SENTINEL MOTHER-INFANT LINKAGE

DATA QUALITY REVIEW AND CHARACTERIZATION PROGRAMS

Prepared by the Sentinel Operations Center

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Table of Contents

Modification History

Version	Date	Modification	By
1.0.0	4/5/2018	• First production version	Sentinel Operations Center
1.1.0	4/6/2018	• Create additional level 3 table restricted to unique deliveries	Sentinel Operations Center
1.2.0	5/2/2018	• In MIL and MIS tables, allows infant sex to be O, in addition to: A, M, F, and U	Sentinel Operations Center

I. OVERVIEW

This document describes the business rules used by the Sentinel Operations Center (SOC) for data quality assurance (QA) review and characterization of the Sentinel Distributed Database (SDD) Mother-Infant Linkage data.

A. DISTRIBUTED PROGRAMMING

To create the Mother-Infant Linkage data, each Data Partner (DP) first transforms local source data into Sentinel Common Data Model (SCDM) format. Mothers and infants are next identified via a distributed programming package. DPs will process these files created, attaching non-SCDM data as necessary, to link the population of mothers and infants. The method for matching each mother-infant pair will be captured during this process and two specific tables will be output as a result. The Mother-Infant Linkage (MIL) table will include core variables sourced from the SCDM and the match method variable only. The Mother-Infant Linkage Support (MIS) table will be identical to the MIL table with the addition of non-SCDM sourced variables utilized to perform the match.

To evaluate data characteristics and overall quality, SOC developed distributed code to query the content of the SCDM-formatted MIS and MIL tables. The output from this process are meant to help determine whether the data conform to SCDM specifications, maintain integrity across variables and tables, and trend as expected over time.

B. SECURITY

This code will have the flexibility to query two forms of the Mother-Infant Linkage table, MIL or MIS. However, only one table, MIL or MIS, will be queried per package and the package will abort if processing parameters do not adhere to this rule.

Both the format and the destination of the output generated by this package will vary by the specific table being queried. In addition, any output resulting from querying the MIS table will remain local with DPs only, regardless of whether patient-level or in aggregate, while output based on the MIL table that is in aggregate and does not included PHI will be provided to SOC for review.

C. QUALITY CHECKS

The quality checks performed are organized into levels 1, 2, or 3 in order to assess pre-defined data quality measures and characteristics as described below.

Level 1 data checks review the structure, completeness and content of each variable in the table to ensure that the required variables contain data and conform to the formats specified by the SCDM specifications. For each SCDM variable, Level 1 data checks verify that data types, variable lengths, and SAS formats are correct and reported values are acceptable. For example, ensuring that the variable SEX in the table is a character variable of length 1 byte and has values of only "F," "M," "A," or "U" is a Level 1 data check.

Level 2 data checks assess the logical relationship and integrity of data values within a variable or between two or more variables within and between tables. For example, the SCDM requires that the variable MBirth_Date is earlier than the variable CBirth_Date.

Level 3 data checks examine data distributions and trends over time, both within a Data Partner's database (by examining output by year and year/month) and across a Data Partner's databases (by comparing updated SCDM tables to previously created versions of the tables). For example, a Level 3 data check would ensure that there are no large, unexpected increases or decreases in linked records over time.

D. MODULE FLOW

In this package, the module execution sequence has been ordered with module stop-gaps as described below.

- **All level 1 checks for existence of tables** are performed first and, if any tables do not exist, the process will abort.
- **All Level 1 checks for variables** including existence, type, and length are performed and, if any major issues are detected i.e. MPatID does not exist or CPatID does not, the process will abort.
- **All Level 1 checks for valid values** are performed and, if any major issues with the data are detected, the package will abort.
- **All Level 2 checks are performed next** and, if any major issues with the MIL data are detected, the package will abort.
- All Level 3 checks for all tables are performed.

Note: Aggregate results based on the MIL table will be output to the "msoc" folder and sent to the SOC for review if the process does not abort during level 1 or 2 checks. Log, metadata, and signature files will be saved to the "msoc" folder and provided the SOC regardless of whether the process aborts during the above steps. All results, including aggregate results, logs, and metadata, based on the MIS table will remain local with DPs regardless of whether and when the process aborts.

II. METHODS

The methods section of this document has been organized by level, checking type and source table. This division has been made to clearly define the nature of each check being performed and also to differentiate between checks that will be performed on the MIL versus the MIS table only, since the two tables include different information and results based on the MIS table will remain with DPs always, without exception. Note that all checks performed on the MIL table will also be performed on the MIS table.

Records from the indicated source table will be processed to evaluate each QA check described in this section. Each QA check will correspond to a value in a supplemental look-up table that includes the abort flag, ultimately determining how remaining processing will be completed if any of the requirements are not met. Detailed instruction are provided for the Level 3 descriptive counts only, as this logic is more involved than preceding levels.

A. LEVEL 1

1. Model Adherence

The following level 1 checks will be used to confirm whether tables adhere to the SCDM file format with respect to variable inclusion, type, and length.

Table 1. MIL Table Level 1 Model Adherence Checks

Check Category	Table/Variable	Requirement	Abort Actions
Table	DP Mother/Delivery table	Table must exist	Table does not exist
Table	DP Infant table	Table must exist	Table does not exist
Table	Mother-Infant Table	Table must exist	Table does not exist
Table	Mother-Infant Table	Table must be populated with rows	Table does not have any rows
Table	Mother-Infant Table	ETL number in file header must match ETL number in the current QA results	ETL number does not exist in table header or does match value in the current QA results
Variable	MPatID	Variable must exist	Variable does not exist
Variable	MBirth_Date	Variable must exist	Variable does not exist
Variable	Age	Variable must exist	Variable does not exist
Variable	EncounterID	Variable must exist	Variable does not exist
Variable	Enc_Type	Variable must exist	Variable does not exist
Variable	ADate	Variable must exist	Variable does not exist
Variable	DDate	Variable must exist	Variable does not exist
Variable	CPatID	Variable must exist	Variable does not exist
Variable	CBirth_Date	Variable must exist	Variable does not exist
Variable	Sex	Variable must exist	Variable does not exist
Variable	CEnr_Start	Variable must exist	Variable does not exist
Variable	MatchMethod	Variable must exist	Variable does not exist
Variable	Birth_Type	Variable must exist	Variable does not exist
Variable	Birth_Type_Primes	Variable must exist	Variable does not exist
Variable	MPatID	Variable must be character type	Different data type
Variable	MBirth_Date	Variable must be numeric type	Different data type
Variable	Age	Variable must be numeric type	Different data type
Variable	EncounterID	Variable must be character type	Different data type
Variable	EncType	Variable must be character type	Different data type
Variable	ADate	Variable must be numeric type	Different data type

