Alameda County Homeless Management Information System
Data Quality Policies and Procedures
6/8/2022

General Objective:

Data quality is built on five pillars: Timeliness; Completeness; Accuracy; Consistency; and Coverage. The policies and procedures are designed to strengthen each of these pillars to improve the reliability of analysis of the data and measure the effectiveness of the provision of homeless services within Alameda County. The goal of our community members should be to regularly review data quality and consistently make improvements in their data quality measures.

1. **TIMELINESS:** Timeliness measures the period of time between a program entry or program exit date and when the data is entered into HMIS. The shorter the period between the time the data was collected and the time the data was entered, the more beneficial the data is to the community in order to track services and provide accurate reporting. These data are used to inform decisions about providing client supports. Timely data supports good decisions.

   1.a. Policy:

   Participating agencies/jurisdictions should use the Alameda County Continuum of Care (CoC) standard forms for collecting the Universal Data Elements (UDEs) required by HUD at project enrollment, annual updates, and project exit.

   1.b. Standard:

   The eventual goal of the Alameda County CoC is for 100% of project entry and exit data be entered in the HMIS within three days of actual program entry or exit date. Leading up to that goal, in Year 1 of this plan the expectation is for project entry and exit data to be entered within 3 days or less for 75% of clients, and in Year 2, the expectation is for project entry and exit data to be entered within 3 days or less for 85% of clients. In Year 3, the expectation is for project entry and exit data to be entered within 3 days or less for 95% of clients.

   1.c. Procedure:

   Participating agencies/jurisdictions run the HUD Annual Performance Report (APR) or HMIS Data Quality Report (DQR)[1] at the project level at least once a month to monitor overall agency performance. Agency Liaisons should also run this report on a quarterly basis to share and discuss with the Funder Liaison.

   Reports should be run at the project level to identify underperforming projects. The information should be used to identify potential workflow issues or staffing issues that are contributing to delayed data entry.

   Timeliness should be reviewed at the Agency Liaison Meeting that is convened monthly and facilitated by the HMIS Lead. Agencies should be prepared to share their performance, discuss challenges, and develop strategies to improve performance.

   HMIS Lead should present timeliness reporting to HMIS Oversight Committee on a quarterly basis.

   The CoC should add timeliness to the scoring criteria for the annual CoC Local Competition for funding.

   1.d. Best Practice:

   Running reports on a bimonthly basis (agency staff or Agency Liaison) and correcting data quality issues uncovered by the reports builds a culture of timeliness. A more specific timeliness report can be created to assist with more accurate data to

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[1] The HUD Annual Performance Report (APR) includes additional data points not required for the data quality report so may take longer to run, and the HMIS Data Quality Report (DQR) is more specific and may run more quickly. Either report is acceptable for the purposes of the data quality plan.

reflect recent enrollments. Workflow and staffing issues are discovered early which greatly reduces the systemwide impact of data issues. Timeliness metrics should be included in program contracts and monitoring, as well as performance incentives and reporting requirements for funding.

Timeliness Data Source: **DQR** Q6 and Q1 or **APR** Q6e and Q5a							
Data Entry / Days after collection	Project Starts	% of Total	Project Exits	% of Total	Year 1 Goals	Year 2 Goals	Year 3 Goals
0-3 days	DQR Q6 row 1 + 2	DQR Q6 row 1 + 2 / Q1 row 1 as %	DQR Q6 row 1 + 2	DQR Q6 row 1 + 2 / Q1 row 5 as %	>75% of client entries	>85% of client entries	>95% of client entries
4+ days	DQR Q6 row 3 + 4 + 5	DQR Q6 row 3 + 4 + 5 / Q1 row 1 as %	DQR Q6 row 3 + 4 + 5	DQR Q6 row 3 + 4 + 5 / Q1 row 5 as %	<25% of client entries	<15% of client entries	<5% of client entries

2. **COMPLETENESS:** Completeness is a measure of whether all of the required data elements are entered into HMIS, and whether all of the persons being served are reported in HMIS. Error rates include missing data, data not collected, client doesn't know, client refused, and fields with data quality issues. Data should be collected on all clients being served or assessed.

