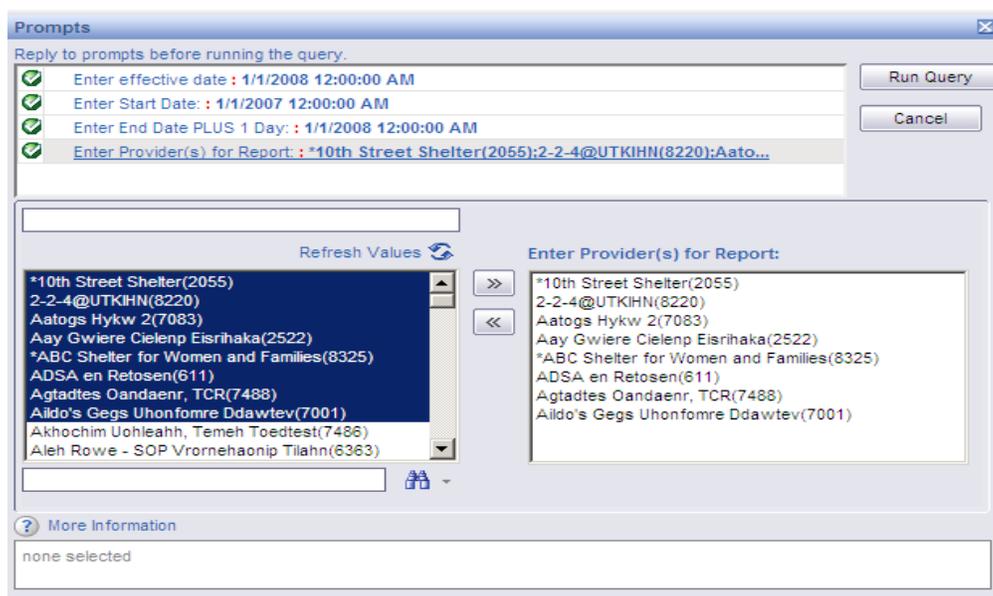

Figure 2

The four user prompts contained in this report are:

1. **Enter Effective Date:** The user should enter (or select from the calendar) the day immediately following the date range that has been selected. (The value selected is retained as the default for the next time the report is run.)

2. **Enter Start Date:** The user should enter (or select from the calendar) the first day of the date range that has been selected. (Again the value selected is retained as the default for the next time the report is run.)

3. **Enter End Date PLUS 1 Day:** The user should enter (or select from the calendar) the day immediately following the date range that has been selected. (Once again this value is retained as the default for the next time the report is run.)

4. **Enter Provider(s) for Report:** First click the left arrow to remove the "none selected" choice from the right window. Then click the "refresh list" icon and wait for the left window to refresh. Now select the providers to include by highlighting them in the left window and moving them into the right window using the right selection arrow.

> **IMPORTANT NOTE**: In order to achieve valid results, the providers included in the running of the report must all share a common work flow element and the proper/corresponding version of this report must be used (outlined above); that is, either all must require program entries and exits in their workflow, or if entry exits are not utilized, then all must require service transactions and utilize the service end date in the same manner. In situations where the providers in the Continuum of Care do not share common work flow elements, it will be necessary to run the report multiple times using the proper version of the report for different subsets of providers and then combine the results, and determine the percentages mathematically.

How to read: The report results consist of four report tabs (A, B, C and D). Screen shots (Figures 3-6) and descriptions of these tabs are provided below.

> **Tab A: Summary: (Figure 3)** This tab analyzes the data connected to clients who were selected based upon whether they were actively enrolled in a provider's program during the date range as determined by their program entries and exits. The data contained in this tab is valid when all providers included in the report are utilizing a workflow that requires program entries and program exits.