Check Category	Table/Variable	Requirement	Abort Actions
Variable	DDate	Variable must be numeric type	Different data type
Variable	CPatID	Variable must be character type	Different data type
Variable	CBirth_Date	Variable must be numeric type	Different data type
Variable	Sex	Variable must be character type	Different data type
Variable	CEnr_Start	Variable must be numeric type	Different data type
Variable	MatchMethod	Variable must be character type	Different data type
Variable	Birth_Type	Variable must be numeric type	Different data type
Variable	Birth_Type_Primes	Variable must be numeric type	Different data type
Variable	MBirth_Date	Length: 4 bytes	Length does not meet requirement
Variable	Age	Length: 3 bytes	Length does not meet requirement
Variable	EncType	Length: 2 bytes	Length does not meet requirement
Variable	ADate	Length: 4 bytes	Length does not meet requirement
Variable	DDate	Length: 4 bytes	Length does not meet requirement
Variable	CBirth_Date	Length: 4 bytes	Length does not meet requirement
Variable	Sex	Length: 1 byte	Length does not meet requirement
Variable	CEnr_Start	Length: 4 bytes	Length does not meet requirement
Variable	MatchMethod	Length: 2 bytes	Length does not meet requirement
Variable	Birth_Type	Length: 3 bytes	Length does not meet requirement
Variable	Birth_Type_Primes	Length: 8 bytes	Length does not meet requirement

All checks will be identical to those performed for the MIL table with the addition of checks described below. Please note that the results of these checks will never be shared with the SOC. They will remain local with DPs always.

Table 2. MIS Table Level 1 Model Adherence Checks

Check Category	Table/Variable	Requirement	Abort Actions
Variable	MSubscriberID	Variable must exist	Variable does not exist
Variable	MSSN	Variable must exist	Variable does not exist
Variable	MFName	Variable must exist	Variable does not exist
Variable	MMName	Variable must exist	Variable does not exist
Variable	MLName	Variable must exist	Variable does not exist
Variable	FamilyID	Variable must exist	Variable does not exist
Variable	CSubscriberID	Variable must exist	Variable does not exist
Variable	CSSN	Variable must exist	Variable does not exist
Variable	CFName	Variable must exist	Variable does not exist
Variable	CMName	Variable must exist	Variable does not exist
Variable	CLName	Variable must exist	Variable does not exist
Variable	MSubscriberID	Variable must be character type	Different data type
Variable	MSSN	Variable must be character type	Different data type
Variable	MFName	Variable must be character type	Different data type
Variable	MMName	Variable must be character type	Different data type
Variable	MLName	Variable must be character type	Different data type
Variable	FamilyID	Variable must be character type	Different data type
Variable	CSubscriberID	Variable must be character type	Different data type
Variable	CSSN	Variable must be character type	Different data type
Variable	CFName	Variable must be character type	Different data type
Variable	CMName	Variable must be character type	Different data type
Variable	CLName	Variable must be character type	Different data type
Variable	MSubscriberID	Length: 50 bytes	Length does not meet requirement
Variable	MSSN	Length: 9 bytes	Length does not meet requirement
Variable	MFName	Length: 20 bytes	Length does not meet requirement
Variable	MMName	Length: 20 bytes	Length does not meet requirement
Variable	MLName	Length: 20 bytes	Length does not meet requirement
Variable	FamilyID	Length: 50 bytes	Length does not meet requirement

Check Category	Table/Variable	Requirement	Abort Actions
Variable	CSubscriberID	Length: 50 bytes	Length does not meet requirement
Variable	CSSN	Length: 9 bytes	Length does not meet requirement
Variable	CFName	Length: 20 bytes	Length does not meet requirement
Variable	CMName	Length: 20 bytes	Length does not meet requirement
Variable	CLName	Length: 20 bytes	Length does not meet requirement

2. Values Check

The following level 1 checks will be used to confirm values of variables in tables adhere to the SCDM specification.

Table 3. Level 1 MIL Table Values Checks

Check Category	Table/Variable	Requirement	Abort Actions
Value	MPatID	Can be null; if filled, must have no leading spaces	No action on null; abort if filled and does not meet requirements
Value	Age	Can be null; if filled, must be between 10 and 54 inclusive	No action on null; abort if filled and does not meet requirements
Value	EncounterID	Can be null; if filled, must have no leading spaces	No action on null; abort if filled and does not meet requirements
Value	EncType	Can be null; if filled, must be one of: IP, ED, AV, IS, or OA	No action on null; abort if filled and does not meet requirements
Value	CPatID	Can be null; if filled, must have no leading spaces	No action on null; abort if filled and does not meet requirements
Value	Sex	Can be null; if filled, must be one of: A, M, F, U, or O	No action on null; abort if filled and does not meet requirements
Value	MatchMethod	Value must be one of: BC, RE, SI, LA, OT, N1, N2, N3, or NA only	Abort if does not meet requirements
Value	Birth_Type	Can be null; if filled value must be one of: 0, 1, 2, 3, 4, 5, 8, or 9	No action on null; abort if filled and does not meet requirements
Value	Birth_Type_Primes	Can be null; if filled must be only a product of prime numbers 2, 3, 5, 7, 11, 13, and 17 in any combination	No action on null; abort if filled and does not meet requirements

All checks will be identical to those performed for the MIL table with the addition of checks included below. Please note that the results of these checks will never be shared with the SOC. They will remain local with DPs always.

