Data Quality 201
Governance Agreements & Monitoring for Data Quality
DATE

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&
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Who's in the Room?

What type of organization do you represent?

- CoC Lead Organization
- HMIS Lead Organization
- Homeless Service Provider
- Government Organization (local, state, or federal)
- Other Service Provider (healthcare, mental health, etc.)
- Other

Learning Objectives

- Connect data quality monitoring process to the HUD SNAPS Data TA Strategy and review the goals for the next 3-5 years

- Understand the components of a robust data quality monitoring process and determine where your community currently functions

- Identify the stakeholders involved in a data quality monitoring process and the roles and responsibilities of each

SNAPS Data TA Strategy

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

Data Quality is implicated in all three strategies
- Directly related to Strategies 1 & 2

Let's talk for a second
- Who has seen this?
- How does it make you feel?
- Do these seem realistic?

Strategy # 1

Characteristic: Expert Homeless Management Information System (HMIS) Leads and System Administrators		
Current status (or near-term)	**Majority of CoCs in 3-5 years**	**Advanced CoCs in 3-5 years**
▪ Software provider: HMIS Leads are entrusted by CoCs to manage software provider contracts/ relationships, and act as fiduciary on behalf of the CoC ▪ End User: HMIS Leads support all end users and administrators meet DQ standards (Strategy 2) ▪ CoCs: HMIS Leads ensure data is high quality for use in planning/ review and ranking	▪ Software provider: HMIS Leads monitor software providers to the terms of the contract, or are provided with accreditation by software providers ▪ End User: HMIS Leads have developed training curricula to meet the unique needs of beginner, intermediate, and advanced users ▪ CoCs: HMIS Leads support data literacy across CoC planning	▪ Software provider: HMIS Leads conduct frequent monitoring of software providers and have access to all programming specs/ logic, terminology assumptions, and report generation functionality ▪ End User: HMIS Leads collect data from end users pre- and post-training, and use the results to enhance training curricula and delivery ▪ CoCs: HMIS Leads provide/manage/ merge and de-duplicate high quality data to support cross-system care coordination and planning efforts

Characteristic: CoCs have data-driven leaders		
Current status (or near-term)	**Majority of CoCs in 3-5 years**	**Advanced CoCs in 3-5 years**
▪ CoC has a data subcommittee	▪ CoC shares a vision to end homelessness ▪ CoC supports culture of performance	▪ CoCs are engaged with and sharing data and performance metrics across systems of care

Strategy # 2

Characteristic: Bed Coverage across Continuum (funded and unfunded)		
Current status (or near-term)	**Majority of CoCs in 3-5 years**	**Advanced CoCs in 3-5 years**
▪ 100% required providers and less than 100% non-required providers contribute to HMIS	▪ 100% all homeless service providers contribute to HMIS	▪ 100% homeless providers and non-homeless service providers contribute to shared data environment

Characteristic: Quality data = Timely Accurate Comprehensive		
Current status (or near-term)	**Majority of CoCs in 3-5 years**	**Advanced CoCs in 3-5 years**
▪ 100% complete ▪ Less than 100% accurate ▪ No timeliness standard	▪ 100% accurate ▪ 100% complete ▪ Projects directly enter data within 2 hours for crisis response and project start/ project exit ▪ PSH projects directly enter data within 24 hours	▪ 100% accurate ▪ Customized local data elements are limited to information needed to report, serve and house clients. ▪ 100% complete ▪ Timeliness meets Coordinated Entry placement and referral needs

Definition of Data Quality

Data quality refers to the reliability and comprehensiveness of a community's data, as collected in HMIS

- Do you have sufficient data to accurately reflect the demographics, needs, experiences, and outcomes of persons experiencing homelessness in your community?

Components of data quality:

- Completeness
- Timeliness
- Accuracy
- Consistency
- System coverage

Requirements for Data Quality

Per the 2004 HUD Data and Technical Standards:

4.2.2 Data Quality

Baseline Requirement: "PPI collected by a CHO must be relevant to the purpose for which it is to be used. To the extent necessary for those purposes, PPI should be accurate, complete, and timely."

[2004 Data & Technical Standards](#)

Requirements for Data Quality

Per the CoC Interim Rule:

578.7 Responsibilities of the Continuum of Care

(b) *Designating and Operating an HMIS.* The Continuum of Care must:

(1) Designate a single Homeless Management Information System (HMIS) for the geographic area;

(2) Designate an eligible applicant to manage the Continuum's HMIS, which will be known as the HMIS Lead;

(3) Review, revise, and approve a privacy plan, security plan, and data quality plan for the HMIS.

