

Child and Family Services Reviews
Technical Bulletin #10

August 13, 2019

This Technical Bulletin provides the Administration for Children and Families' (ACF) response to the comments solicited in the November 27, 2018 Federal Register Notice (83 FR 60874) inviting state child welfare agencies, partner organizations, and the public to review, test, and provide comments on the revised syntax that performs data quality checks and calculates observed performance on the Child and Family Services Review (CFSR) statewide data indicators.

Section I. Summary

The November 2018 Notice followed a comprehensive internal and independent review of the syntax that the Children's Bureau (CB) uses to perform data quality checks and calculate observed and risk-standardized performance on the indicators. The November 2018 Notice provided an opportunity for additional independent review and testing of the syntax to help us determine readiness to finalize the revised syntax, or to make further corrections. We reviewed the public comments and conducted further analysis, after which we determined there are no significant errors with the revised syntax. While there are some potential opportunities to increase the precision of the calculations, further consideration of commenter's suggestions requires additional time and will be completed in preparation for CFSR Round 4. Updates to the syntax published with this Technical Bulletin are limited to edits to improve the utility of the syntax, such as clarifying some of the comments embedded in the lines of code and including the numerator and denominator as variables in each of the files. Therefore, rather than publish a follow up Federal Register notice, we are publishing this Technical Bulletin that announces our plan to make immediate use of the statewide data indicator syntax and resulting performance information as we close out CSFR Round 3. What follows is a brief background of the circumstances leading to this Bulletin, our conclusions, supporting documents, and an Appendix with an overview of the comments and our responses.

Section II. Background

We implemented the CFSR in 2001 in response to a mandate in the Social Security Amendments of 1994. The reviews are required to determine if programs are in substantial conformity with the requirements of title IV-B and IV-E of the Social Security Act (the Act). The review process grew out of extensive consultation with interested groups, individuals, and experts in child welfare and other related fields. The CFSRs are authorized under section 1123A of the Act and regulated in 45 CFR 1355.31-37.

The CFSRs enable us to: (1) ensure conformity with federal child welfare requirements, (2) determine what happens to children and families as they are engaged in child welfare services, and (3) assist states in their efforts to enhance their capacity to help children and families achieve positive outcomes. We conduct the reviews in partnership with state child welfare agency staff and other partners and stakeholders involved in the provision of child welfare

services. We have structured the reviews to help states identify strengths as well as areas needing improvement within their agencies and programs.

We use the CFSR to assess state performance on seven outcomes and seven systemic factors. The seven outcomes focus on key items measuring safety, permanency, and well-being. The seven systemic factors focus on important plan requirements of titles IV-B and IV-E that provide a foundation for child outcomes. If we determine a state has not achieved substantial conformity in one or more of the areas assessed in the review, the state is required to develop and implement a Program Improvement Plan (PIP) to address the areas of nonconformity. CB supports states with technical assistance and monitors implementation of PIPs. If the state is unable to complete its PIP successfully, a portion of the state's federal title IV-B and IV-E funds is withheld.

In preparation for CFSR Round 3 and based on authority provided by regulations (45 CFR 1355.34(b)(4) and (5)) to add, amend, or suspend any of the statewide data indicators and to adjust the national standards when appropriate we published a Federal Register Notice on April 23, 2014 (79 FR 22604). The notice provided a detailed summary of the proposed statewide data indicators and the methods to calculate the national standards for those indicators, and invited public comment before their use in CFSRs. The notice included results from consultation with the field and information we considered in developing the plan to replace the statewide data indicators.

Later that year, on October 10, 2014, after considering all public comments received in response to the April 2014 request for public comment, we issued a Federal Register Notice (79 FR 61241) to communicate the final set of statewide data indicators and the national standards that would be used to help determine a state's substantial conformity with titles IV-B and IV-E through the CFSR. While the Adoption and Foster Care Analysis and Reporting System (AFCARS) and National Child Abuse and Neglect Data System (NCANDS) continued to be the data source used to calculate performance, the CFSR statewide data indicators were redefined and designed to be prospective rather than retrospective measures. The prospective measure design follows the entire population of children who could experience the desired outcome (generally the denominator) for a prospective period to see if they experience the outcome of interest (generally the numerator). Simultaneously, we released CFSR Technical Bulletin #8 to provide technical details on methods to calculate national and state performance, determine whether a state meets national standards, and establish state program improvement goals for the indicators. In addition, we published the statistical syntax (i.e. set of code) used to calculate performance information on the indicators, and a workbook showing preliminary state performance compared to national standards and example improvement goals.

