

# CCWIS Data Quality Plans



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# Agenda

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# Why is Data Quality Important?

## High-quality data allows...

- ...the CCWIS to “**tell the story**” of a child and their family.
- ...the child welfare system to address safety, permanency, and well-being.
- ...agencies to assess service needs and effectiveness for individuals, families, and communities.
- ...agencies to accurately forecast financial and resource needs.
- ...the child welfare system to manage by data and make adjustments when needed.
- ...individuals, teams, and agencies to operate more **efficiently, economically, and effectively.**

# Consequences of Poor Data Quality

Delayed entry can result in missing information due to lapsed memory

Missed opportunities to identify and place a child with relatives

Denials of funding or underpayments to a foster parent and/or relative caregiver

Insufficient safety plans that do not address risks or children left in unsafe situations

Services are not offered or do not meet the client's needs

Barriers or delays in obtaining medical and/or education services

AFCARS/NYTD reporting errors

Duplicate clients which can affect case outcomes and measures of quality

Missing contact information which prevents proper notification to the caregivers

Inaccurate reports to courts and providers

# CCWIS Data Quality Regulations

Data Quality Standards – 1355.52(d)(1)

Automating Data Quality – 1355.52(d)(2)

Agency Data Quality Reviews – 1355.52(d)(3)

Data Quality Review Findings – 1355.52(d)(4)

Data Quality Plan – 1355.52(d)(5)

## **Data Quality Plan – 1355.52(d)(5)**

The title IV-E agency must develop, implement, and maintain a CCWIS data quality plan in a manner prescribed by ACF and include it as part of Annual or Operational APDs submitted to ACF as required in 45 CFR 95.610. The CCWIS data quality plan must:

- (i) Describe the comprehensive strategy to promote data quality including the steps to meet the requirements at paragraphs (d)(1) through (3) of this section; and
- (ii) Report the status of compliance with paragraph (d)(1) of this section.

# Observations of Submitted Plans

Agencies that have leadership who support continuous quality improvement, utilize automated tools, apply data governance best practices, or those who have embraced data management practices (e.g. DMBOK) have been better able to demonstrate how they will address data quality in their CCWIS.

We recognize that resources and leadership priorities can effect an agency's data quality efforts. Here are a few observations of the CCWIS Data Quality Plans that have been submitted so far:

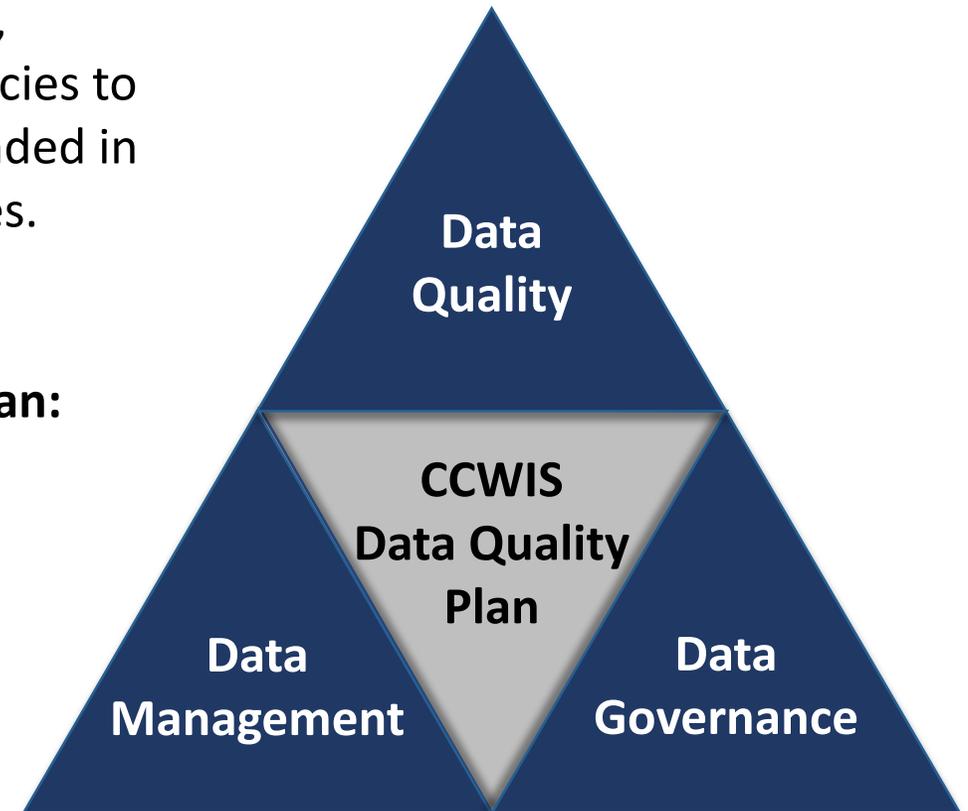
- Missing or incomplete descriptions of the title IV-E agency's plan for conducting biennial reviews and managing any findings. Or have timelines that are unclear.
- Focus on Timely/Accurate/Complete data with limited attention given to the other aspects of data quality found in 1355.52(d)(1) and lack of articulated/measurable standards.
- Data governance or data management practices were not addressed. If they were mentioned, the information provided was not complete or comprehensive.
- Focus was on automated functions and did not address practice or ongoing QA/CQI/PIP efforts. There were missed opportunities to coordinate with ongoing reviews, CFSR PIP, and the APSR.
- Data addressed in plans was limited to AFCARS/NCANDS/NYTD and did not consider other types of federal or state data.
- No mention of plans or efforts to address quality of data entered by CWCAs or in external title IV-E systems.