CoC Interim Rule

Data Quality

CoC Data Quality Brief:

"A Data Quality Management Program will help ensure these plans are improving data quality."

- Identify a baseline
- Secure CoC Buy-In
- Develop a Data Quality Plan
- Engage Vendors
- Execute Enforceable Agreements
- Ongoing Monitoring & Reporting
- Create Incentives & Enforcement Expectations

[CoC Data Quality Brief](#)

Current Status
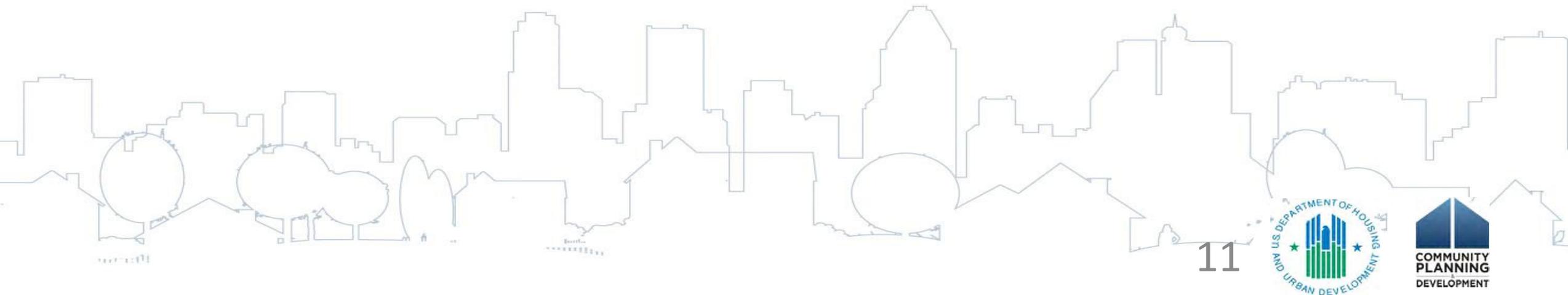
Poll Question

www.menti.com (use code 32 01 61)

Does your community currently have a comprehensive Data Quality Management Plan framework?

- Yes, and we're 100% happy with it
- Yes, and we want to make it better
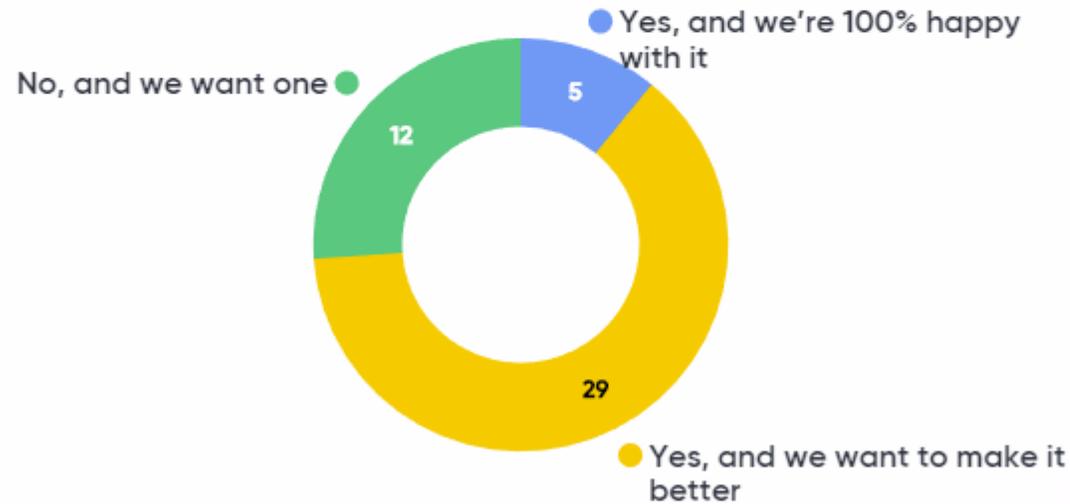- No, and we want one
- No, and we don't need one

Poll Question

Go to **www.menti.com** and use the code **97 89 20**

Mentimeter

Does your community currently have a comprehensive Data Quality Management Plan framework?