On May 15, 2015, we issued a Federal Register Notice (80 FR 27263) to correct calculations and descriptions in the October 10, 2014 Notice (79 FR 61241) and information provided in the supporting documents. After additional technical errors in the syntax and formulation of the statewide data indicators were discovered, we published CFSR Technical Bulletin #9 on October 11, 2016, to inform states of our decision to limit use of performance on the CFSR statewide

data indicators to context information and suspend use of the indicators in determinations of substantial conformity and as a basis for imposing potential financial penalties during CFSR Round 3. The discovery of more errors made clear that a comprehensive and thorough review of the syntax was necessary in order to validate the process for development of the source data files, the construction of the data quality checks and statewide data indicator measures, and the corresponding syntax to calculate performance.

In May 2017, we completed a comprehensive internal review, revision, and testing process of corrections we made to the statistical syntax used to generate performance information on the indicators and refinements to the operationalization of the measures. These changes did not alter measure definitions published in the October 2014 Federal Register notice (79 FR 61241). In addition to our internal review, an independent contractor conducted a multi-step, systematic review and verification of the code. The independent reviewers determined the revised syntax can be used to validly and reliably develop source data files, perform data quality checks, and calculate performance on the indicators. The independent reviewers also determined that there were no errors that would cause inaccurate calculations.

As part of a comprehensive and transparent process to rectify the syntax, we published a Federal Register Notice (83 FR 60874) on November 27, 2018, inviting state child welfare agencies, partner organizations, and the public to review, test, and provide comments on the revised syntax to perform data quality checks and calculate observed performance on the statewide data indicators. To assist states and other interested parties with the review and testing process, we published a supplemental set of resources, including the revised syntax, instructions to run the syntax, a summary of syntax revisions, an updated data dictionary, and the report detailing the independent review and verification process and associated findings. We requested that comments containing suggested revisions be limited to operationalizing the measures and calculation methods contained in the statistical syntax used to generate performance data. We limited the scope because we are not making changes at this time to the statewide data indicator measures as defined in the October 2014 Federal Register notice (79 FR 61241).

Section III. Conclusions

The November 2018 Federal Register Notice comment period was open for 112 days and ended on March 18, 2019. In response, we received 27 specific comments from four state child welfare agencies, one national foundation, and one university with suggestions and/or requests for clarification. We provide a comment summary and our response in Appendix A.

We carefully reviewed all comments and questions, replicated or attempted to replicate some of the issues commenters identified, and explored the population of child records impacted by some of the issues and proposed adjustments suggested by the commenters. Our conclusions from the review and analysis are enumerated below:

1. The revised syntax published in the November 2018 Federal Register Notice improved the construction of source data files, measurement methodology, and syntax calculations.

Several commenters provided support and appreciation for making the identified corrections and noted the revised syntax is improved.

2. The revised syntax and resulting performance calculations provide reliable indicators of performance for states to assess, monitor, and broaden its understanding of safety and permanency for children served by state child welfare systems. As we stated in Technical Bulletin #9, the statewide data indicators will be used as context for the remainder of CFSR Round 3 and we expect state child welfare agencies and their partners use the statewide data indicator performance information to:
 - Help assess program improvement and systems change during the PIP implementation and monitoring period;
 - Develop, implement, and assess progress on goals and objectives included in state Child and Family Service Plans (CFSP) and Annual Progress and Services Reports (APSR); and
 - Inform and guide ongoing continuous quality improvement activities to improve child and family outcomes, including areas to target further exploration using state administrative data systems. One commenter supported this position by recommending that we officially confirm our support and expectation that states regularly monitor and use CFSR statewide data indicators for system improvement planning to provide context for, and complement other state data sources, such as case record reviews.