Table 4. Level 1 MIS Values Checks

Check Category	Table/Variable	Requirement	Abort Actions
Value	MSubscriberID	Can be null	No action
Value	MSSN	Can be null; if filled, must consist of digits only	No action on null; warn if filled and does not meet requirements
Value	MFName	Can be null; if filled, must consist of letters or name punctuation[1] only	No action on null; warn if filled and does not meet requirements
Value	MMName	Can be null; if filled, must consist of letters or name punctuation[1] only	No action on null; warn if filled and does not meet requirements
Value	MLName	Can be null; if filled, must consist of letters or name punctuation[1] only	No action on null; warn if filled and does not meet requirements
Value	CSubscriberID	Can be null; if filled, must be left justified	No action on null; warn if filled and does not meet requirements
Value	CSSN	Can be null; if filled, must consist of digits only	No action on null; warn if filled and does not meet requirements
Value	CFName	Can be null; if filled, must consist of letters or name punctuation[1] only	No action on null; warn if filled and does not meet requirements
Value	CMName	Can be null; if filled, must consist of letters or name punctuation[1] only	No action on null; warn if filled and does not meet requirements
Value	CLName	Can be null; if filled, must consist of letters or name punctuation[1] only	No action on null; warn if filled and does not meet requirements

[1] Hyphen, apostrophe, or period

B. LEVEL 2

1. Within table checks

The following level 2 checks will be used to confirm whether the relationship between variables within each specific table are in compliance with the SCDM.

Table 5. Level 2 MIL Within Table Checks

Variable1	Variable2	Requirement	Message
MPatID	MBirth_Date	If Variable1 is filled, then Variable2 must be filled	MPatID=*value*: No value found for MBirth_Date
MPatID	Age	If Variable1 is filled, then Variable2 must be filled	MPatID=*value*: No value found for Age
MBirth_Date	EncounterID	If Variable1 is filled, then Variable2 must be filled	MPatID=*value*: MBirth_Date=*value*, but no value found for EncounterID
MBirth_Date	ADate	If Variable1 is filled, then Variable2 must be filled	MPatID=*value*: MBirth_Date=*value*, but no value found for ADate
MBirth_Date	Birth_Type	If Variable1 is filled, then Variable2 must be filled	MPatID=*value*: MBirth_Date=*value*, but no value found for Birth_Type
ADate	DDate	If both variables are filled, then Variable2 must be on or later than Variable1	MPatID=*value*: ADate=*value*, DDate=*value*, but DDate must be >= ADate
CPatID	CBirth_Date	If Variable1 is filled, then Variable2 must be filled	CPatID=*value*: No value found for CBirth_Date
CPatID	Sex	If Variable1 is filled, then Variable2 must be filled	CPatID=*value*: No value found for Sex

All checks will be identical to those performed for the MIL table with the addition of checks listed below. Please note that the results of all checks based on the MIS table will never be shared with the SOC. They will remain local with DPs always.

Table 6. Level 2 MIS Within Table Checks

Variable1	Variable2	Requirement	Message
MPatID	MFName	If Variable1 is filled, then Variable2 must be filled	MPatID=*value*: No value found for MFName
MPatID	MLName	If Variable1 is filled, then Variable2 must be filled	MPatID=*value*: No value found for MLName
MSubscriberID	MPatID	If Variable1 is filled, then Variable2 must be filled	MSubscriberID =*value*: No value found for MPatID
CPatID	CFName	If Variable1 is filled, then Variable2 must be filled	CPatID=*value*: No value found for CFName
CPatID	CLName	If Variable1 is filled, then Variable2 must be filled	MPatID=*value*: No value found for CFName
CSubscriberID	CPatID	If Variable1 is filled, then Variable2 must be filled	CSubscriberID =*value*: No value found for CPatID

2. Within table checks by linkage status

The following level 2 checks will be used to confirm whether the relationship between variables within each specific table are in compliance with the SCDM for linked mother-infant records only.

Table 7. Level 2 MIL Within Table Checks by Linkage Status

Linkage Status	Variable1	Variable2	Check Requirement	Message	Abort Actions
Not-Linked	MatchMethod		MatchMethod must be one of only the following values: N1, N2, N3, or NA	MPatID= Value and CPatID= Value: MatchMethod = . MatchMethod not valid value for not-linked methods.	Abort if requirements not met
Linked	MatchMethod		MatchMethod must be one of only the following values: RE, SI, LA, BC, or OT	MPatID= Value and CPatID= Value: MatchMethod = . MatchMethod not valid value for linked methods.	Abort if requirements not met
Linked	MBirth_Date	CBirth_Date	If both variables are filled, then Variable2 must be later than Variable1 and by >= 10 years	MPatID=_Value_ and CPatID=_Value_: MBirth_Date (_mm/dd/yyyy_) must be >= 10 years before CBirth_Date (_mm/dd/yyyy_). They are only _##.#_ years apart.	Abort if requirements not met
Linked	ADate	CBirth_Date	CBirth_Date must be between 3 days before the ADate through DDate; if DDate is null, then CBirth_Date must be between 3 days before, through 1 day after the ADate	Filled DDate: MPatID=_Value_ and CPatID=_Value_: CBirth_Date (_mm/dd/yyyy_) must be between 3 days before ADate (_mm/dd/yyyy_) through DDate (_mm/dd/yyyy_). Null DDate: MPatID=_Value_ and CPatID=_Value_: CBirth_Date (_mm/dd/yyyy_) must be between 3 days before ADate (_mm/dd/yyyy_) through 1 day after	Warn if requirements not met

Table 8. Level 2 MIS Within Table Checks by Linkage Status

All checks will be identical to those performed for the MIL table with the addition of those below. Please note that the results of all checks based on the MIS table will never be shared with the SOC. They will remain local with DPs always.