# Fundamentals of a Data Quality Plan

A CCWIS Data Quality Plan refers to the comprehensive, purposeful, and iterative efforts taken by title IV-E agencies to ensure the reliability and fitness of data for use as intended in the support of child welfare policies, goals, and practices.

## Three fundamentals of a strong CCWIS Data Quality Plan:

- Data Quality
- Data Governance
- Data Management



# Sample CCWIS Data Quality Plan Outline

1 Data Quality

2 Data Governance

3 Data Management

4 Roles & Responsibilities

5 Data Stewardship

6 Key Stakeholders

7 State & Tribal Requirements

8 Biennial Reviews

9 Coordinating Efforts

10 Practice & Technical Integration

11 Data Exchanges

12 Child Welfare Contributing Agencies

13 Data Conversion

14 Data Profiling

15 Technical Considerations

16 Contractual Considerations

17 Training Considerations

18 Subsequent Submissions

# Data Quality

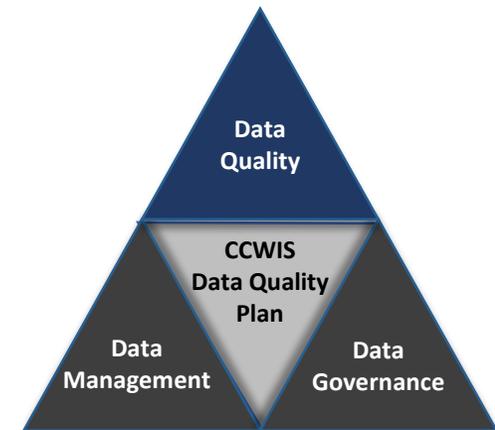
1

Data Quality is the fitness of data (or data set) to serve an intended purpose. CCWIS Data Quality Plans must address how the title IV-E agency will ensure high-quality data through data quality management.

The title IV-E agency should not consider data quality as solely a systems issue. Data quality is also a practice issue and the degree by which practice varies across a state or tribe can affect the level of data quality.