2.a. Policy:

All data on standard collection forms is required to be collected. Error rates include missing data, data not collected, client doesn't know, client refused, and fields with data quality issues. Data should be collected on all clients being served or assessed. Those collecting data should attempt to have as few null, missing, "data not collected," "client refused," and "client doesn't know" options as possible.

2.b. Standard:

5%* or less error rate for ES, TH, RRH, PSH, Supportive Services Only, Homeless Prevention, Coordinated Entry and Other projects.

Annual updates should be completed on all clients enrolled more than twelve months. The annual update should be completed thirty days before or after the client's anniversary date.

*15% or less error rate for Street Outreach. Only those participants with a date of engagement entered would be included in this error rate calculation.

Personally Identifiable Information - Data Source: DQR Q2 or APR Q6a				
Data Element	Error Count	% of Error Rate	Maximum Acceptable Error Rates (ES,TH,RRH, PSH)	Maximum Acceptable error rates for Street Outreach Programs
Name (3.1)	DQR Q2 row 1 col 1+2+3	DQR Q2 row 1 col 4 as %	5%	15%
Social Security Number (3.2)	DQR Q2 row 2 col 1+2+3	DQR Q2 row 2 col 4 as %	10%	20%
Date of Birth (3.3)	DQR Q2 row 3 col 1+2+3	DQR Q2 row 3 col 4 as %	5%	15%
Race (3.4)	DQR Q2 row 4 col 1+2	DQR Q2 row 4 col 4 as %	10%	20%
Ethnicity (3.5)	DQR Q2 row 5 col 1+2	DQR Q2 row 5 col 4 as %	5%	15%
Gender (3.6)	DQR Q2 row 6 col 1+2	DQR Q2 row 6 col 4 as %	5%	15%
Overall Score*		DQR Q2 row 7 col 4 as %	10%	20%
Universal Data Elements – Data Source: DQR Q3 or APR Q6b				
Data Element	Error Count	% of Error Rate	Maximum Acceptable Error Rates (ES,TH,RRH, PSH)	Maximum Acceptable error rates for Street Outreach Programs
Veteran Status (3.7)	DQR Q3 row 1 col 1	DQR Q3 row 1 col 2 as %	5%	15%

Data Element	Error Count	% of Error Rate	Maximum Acceptable Error Rates (ES,TH,RRH, PSH)	Maximum Acceptable error rates for Street Outreach Programs
Project Start Date (3.10)	DQR Q3 row 2 col 1	DQR Q3 row 2 col 2 as %	5%	15%
Relationship to Head of Household (3.15)	DQR Q3 row 3 col 1	DQR Q3 row 3 col 2 as %	5%	15%
Disabling Condition (3.8)	DQR Q3 row 4 col 1	DQR Q3 row 4 col 2 as %	5%	15%
Income and Housing Data Quality – Data Source: DQR Q4 or APR Q6c				
Data Element	Error Count	% of Error Rate	Maximum Acceptable Error Rates (ES,TH,RRH, PSH)	Maximum Acceptable error rates for Street Outreach Programs
Destination (3.12)	DQR Q4 row 1 col 1	DQR Q4 row 1 col 2 as %	5%	15%
Income and Sources (4.2) at Start	DQR Q4 row 2 col 1	DQR Q4 row 2 col 2 as %	5%	15%
Income and Sources (4.2) at Annual Assessment	DQR Q4 row 3 col 1	DQR Q4 row 3 col 2 as %	5%	15%
Income and Sources (4.2) at Exit	DQR Q4 row 4 col 1	DQR Q4 row 4 col 2 as %	5%	15%
Non-Cash Benefits (4.3) at Start	DQR Q4 row 5 col 1	DQR Q4 row 5 col 2 as %	5%	15%
Non-Cash Benefits (4.3) at Annual Assessment	DQR Q4 row 6 col 1	DQR Q4 row 6 col 2 as %	5%	15%
Non-Cash Benefits (4.3) at Exit	DQR Q4 row 7 col 1	DQR Q4 row 7 col 2 as %	5%	15%
Annual Assessment Data Source: APR Q16				
Annual Assessment	Error Count	% of Error Rate	Maximum Acceptable Error Rates (ES,TH,RRH, PSH)	Maximum Acceptable error rates for Street Outreach Programs
Adults Missing Annual Assessment	APR Q16 row 12 col 2	APR Q16 row 12 col 2 / Q5a row 8 as %	5%	15%
Chronic Homelessness - Data Source: DQR Q5 or APR Q6d				
Starting into Project Type	% of Error Rate		Maximum Acceptable Error Rates	
ES, SH, Street Outreach	DQR Q4 row 1 col 7 as %		5%,15% for Street Outreach	
TH	DQR Q4 row 2 col 7 as %		5%	
PH (all)	DQR Q4 row 3 col 7 as %		5%	