Variable1	Variable2	Check Requirement	Message	Abort Actions
MSubscriberID	CSubscriberID	If Variable1 is filled, then Variable2 must be filled	MPatID=_Value_ and CPatID=_Value_: MSubscriberID (_Value_) is filled, but no value for CSubscriberID	Warn if requirements not met
MLName	CLName	Both must be filled	MPatID=_Value_ and CPatID=_Value_: MLName and CLName must both be filled	Warn if requirements not met
MFName	CFName	Both must be filled	MPatID=_Value_ and CPatID=_Value_: MFName and CFName must both be filled	Warn if requirements not met

3. Within table unique key checks for all records

The following level 2 checks will be used to confirm that records within each specific table meet SCDM requirements for uniqueness as defined by key variables. Linked records are defined as those where both MPatID and CPatID are filled.

Table 9. Level 2 MIL Table Unique Key Check

Linkage Status	Check Requirement	Message
Linked or Not-Linked	CPatID filled and appears on only 1 row	CPatID (_Value_), CBirth_Date (_mm/dd/yyyy_), Sex (_Value_): Must appear on only 1 row
Not-Linked	MPatID, EncounterID, ADate unlinked combination appears on only 1 row	MPatID (_Value_), EncounterID (_Value_), ADate (_mm/dd/yyyy_): , MBirth_Date (_mm/dd/yyyy_): Not linked, but variable combination appears on > 1 row
Linked	MPatID, CPatID and appears on only 1 row	Linked record: MPatID (_Value_), CPatID (_Value_), EncounterID (_Value_), EncType (_Value_), ADate (_mm/dd/yyyy_), Sex (_Value_), CBirth_Date (_mm/dd/yyyy_), MatchMethod (_Value_): Linked, but variable combination appears on > 1 row
Linked	MPatID, EncounterID, ADate, CPatID and appears on only 1 row	Linked record: MPatID (_Value_), CPatID (_Value_), EncounterID (_Value_), EncType (_Value_), ADate (_mm/dd/yyyy_), Sex (_Value_), CBirth_Date (_mm/dd/yyyy_), MatchMethod (_Value_): Linked, but variable combination appears on > 1 row

Linkage Status	Check Requirement	Message
Linked	MPatID, EncounterID, ADate found in multiple rows with same values of MBirth_Date	Linked record: MPatID (*Value*), EncounterID (*Value*), EncType (*Value*), ADate (*mm/dd/yyyy*): MBirth_Date values differ across rows
Linked	MPatID, EncounterID found in multiple rows with same values of ADate	Linked record: MPatID (*Value*), EncounterID (*Value*), EncType (*Value*): ADate values differ across rows
Linked	MPatID, EncounterID found in multiple rows with same values of EncType	Linked record: MPatID (*Value*), EncounterID (*Value*): EncType values differ across rows
Linked	MPatID, EncounterID found in multiple rows with same values of Birth_Type	Linked record: MPatID (*Value*), EncounterID (*Value*): Birth_Type values differ across rows
Linked	MPatID, ADate found in multiple rows with same values of EncounterID	Linked record: MPatID (*Value*), ADate (*mm/dd/yyyy*): EncounterID values differ across rows
Linked	MPatID, ADate found in multiple rows with same values of MBirth_Date	Linked record: MPatID (*Value*), ADate (*mm/dd/yyyy*): MBirth_Date values differ across rows
Linked	MPatID, ADate found in multiple rows with same values of Birth_Type	Linked record: MPatID (*Value*), ADate (*mm/dd/yyyy*): Birth_Type values differ across rows

All checks will be identical to those performed for the MIL table with the addition of those below. Please note that the results of all checks based on the MIS table will never be shared with the SOC. They will remain local with DPs always.

Table 10. Level 2 MIS Table Unique Key Check

Linkage Status	Check Requirement	Message
Linked	MLName, MFName, CLName, CFName and appears on only 1 row	Linked record: MPatID (*Value*), CPatID (*Value*), EncounterID (*Value*), EncType (*Value*), ADate (*mm/dd/yyyy*), Sex (*Value*), CBirth_Date (*mm/dd/yyyy*), MatchMethod (*Value*), MLName (*Value*), MFName (*Value*), CLName (*Value*), CFName (*Value*): Linked, but variable combination appears on > 1 row
Linked or Not-Linked	MLName, MFName with same values of MPatID	EncounterID (*Value*), EncType (*Value*), ADate (*mm/dd/yyyy*), MLName (*Value*), MFName (*Value*): MPatID differs across rows
Linked or Not-Linked	MLName, MFName with same values of MBirth_Date	EncounterID (*Value*), EncType (*Value*), ADate (*mm/dd/yyyy*), MLName (Value), MFName (*Value*): MBirth_Date differs across rows
Linked or Not-Linked	CLName, CFName, combination appears on only 1 row	CPatID (*Value*), CLName (*Value*), CFName (*Value*): Variable combination appears on > 1 row
Linked or Not-Linked	CLName, CFName, Sex, CBirth-Date combination appears on only 1 row	CPatID (*Value*), Sex (*Value*), CBirth_Date, CLName (Value), CFName (Value): Variable combination appears on > 1 row

4. Across table checks for all records

The following level 2 checks will be used to confirm SCDM requirements are met across tables and will be identical regardless of whether the MIL table or MIS table are being queried.