While **completeness**, **timeliness**, and **accuracy** are all elements of data quality, CCWIS Data Quality Plans must also address how data will be:

- Consistently & Uniformly Collected
- Exchanged & Maintained Confidentially
- Supportive of Child Welfare Policies, Goals, & Practices
- Not Created by Default or Inappropriately Assigned
- Monitored by Automated Functions



# Data Governance

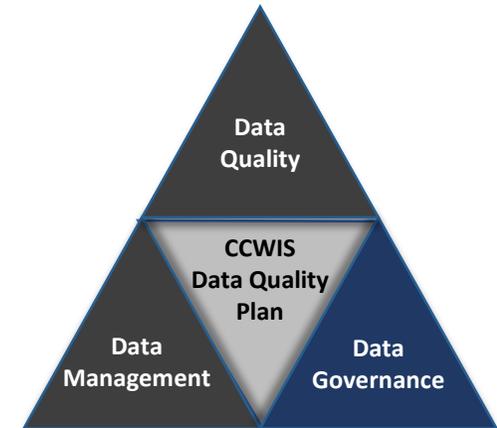
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Data Governance is how staff and partners manage and plan for data to support business needs. CCWIS Data Quality Plans should include an outline of how the title IV-E agency will address data governance and decision-making for CCWIS data categories and standards.

The CCWIS Data Quality Plan should include multiple domains that can be managed through data governance such as:

- data architecture
- development & deployment
- testing
- operations
- vendor management
- security and access
- document & content management
- legacy data
- data quality management

**“Who can take what actions, with what information, and when, under what circumstances, using what methods.”<sup>1</sup>**



<sup>1</sup> Thomas, G. *Definitions of Data Governance*.

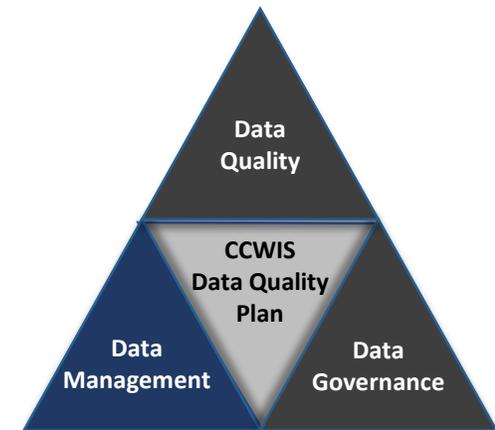
# Data Management

3

Data management is the method by which agencies process, store, and manage data in order to maintain quality data, inform decision-making, and determine the root causes of safety, permanency, and well-being outcomes. CCWIS Data quality plans should include details about the title IV-E agency's data management practices.

Data management practices address:

- the organization – including data stewardship
- policies/procedures
- technical/software tools
- sustainability factors
- security/access to data
- disaster recovery planning



# Roles & Responsibilities

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While a project organization chart is helpful and necessary to show positions and relationships, we also encourage the use of a Responsibility Assignment Matrix (RAM) or Linear Responsibility Chart (LRC) to define roles and responsibilities. In county-administered systems, this should include the role of county representatives.

Here is an example of one type of RAM, the Responsible, Accountable, Consulted, & Informed (RACI) Matrix:

R - Responsible	A - Accountable	C - Consulted	I - Informed	N/A - Not Applicable
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Phase One

Phase Two

Task ID	Task Name	Executive Sponsor	Project Sponsor	Steering Committee	Project Manager	Technical Lead	Business Lead	Operations Lead
1	Define Scope	A	C	R	C	C	C	I
2	Create Project Schedule	C	A	C	R	C	C	C
3	Create Project Charter	I	C	A	C	R	R	I
4	Define Budget	C	A	I	C	N/A	N/A	R

Task ID	Task Name	Executive Sponsor	Project Sponsor	Steering Committee	Project Manager	Technical Lead	Business Lead	Operations Lead
5	Communications Plan	N/A	C	C	A	N/A	C	R
6	Training Plan	N/A	I	C	C	C	A and R	C
7	Data Quality Plan	I	A	I	C	C	C	R
8	Sprint Management	I	I	I	A and R	C	C	C

# Data Stewardship

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CCWIS Data Quality Plans should clearly identify the people or positions responsible for the title IV-E agency's data stewardship. This includes identifying those responsible for the establishment and management of policies to govern the proliferation, retention, and destruction of data as well as the enforcement of privacy controls. There can be different types of data stewards in an organization and the plan should identify and define each in turn.