- No, and we want one — 12
- Yes, and we're 100% happy with it — 5
- Yes, and we want to make it better — 29

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What is a DQMP?

A Data Quality Management Plan (DQMP) is the overall framework from which a community works to understand their current data quality, their baseline requirements, their ideal, and what tools to use to get from here to there

- It's the anchor for all HMIS data quality expectations, roles, responsibilities, and activities

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What is a DQMP?

- It's a process
- Iterative
- Continuous
- Actionable
- Measurable
- Never stops evolving
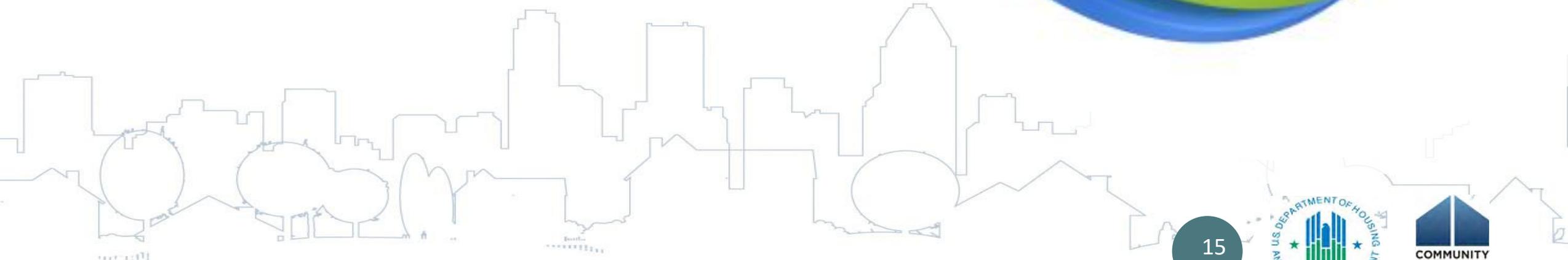
DQMP

Include a clear and transparent DQMP framework and develop enforceable agreements based on that framework

- Agreements should be implemented with all organizations participating in HMIS
- Provide guidance on the consequences for failure to meet the standards in the DQMP framework
- Outline the process for notification of failure to meet a standard / baseline
- Lay out the responsibilities of the HMIS participating organization, the HMIS Lead, and the CoC

Discussion

What have you found to be the most important piece of a DQMP?

- Baseline threshold requirements
- Data completeness
- Data timeliness
- Data accuracy
- Bed coverage
- Enforceable agreements
- Enforcements & encouragements
- HMIS project monitoring
- Data quality improvement plan
- System setup requirements

Baseline Threshold Requirements

Start with where your system is and adjust based on improvements made over time

- Don't make them unrealistic / out of reach
- Make them clear and transparent
- Make them specific to project types (CE, SO, ES, TH, RRH, PSH)
- Includes data completeness, data timeliness, data accuracy
- Use them to monitor projects to

Key Considerations

Are the baseline requirements, expectations, and responsibilities reasonable for all involved parties?

- Have they been discussed in a public setting, to allow for feedback from various stakeholders with various perspectives, and to generate buy-in?
- If already implemented, are they reviewed regularly for modifications as needed?
- How far back do you need to go historically to review data quality improvements? How does historically poor data quality impact system monitoring and reporting?

Identifying Your Baseline

- How complete is the data in your system? **Baseline for *completeness***
- How soon after the data is collected from the client is it entered into your system? **Baseline for *timeliness***
- Does the data in your system reflect what the client's experience / reality is? **Baseline for *accuracy***
- How often do users with access to your system log in and actively interact with your system (enter data, run reports, etc.)? **Baseline for *consistency***
- How comprehensive is your system based on your entire homeless services system "in real life" (HMIS-participating beds, street outreach system coverage, etc.)? **Baseline for *system coverage***

Bed Coverage

Who's currently at 100% HMIS system coverage for every project type dedicated to serving clients at-risk of or experiencing homelessness?