Table 11. Level 2 MIL and MIS Across Table Checks

Mother-Infant (Variable1)	SCDM Table (Variable2)	Check Requirement	Message
ADate	Delivery.Adate	Can be null; if filled, must be a valid date between the min and max, inclusive, of the ADate in the DP Mothers/Deliveries table	No action on null; abort if filled and does not meet requirements
DDate	Delivery.Ddate	Can be null; if filled, must be a valid date between the min and max, inclusive, of the DDate in the DP Mothers/Deliveries table	No action on null; abort if filled and does not meet requirements
MBirth_Date	Delivery.MBirth_Date	Can be null; if filled, must be a valid date between the min and max, inclusive, of the MBirth_Date in the DP Mothers/Deliveries table	MPatID (_Value_) of MBirth_Date(_Value_) not found in Delivery table
CBirth_Date	Infant.CBirth_Date	Can be null; if filled, must be a valid date between the min and max, inclusive, of the CBirth_Date in the DP Infants file	No action on null; abort if filled and does not meet requirements
CEnr_Start	Infant.CEnr_Start	Can be null; if filled, value must be in between the min and max, inclusive, of the CEnr_Start in the DP Infants file	No action on null; abort if filled and does not meet requirements

Mother-Infant (Variable1)	SCDM Table (Variable2)	Check Requirement	Message
MPatID	DEM.PatID	If variable1 is filled, must be found in Variable2, when linking between tables on MPatID=PatID	MPatID (*Value*) not found in Demographic table
MPatID	DEM.PatID	If variable1 is filled, must be the same variable length as Variable2.	MPatID variable length differs from PatID length in Demographic table
MPatID	ENR.PatID	If variable1 is filled, must be found in Variable2, when linking between tables on MPatID=PatID	MPatID (*Value*) not found in Enrollment table
MBirth_Date	DEM.Birth_Date	If variable1 is filled, must be equal to Variable2, when linking between tables on MPatID=PatID	MPatID (*Value*): MBirth_Date (*mm/dd/yyyy*) not equal to Demographic.Birth_Date (*mm/dd/yyyy*), when linking MPatID=Demographic.PatID
EncounterID	ENC.EncounterID	If variable1 is filled, must be found in Variable2	EncounterID (*Value*) not found in Encounter table
EncounterID	ENC.EncounterID	If variable1 is filled, must be the same length as Variable2.	EncounterID length differs from EncounterID length in Encounter table
ADate	ENC.ADate	If variable1 is filled, must be equal to Variable2, when linking between tables on EncounterID	EncounterID (*Value*): ADate (*mm/dd/yyyy*) not equal to Encounter.ADate(*mm/dd/yyyy*), when linking EncounterID=Encounter.EncounterID
DDate	ENC.DDate	If variable1 is filled, must be equal to Variable2, when linking between tables on EncounterID	EncounterID (*Value*): DDate (*mm/dd/yyyy*) not equal to Encounter.DDate(*mm/dd/yyyy*), when linking EncounterID=Encounter.EncounterID

Mother-Infant (Variable1)	SCDM Table (Variable2)	Check Requirement	Message
CPatID	DEM.PatID	If variable1 is filled, must be found in Variable2, when linking between tables on CPatID=PatID	CPatID (*Value*) not found in Demographic table
CPatID	DEM.PatID	If variable1 is filled, must be the same length as Variable2.	CPatID length differs from PatID length in Demographic table
CPatID	ENR.PatID	If variable1 is filled, must be found in Variable2, when linking between tables on CPatID=PatID	CPatID (*Value*) not found in Enrollment table
CBirth_Date	DEM.Birth_Date	If variable1 is filled, must be equal to Variable2, when linking between tables on CPatID=PatID	CPatID (*Value*): CBirth_Date (*mm/dd/yyyy*) not equal to Demographic.Birth_Date (*mm/dd/yyyy*), when linking CPatID=Demographic.PatID
Sex	DEM.Sex	If variable1 is filled, must be equal to Variable2, when linking between tables on CPatID=PatID, with this exception: If MIL.Sex=O then allow DEM.Sex to =A or U	CPatID (*Value*): Sex (*value*) not equal to Demographic.Sex (*value*), when linking CPatID=Demographic.PatID

C. LEVEL 3

1. Suspect Linkages

The following level 3 checks will be used to characterize linkages and will not result in flags or consequent aborts based on the results.

Table 12. Level 3 MIL Table Suspect Linkage Checks

Definition	Message
Birth_Type= 1-8 and number of linked records per MPatID/ADate combination differs (e.g., Birth_Type=1 and >1 CPatID is linked to MPatID/EncounterID combination)	MPatID (*Value*), EncounterID (*Value*), ADate (*mm/dd/yyyy*), Birth_Type (*Value*): Birth_Type value not consistent with number of linkages; confirmation required
Birth_Type= 2-8 and no CPatIDs are linked	MPatID (*Value*), EncounterID (*Value*), ADate (*mm/dd/yyyy*) Birth_Type (*Value*)::No linkages were found; confirmation required
MPatID not linked to CPatID	MPatID (*Value*), EncounterID (*Value*), ADate (*mm/dd/yyyy*):No linkage to infant was found; confirmation required
CPatID not linked to MPatID	MPatID (*Value*), CBirth_Date (*mm/dd/yyyy*):No linkage to mother/delivery was found; confirmation required

Table 13. Level 3 MIS Table Suspect Linkage Checks

All checks will be identical to those performed for the MIL table with the addition of those below. Please note that the results of all checks based on the MIS table will never be shared with the SOC. They will remain local with DPs always.

Definition	Message
MLName, MFName linked to multiple rows of same values of CLName, CFName, but with different CPatID values	MLName (*Value*), MFName (*Value*): Linked to apparent multiple child records of the same person CLName (*Value*), CFName (*Value*), with different CPatID values
CLName, CFName linked to multiple rows of MLName,MFName	CLName (*Value*), CFName (*Value*): Linked to apparent multiple Mother/Delivery records of the same person MLName (*Value*), MFName (*Value*)

III. MOTHER-INFANT LINKAGE DATASETS

All information in this table will be pulled from the files **r01_mother_deliveries** and/or the **r02_infants**, created in a separate Mother-Infant Identification Program Package run against the SCDM, *with the exception of* the variable MatchMethod. MatchMethod is a DP populated field that indicates the method used to match mothers and infants.

