Child and Family Services Review

Overview of CFSR 3 Statewide Data Indicators Syntax

Overview

The Children's Bureau (CB) is releasing the syntax and supporting files used by the CB to calculate data quality, observed performance, and risk-standardized performance for the Child and Family Services Review (CFSR) Round 3 Statewide Data Indicators.

CB is providing the statistical syntax to states and other interested parties as an informational resource to better understand the calculation methods CB uses to generate CFSR data indicator performance information. The syntax is written for use in the IBM SPSS Statistics and STATA statistical software. For individuals who do not have SPSS and/or STATA, but wish to view the syntax, the syntax files can be opened in most common word processors or text editors, like Microsoft Word and Notepad.[1] An appendix is attached to this document to provide a short description of the folders, files, and syntax the CB uses to generate information related to the statewide data indicators. These items are included in the CFSR3IndicatorSyntax.zip file.

The enclosed syntax is programmed to run on data files containing data from all states. These national datasets were required to compute national standards and assess state performance against those standards.

The SPSS syntax is used by CB to calculate data quality and observed performance for each state. When CB makes these calculations, it uses child-level data from all states, and the SPSS syntax assumes this data exists. To replicate CB calculations for data quality and observed performance, states may need to modify the SPSS syntax to work with data from only one state. The STATA syntax is used by CB to calculate risk-standardized performance (RSP) for each state in a national, risk-adjusted model. This syntax requires child-level data from *all* states (i.e., national datasets). Therefore, states and other interested parties will not be able to use the STATA syntax to calculate RSPs or otherwise replicate CB's results.

Considerations

- Although CB is providing the syntax publicly for informational purposes, we recognize that some states and other interested parties may want to apply the logic to monitor themselves. To replicate CB calculations for data quality and observed performance, states may need to modify the SPSS syntax to work with data from only one state.

[1] To do so, open the word processor or text editor, go to File > Open, navigate to where the syntax file is saved and select it. The syntax should open as a readable file. If the syntax file is not listed, change the Open file settings to show "All files (&*.*)." These instructions may differ slightly depending on the operating system and software being used to view the syntax.

- When the CFSR3IndicatorSyntax.zip file is unzipped it will create a folder called "CFSR3" which contains the folders, subfolders, and files described in the Appendix. The statistical software programs will not recognize the compressed zip file if opened from within the programs. The functionality to unzip the file differs based on the computer. The syntax requires the entire folder/file structure to be in place (i.e., unzipped) and on the computer running the programs.

- The syntax is set up for CB to run on a specific subdirectory (C:\CFSR3). The directory, subdirectory, and filenames may need to be modified in the syntax to run on individual computers and to work with state files names.

- CB follows these steps (in order) when running the syntax:

  1. Run the SPSS syntax, CFSR 3 – 1 Create AFCARS source data.sps (See instructions in syntax for more information)
  2. Run the SPSS syntax, CFSR 3 – 1 Create AFCARS DQ files.sps. (See instructions in syntax for more information)
  3. Run the SPSS "observed" syntax for the indicator(s) of interest. The SPSS syntax to calculate observed performance on the statewide data indicators does not need to be run in any particular order.

Software Used

- IBM® SPSS® Version 21.0 or higher [2]

  Note: Some SPSS syntax also requires:

  - IBM® SPSS® Custom Tables
  - Python Essentials for IBM® SPSS® Statistics (this is installed by default beginning with SPSS® Version 22)

- STATA Version 12 or higher [3]
- Microsoft Excel 2007 or higher

Technical Assistance

The Children's Bureau will share information on additional technical assistance resources related to the CFSR Round 3 Statewide Data Indicators as it becomes available.

[2] Earlier versions of SPSS may be used with a setting changed to turn 'Unicode' on. This became a default setting in SPSS version 21 and on.

[3] STATA is used only to calculate states' risk-standardized performance in a national, risk-adjusted model. It is not required to calculate observed performance on the indicators.