- How did you get there?
- Can you provide incentives and encouragements to non-HMIS participating organizations?
- What is their "why" for not participating?
- What is your "why" for wanting their participation?
- How can the "whys" align?
- Match your solution to their why
- Try, try, try again

Enforceable Agreements

Agreed upon and signed by the HMIS participating organization, the HMIS Lead, and the CoC

- Signed by any organization participating in HMIS, regardless of funding received (or not)
- Names the specific projects and project types for which the organization is entering data into HMIS
- Lays out the baseline requirements for the named projects, based on the project types
- Is clear about the steps taken should the organization fail to abide by the DQMP framework
- Defines the roles and responsibilities of the entities signing the Agreement

Enforcements & Encouragements

Public acknowledgement is powerful

- So is public shame
- Help troubleshoot with providers based on their specific "why" (mass emergency shelter data quality issues will have a different "why" than street outreach data quality issues than rapid rehousing data quality issues, etc.)
- Ensure a transparent process when using HMIS data quality in the rank & review process
  - For all determinations of funding allocations – federal, state, and local

Enforcements & Encouragements

Celebrate the successes and allow room for learning and growth

- Communicate the importance of the data quality efforts by connecting it to other CoC efforts
  - Rank & review processes, funding allocation decisions
  - Impact of data quality on the accuracy of system monitoring
  - Data quality efforts as they relate to the HUD reporting requirements (CoC APR, System Performance Measures, Longitudinal System Analysis, PIT, etc.)
  - How data quality can directly affect clients' access to needed services through Coordinated Entry / Prioritization List

HMIS Project Monitoring

Use the HMIS Project Monitoring process to monitor projects to the data quality baseline thresholds

- Should use the Data Quality Management Plan as an overall framework for HMIS project monitoring for data quality
- Organizations should know what's expected of them prior to monitoring
- Transparency for working through and addressing findings as a result of the HMIS Project Monitoring process

HMIS Project Monitoring

Can the HMIS Lead monitor each organization for HMIS data quality compliance on a regular basis? Is this done onsite, remotely, or both?

- Does the monitoring process include all elements of data quality and monitor to the DQMP framework baseline requirements for:
    - Completeness
    - Timeliness
    - Accuracy
    - Consistency

How will monitoring results be shared with the organization and the CoC?

Data Quality Improvement Plan

A Data Quality Improvement Plan (DQIP) is a joint agreement among the CoC, HMIS Lead, and HMIS participating organization

- Includes actionable, measurable steps to take to address a data quality issue
- Includes timelines for when steps will be taken
- Addresses which entity is responsible for which components of a DQIP
- Can be used to address an HMIS Project Monitoring finding or as a standalone process when a data quality issue needs to be addressed, as laid out in the DQMP framework

System Setup Requirements / HMIS Lead Monitoring

System Setup and monitoring the HMIS Lead

- Similar to other pieces related to data quality monitoring, the HMIS Lead responsibilities related to system setup and accurate PDDEs should be monitored and have a consistent, ongoing quality check process
- Should be addressed in the overall DQMP framework
- Use the HMIS Lead Monitoring tool
  - As with HMIS Project Monitoring, the HMIS Lead Monitoring process should be transparent with clearly defined roles and responsibilities of each entity involved

Discussion

What's the biggest struggle you have related to data quality?

- Capacity to address it on an ongoing basis
- Knowing what issues exist in the data
- Knowing how to address issues that exist
- Stakeholder involvement (one or more stakeholders)
- No governance surrounding monitoring for data quality
- Other

Resources to Use

It depends on the issue

- Ensure the HMIS Lead has sufficient capacity to monitor HMIS data quality on an ongoing basis
    - The HMIS Lead does the bulk of the day-to-day work of the DQMP – ensure the CoC has empowered the HMIS Lead to do this
- Ensure the HMIS Lead has tools available to them, or has the knowledge to create tools, to address data quality issues
- Talk it out – know who should be involved, at what points, and how
- Use the DQMP as your framework for monitoring data quality – make it realistic, transparent, measurable, and actionable

Monitoring, Reporting, & Compliance Processes

Once the DQMP framework has been reviewed and approved by the CoC, implement enforceable agreements with all HMIS-participating organizations

- Ensure sufficient "lead time" to train and communicate with organizations and HMIS end users, and ensure everyone understands their roles, responsibilities, and expectations
- If the CoC is implementing a DQMP for the first time, or they are significantly changing one already in place, allow for a "grace period"
- Results must be transparent and consistently reported to show progress (or lack thereof) over time

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Poll Question

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Who is currently involved in data quality monitoring?