*If overall score has more than 5% error rate those errors should be attributable to errors in race/ethnicity and/or social security number

2.c. Procedure:

Participating agencies/jurisdictions should run the HUD Annual Performance or the HMIS Data Quality Report looking specifically at Personally Identifiable Information, Universal Data Elements, Income and Housing Data Quality, and Chronic Homelessness to ensure % error rates are within the standard guidelines listed above.

At a minimum the reports should be run on an agency-wide basis at least once a month to monitor overall agency performance. The information should be used to identify data collection and data entry problems and resolutions to those problems such as staff training.

Completeness should be reviewed at the Agency Liaison Meeting that is convened monthly and facilitated by the HMIS Lead. Agencies should be prepared to share their performance, discuss challenges, and develop strategies to improve performance. Agency Liaisons should also run this report on a quarterly basis to share and discuss with the Funder Liaison.

2.d. Best Practice:

Running reports on a bimonthly basis and correcting issues uncovered by the reports builds a culture of completeness. Workflow and staffing issues are discovered early which greatly reduces the systemwide impact of data entry errors.

3. **ACCURACY:** Accuracy is a measure of how well the client record reflects the client experience. Accuracy is the most difficult to measure objectively. We look for indicators that are inconsistent within a client record. We also look for indicators that project data is unlike other similar projects. Accuracy is best checked by comparing project hard copy files to project data elements.

3.a. Policy:

Agency staff should maintain electronic client records in HMIS that accurately reflect the current situation. This should include maintaining the client's enrollment information and ensuring that project census data accurately reflects the project population on any given night or period of operation.

3.b. Standard:

Client characteristics (and demographics) and program data elements should be consistent with project eligibility requirements (for example veteran status, family structure, income requirements, etc.)

100% of PSH and RRH entries should have move in dates documented in HMIS once participant has moved in.

The enrolled project population should match the project capacity (+/- 5%). Exceptions should be established and reported to the HMIS lead for the Housing Inventory Count (HIC) monthly.

Current Living Situation Assessments should be conducted every calendar month for those actively enrolled in coordinated entry.

3.c. Procedure:

Participating agencies/jurisdictions should run the HUD Annual Performance, Data Quality Report and Missing Move-In Date Report and any community reports found in the data quality section of the reporting tool that would be relevant and helpful.

At a minimum the reports should be run on an agency-wide basis at least once a month to monitor overall system performance. The information should be used to identify potential data accuracy issues.

Accuracy should be reviewed at the Agency Liaison Meeting that is convened monthly and facilitated by the HMIS Lead. Agencies should be prepared to share their performance, discuss challenges, and develop strategies to improve performance. Agency Liaisons should also run this report on a quarterly basis to share and discuss with the Funder Liaison.

Accuracy should be reviewed by the HMIS Oversight Committee on at least a quarterly basis. Accuracy metrics should be included in program incentives and reporting requirements for funding.

Accuracy – Data Source: Missing Move-In Dates and DQR Q1 or APR Q5a		
Project	Count in HMIS	Maximum Acceptable Error Rates
PSH – missing move-in date	Missing Move-In Dates	0%
RRH – missing move-in date	Missing Move-In Dates	0%

3.d. Best Practice:

Running reports on a bimonthly basis and correcting issues uncovered by the reports builds a culture of accuracy. Workflow and staffing issues are discovered early which greatly reduces the systemwide impact of data issues.