We are confident in the value and reliability of the statewide data indicator performance information using the revised syntax and will take the following actions to promote, support, and strengthen state's understanding and use of this performance data:

- Re-institute issuance of CFSR state data profiles to states twice yearly in August and February.
- Provide each state with supplemental context data for each profile beginning in August 2019. The supplemental context data will include age breakouts, times to permanency beyond 12 months, and county level data to assist states in gaining additional insight into their CFSR measures' *observed* results.
- Update these existing resource documents to further clarify and strengthen individual understanding of the measures: [CFSR Round 3 Statewide Data Indicator Data Dictionary](#) and the [CFSR Round 3 Statewide Data Indicator Series](#).
- Publish a CFSR statewide data indicator syntax toolkit, in partnership with the Capacity Building Center for States, to assist states and partner organizations with customizing and running the syntax to calculate performance on their own (e.g. sample data files for testing the syntax, step-by-step directions for running and troubleshooting the CFSR Statewide Data Indicators Syntax).

- Continue to have CB staff use the data to assess state strengths and improvement needs and to inform discussions with states regarding strategic planning, program improvement, and systems change.
 - Continue to offer states technical support through the program improvement and title IV-B joint planning and monitoring process, and services provided by the Capacity Building Collaborative.
3. While there are no significant errors in the code, there are some potential opportunities to increase the precision of the calculations. As a result, we will further consider some of the suggestions commenters offered to strengthen the quality of the source data files and performance calculations generated by the syntax. We may make additional amendments to the code, and test the impact of those adjustments. If adjustments are made in preparation for CFSR Round 4, we will publish updated performance results for all states, revised national standards, and the amended syntax and supporting files to calculate data quality, observed performance, and risk-standardized performance on the statewide data indicators.

Section IV. Supporting Documents

The documents identified below are designed to help states better understand the statewide data indicator measures and calculations, and to implement the syntax:

- A. [Updated CFSR Round 3 Statewide Data Indicator Data Dictionary](#): Provides a description of each statewide data indicator and data quality check, including the numerators, denominators, risk adjustments, exclusions, and corresponding data notes.
- B. [CFSR Round 3 Statewide Data Indicator Syntax Zip File](#): Provides updated syntax to improve ease of use, along with supporting files in SPSS format that are used to calculate data quality and observed performance. Note: Syntax to calculate risk-standardized performance (RSP) for each state uses a national, risk-adjusted model that requires child-level data from all states (i.e., national datasets) and thus cannot be replicated by states and interested parties.
- C. [Instructions to Run Data Quality \(DQ\) Checks and Observed Performance Syntax for Statewide Data Indicators](#): Provides an overview and brief description of the folders, files, and syntax included in the CFSR round 3 zip file; considerations and steps for running the syntax; and software requirements.

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Appendix A: CB Response to Public Comments

Public Comments and CB Response

We carefully reviewed all comments and questions in response to the November 2018 Federal Register notice. Below is a general overview of the comments, divided into categories, and our response:

a. Use Longitudinal Source Data Files

Several commenters' recommended state AFCARS and NCANDS submissions be replaced with longitudinal data. Commenters noted the current structure of state data submissions for AFCARS and NCANDS are incomplete and do not provide information on all foster care episodes, placement events, and victimizations for each child. We recognize the national data reporting systems have inherent limitations that create challenges constructing source data files and generating performance information on the statewide data indicators. While this comment is outside the scope of the November 2018 Notice, we wholeheartedly agree that longitudinal files would provide a more complete record of children served by child welfare agencies and improve the precision and quality of statewide data indicator performance calculations. Amendments to the AFCARS regulations will require title IV-E agencies to submit historical information for children who are in the reporting population. Until those amendments are implemented, we will continue to work within the parameters and limitations of the existing national data reporting structures as we transform state submissions into analytic files that support the calculation of state and national performance on the measures.

b. Refine Syntax that Determines which Child Records to Include/Exclude in Calculations

