

COSF Calculator Model 2.0 Guidance: Analytic Version with Expanded Descriptive Output and Summary Statements for 150+ cases

Summary of changes with Model 2.0

- Graphic presentation of OSEP progress categories and summary statements
 - See “OSEP Category Charts” tab
- Calculation of OSEP Summary Statement percentages
 - See “OSEP Category Totals” tab
- Graphic presentation of entry and exit data for each outcome
 - See “Outcome 1 Ratings,” “Outcomes 2 Ratings,” and “Outcome 3 Ratings” tabs
- Tables that provide checks on data quality
 - See “Data Issues,” “Category A,” and “Category E” tabs
- Additions of columns in the data table that provide information about data quality
 - See columns EC, ED, and EE in the “Data” tab and drop down arrow that allows sorting and filtering by data in these columns.
- Capability to add extra columns of data in columns EF and beyond (note recommendation to repeat child ID in column EF)

Warning Messages When Opening the File

When opening the Excel file, you may receive different warning messages depending on the level of security set and the version of Excel you are using.

- Those with “medium” or “low” security setting will be asked if they want to disable or enable macros as they open the file. Click on “enable” to allow the macros that auto-compute information in the file to work.
- Those with “high” or “very high” security settings in Excel will receive a message that the file cannot open based on the security setting. If you receive this message, you may do one of two things:
 - Either follow the specific instructions outlined in the warning message to enable macros in this file, or
 - Close the file and go into Excel’s menu. For Excel 2003, first click on “Tools”, then “Options”, then the “Security Tab”, then the “Macro Security” button to change your macro security setting to medium and press “ok”. Close the Excel program and re-open it before browsing to “open” the calculator file from its saved location. When the file begins to open you will be asked to enable or disable macros. You can then click on enable macros and the file will open to show a number of worksheet tabs across the bottom, including “Contents & Tips” which provides an overview for getting started.
- If you are unable to open the Excel document due to security issues and you are using Excel 2007, you need to do the following:
 - Open Excel
 - Click on the icon in the top left (that ball w/ little squares).
 - Click on Excel Options on the bottom right



- Click on Trust Center
- Click on Trust Center Settings
- Click on Macro Settings
- Select "disable macros with notification"

If you are able to open the document but it has a security warning about disabled macros, you should click on 'options' and then click 'enable this content'.

When the file opens, a variety of worksheet tabs will appear across the bottom. The first one "Contents & Tips" summarizes calculator contents and provides an overview of key tips and instructions for using the calculator. Data should be entered in the "Data" tab. Then, click on the additional tabs to see information produced from your data.

Data Entry

Like the previous analytic version of the COSF calculator, the Excel file below can be used (or adapted for use by someone who knows Excel) with large data sets of COSF ratings to generate OSEP data for child outcomes (i.e., the data that must be submitted to OSEP every February). Open the file. After reading the "contents and tips" worksheet suggestions, then go to the worksheet labeled "Data." Follow the instructions and enter your data in the different cells. Once you enter all of your data, go to the tab labeled "OSEP Category Totals" and you will find percentages calculated for the different OSEP reporting categories under outcomes 1, 2, and 3 respectively along with the percentages for the OSEP Summary Statements.

To add additional rows to the data set, please follow these steps: 1) A Security Warning Box will pop up when you open the file. Click on the "Enable Macros" button in that box. 2) Enter data in cell B 21. 3) Keeping the cursor/tab in cell B21, press *Ctrl-R*. A row will be added above this cell with all macros enabled such that you can enter data. Once you enter the data, the OSEP progress categories will be calculated automatically for all 3 outcomes. Additional columns at the end of each row of data also can be used to include more information in the calculator than is shown (e.g., to add in additional demographic or child information fields). Please note, it is strongly recommended that the child's id number be repeated with these additional columns.

Features

The COSF Calculator Model 2.0, Analytic version, contains all the features of the initial COSF calculator, but it provides some additional automated features, including the following:

- Computes OSEP summary statements in addition to the OSEP progress categories from COSF data (Tab: OSEP Category Totals)
- Graphically presents charts with OSEP progress category and summary statement information (Tab: OSEP Category Charts)
- Computes entry and exit distributions for each outcome (Tab: Outcome 1 Ratings, Outcome 2 Ratings, Outcome 3 Ratings)
- Creates charts showing entry and exit distributions for each outcome (Tab: Outcome 1 Ratings, Outcome 2 Ratings, Outcome 3 Ratings) Displays the number of children with different patterns for progress category a across the three different outcomes. (Tab: Category A) We would not expect to see more than 5% in category a.
- Displays the number of children with different patterns for progress category e across the three different outcomes. This allows users to see the percentage of children who maintained age expected functioning on all three outcomes from entry to exit. (Tab:



Category E). Although there is no agreed upon percentage of category e, a very high percentage might indicate a problem with data quality.