Universal Data Element Completeness
HMIS Data Quality Report
Version Based on Entry Exit Records
Date Range: 7/1/08- 6/30/09

Universal Data Element	Records with no values		Records where value is refused or unknown	
Social Security Number	0.00%	0 / 1	0.00%	0 / 1
Date of Birth	0.00%	0 / 1	0.00%	0 / 1
Ethnicity	0.00%	0 / 1	0.00%	0 / 1
Race	0.00%	0 / 1	0.00%	0 / 1
Gender	0.00%	0 / 1	0.00%	0 / 1
Veteran Status	100.00%	1 / 1	0.00%	0 / 1
Disabling Condition	100.00%	1 / 1	0.00%	0 / 1
Housing Status	100.00%	1 / 1	0.00%	0 / 1
Residence Prior to Program Entry	0.00%	0 / 1	0.00%	0 / 1
Zip Code of Last Permanent Address	100.00%	1 / 1	100.00%	1 / 1
Name	0.00%	0 / 1	0.00%	0 / 1

Figure 3

Tab B: Null Data IDs (Figure 4): This tab is self explanatory and identifies the individual clients (by their client ID number) who are connected with the null data in Tab A.

Universal Data Element Completeness
HMIS Data Quality Report
Version Based on Entry Exit Records
Date Range: 7/1/08- 6/30/09

ID numbers of clients with null value where answer is required											
ID#	**SSN**	**DOB**	**ETH**	**RACE**	**GEN**	**VET**	**DISAB**	**HSNG**	**PLS**	**ZIP**	**NAME**
339718	ok	ok	ok	ok	ok	null	null	null	ok	ok	ok
339719	ok	ok	ok	ok	ok	null	null	ok	ok	null	ok

Figure 4

Tab C: Don't Know and Refused IDs (Figure 5) This tab is also self explanatory and identifies the individual clients (by their client ID number) who are connected with the "Don't Knows" and "Refused" counts in Tab A.

Universal Data Element Completeness
HMIS Data Quality Report
Version Based on Entry Exit Records
Date Range: 7/1/08- 6/30/09

ID#s of clients with "don't know" or "refused" values recorded in required UDEs											
ID#	**SSN**	**DOB**	**ETH**	**RACE**	**GEN**	**VET**	**DISAB**	**HSNG**	**PLS**	**ZIP**	**NAME**
339718	ok	ok	ok	ok	ok	ok	ok	ok	ok	DK or R	na

Figure 5

Tab D: Additional Information (Figure 6): This tab is provided as a reference to the user running the report and lists the parameters specified in the user prompts as well as a complete list of the client counts by provider. It should be noted that the sum of the client listings by provider in tab D will most likely not equal the sum of the clients in tab A since an individual client may have been served by multiple providers and hence included in their listing, while the counts in tab A are fully de-duplicated.

Universal Data Element Completeness
HMIS Data Quality Report
Version Based on Entry Exit Records
Date Range: 7/1/08- 7/1/09

User Prompt Field	Value(s) Selected
Enter Effective Date:	10/8/09
Enter Start Date:	7/1/08
Enter End Date PLUS 1 Day:	7/1/09
Enter Provider(s) for Report:	HPRP-QA5(8577)

Providers Reporting Information	Unduplicated Client Count
HPRP-QA5(8577)	1

Figure 6

TECHNICAL NOTES:

1. The results in this report are de-duplicated by counting on the Unique Client ID, which relies on, and assumes an accurate recording of the client's name, date of birth and gender. Clients with inaccurate or missing information in one or more of these key fields are included but could potentially be duplicates.

2. Clients included in the results are clients who were actively enrolled in the selected program(s)/provider(s) on the user specified date range based upon their program entry dates and program exit dates. Clients with inaccurate or missing information in their entry, exit, or service information may not be included in the results.

3. In determining how to apply the Universal Data Elements (UDE) requirements, individual clients without a recorded date of birth were considered to be adult clients, and were not exempted from the UDE questions which do not apply to children and unaccompanied youth.

4. Clients entered into HMIS as anonymous are considered to have the Name Missing.

5. In determining which clients met the definition of unaccompanied youth, and are therefore exempt from the veteran UDE requirements, the following tests were applied. The individual had to be between the ages of 11 and 17 (inclusive) and meet one or more of the following criteria:
   a. Not a member of an active household
   b. A "yes" answer to the "head of a household" question
   c. A "self" answer to the "relationship to the head of household" question
   d. An active member of a household of the type "single"

6. In determining the null percentage for the disability UDE, only the stand alone question "Does the clients have a disability of long term duration?" was considered. Entries into the disability sub-assessment were not considered in evaluating the "disabling condition" UDE requirement.