- HMIS Lead only
- Homeless Services Provider only
- CoC only
- HMIS Lead and Homeless Services Provider only
- CoC and HMIS Lead only
- Homeless Services Provider and CoC only
- All three are involved
- None are involved

Poll Question
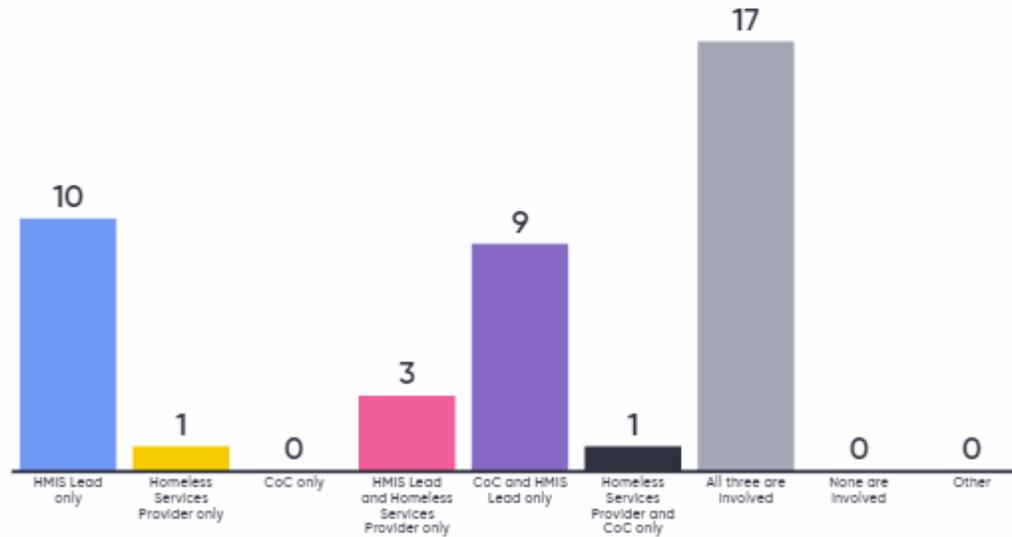
Stakeholder Involvement

HMIS Lead is a key stakeholder but not the only one

- Co-create the DQMP framework with the CoC and HMIS participating organizations
- Use tools and resources to monitor data quality PROACTIVELY and on an ongoing basis
- Make tools, resources, and trainings available to users to address data quality issues
- Ensure proper system setup
- Communicate with and advocate for the community to the HMIS Software Vendor, when necessary

Ensure Stakeholder Commitment

Important to clarify (in the DQMP directly) expectations for all stakeholders
- The Continuum(s) of Care will need to review and approve the DQMP framework and all components within it and used to monitor data quality
- The Continuum(s) of Care should also be heavily involved in determining the expectations for monitoring and compliance

This work cannot and should not fall on the HMIS Lead alone – Continuums of Care and HMIS Participating Organizations must be invested
- Also beneficial to involve local funders and other key stakeholders

Stakeholder Involvement

HMIS Participating Organizations work with the HMIS Lead and CoC to address data quality issues in a timely manner

- Work collaboratively under signed DQMP Organization Agreements
- Ensure an understanding and commitment to the DQMP framework and baseline requirements laid out in the framework
- Communication is key – talk with the HMIS Lead, talk with the CoC, ask for help when it's needed
- Notify the CoC and HMIS Lead of programmatic changes that directly affect HMIS data entry / quality as soon as possible

Stakeholder Involvement

CoC plays an integral role in the Data Quality Monitoring process

- Co-create the DQMP framework
- Provide the enforcements and encouragements for the plan
- Empower the HMIS Lead to carry out the day-to-day activities of the DQMP framework
- Ensure the HMIS Lead has sufficient capacity to conduct the work of the DQMP framework in a proactive manner
- Be a support to the HMIS Lead when HMIS Participating Organizations are non-responsive at any step of the DQMP process
- Complete monitoring on the HMIS Lead

Stakeholder Involvement

Is everyone at the CoC, HMIS Lead, and participating organizations level all clear in the roles and responsibilities related to the community's HMIS data quality framework?

- How has this been communicated?
  - Clear and transparent expectations
- How is it reviewed?
  - Flexibility, adaptation, nimble-ness
- How is it monitored?
  - HMIS Lead Monitoring, HMIS Agency Monitoring, CoC Monitoring

Key Considerations

- How will the CoC enforce expectations for data quality?
- How will the CoC empower the HMIS Lead's role in monitoring data quality?
- Will the expectations for data quality extend to all homeless assistance and homeless prevention programs in the community?
- How frequently will the CoC leadership review data quality reports and show how the process is positively (or negatively) affecting other CoC initiatives (SPMs, LSA, Coordinated Entry, etc.)?