- Summarizes some common data issues, including the percentage data entered for which there is valid entry and exit data on all three outcomes and the percentage of cases missing entry or exit dates or missing progress information. This is not a replacement for effective data screening and cleaning, but we hope that these features provide easy access to some key information to use in examining the quality of the data (Tab: Data Issues)
- Includes columns in the data table that provide information about data quality (Tab: Data - see columns EC, ED, and EE)
- Includes blank columns for state customization of additional data fields (Tab: Data – see columns EF and beyond)

The Model 2.0 version of the COSF Calculator also includes some new features that make it more versatile and user friendly. These include the following:

- The ability to sort and filter auto-generated OSEP progress category columns (see columns S, T, U, EC, ED, & EE) on the data worksheet to see cases with specific progress category ratings or those missing progress data or those where data are entered in an impossible combination.

HOW TO SORT OR FILTER AUTO-GENERATED FIELDS

- To sort or filter data, click on the black arrow in the lower right corner of the preferred OSEP category or other column (columns S, T, U or EC, ED, or EE). Select the choice indicating the way you want data sorted or filtered. The arrow will then turn blue.
- To return to all cases again, click on the arrow and then on “all”. If you have sorted several of the categories (i.e., have several blue arrows), you must click “all” on all of the categories to return your data to its initial state.
- This feature is useful for identifying impossible cases or cases missing progress information to review the information more carefully and see if additional information is available to correct the data problem. It can also be used, for instance to look just at those in one particular progress category on an outcome and see what the entry and exit distributions look like for that group of children. Note: This calculator does not auto-generate a crosstab showing entry and exit ratings, though data can be sorted or filtered and copied and pasted into a software program where users can generate that information to learn more about the patterns of movement in the data between entry and exit. Also, when data are filtered in the COSF calculator, charts and tables do not automatically update. However, you could copy and paste that subset of data into another blank COSF calculator to see the tables and charts for that subset.

- Flexibility to add additional columns of data at the end of each row. Columns EF and on are free from protections so that users can add demographic, service, child, or other



relevant data in the calculator as needed. Examining different data patterns for different groups can be especially informative in identifying improvement activities. NOTE: Users adding extra columns of data are encouraged to repeat child's ID again as data in column EF for greatest ease in using the sorting functions (see contents and tips tab).

- Flexibility to copy charts produced into Power Point and other files. Permissions allow users to edit titles on these charts as well to include additional information such as the state name or year of included data.
- The ability to sort columns of data that were entered (e.g., entry date, exit date, program, id, outcome rating, progress type).

HOW TO SORT DATA BASED ON ENTERED DATA FIELDS

- To sort data highlight the full row of entered data fields (start with B21 and highlight across to N21 and then highlight down through the full amount of data entered.
- Then, regular sorting functions apply, allowing you to sort by any of the columns included in the highlighted sections. This feature is useful for selecting specific entry and exit dates or sorting by program or id.
- When the data is sorting, the auto-computed OSEP category fields will temporarily disappear. After the entered data re-sort, the OSEP category fields will re-compute on the new line.
NOTE: raw data to the right of the auto-generated OSEP category columns are not included in this sort. Repeating child id in column EF will minimize any challenges from this feature.

The rules worksheet tab continues to show the rules used to generate the OSEP progress categories. These have not changed since the previous version of the COSF Calculator.

Considerations and Resources.

While we hope that the COSF Calculator will make it easier to review some common types of information desired from COSF data, this list is in no way comprehensive or fully reflects the many different types of recommended pattern checking with COSF data. For more information about some of the many kinds of pattern checking analyses that can be conducted see <http://www.fpg.unc.edu/~eco/pages/archive.cfm> and review presentations on *March 19, 2009* for information about pattern checking and on *October 20, 2009* for information about sharing some of these kinds of data back with local programs. We also encourage individuals collecting state level COSF data to consider participating in the COSF Data Community of Practice (see http://www.fpg.unc.edu/~eco/pages/learning_comm.cfm) to learn more about types of analysis and the characteristics of data being analyze in other states using the COSF.

Finally, cleaning your data prior to entering the data into the COSF calculator will make the calculator easier to use and improve the quality of the output in the tables and graphs. Taking time to carefully review cases for duplicates, out of range values, and missing information and address any issues identified will provide more accurate and complete data for the calculator.