Table 14. MIL Table

Variable Name	Type & Length	Format	Label	Values	Definition / Comments / Guideline
MPatID	Char(Site specific length)	$##.	Mother patient ID	Unique member identifier. Text string; left justified.	Arbitrary person-level identifier. Used to link across tables. Length is DP specific. Must match mom "PatID" value in all other SCDM tables. Blank for child-only records.
MBirth_Date	Num(4)	mmddyy10.	Mother birth date	SAS Date	Mother Birth_Date value from SCDM Demographic table. Blank for child-only records.
Age	Num(3)	2.	Mother's age	SAS Date	Mother's age in years as of delivery Encounter.ADate
EncounterID	Char(Site specific length)	$##.	Mother's delivery EncounterID	Unique encounter identifier. Text string; left justified.	EncounterID value from SCDM Encounter table, for mother's delivery encounter. [1] Blank for child-only records.
EncType	Char(2)	$2.	Encounter type	IP, ED, AV, IS, or OA	EncType value from SCDM Encounter table, for mother's delivery encounter. [1] Blank for child-only records.

[1] If more than 1 delivery encounter occur on the same ADate, then the values are based on the encounter selected from the following hierarchy: IP > ED > AV > IS > OA

Variable Name	Type & Length	Format	Label	Values	Definition / Comments / Guideline
ADate	Num(4)	mmddyy10.	Admission date for mother's delivery encounter	SAS Date	ADate value from SCDM Encounter table, for mother's delivery encounter. [1] Blank for child-only records.
DDate	Num(4)	mmddyy10.	Discharge date for mother's delivery encounter	SAS Date; may be null	DDate value from SCDM Encounter table, for mother's delivery encounter [1] Blank for child-only records.
CPatID	Char(Site specific length)	$##.	Child patient ID	Unique member identifier. Text string; left justified.	Arbitrary person-level identifier. Used to link across tables. Length is DP specific. Must match child "PatID" value in all other SCDM tables. Blank for mother/delivery-only records.
CBirth_Date	Num(4)	mmddyy10.	Child birth date	SAS Date	Child Birth_Date value from SCDM Demographic table. Blank for mother/delivery-only records.
Sex	Char(1)	$1.	Child sex	A = Ambiguous F = Female M = Male U = Unknown O = Either Ambiguous or Unknown	Child Sex value from SCDM Demographic table Blank for mother/delivery-only records.
CEnr_Start	Num(4)	mmddyy10.	Earliest infant enrollment start date	SAS Date	Earliest Enr_Start from Enrollment table

Variable Name	Type & Length	Format	Label	Values	Definition / Comments / Guideline
MatchMethod	Char(2)	$2.	Prioritized method of linkage for mom-baby match	BC = Birth Certificate RE = DP maintained birth registry SI = health plan subscriber or family number LA = exact or probabilistic last name and address match based upon health plan administrative data N1 = No subscriber/family IDs available for linkage N2 = No name/address available for linkage N3 = Neither subscriber/family IDs nor name/address available for linkage NA = no linkage made; any other reasons OT = other NA = no linkage made	Note - Prioritize so that only one method listed: RE > SI > LA > BC > OT. For cases where a mother/delivery is not linked to a child OR a child enrolled is not linked to a mother/delivery, the value of this variable should be NA. Cannot be blank.
Birth_Type	Num(3)	1.	Singleton vs. multiple	0 = Unspecified # of live births 1 = 1 live birth 2 = 2 live births 3 = 3 live births 4 = 4 live births 5 = 5 live births 8 = Multiple live births, unspecified number 9 = Conflicting code(s) for number of live births	Based upon ICD-9-CM/ICD-10-CM codes in the health plan data for the delivery admission. Blank for child-only records

Variable Name	Type & Length	Format	Label	Values	Definition / Comments / Guideline

Birth_Type_Primes	Num(8)	comma15.	All birth types	2+	Multiplication of all prime numbers assigned to all Birth_Types found in delivery codes within the selected encounter:
					
					Birth_Type Prime Number
					  0 2
					  1 3
					  2 5
					  3 7
					  4 11
					  5 13
					  8 17
					Blank for child-only records

This table includes all variables from MIL table with the addition of variables from non-SCDM sources listed below. Only the additional, non-SCDM variables to be included in this table are listed below.

Table 15. MIS Table

Variable Name	Type & Length	Format	Label	Values	Definition / Comments / Guideline
MSubscriberID	Char(50)	$50.	Mother subscriber ID	Text string; left justified.	Mother subscriber ID, if available.
MSSN	Char(9)	$9.	Mother Social Security number	Text string; 9 digits only.	Mother Social Security number, if available.
MFName	Char(20)	$20.	Mother first name	Text string; left justified.	Mother first name, if available.
MMName	Char(20)	$20.	Mother middle name	Text string; left justified.	Mother middle name, if available.
MLName	Char(20)	$20.	Mother last name	Text string; left justified.	Mother last name, if available.
FamilyID	Char(50)	$50.	Family subscriber ID	Text string; left justified.	Family ID, if available, common to both mother and infant
CSubscriberID	Char(50)	$50.	Child subscriber ID	Text string; left justified.	Child subscriber ID, if available.
CSSN	Char(9)	$9.	Child Social Security number	Text string; 9 digits only.	Child Social Security number, if available.
CFName	Char(20)	$20.	Child first name	Text string; left justified.	Child first name, if available.
CMName	Char(20)	$20.	Child middle name	Text string; left justified.	Child middle name, if available.
CLName	Char(20)	$20.	Child last name	Text string; left justified.	Child last name, if available.

IV. OUTPUT DATASETS

This process will output one version of each of the following files per package execution. Any and all patient-level results will remain local with DPs always. Further, any aggregate results based on the MIS table will remain local with DPs. Only aggregate tables based on the MIL table will be provided to SOC for review based on abort status and module flow.

A. LEVEL 1

1. Patient-level Level 1 Flags

(output filenames: mil_l1_flags_mstr or mis_l1_flags_mstr)

This table will be saved to the "dplocal" folder and will remain local with DPs.