As noted in (a), existing AFCARS and NCANDS reporting structures have limitations that affect our ability to create national source data files. It is also not uncommon for state data submissions to include some data integrity issues. As a result, the code for these prospective CFSR measures applies rules to determine which child records to include and exclude in the calculations. The rules are based on information in the child's records and they are designed to address common challenges when reconciling and managing information across submissions, but they are not without some imperfections. Common challenges including managing situations when information cannot be reported (e.g. discharge reason for a child's initial foster care episode when the discharge date is reported in a subsequent AFCARS submission), information that cannot be distinguished (e.g. number of placement moves attributed to time in care after a child turns 18 years), information not reported (e.g. missing discharge date), and conflicting information across consecutive files (e.g. overlapping foster care episodes).

Several commenters provided suggestions for syntax revisions to improve the precision of existing rules. However, we did not make changes to the code or rules because:

- An initial assessment of some of the issues reported by commenters showed a minimal number of records (less than one percent) are affected and as a result, have a limited impact on national and state performance results.
- The nature of suggested code revisions requires careful development and testing to evaluate potential impacts, so that we may avoid unanticipated and unintended consequences to other sections of the code. Initial testing of several potential code amendments suggested by commenters resulted in some unintended consequences.

We are committed to considering and potentially making amendments to the code to create more precise state and national performance values in preparation for CFSR Round 4.

c. Change How Incident Dates are Used¹

A couple of commenters expressed concern that the syntax to calculate the Recurrence of Maltreatment measure does not account for some instances of recurrence, and in other instances results in an overestimate of recurrence. Commenters also noted that allegations associated with substantiated or indicated maltreatment reports may include multiple incident dates, or incident dates that may precede or follow the report date which is not accounted for in the code. Commenters recommended the syntax be modified to make greater or different use of victimization incident dates in safety data indicator calculations. We did not make changes to the syntax in response to these comments because:

- While commenters provided some suggested syntax revisions to help deduplicate maltreatment reports that refer to the same incident, testing we performed was unable to eliminate the risk of generating unintended errors.
- There are a multitude of complexities associated with using victimization incident dates in the code.
- States do not uniformly include incident dates in NCANDS submissions, and states that do include incident dates may not report incidents dates for all substantiated or indicated maltreatment reports. As a result, suggested changes to the use of victimization incident dates would not be applied equally across states.

d. Provide Clarification

Commenters requested clarification on a variety of topics including, but not limited to calculation methodologies, NCANDS reporting guidance, reasons for specific designs in the code, and limitations in data quality checks. A few commenters misunderstood the calculation methodologies and inaccurately reported issues or incorrect functioning of the

¹For clarification, syntax for Recurrence of Maltreatment uses child abuse victimization incident dates when available to determine whether substantiated or indicated maltreatment reports refer to the same incident, in which case the duplicate record is excluded. The comparison of victimization incident dates is a secondary check done only when incident dates are reported in the NCANDS file for each substantiated or indicated maltreatment report being compared. Syntax for Maltreatment in Foster Care uses child abuse victimization incident dates when available to help determine whether the victimization occurred outside the dates of the child's foster care episode. Victimization incident dates are not used to determine the occurrence or recurrence of child maltreatment for these indicators.

code. Clarification requested by commenters is provided in the next section of this appendix.

e. Improve Usability of Syntax, Supplemental Files, and Performance Information

Several commenters requested we make the code and corresponding output files easier to use, and suggested ways we could enhance states ability to more closely review its state's data. For example, one suggestion was to improve the utility of the syntax, such as clarifying some of the comments embedded in the lines of code and including the numerator and denominator as variables in each of the files. These changes are reflected in the updated syntax included as a supporting document. We agree with another suggestion to create sample data files to provide states a dataset that can be run more easily in statistical software and used to test and train others on the process. We also see the value of another suggestion to return processed data files we create to each state when we run the statistical software to calculate state performance on the indicators to issue CFSR state data profiles. We anticipate developing sample data files, and exploring the feasibility of providing states processed data files in preparation for CFSR Round 4.