4. **CONSISTENCY:** Consistency is the degree to which all data is collected, entered, stored, and reflective of the use of HMIS as a standard operating procedure. Consistency will be representative of how well completeness, accuracy, and timeliness standards have been operationalized across the data collection and entry stages. Consistency may also refer to the data storage, table structure, and overall reliability of the HMIS database management process. In this regard, consistency bridges data quality across data collection, entry, and management stages and should be considered a shared responsibility across multiple HMIS stakeholders.

As with accuracy, strong data consistency also relies on excellent training—both for data collection and entry, as well as for project setup and report structures. Consistency in data entry for project types from provider to provider is essential. For example, a permanent supportive housing (PSH) project run by Provider A should have the same workflow as a PSH project run by Provider B. All stakeholders have a role in ensuring data consistency.

4.a. Policy:

> Client and project data should be collected on data collection forms that are standardized and maintained by the CoC and communicated to the HMIS Lead. Supplemental data should be collected on supplemental assessments defined by the program funder. Agencies can collect additional supplemental data by coordinating with HMIS staff to develop a supplemental assessment that maintains data consistency across the CoC.

4.b. Standard:

> All clients should have one single record, duplicate clients should never be created.

> Project enrollments should be completed on a standard set of designated enrollments used by the CoC.

> Coordinated entry assessments should be done on designated online assessments used by the CoC.

> Supplemental project data should be collected on supplemental forms and entered on supplemental screens common to that project type.

> Supplemental agency data should be collected on supplemental forms and entered on supplemental screens common to that agency's projects.

4.c. Procedure:

> Participating agencies/jurisdictions should run the HUD Annual Performance report and any community reports found in the data quality section of the reporting tool. At a minimum, the reports should be run on an agency-wide basis at least once a month to monitor overall system performance. The reports can be run at the project level to identify underperforming projects. The information should be used to identify potential workflow issues or staffing issues that are contributing to delayed data entry. Agency Liaisons should also run this report on a quarterly basis to share and discuss with the Funder Liaison.

4.d. Best Practice:

> Running reports on a bimonthly basis and correcting issues uncovered by the reports builds a culture of consistency. Workflow and staffing issues are discovered early which greatly reduces the systemwide impact of data issues.

> Agencies should use regular reporting to ensure that project performance is meeting or exceeding project expectations and is consistent with project expectations.

> All HMIS users must complete required trainings before gaining access to the system. All Coordinated Entry Users should complete required trainings before gaining access to the system.

5. **COVERAGE:** Coverage is the measure of how completely bed and unit inventory information is captured in HMIS. Coverage is measured at the project level by dividing the total number of beds represented in HMIS by the total number of beds available in the project. At the agency and system level, coverage is measured by dividing the total number of beds, for that project type, that are represented in HMIS by the total number of beds available for that project type.

5.a. Policy:

> All housing dedicated to improving the living situation of homeless people in Alameda County should capture

client and project data in HMIS.

5.b. Standard:

Goal of 90% coverage across emergency shelter, transitional housing, rapid re-housing, and permanent supportive housing that appear in the Housing Inventory Count (HIC).

5.c. Procedure:

Agencies should ensure that all beds are recorded in and enrolled through HMIS, regardless of funding source.

Agency Liaisons should also run the HIC report on a quarterly basis to share and discuss with the Funder Liaison.

The HMIS Lead should present coverage rates to HMIS Oversight Committee and CoC Board twice a year.

HMIS Oversight Committee and CoC Board identify and outreach to providers and programs that aren't in the HMIS.

Partner agencies must communicate changes in bed capacity as soon as possible to the HMIS Lead for incorporation in the Housing Inventory Chart (HIC).