A non-exhaustive list of data steward categories:

- **Business:** person/role representing a business area(s) who is responsible for the meaning and use of data. Some business data stewards may represent a specific program area (e.g. adoption), while others represent the entirety of child welfare programs.
- **Technical:** person/role assigned to the CCWIS application who is responsible for understanding how the data is created, stored, and exchanged. Provides technical expertise and manages the flow of information into the data warehouse. Usually reports to agency IT management.
- **System:** person/role assigned at the enterprise level, responsible for establishing data management and data sharing guidelines across a portfolio of information systems.

# Key Stakeholders

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Identify the individuals, groups, and organizations who are impacted by the outcome or have an interest in the success of the CCWIS. To what extent are they involved in the CCWIS project? What is the feedback mechanism to keep them informed and assess the effectiveness of data quality strategies? How are they involved in data governance activities or decision making?

Some possible stakeholders to address in the plan:

- Case Workers
- Supervisor
- County or Regional Leadership
- State Leadership
- Budget/Finance Staff
- Program Staff
- Youth in Foster Care
- Alumni/Youth Formerly in Foster Care
- Foster Parents
- Birth Families
- Child Welfare Contributing Agencies (CWCA)
- Court Improvement System
- Tribes
- State Education Agency
- State Medicaid Agency

# State & Tribal Data Quality Requirements

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The CCWIS Data Quality Plan should include title IV-E agency, state, and/or tribal requirements for data quality. ACF will determine compliance with data requirements described in 1355.52 (b)(2) by reviewing state and tribal laws, regulations, policies, practices, reporting requirements, audits and program evaluations in consultation with title IV-E agency representatives.

Some examples of state and/or tribal requirements:

- Expectations for timely entry into the CCWIS
- Supervisory requirements for case reviews
- Process for addressing blank data fields
- Data fields from programs not required by federal law (E.g. data from a specific assessment tool that is required by the title IV-E agency as a preferred practice model or program intervention).
- General data quality standards utilized across development teams
- Training standards/requirements that address data collection and entry requirements
- Regular review of data elements to ensure relevancy

# Biennial Reviews – Part 1

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Biennial reviews are critical to ensure CCWIS provides meaningful information and that title IV-E agencies monitor and improve data, uncover factors negatively affecting data quality, and implement corrective measures as needed.

In the title IV-E agency's initial CCWIS Data Quality Plan, the agency must document plans to conduct its biennial reviews and note how findings will be addressed. Some agencies have existing practices that can support this requirement while others will need to develop a plan.

It is not necessary to report any findings in the initial CCWIS Data Quality Plan, however, the title IV-E agency must document the steps taken to address key biennial review findings in subsequent data quality plans.

*Continued on Next Slide...*

# Biennial Reviews – Part 2

Here are some considerations for addressing biennial reviews in the CCWIS Data Quality Plan:

- What is the type and frequency of data quality reviews that feed the biennial reviews? Are they done on an ongoing basis or are they done daily, weekly, quarterly, annually, etc.?
- Is this an existing review process or will a new one be developed for the CCWIS Data Quality Plan?
- How much of the review process is automated, what elements require qualitative review?
- Is a sampling methodology needed? If so, what is it based on?
- Who is performing the reviews and/or analyzing the findings?
- Who is responsible for addressing biennial review findings and tracking improvement activities?
- What automated functions and/or data quality tools will be used?
- What connections are there to ongoing practice-improvement efforts such as the APSR and CFSR PIP?
- What is the communication strategy for sharing the results of the biennial review?
- How will the overall effectiveness of the biennial reviews be evaluated on an ongoing basis?

# Coordinating Data Quality Efforts

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To improve utilization of data and to avoid duplication of effort, the title IV-E agency should coordinate CCWIS Data Quality efforts with any active and relevant data quality plans, PIPs, or existing Continuous Quality Improvement (CQI) efforts, as well as steps taken by applicable CWCAs to address findings.

While not an exhaustive list, these efforts must include the CFSR PIP, AFCARS or NYTD PIPs, CFSP/APSR, IV-E/IV-B plans, CCWIS, and other federal, state or tribal efforts as applicable.

Some considerations for the CCWIS Data Quality Plan:

- How will the CFSR PIP and other PIPs or plans guide or affect the CCWIS Data Quality Plan and biennial reviews?
- How will existing case monitoring efforts be used to generate data for the biennial reviews?
- How does the title IV-E agency address data quality through existing or planned trainings?
- To what extent will existing sub-recipient monitoring activities be included?

