

**Data Element Handling for the DHCS**

**Functional Assessment Screening Tools**

**Performance Outcomes System**

 

 For the 2018 Data Collection Period Version 2.1

**Purpose of this Document**

The primary goal of this document is to provide information to DHCS technical team members and contractors with the procedures for handling data associated with the Performance Outcomes System (POS) functional assessment screening tools data system. This data system is comprised of results from Medi-Cal beneficiaries utilizing Specialty Mental Health Services (SMHS) who undergo periodic functional screening tool assessments. DHCS has identified two functional assessment screening tools: (1) The Child and Adolescent Needs and Strengths (CANS) and the (2) Pediatric Symptom Checklist (PSC).

DHCS wants to collect, analyze, and report on the results of these two tools as a deliverable for POS. In order for this to occur, data integrity must be ensured. Specific handling and rules will need to be applied. This document will detail each data element from the CANS and PSC data dictionaries that will require specific handling and rules to be applied. The two data dictionaries describe the purpose and specific format of each data element. This document will describe the desired processes as functional assessment screening tool data is collected within the DHCS systems. This document will also be useful not only to DHCS technical staff, but also to county staff as well, as they define their systems to collect and submit functional assessment screening tool data. Understanding the rules will help reduce data errors, time-consuming corrections and resubmission.

**Description of Data Element Handling**

The data elements for both the CANS and PSC functional assessment screening tools have been simplified as to maintain only the minimum number of fields used for analysis and reporting. The structure of both tables are designed as follows:

* A set of common “Administrative” data elements used to provide details about the beneficiary and the county Mental Health Plan (MHP) submitting the data. These data elements are identical for both the CANS and PSC data records.
* The “Results” from the individual items or questions for each functional assessment screening tool For the CANS tool there will be 50 individual answers or “scores”. The PSC will have 35 scores.

There will be two primary types of results that can occur when county assessment data is collected and processed by the DHCS database system. The checking and verification will occur at an individual record level.

A “functional assessment record” is merely a combination of administrative and results data from one functional assessment screening tool that was administered for an individual beneficiary. During the attempt to store the assessment record into the DHCS system, the following two results can occur:

* The functional assessment screening tool record contained the required amount of data elements, formatted sufficiently, and was successfully saved into the system. Note this could also result in warning or informational messages being triggered.
* The functional assessment screening tool record triggered a fatal error and could not be further processed. Fatal errors typically occur when required data elements in the assessment record are missing or incorrectly formatted.

When encountering fatal errors, the DHCS system should provide sufficient information to the submitting county on the specific details of the error(s) so the county can make the necessary corrections for resubmission. In addition to the data element(s) which triggered the error(s), mandatory fields should be contained in each error message for easy identification. For example, each error message should contain information to uniquely identify the beneficiary (e.g. CCN) and the date of the assessment.

Warning and informational messages can also be supplied in error reporting to assist the counties with data integrity. These messages should be produced when formatting doesn’t meet the specific requirements, or when optional data elements are not contained in the assessment record (where they might be available in the future).

Note on optional data elements:

Initial implementations of the functional assessment screening tools data system will use batch processing of text files containing assessment records uploaded by each county. These text files will have each data element, or field, separated by a delimiter (e.g. a pipe symbol “|”). Optional, non-mandatory data elements that cannot be provided by the county should still be separated by a delimiter to ensure proper processing.

Unique Table Keys

One of the basic rules involved with hosting the data in the two primary tables associated with each assessment tool will be to ensure there are not multiple assessment records for a given beneficiary (CCN) for the same assessment dates. The tables in the system should be designed to produce a fatal error in the case this happens. Defining unique primary keys using the combination of CCN, Assessment Date, County Code, and the Assessment Tool Code should be implemented to avoid redundant assessment records.