This table will include data related to the following check(s):

Table 16. Patient-level Level 1 Flags

Variable	Description	Length	Type	Format	Label	Source	Derivation	Order
DPID	2 character Data Partner identifier.	2	Char			Common Components macro variable DPID	Assigned by the SOC and populated by the DP at the site	1
SiteID	1-4 character sub-site identifier.	4	Char			Common Components macro variable SiteID	Assigned by the SOC and populated by the DP at the site	2
FlagID	Flag identifier	21	Char	$21.				3
Flag_Descr	Flag description	255	Char	$255.				4
FlagType	Flag type	4	Char	$4.				5
AbortYN	Indicates QA package abort status (Y or N) for each FlagID	1	Char	$1.				6
Variable1	Variable name	32	Char	$32.				7
Value	Observed value	20	Char	$20.				8
MPatID	Mother's PatID	Site-specific	Char	$Site-specific				9
CPatID	Mother's PatID	Site-specific	Char	$Site-specific				10

Table 17. Example Values Check Table

DPID	SiteID	FlagID	Flag_Descr	FlagType	Abort Y/N	Variable1	Value	MPatID	CPatID
XX	YY	MIL_1_13_00-0_110	Birth_Type variable does not exist	Fail	Y	Birth_Type	X	1234567	2234567
XX	YY	MIL_1_13_00-0_110	Birth_Type variable does not exist	Fail	Y	Birth_Type	X	3234567	4234567
XX	YY	MIL_1_13_00-0_110	Birth_Type variable does not exist	Fail	Y	Birth_Type	X	3234567	4234567
XX	YY	MIL_1_01_00-0_122	MPatID value contains leading spaces	Fail	Y	MPatid	4234567	4234567	

2. Aggregate Model Adherence

(output filenames: mil_l1_scdm_comp or mis_l1_scdm_comp)

This table will be saved to the "dplocal" folder and moved to the "msoc" folder to be shared with SOC if: 1) the results of the table are based on the MIL table 2) the process did not abort during level 1 or 2 checks.

This table will include data related to the following check(s):

Table 18. Model Adherence

Variable	Description	Length	Type	Format	Label	Source	Derivation	Order
DPID	2 character Data Partner identifier.	2	Char			Common Components macro variable DPID	Assigned by the SOC and populated by the DP at the site	1
SiteID	1-4 character sub-site identifier.	4	Char			Common Components macro variable SiteID	Assigned by the SOC and populated by the DP at the site	2
TabID	3 character abbreviation for source SCDM table	3	Char			inputfiles.control_flow.module	Where execute_flag=Y and cc_table ne X	3
Var	Variable name	32	Char		Variable Name	inputfiles.lkp_mi l1.variable |dplocal.l1_cont_{tabid}.name	Coalesce(variable,name)	4

Variable	Description	Length	Type	Format	Label	Source	Derivation	Order
VarID	SCDM variable ID assigned by SOC	2	Char	$2.	SCDM Variable ID	inputfiles.lkp_mi_l1.varid	NA	5
MS_var	YN indicator for variable that is expected as per SCDM	1	Char		Variable expected?	inputfiles.lkp_mi_l1.variable	Ms_var='Y' if variable is in lookup table	6
DP_var	YN indicator for presence of variable inDP SCDM table	1	Char		Variable present?	msoc.mi_l1_cont	NA	7
MS_type	Expected variable type	1	Char	$1.	Expected variable type	inputfiles.lkp_mi_l1.vartype	NA	8
DP_type	Observed variable type	1	Char		Actual variable type	Dplocal.l1_cont_{tabid}.type	If type=1, then dp_type='N', else if type=2, dp_type='C"	9
MS_length	Expected variable length in bytes	3	Num		Expected variable length	inputfiles.lkp_mi_l1.varlength	NA	10
DP_length	Observed length of variable in bytes	3	Num		Actual variable length	Dplocal.l1_cont_{tabid}.length	NA	11

Table 19. Example Model Adherence Table

DPID	SiteID	TabID	var	VarID	MS_var	DP_var	MS_type	DP_type	MS_length	DP_length
XX	YY	MIL	MPatID	01	Y	Y	C	C	255	10
XX	YY	MIL	MBirth_Date	02	Y	Y	N	N	8	8
XX	YY	MIL	EncounterID	03	Y	Y	C	C	2	2

3. Aggregate Level 1 and Level 2 Flag Counts

(output filenames: mil_all_l1_l2_flags or mis_all_l1_l2_flags)

Please note the results of this table will be appended to the level 2 flag counts output to create the final output dataset.

This table will be saved to the "dplocal" folder and moved to the "msoc" folder to be shared with SOC if: 1) the results of the table are based on the MIL table 2) the process did not abort during level 1 or 2 checks.

This table will include data related to the following check(s):

Table 20. Aggregate Level 1 and Level 2 Flag Counts

Variable	Description	Length	Type	Format	Label	Source	Derivation	Order
DPID	2 character Data Partner identifier.	2	Char			Common Components macro variable DPID	Assigned by the SOC and populated by the DP at the site	1
SiteID	1-4 character sub-site identifier.	4	Char			Common Components macro variable SiteID	Assigned by the SOC and populated by the DP at the site	2
FlagID	Flag ID used by SOC to identify specific error checks across all SCDM tables	21	Char				NA	3
FlagType	FlagType	4	Char				NA	5
AbortYN	Indicates QA package abort status (Y or N) for each FlagID	1	Char				NA	4
Flag_Descr	Description of flag	255	Char				NA	6
count	Count of flagged records	8	Num	COMMA18.		NA	Count is 99999 for table-wide issues; otherwise is a row count	7

Table 21. Example Aggregate Level 1 and Level 2 Flag Counts

DPID	SiteID	FlagID	FlagType	AbortYN	Flag_Descr	count
XX	YY	MIL_1_02_00-0_112	Fail	Y	MBirth_Date variable type does not conform to specifications	5
XX	YY	MIL_1_02_00-0_113	Fail	Y	MBirth_Date variable length does not conform to specifications	11
XX	YY	MIL_1_05_00-0_113	Fail	Y	EncType variable length does not conform to specifications	7

B.   LEVEL 2

1.   Level 2 Messages

(output filenames: mil_l2_mstr or mis_l2_mstr)

This table will be saved to the "dplocal" folder and will remain local with DPs.