Real Talk
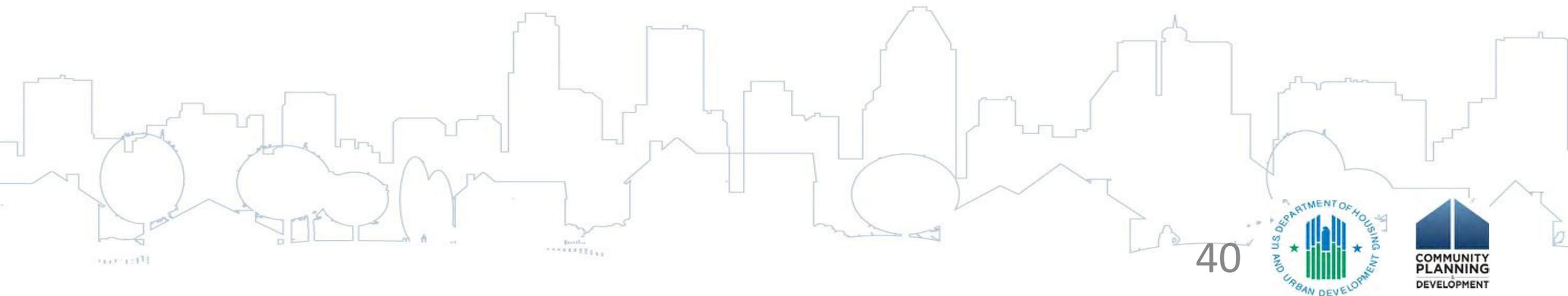
Benchmarks

Based on your community's current status, what are realistic baseline thresholds related to:

- Data completeness
- Data timeliness
- Data accuracy
- Bed coverage

"Realistic" meaning thresholds you could implement today and feel comfortable monitoring providers to.

Who's Ready?

Start with where you are – don't wait for it

- Determine your baseline requirements by project type and data quality component
- Discuss a DQMP framework with the CoC and HMIS participating organizations or advisory group
- Think through realistic encouragements and enforcements, as well as realistic expectations
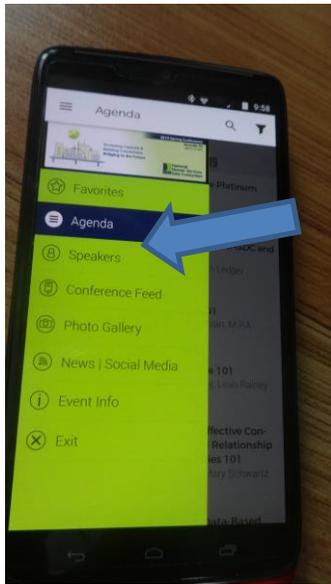- Give everyone some room to grow