**Administrative Data Element Handling**

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| **Data Element Name** | **Transaction Code** |
| **Field Name** | **TRANS\_CD** |
| **Type(Size)** | **CHAR(1)** |
| **Data Handling Rules:** | This field should contain one of these characters:‘**A’ – Add a new assessment record (Default value).****‘R’ – Replace an existing assessment record.****‘D’ – Delete an existing assessment record.**Most of the time the suppled transaction code will be set to‘A’ to add a new record. So this should be the default value. If the upper case value of the transaction code suplplied is not one of the 3 above, then just create a warning message and continue processing as if it was an ‘A’.**Adding a New assessment record (‘A’)**The first check should confirm there is not already an assessment record for the provided CNTY\_CD, ASSESS\_DT, ASSESS\_TOOL\_CD, and CCN fields. If there is, this would be a fatal error. Otherwise, if there are no additional fatal errors, add this record to the system.**Replacing an existing assessment record (‘R’)**The first check should confirm there is an existing assessment record for the provided CNTY\_CD, ASSESS\_DT, ASSESS\_TOOL\_CD , and CCN fields. If there is not, this would be a fatal error. Otherwise, if there are no additional fatal errors, replace this record in the system. Note an assessment record with a ‘R’ transaction code should contain all required fields similar to a new assessment record. **Deleting an existing assessment record (‘D’)**The first check should confirm there is an existing assessment record for the provided CNTY\_CD, ASSESS\_DT, ASSESS\_TOOL\_CD, and CCN fields. If there is not, this would be a fatal error. Otherwise, delete the existing record for the provided CNTY\_CD, ASSESS\_DT, ASSESS\_TOOL\_CD, and CCN fields. It should not be necessary to check any additional fields (the other fields do not need to be supplied in the assessment record for proper processing). |

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| **Data Element Name** | **Assessment Tool Code** |
| **Field Name** | **ASSESS\_TOOL\_CD** |
| **Type(Size)** | **CHAR(1)** |
| **Data Handling Rules:** | This field is mandatory and should be included in each assessment record. If this field doesn’t exist, or is not one of the valid codes identified in the CANS and PSC Data dictionaries (‘1’ for CANS, ‘2’ for PSC, a fatal error should occur.  |

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| **Data Element Name** | **County Code** |
| **Field Name** | **CNTY\_CD** |
| **Type(Size)** | **CHAR(2)** |
| **Data Handling Rules:** | This field is mandatory and should be included in each assessment record. If this field doesn’t exist, or is not one of the valid codes identified in the CANS and PSC Data dictionaries, a fatal error should occur.  |

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| **Data Element Name** | **County Client Number** |
| **Field Name** | **CCN** |
| **Type(Size)** | **CHAR(9)** |
| **Data Handling Rules:** | This field is mandatory and should be included in each assessment record. If this field doesn’t exist, or if the number of characters is more than 9, a fatal error should occur. Please refer to Appendix C in the data dictionary document for proper formatting. A warning message should be created if any of the formatting criteria is not met.  |

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| **Data Element Name** | **Client Index Number** |
| **Field Name** | **CIN** |
| **Type(Size)** | **CHAR(9)** |
| **Data Handling Rules:** | This field is optional. If the CIN is not present, an informational message should be created. A warning message should be created if any of the formatting criteria is not met (less than 9 characters and the first character is not a ‘9’). Please refer to Appendix F in the data dictionary document for proper formatting. |

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| **Data Element Name** | **Client Name** |
| **Field Name** | **CLIENT\_NAME** |
| **Type(Size)** | **CHAR(53)** |
| **Data Handling Rules:** | This field is mandatory. If the CLIENT\_NAME is not present, a fatal error should occur. Please refer to Appendix D in the data dictionary for proper formatting. A warning message should be created if any of the formatting criteria is not met  |

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| **Data Element Name** | **Client DOB** |
| **Field Name** | **CLIENT\_DOB** |
| **Type(Size)** | **CHAR(8)** |
| **Data Handling Rules:** | This field is mandatory and should be included in each assessment record. If this field doesn’t exist, a fatal error should occur. If the format is not in the proper format (YYYYMMDD), a fatal error should occur. A fatal error should also be triggered if the calculated age from the CLIENT\_DOB falls outside the acceptable age range. **Note:** Acceptable ages depend on the ASSESS\_TOOL\_CD. Acceptable ages for the CANS tool are ages 6 through 20. Acceptable ages for the PSC tool are ages 3 through 18. |

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| **Data Element Name** | **Provider Number** |
| **Field Name** | **PROVIDER\_NUM** |
| **Type(Size)** | **CHAR(4)** |
| **Data Handling Rules:** | This field is mandatory and should be included in each assessment record. If this field doesn’t exist, or does not containa 4 alphanumeric characters, a fatal error should occur |