# Practice & Technical Integration

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When developing their CCWIS Data Quality Plan, the title IV-E agency should address the integration of practice and technical aspects of data collection and utilization.

Some considerations for the CCWIS Data Quality Plan:

- Is there a comprehensive list of reports generated by the system? If so, does this list include the frequency and audience?
- Are reports reviewed for accuracy or relevance? If so, how often and by whom? Are you able to determine utilization (or views) of a particular report?
- Is there a defined process for how existing or new data reports are utilized in decision making and/or practice improvement?
- Do you have a defined data utilization framework? If so, how is this governed?
- How are the technical project members included in the data quality plans and how are they exposed/involved in the issues and needs identified in the agency's reviews and/or PIPs?
- Are qualitative reviews performed on CCWIS data? If so, how often and by whom? For example, the quality of home visit documentation may be poor even if 100% of children were seen in the given month.

# Data Exchanges

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There are both mandatory and optional data exchanges in a CCWIS. The CCWIS Data Quality Plan should include a description of the data exchange standards the title IV-E agency uses to exchange data between the CCWIS and CWCAs and any external title IV-E agency systems.

The plan should include a description of the process the title IV-E agency will use to monitor and correct data quality issues resulting from these data exchanges or external title IV-E agency systems.

Some considerations for the CCWIS Data Quality Plan:

- What are the names and purpose for any external title IV-E systems used?
- What data exchange standards have you adopted for the CCWIS? Are these governed by the project, title IV-E agency, or other department/agency?
- Identify information all stakeholders need/care about, start small and build on success.
- How are you planning to address incomplete, inaccurate, and/or untimely data entered into the external title IV-E agency systems?
- What automated functions are used to monitor and/or address data quality?

# Child Welfare Contributing Agencies

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The plan should include efforts to ensure that data from CWCAs and external systems meets the same data quality standards as the data entered directly into the CCWIS.

Complete, high-quality data collected and exchanged by all partners is critical to supporting the communication and collaboration necessary for coordinating services to children and families, assisting with the title IV-E agency's monitoring activities, and producing accurate federal reports.

Some considerations for the CCWIS Data Quality Plan:

- What automated functions and processes are in place to monitor the data quality of data entered by a CWCA or imported from an external system?
- How will the title IV-E agency address areas of improvement needed?
- What data exchange standards are used and how are the standards governed?
- How will the title IV-E agency handle training and communication on data quality issues with CWCAs?
- Is there a common data dictionary in use? If not, what plans are there to align the data profiles?

# Data Conversion

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Data conversions can be from one database to another, a database to a data warehouse, or even a paper-based system to an electronic one. The CCWIS Data Quality Plan should include a description of how the title IV-E agency will address data quality during any data conversion and/or ongoing data extraction activities.

Some considerations for the CCWIS Data Quality Plan:

- How will you know that the data you are importing from the old system into the new one is accurate and complete? Will you audit a random sample, use a 3rd party tool, etc.?
- Are you importing all data or just some? If just some, what will you do with the data you do not convert?
- How will stakeholders, especially the end-users, be involved in these decisions?
- What data cleanup efforts, if any, are you planning prior to conversion?
- Are you using any software tools to support conversion or data cleanup efforts?

# Data Profiling

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If the title IV-E agency has standards or methods for profiling sensitive data, or utilizes data profiling methods to assess or reinforce data quality in general, the title IV-E agency should describe and incorporate these into the agency's data quality plan and review activities.

Some considerations for the CCWIS Data Quality Plan:

- How will the agency handle information from various sources that have different labels but likely refer to the same data point. For example, "Name", "Person", "Client Name", "Child Name", and "Student Name".
- Once in production, is data consistently being entered and formatted as intended? For example, are addresses all the same format? How does the CCWIS handle an apostrophe in a person's name? What happens when there is an 8 digit SS#?
- Is the data dictionary widely used among all vendors? Is it written in plain language and easily accessible?
- What software will be used to perform data profiling and how does the agency plan to address any findings?