Coverage – Data Source: HIC				
HIC Beds - HH Type - Bed Type	HIC Beds Count	HMIS Beds	% HMIS Bed Coverage	Acceptable % Coverage
Year-Round ES Beds for HH w/o Children	Sum of Beds by type	Sum of HMIS Beds by type	HMIS Beds / Beds as %	90%
Year-Round ES Beds for HH with Children	Sum of Beds by type	Sum of HMIS Beds by type	HMIS Beds / Beds as %	90%
Year-Round ES Beds for HH with only Children	Sum of Beds by type	Sum of HMIS Beds by type	HMIS Beds / Beds as %	90%
Total Seasonal Beds	Sum of Beds by type	Sum of HMIS Beds by type	HMIS Beds / Beds as %	90%
Overflow Beds	Sum of Beds by type	Sum of HMIS Beds by type	HMIS Beds / Beds as %	90%
Year-Round PH Beds for HH w/o Children	Sum of Beds by type	Sum of HMIS Beds by type	HMIS Beds / Beds as %	90%
Year-Round PH Beds for HH with Children	Sum of Beds by type	Sum of HMIS Beds by type	HMIS Beds / Beds as %	90%
Year-Round PH Beds for HH with only Children	Sum of Beds by type	Sum of HMIS Beds by type	HMIS Beds / Beds as %	90%
Year-Round TH Beds for HH w/o Children	Sum of Beds by type	Sum of HMIS Beds by type	HMIS Beds / Beds as %	90%
Year-Round TH Beds for HH with Children	Sum of Beds by type	Sum of HMIS Beds by type	HMIS Beds / Beds as %	90%
Year-Round TH Beds for HH with only Children	Sum of Beds by type	Sum of HMIS Beds by type	HMIS Beds / Beds as %	90%

Reports Needed to Support Data Quality:

APR: [HUDX-227-AD] Annual Performance Report [FY 2020] (Multiple Agency) or [HUDX-227] Annual Performance Report [FY 2020] (Single Agency)

DQR: [HUDX-225-AD] HMIS Data Quality Report [FY 2020] (Multiple Agency) or [HUDX-225] HMIS Data Quality Report [FY 2020] (Single Agency)

Duplicate Clients: [DQXX-110-AD] Duplicate Clients

HIC: [HUDX-123-AD] Housing Inventory (HIC) [FY 2020] (Multiple Agency)

Missing Move-in Dates: Missing Move-in Dates (Data Analysis)

TOPICS		TIMING		KEY STAKEHOLDERS - ROLES & RESPONSIBILITES					
AREA	PRIORITIES & ACTION ITEMS	TIMING	FREQUENCY	HMIS Lead	EOH	HMIS OVERSIGHT COMMITTEE	AGENCY LIAISON	FUNDER LIASION	NOTES
CREATE DATA QUALITY ACTION PLAN (DQAP)	Convene HMIS Workgroup to revise/review Data Quality Action Plan	March 2022	Once a Year	Participate in workgroup	Invite additional workgroup participants based on expertise in workgroup topic areas	Oversight committee convene workgroup to start DQAP			
	Draft Outline of updated DQAP 2022	April 2022	Once a Year		Draft documents from workgroup	Review and approve DQAP			
ROLL OUT OF DQAP	Communication and roll out of new DQAP	April/May 2022	Once a Year	Communicate with HMIS User Group about the plan and its priorities/ components	Communicate about updated DQAP in CoC Committee meetings where appropriate, publish on EOH website	Participate in communicating out about updated data plan			
DATA QUALITY MONITORING: AGENCY LIAISON	Each agency must identify an Agency Liaison and provide contact info to ACHMIS Staff	May 2022	Once a Year and whenever there is turnover	Develop and publish a roster of Agency Liaisons Develop a protocol with Agency Liaisons for when they will be leaving an agency to identify new Agency Liaison			Summary Report to HMIS Oversight from Funders and Agency Liaisons group on a monthly interval	Summary Report to HMIS Oversight from Funders and Agency Liaisons group on a quarterly interval	
	Convene and Train Agency Liaisons	May 2022	Once a year for main training. Training also incorporated in monthly Liaisons meetings	Develop training for Agency Liaisons Ensure all Clarity reports needed for Liaisons are accurate and working well Meet with Agency Liaisons Monthly to address issues and for ongoing training			Attend required training		Consider building self-guided trainings to assist with turnover
	Generate Agency Data Quality Reports	Ongoing	Monthly - by the 1st of the month	Collect and review all reports			Generate and review reports		