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| **Data Element Name** | **Assessment Date** |
| **Field Name** | **ASSESS\_DT** |
| **Type(Size)** | **CHAR(8)** |
| **Data Handling Rules:** | This field is mandatory and should be included in each assessment record. If this field doesn’t exist, a fatal error should occur. If the format is not in the proper format (YYYYMMDD) a fatal error should occur. A fatal error should also be triggered if the date falls outside the range of acceptable values (e.g. a date in the future, or a date earlier than the initial rollout of the system “20180701”)**Additional Rules for Assessment Dates**Assements are expected to be received at regular intervals in order to assist in tracking functional progress. After the initial functional assessment, reassessments should be performed within regularly defined intervals approximately every **6** months until they are discharged from care. Specific rules for the assessment date data element need to be defined depending on the “Assessment Type” data element (ASSESS\_TYPE field) defined in the data dictionaries. Note these rules apply to when the “Transcaction Code” field specifies adding or replacing assessment records (does not apply to deleting records). When defining the rules below, it is understood that the system will be searching for client assessment date by matching in the CCN field. Also, when performing date comparisons, the system should use the ASSESS\_DT field value (not the current date) when processing. In addition, the term “previous” in the rules below means the most recent earlier assessment date in chronological order matching the client (if one exists). “Next” means the nearest assessment floowing the date in the ASSESS\_DT field (if one exists).**Initial Assessment Received (Type ‘1’)**A fatal error should be created for the initial assessment type for the following scenarios:* If there is a previous assessment is of type “Initial” or “Reassessment” (regardless of the previous assessment date).
* If there is a next assessment of type “Initial” (regardless of the next assessment date)
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| **Data Element Name** | **Assessment Date (Continued)** |
| **Field Name** | **ASSESS\_DT** |
| **Type(Size)** | **CHAR(8)** |
| **Data Handling Rules:** | * If there is a next assessment date of type “Reassessment” which is less than 4 months later or more than 8 months later.

**Reassessment Received (Type ‘2’)**Note “Reassessment” assessments are considred the periodic assessments which occur approximately every **6** months after an initial assessment prior to discharge. A fatal error should be created for the Reassessment type for the following scenarios:* If there is a previous assessment of types “Reassessment” or “Initial” less than **4** monthsearlieror more than **8** monthsearlier.
* If there’s a next assessment of type “Reassessment” less than **4** monthslateror more than **8** monthslater.
* If there is a previous assessment of types “Discharge” or “Admin Closed” (regardless of the date).

**Discharge Assessment Received (Type ‘4’)**A fatal error should be created for the discharge assessment type for the following scenarios:* If there is a previous assessment of types “Initial” or “Reassessment” more than **8** months earlier.
* If the previous assessment type is NOT of types “Initial” or “Reassessment” (and is within 8 months earlier).
* If there is a previous assessment of types “Discharge” or “Admin. Closed” (regardless of date).
* If there is a next assessment that is NOT of type “Initial”.
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| **Data Element Name** | **Assessment Date (Continued)** |
| **Field Name** | **ASSESS\_DT** |
| **Type(Size)** | **CHAR(8)** |
| **Data Handling Rules:** | **Administrative Close Assessment Received (Type ‘5’)**A fatal error should be created for the discharge assessment type for the following scenarios:* If there are no previous assessments of types “Initial” or “Reassessment”.
* If there is a next assessment that is NOT of type “Initial”.

**Urgent Assessment Received (Type ‘6’)**Note “Urgent” assessments are similar to “Reassessment” assessments, with the exception that they can occur earlier than the average 6 month intervals. These types of assessments are rare, and typically occur when there is a critical need to perform an assessment prior to the regularly scheduled assessment. So the rules of handling Urgent assessments should be similar to the “Reassessment” assessment types.A fatal error should be created for the urgent assessment type for the following scenarios:* If there is a previous assessment of types “Reassessment” or “Initial” more than **8** monthsearlier.
* If there’s a next assessment of type “Reassessment” more than **8** monthslater.
* If there is a previous assessment of types “Discharge” or “Admin Closed” (regardless of the date).