# Other Considerations

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## Technical

A list and description of the data quality automation methods and/or business intelligence tools the title IV-E agency uses or will use to support data quality monitoring activities. Document the software or database tools, if any, that will be used to support data quality, governance, and/or management.

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## Contractual

A description of contract language or deliverables related to data quality artifacts, deliverables, or activities in the system development and/or operations support contracts. Agencies should also consider Memorandum of Understanding (MOU), data sharing, and other service contracts where issues of data quality are clearly articulated to support data quality standards and review activities.

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## Training

A description of how training and policy will address data quality and a timeline of implementation if new policy and training will be created or updated.

# Subsequent Submissions

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After submitting the initial CCWIS Data Quality Plan, any subsequent plan should address the following:

- What has changed since the last submission?
  - New governance structure?
  - New roles and responsibility matrix?
  - New data quality software or processes?
  - New data standards?
- What are the significant biennial review findings?
- How has the agency responded to the biennial review findings? Has practice, policy, and/or training been updated? Who is responsible for ensuring success?
- How has the agency enhanced or modified data quality automated functions and/or data exchanges to address any findings?
- Has the agency developed more efficient, economical, and/or effective strategies to ensure data quality?
- How are changes communicated to affected users and stakeholders?

# Frequently Asked Questions – Page 1

**Question:** When is the initial CCWIS Data Quality Plan due? What about subsequent ones?

**Answer:** The initial plan is due in the first Annual or Operational Advance Planning Document (APD) submitted to ACF after the title IV-E agency formally notifies AF that it will implement a CCWIS. Thereafter, an updated plan is included as part of Annual and Operational APDs submitted to ACF as required in 45 CFR §95.610.

**Question:** Is a title IV-E agency required to include CWCAs and external title IV-E agency systems in its data quality plan?

**Answer:** Yes. The data quality plan must describe how the title IV-E agency ensures the quality of data collected by CWCAs or through external systems. This includes CWCAs that have contracts or agreements with county child welfare agencies.

**Question:** When does the “clock start ticking” for our first biennial data quality review?

**Answer:** Data quality review activities defined in the approved CCWIS Data Quality Plan, including the biennial review, must be completed during the following two-year period.

# Frequently Asked Questions – Page 2

**Question:** We are still in the planning phases of CCWIS. Are we required to submit a CCWIS Data Quality Plan?

**Answer:** The first CCWIS Data Quality Plan is due at the same time as the submission of the first Annual APD update. Annual updates are due whether the title IV-E agency is in planning, development, or operation.

**Question:** Can existing data quality plans or continuous quality improvement (CQI) efforts meet the requirements for CCWIS biennial reviews?

**Answer:** Most title IV-E agencies have established methods of reviewing data for quality that will meet some of the requirements for a CCWIS biennial review. For example, some agencies have detailed data quality efforts documented in their APSR. Other agencies perform ongoing reviews for 100% of cases while some perform quarterly reviews of a sample of cases. Usually, these plans and reviews include a combination of automated and manual evaluations of data contained in the information system. However, the CCWIS biennial reviews must meet the requirements of §1355.52(d)(3). It is unlikely that data quality plans or CQI efforts developed prior to the issuance of the CCWIS regulations will meet all CCWIS requirements. ACF will review CCWIS Data Quality Plans from title IV-E agencies to assess if the agency's proposal will meet CCWIS requirements.

# Final Thoughts

We hope you have found this webinar to be useful. Here are a few final thoughts we'd like to leave you with:

- **Quality data is a team effort.** It requires executive support and cooperation between practice and technical teams.
- **CCWIS Data Quality Plans are iterative.** As title IV-E agencies plan, develop, and implement a CCWIS, the data quality plan should expand to address increased scope and significance.
- Meeting federal data reporting requirements is important but so are **state and tribal requirements.**
- Biennial data quality reviews should be working documents and must **demonstrate concrete efforts to address data quality.**
- **Use or coordinate with existing data quality efforts** whenever possible to operate more effectively, efficiently, and economically.

# Attendee Q&A

## Questions?

You may type your questions or comments into the chat box  
or

Press \*1 on your phone to access an operator to speak to the presenter