Conclusion
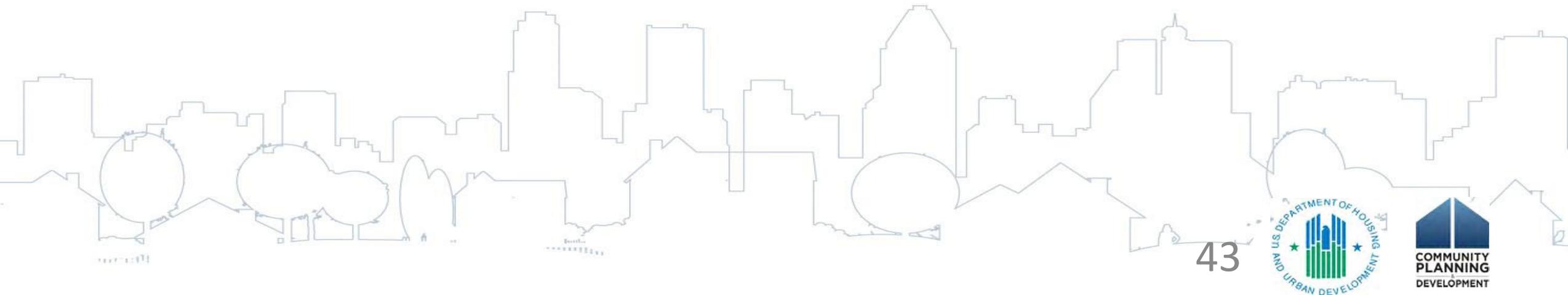
Discussion

Tell us one thing you took away from this session that you will implement in your data quality monitoring framework when you go back to your community
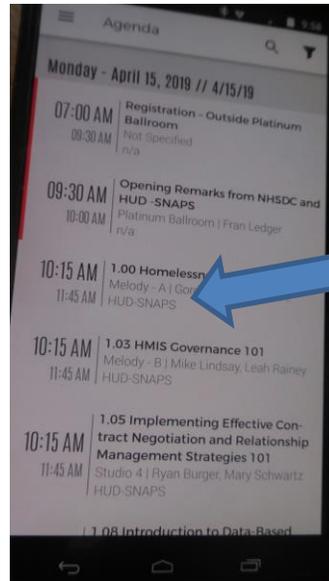
Q&A
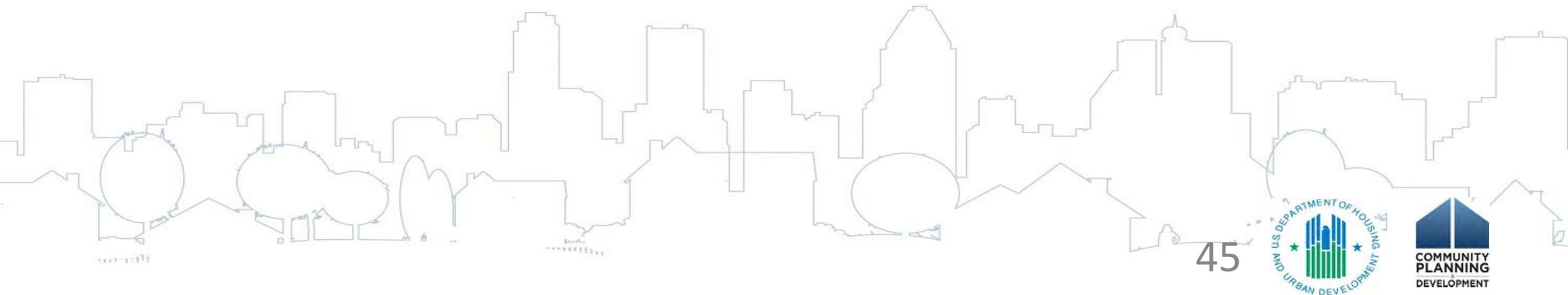
Evaluate This Session on Your Conference App!
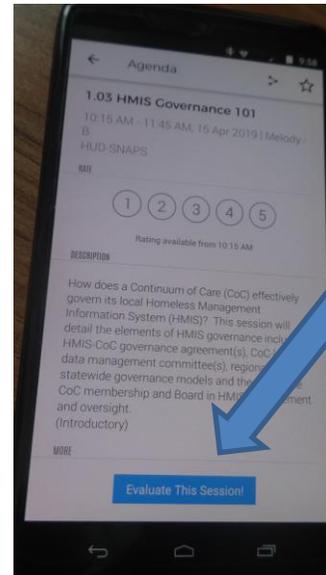## (It takes 5 minutes to complete)
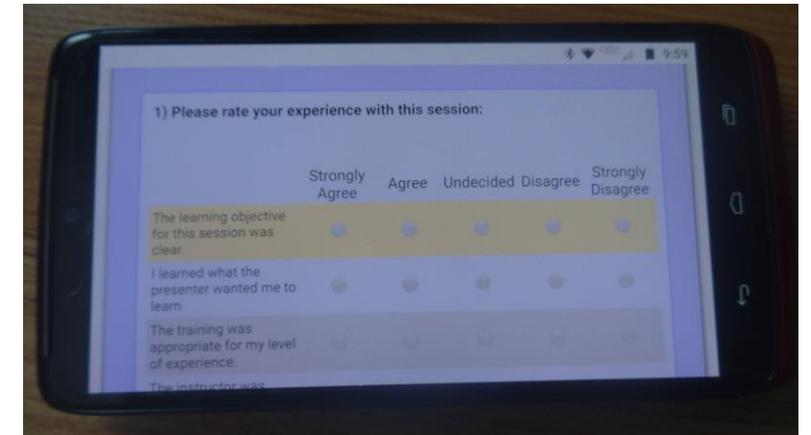
1) Select "Agenda" from the navigation menu.

2) Select the name of the session.

3) Select the blue "Evaluate This Session".

4) Complete the Evaluation and Select "Finish".

TIP:
Turn your phone horizontally to see rating options.

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Thank you!

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