\*A separate document may need to be created to detail the process the DHCS systemshould follow to monitor assessments of existing clients in the system. An example of this would be to check for clients who are “due” an assessment, and where the system hasn’t received a periodic assessment after a defined period of time (weeks, months). The system could then create the proper notifications and/or reports for the county MHPs. |

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| **Data Element Name** | **Assessment Type** |
| **Field Name** | **ASSESS\_TYPE** |
| **Type(Size)** | **CHAR(1)** |
| **Data Handling Rules:** | This field is mandatory and should be included in each assessment record. If this field doesn’t exist, or is not one of the valid values (‘1’ through ‘6’), a fatal error should occur. |

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| **Data Element Name** | **Has Caregiver** |
| **Field Name** | **CAREGIVER** |
| **Type(Size)** | **CHAR(1)** |
| **Data Handling Rules:** | This field is optional. Valid values are ‘Y’, ‘N’ or blank. A warning message should be issued if the ASSESS\_TOOL\_CD is ‘1’ (indicating a CANS assessment record) and the value is not a ‘Y’ or ‘N’. |

**Functional Assessment Data Element Handling**

The data handling and rules for the two functional assessment screening tools is straightforward. All fifty responses for the CANS tool, and all thirty-five for the PSC tool have identical choices. The only difference is some items from the PSC tool can be left blank/not scored.

**CANS Data Element Handling**

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| **Data Element Name** | **CANS Items 1-50** |
| **Field Name** | **CANS\_XX\_Q##** |
| **Type(Size)** | **CHAR(1)** |
| **Data Handling Rules:** | The first 40 CANS items (CANS\_XX\_Q01 through CANS\_XX\_Q40) are mandatory (see note below) and should be included in each assessment record. If each of the the first 40 values is not one of the valid responses (‘0’, ‘1’, ‘2’, ‘3’) a fatal error should occur. The last 10 CANS items (CANS\_CR\_Q41 through CANS\_CR\_Q50) from the “Caregiver Resources and Needs” domain are optional if the answer to the field CAREGIVER is set to ‘N’. In this case the values should be all set to ‘8’ or a warning message should be issued. If the answer for the CAREGIVER question is ‘Y’, and all of the last 10 items are not valid responses (‘0’, ‘1’, ‘2’, ‘3’) , then a fatal error should be triggered.Note: If an assessment record for an “Administrative Close” is received (ASSESS\_TYPE field is set to ‘5’), then all CANS items (CANS\_XX\_Q01 through CANS\_XX\_Q50) can be ignored, as this indicates an assessment did not occur. |

**PSC Data Element Handling**

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| **Data Element Name** | **PSC Items 1-35** |
| **Field Name** | **PSC\_Q##** |
| **Type(Size)** | **CHAR(1)** |
| **Data Handling Rules:** | The PSC allows up to three items to be left blank/not answered. If four or more items are not one of the valid responses (‘0’, ‘1’, ‘2’) a fatal error should occur (see note below). Otherwise, any invalid response should be set to ‘9’ to indicate there was no response.Note: If an assessment record for an “Administrative Close” is received (ASSESS\_TYPE field is set to ‘5’), then all CANS items (psc\_Q01 through PSC\_Q35) can be ignored, as this indicates an assessment did not occur. |

**PSC Final Questions**

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| **Data Element Name** | **Emotional or Behavioral Problems** |
| **Field Name** | **PSC\_PROBLEMS** |
| **Type(Size)** | **CHAR(1)** |
| **Data Handling Rules:** | This is an optional data element. Valid responses are ‘Y’, ‘N’, ‘ ‘ (Blanks or Null). |

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| **Data Element Name** | **Additional Services** |
| **Field Name** | **PSC\_ADDL\_SERVICES** |
| **Type(Size)** | **CHAR(1)** |
| **Data Handling Rules:** | This is an optional data element. Valid responses are ‘Y’, ‘N’, ‘ ‘ (Blanks or Null). |

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| **Data Element Name** | **Additional Service List** |
| **Field Name** | **PSC\_SERVICE\_LIST** |
| **Type(Size)** | **CHAR(160)** |
| **Data Handling Rules:** | This is an optional data element. If the response to the field PSC\_ADDL\_SERVICES is ‘Y’, and this field is Blank/Null, and informational message should be triggered. |