APPENDIX

Descriptions of Folders, Files, and Syntax the Children's Bureau Uses to Calculate Data Quality, Observed Performance, and Risk-Standardized Performance for CFSR 3 Statewide Data Indicators

Available in the CFSR3IndicatorSyntax.zip file

.sav = SPSS data file • .sps = SPSS syntax • .dta = STATA data file • .do = STATA syntax

Folders and files	Description
DQ AFCARS	Syntax will save to this folder SPSS data files (.sav) containing states' data quality results related to the AFCARS data quality checks for every 6-month period examined
DQ AFCARS\Merged	Syntax will save to this folder an SPSS data file (.sav) containing the aforementioned data quality results files, merged together
DQ NCANDS	Syntax will save to this folder SPSS data files (.sav) containing states' data quality results related to the NCANDS data quality checks for every 12-month period and FY examined
Fixed files	Some syntax calls the four fixed data files described below:
CFSR 3 AFCARS data quality checks.sav	Holds details about the AFCARS data quality checks, including data quality limits, descriptions, and the indicators to which they apply
Child populations.sav	Holds U.S. Census Bureau child population estimates for 50 states and the District of Columbia for 2010, 2011, 2012, and 2013
states.dta	Holds state FIP codes, full text name, and postal code abbreviations (STATA version)
states.sav	Holds states FIP codes, full text name, and postal code abbreviations (SPSS version)
Output	Syntax will save to this folder SPSS output files (.spv)
Performance modeled	Syntax will save to this folder child- and state-level files produced after running the STATA syntax to calculate states' risk-standardized performance
Performance observed child	Syntax will save to this folder child-level files produced after running the SPSS syntax to calculate states' observed performance
Performance observed state	Syntax will save to this folder state-level files produced after running the SPSS syntax to calculate states' observed performance
Submissions AFCARS	Syntax will save to this folder a merged SPSS data file (.sav) containing states' 6-month AFCARS submissions, merged together

Folders and files	Description
Submissions AFCARS \ SixMonthFiles	Used to place individual 6-month AFCARS submissions. Indicator-specific syntax provides guidance on what submissions to include.
Submissions NCANDS	Used to place FY NCANDS child file submissions. Indicator-specific syntax provides guidance on what submissions to include.
Syntax [1]	
CFSR 3 – 0 Create census child populations.sps	Shows how the Children's Bureau downloaded and prepared the child population data from the U.S. Census Bureau that is reflected in the Child populations.sav data provided in the .zip file.
CFSR 3 – 1 Create AFCARS source data.sps	Creates the source data file needed to calculate observed and risk-standardized performance on all indicators except Recurrence of Maltreatment
CFSR 3 – 2 Create AFCARS DQ files.sps	Creates the data quality files needed to examine state's data quality results relative to the AFCARS data quality checks and limits, to determine if a state should be excluded from the analysis for a particular indicator
CFSR 3 – 3 Observed perf for maltx in care.sps	Calculates observed performance for Maltreatment in foster care
CFSR 3 – 3 Observed perf for maltx recurrence.sps	Calculates observed performance for Recurrence of maltreatment
CFSR 3 – 3 Observed perf for perm (entries) & reentry.sps	Calculates observed performance for Permanency in 12 months for children entering care and Re-entry to foster care in 12 months
CFSR 3 – 3 Observed perf for perm (first day).sps	Calculates observed performance for Permanency in 12 months for children in foster care 12-23 months and Permanency in 12 months for children in foster care 24 months or more
CFSR 3 – 3 Observed perf for placement stability.sps	Calculates observed performance for Placement stability
CFSR 3 – 4 RSP for maltx in care.do	Calculates risk-standardized performance for Maltreatment in care
CFSR 3 – 4 RSP for maltx recurrence.do	Calculates risk-standardized performance for Recurrence of maltreatment
CFSR 3 – 4 RSP for perm (entries).do	Calculates risk-standardized performance for Permanency in 12 months for children entering care
CFSR 3 – 4 RSP for perm (FD 12-23).do	Calculates risk-standardized performance for Permanency in 12 months for children in foster care 12-23 months
CFSR 3 – 4 RSP for perm (FD 24 or more).do	Calculates risk-standardized performance for Permanency in 12 months for children in foster care 24 months or more
CFSR 3 – 4 RSP for placement stability.do	Calculates risk-standardized performance for Placement stability
CFSR 3 – 4 RSP for reentry.do	Calculates risk-standardized performance for Re-entry to foster care in 12 months

[1] The STATA (.do) syntax used to calculate risk-standardized performance (RSP) is provided for informational purposes only. Calculating RSPs requires child-level data from every state.