	TOPICS		TIMING		KEY STAKEHOLDERS - ROLES & RESPONSIBILITES					
AREA	PRIORITIES & ACTION ITEMS		TIMING	FREQUENCY	HMIS Lead	EOH	HMIS OVERSIGHT COMMITTEE	AGENCY LIAISON	FUNDER LIASION	NOTES
	Identification and Exploration of poor performing programs		Ongoing	Monthly Quarterly for report out to HMIS OS Committee	Support Agency Liaisons with programs with persistent DQ issues Implement consequences for poor performance when needed Identify training needs and/or TA needs that can prevent future issues		Review ongoing persistent data quality issues	Work with Funder Liaison on programs with persistent DQ issues Assist programs with data quality issues	Assist Agency Liaison with poor performing programs	Poor Performance could be managed by: - NOFO scoring points - Public reporting of data quality - Creation of additional training - Celebration of high performing agencies - Corrective action plans - Incentives - Suspending licenses (last resort)
DATA QUALITY CAPACITY and MONITORING: FUNDER LIAISON	Develop HMIS Funder Liaison role		4/2022 to 9/2022	Once		- Schedule and facilitate meetings - Draft Documents - Distribute Policy documents to community	- Draft outlines of Role - Draft and approve Policy that outlines the role's functions and responsibilities - Propose 1- 2 rounds of special HMIS Oversight meeting(s) to meet with funders and agency liaisons to discuss the Funder Data Role	Provide Feedback on Role during HMIS Liaisons meeting		
	Engage Funders to Identify Funder Liaison Role		Jun/Jul 2022; Sept 2022		Update agency onboarding form to identify Funder Data Liaisons	Compile Materials to document role development to as part of DQP	Draft outreach to funders identified to participate in pilot to share about the role and to invite schedule discussions	Provide Feedback as invited		
	Train and Convene Funder Liaisons			Quarterly	- Prepare Training Topics and Agenda - Confirm Agency and Data Liaisons monthly meeting schedule 2022.	Provide Templates for CoC Committees Orientation to guide building orientation materials for consistency	Collaborate w HMIS Lead and EOH to build HMIS Funder Data Liaison Orientation deck	Attend HMIS Oversight discussion about role	Complete HMIS Funder orientation during the monthly HMIS Liaisons meeting and facilitated by the HMIS Lead team.	

TOPICS		TIMING		KEY STAKEHOLDERS - ROLES & RESPONSIBILITES						
AREA	PRIORITIES & ACTION ITEMS	TIMING	FREQUENCY	HMIS Lead	EOH	HMIS OVERSIGHT COMMITTEE	AGENCY LIAISON	FUNDER LIASION	NOTES
DATA QUALITY MONITORING	Analyzing and reviewing Data Quality Reports	Ongoing	Occupancy Report Agency Liaison Summary Reports Data Quality Report/Report Card APR Reports HIC Report	Generate and distribute reports with key insights gleaned from each report to focus discussions in HMIS OS Committee and HMIS User Group Meetings		Review data quality reports, identify areas for improvement and generate action steps for change Consider what elements require systemwide process improvements and/or policy changes	Ensure data quality reports are timely to meet review deadlines		
	Soliciting user feedback to better understand: - training needs - system issues - new user needs	Ongoing	Quarterly with a survey to HMIS User Group	HMIS Lead collect issues, analyze for trends and report to Liaisons and Oversight Committee (OC) as needed Developing tips and tricks for regular errors that could be shared with user group and/or on website		Review survey data from HMIS User group quarterly where appropriate			
	Identification of systemwide process improvements needed	Ongoing	Monthly User Group Meetings can address larger process/system issues Quarterly HMIS OS Committee meetings can explore larger system issues	Gather, synthesize, and present process recommendations to OC Coordinate recommendations made by HMIS OS Committee to implement in the field		Support thinking and problem solving around systemwide issues to develop policy, resource, or other related solutions	Provide recommendations for system improvement to HMIS Lead		Bit Focus relationship is a key stakeholder for process improvements Resources will be updated and maintained on the HMIS Support Portal as identified on the ACHMIS website: http://acgov.org/cda/hcd/hmis/materials.htm