Clarification Requested by Commenters

Description of Public Comment	Statewide Data Indicator(s)	CB Response
1. For cases where multiple incident dates are associated with a single referral, which incident date should be reported?	Maltreatment in Foster Care and Recurrence of Maltreatment	The 2015 NCANDS Child File Codebook provides the following guidance for identifying the report incident date to include in the NCANDS Child File: “The month, day, and year of the most recent known incident of alleged child maltreatment. This is the date of the most recently known incident of an alleged maltreatment that led to the report and subsequent investigation or assessment. If the report alleges several types of maltreatment, the most recent incident date across the various types of maltreatment would be used. The date should be prior or equal to the report date, but should not be greater than the report date, even if the child is found to be maltreated during the investigation or assessment.”
2. Clarify the process for the use of incident and referral dates in the methodology.	Maltreatment in Foster Care and Recurrence of Maltreatment	Victimization incident dates are not used to determine the occurrence or recurrence of child maltreatment. Victimization incident dates are used to (a) determine whether substantiated or indicated maltreatment reports refer to the same incident (Recurrence of Maltreatment), in which case the duplicate record is excluded; and (b) to help determine whether the victimization occurred outside the dates of the child’s foster care episode (Maltreatment in Foster Care). The limited use of incident dates is because not all states uniformly include incident dates in NCANDS submissions, and states that do include incident dates do not consistently include those dates for all substantiated or indicated maltreatment reports. See the <i>CFSR Round 3 Statewide Data Indicator Data Dictionary</i> for additional clarification regarding the use of referral and incident dates in calculations for the safety indicators.
3. Suggest using the maltreatment report date if one or more incident dates associated with the maltreatment report are after the report date.	Maltreatment in Foster Care and Recurrence of Maltreatment	An error is generated for the scenario described by the commenter. It is considered a data quality issue as defined by NCANDS Data Quality Rule 146-3: The Incident Date must be the same as or earlier than the Report Date. When an error occurs, the incident date will be blanked.

Description of Public Comment	Statewide Data Indicator(s)	CB Response
<p>4. Concern expressed the syntax does not flag AFCARS records where number of placements is equal to zero. Lowest valid value is one. Accepting a record where number of placements is equal to zero results in a value of negative one being used for that record when summing number of placement changes.</p>	<p>Placement Stability</p>	<p>The AFCARS edit routine/utility replaces all values of zero placement settings with a missing value. As a result, there should be no records with a number of placement settings less than one.</p>
<p>5. Why apply a restriction to only check a victim's date of birth if the child's age is equal to zero? Checking victims' dates of birth in addition to performing the age comparison would find more differences.</p>	<p>NCANDS Data Quality Check: Missing Age for Victims</p>	<p>This data quality check is limited to checking the victim's date of birth for children less than one year as we exclude unborn children from Recurrence of Maltreatment data indicator calculations. We acknowledge that performing a data quality check on matching dates of birth, in addition to performing age comparisons, would identify additional discrepancies as noted by the commenter. However, it would also have the unintended consequence of records failing the data quality check when states purposefully update the child victim's date of birth to correct a prior data integrity/data entry error.</p>
<p>6. Modify the data quality check as the code should attempt to generate the child victim's age by subtracting the victim's date of birth from the maltreatment report date, and only consider the victims age missing when one of those elements is missing.</p>	<p>NCANDS Data Quality Check: Child IDs for victims match across years, but dates of birth / age and sex do not match</p>	<p>This suggestion is an existing procedure done during the NCANDS data validation process. NCANDS files submitted by states with valid dates of birth are configured to automatically generate and replace existing child victim age values in the "Child Age at Report" field by subtracting the victim's date of birth from the maltreatment report date.</p>
<p>7. Syntax does not produce output results that match recently published CFSR state data profiles.</p>	<p>Permanency in 12 month indicators Re-entry to Foster Care</p>	<p>There is not an expectation that states and partner organizations who implement the syntax for calculating data quality checks and observed performance on the statewide data indicators will have the exact same performance results as the CB published CFSR state data profiles unless the syntax is run on the exact same AFCARS submissions. States can obtain technical assistance from the Capacity Building Center for States if needed to help reconcile and understand differences in results.</p>