7. In determining "unknown" and "refused" percentages the exact HUD established pick-list wording is matched. If pick-list wording changes have been made, or if options were added to pick-lists in which they did not originally exist, they will not be included the results. HUD established pick-list options related to unknown and refused UDE counts are provided below for reference:

   a. Social Security Number: "Don't Know or Don't Have SSN (HUD)" and "Refused (HUD)"
   b. Date of Birth: "Don't Know (HUD)" and "Refused (HUD)"
   c. Ethnicity: "Don't Know (HUD)" and "Refused (HUD)"
   d. Race: "Don't Know (HUD)" and "Refused (HUD)"
   e. Gender: "Unknown" and "Don't Know" and "Refused"
   f. Veteran Status: "Don't Know (HUD)" and "Refused (HUD)"
   g. Disabling Condition: "Don't Know (HUD)" and "Refused (HUD)"
   h. Housing Status: "Don't Know (HUD)" and "Refused (HUD)"
   i. Residence Prior to Program Entry: "Don't Know (HUD)" and "Refused (HUD)"
   j. Zip Code of Last Permanent Address: "Don't Know (HUD)" and "Refused (HUD)"
   k. Name: no unknown/refused option available in ServicePoint.

8. For UDEs such as SS# or Zip where the UDE value and the UDE quality are collected in two separate fields, there the potential for conflicting data. For example, a client's SS# may be recorded, but the SS# quality field may be marked "Don't Know". In such cases the both fields are reported at face value, that is, the report will not indicate a null value, but will indicate a "Don't Know" the value.

9. The following should be noted concerning the use of "unknown", "refused" and similar notations in the client name field(s): Although this is common practice in some installations, it is not in keeping with standard work-flow methodology, HUD standards nor intended software use, and is therefore not accommodated in this report. These and similar substitutes for the client name are considered as completed non-null entries in this report, and are not included in the unknown/refused counts. Those wishing such entries to be counted differently will need to modify the report to accommodate their particular work-flow.

REPORT MODIFICATION

Users with ad-hoc ART licenses may wish to modify/customize this report to better suit their needs and purposes. When modifying an ART Gallery report such as this one, the user will need to make a copy of the original report into a different folder. This copy can be created either by using the "save as" feature or by clicking on the "organize" icon in folder view.

NOTE: The original un-modified version of this report must be retained in the "ART Gallery Templates" folder. This folder is read-only so that changes cannot be inadvertently made to the original version. Since the "ART Gallery Templates" folder is a read-only folder, any/all copies of the report for modification purposes must be made into some other folder.

MODIFICATION OPTIONS

Ad hoc users may choose to customize this report to display the actual values of the UDEs instead of the "ok", "null", "na" and "DK or R" designations. This can easily be accomplished by removing or inactivating the various alerters which have been applied to the tables to mask the data, and by then adjusting the widths of the various columns so that the data is fully viewable. It should be noted however that this change will also affect the printability of the reports and that if printability is needed, additional changes to the page layout will need to be made. By adjusting various options such as font size, page margins, page orientation, text wrap, etc, the reports can be adjusted to be both viewable and printable. If these adjustments fail to produce the desired result, another option would be to create a duplicate of the tab, and include half of the UDEs in one and the other half in the other.

Experienced ad hoc users will also be able to include additional fields in the report if needed. This can be accomplished by:

- adding the needed assessment question(s)/field(s) to the query's results objects
- adding the new field(s) as row(s) in the Tab A sub-report
- adding the new field(s) as column(s) in the Tab B and C sub-reports
- creating the appropriate variables by replicating the logic utilized for the other report elements
- creating the appropriate formula for completion of the data tables, again replicating the logic utilized for the other elements
- applying the appropriate alerters to the Tab B and C sub-reports
- testing printability and modifying the page layout as needed

MAPPING OBJECTS

UNIVERSE: template_u

QUERY NAME	FIELD NAME	LOCATION/TYPE/USE		
BISData	Client Uid	Location:	Clients	
		Type:	System Field	
		Use:	Result Object	
	Client Unique Id	Location:	Clients	
		Type:	System Field	
		Use:	Result Object	
	Client First Name	Location:	Clients/ Client Last Name	
		Type:	System Field	
		Use:	Result Object	
	Client Last Name	Location:	Clients/ Client Last Name	
		Type:	System Field	
		Use:	Result Object	
	Client Soc Sec No Dashed	Location:	Clients/ Client Last Name	
		Type:	System Field	
		Use:	Result Object	
	Client SSN Data Quality	Location:	Clients/ Client Last Name	
		Type:	System Field	
		Use:	Result Object	
	Age (Calculated)	Location:	Clients/Assessments/Additional Profile Information	
		Type:	System Field	
		Use:	Result Object	
	Date of Birth(893)	Location:	Clients/Assessments/Additional Profile Information	
		Type:	System Field	
		Use:	Result Object	
	Gender(894)	Location:	Clients/Assessments/Additional Profile Information	
		Type:	System Field	
		Use:	Result Object	
	Primary Race(895)	Location:	Clients/Assessments/Additional Profile Information	
		Type:	System Field	
		Use:	Result Object	
	Ethnicity(896)	Location:	Clients/Assessments/Additional Profile Information	
		Type:	System Field	
		Use:	Result Object	
	U.S. Military Veteran?(220)	Location:	Clients/Assessments/HUD-40118	
		Type:	System Field	
		Use:	Result Object	

BISData	Do you have a disability of long duration?(979)	Location:	Clients/Assessments/HUD-40118
		Type:	System Field
		Use:	Result Object
	Type of Living Situation(43)	Location:	Clients/Assessments/HUD-40118
		Type:	System Field
		Use:	Result Object
	Zip Code of Last Permanent Address(976)	Location:	Clients/Assessments/HUD-40118
		Type:	System Field
		Use:	Result Object
	Zip data quality(977)	Location:	Clients/Assessments/HUD-40118
		Type:	System Field
		Use:	Result Object
	Household Relate. Date Ended	Location:	Clients/Household Relationships
		Type:	System Field
		Use:	Result Object
	Household Relate. Inactive	Location:	Clients/Household Relationships
		Type:	System Field
		Use:	Result Object
	Household Type	Location:	Household s
		Type:	System Field
		Use:	Result Object
	Household Uid	Location:	Household s
		Type:	System Field
		Use:	Result Object
	Household Relate. Relationship	Location:	Clients/Household Relationships
		Type:	System Field
		Use:	Result Object
	Household Relate. Head Of Household	Location:	Clients/Household Relationships
		Type:	System Field
		Use:	Result Object
	Entry Exit Provider Id	Location:	Clients/Entry Exit (Outer)
		Type:	System Field
		Use:	Result Object
	Date of Birth Type(1888)	Location:	Clients/Assessments/Additional Profile Information
		Type:	System Field
		Use:	Result Object
	Housing Status(1867)	Location:	Clients/Assessments/HPRP
		Type:	System Field
		Use:	Result Object
	Entry Exit Uid	Location:	Clients/Entry Exit (Outer)
		Type:	System Field
		Use:	Query Filters
	Client Inactive	Location:	Clients
		Type:	System Field
		Use:	Query Filters
	Entry Exit Inactive	Location:	Clients/Entry Exit (Outer)
		Type:	System Field
		Use:	Query Filters
	Entry Exit Entry Date	Location:	Clients/Entry Exit (Outer)

		Type:	System Field
		Use:	Query Filters
	Entry Exit Exit Date	Location:	Clients/Entry Exit (Outer)
		Type:	System Field
		Use:	Query Filters

REVISION HISTORY:

Version	Description of Changes
V11.05.31	Original version –BETA
V2	Revision: Per HUD clarification, Clients with Anonymous Name are counted as Missing; corrected format for Housing Status Null and DKR to display as percentage; formatted footers in PDF mode; added EDA Provider to Detail; edited prompts to save last value; removed redundant sub-query; added manual clarification to show the report counts clients, not EEs; added manual clarification to update mapping information.