This table will include data related to the following check(s):

- Within table checks
- Within table checks for linked records only
- Within table unique key checks for all records
- Across table checks for all records

Table 22. Level 2 MIL Checks

Variable	Description	Length	Type	Format	Label	Source	Derivation	Order
DPID	2 character Data Partner identifier.	2	Char			Common Components macro variable DPID	Assigned by the SOC and populated by the DP at the site	1
SiteID	1-4 character sub-site identifier.	4	Char			Common Components macro variable SiteID	Assigned by the SOC and populated by the DP at the site	2
FlagID	Flag identifier	21	Char	$21.				3
Flag_Descr	Flag description	255	Char	$255.				4
FlagType	Flag type	4	Char	$4.				5
AbortYN	Indicates QA package abort	1	Char	$1.				6

Variable	Description	Length	Type	Format	Label	Source	Derivation	Order
	status (Y or N) for each FlagID							
Message	Error message	300	Char	$300.				7
count	Count of flagged records	8	Num	COMMA18.		NA	Count is 99999 for table-wide issues; otherwise is a row count	7

Table 23. Example Level 2 Flag IDs

DPID	SiteID	FlagID	Flag_Descr	FlagType	AbortYN	message	count
XX	YY	MIL_2_06_00-0_255	CBirth_Date populated but CBirth_Date not between 3 days before ADate through Ddate or Ddate is null and CBirth_Date not between 3 days before through 1 days after ADate	Warn	N	Filled DDate: MPatID = 11234567 and CPatid = 2234567: CBirth_Date(05/25/2012) must be between 3 days before ADate(01/05/2012) through Ddate(01/08/2012)	1
XX	YY	MIL_2_06_00-0_255	CBirth_Date populated but CBirth_Date not between 3 days before ADate through Ddate or Ddate is null and CBirth_Date not between 3 days before through 1 days after ADate	Warn	N	Filled DDate: MPatID = 3234567 and CPatid = 4234567: CBirth_Date(01/01/2012) must be between 3 days before ADate(01/05/2012) through Ddate(01/08/2012)	1
XX	YY	MIL_2_06_00-0_255	CBirth_Date populated but CBirth_Date not between 3 days before ADate through Ddate or Ddate is null and CBirth_Date not between 3 days before through 1 days after ADate	Warn	N	Filled DDate: MPatID = 5234567 and CPatid = 7234567: CBirth_Date(01/01/2012) must be between 3 days before ADate(01/05/2012) through Ddate(01/08/2012)	1

C. LEVEL 3

1. Patient-level Level 3 Flags

(output filenames: mil_l3_flags_mstr or mis_l3_flags_mstr)

This table will be saved to the "dplocal" folder and will remain local with DPs.

This table will include data related to the following check(s):

Table 24. Patient-level Level 3 Flags

Variable	Description	Length	Type	Format	Label	Source	Derivation	Order
DPID	2 character Data Partner identifier.	2	Char			Common Components macro variable DPID	Assigned by the SOC and populated by the DP at the site	1
SiteID	1-4 character sub-site identifier.	4	Char			Common Components macro variable SiteID	Assigned by the SOC and populated by the DP at the site	2
FlagID	Flag identifier	21	Char	$21.				3
Flag_Descr	Flag description	255	Char	$255.				4
FlagType	Flag type	4	Char	$4.				5
AbortYN	Indicates QA package abort status (Y or N) for each FlagID	1	Char	$1.				6
Message	Error message	300	Char	$300.				7
count	Count of flagged records	8	Num	COMMA18.		NA	Count is 99999 for table-wide issues; otherwise is a row count	7

Table 25. Example Patient-level Level 3 Flags

DPID	SiteID	FlagID	Flag_Descr	FlagType	AbortYN	message	count
XX	YY	MIL_3_00_00-0_396	MPatid (112345) EncounterID (FGDSHJAGSD), Adate (12/01/2014): No linkage to infant was found; confirmation required	MPatID not linked to CPatID	Warn	N	1
XX	YY	MIL_3_00_00-0_397	CPatid (2234567) CBirth_Date (03/31/2010): No linkage to mother/delivery was found; confirmation required	CPatID not linked to MPatID	Warn	N	1
XX	YY	MIL_3_00_00-0_397	CPatid (4234567) CBirth_Date (03/31/2010): No linkage to mother/delivery was found; confirmation required	CPatID not linked to MPatID	Warn	N	1

2. Aggregate Level 3 Flag Counts

(filenames: mil_l3_flags or mis_l3_flags)

This table will be saved to the "dplocal" folder and moved to the "msoc" folder to be shared with SOC if: 1) the results of the table are based on the MIL table 2) the process did not abort during level 1 or 2 checks.

This table will include data related to the following check(s):

Table 26. Aggregate Level 3 Flag Counts

Variable	Description	Length	Type	Format	Label	Source	Derivation	Order
DPID	2 character Data Partner identifier.	2	Char			Common Components macro variable DPID	Assigned by the SOC and populated by the DP at the site	1
SiteID	1-4 character sub-site identifier.	4	Char			Common Components macro variable SiteID	Assigned by the SOC and populated by the DP at the site	2
FlagID	Flag identifier	21	Char	$21.				3
Flag_Descr	Flag description	255	Char	$255.				4
FlagType	Flag type	4	Char	$4.				5
AbortYN	Indicates QA package abort status (Y or N) for each FlagID	1	Char	$1.				6
count	Count of errors	8	Num	comma12.				8

Table 27. Example Aggregate Level 3 Flag Counts

DPID	SiteID	flagid	flag_descr	Flagtype	abortyn	count
XX	YY	MIL_3_00_00-0_396	MPatID not linked to CPatID	Warn	N	2
XX	YY	MIL_3_00_00-0_397	CPatID not linked to MPatID	Warn	N	1

3. Aggregate Level 3 Descriptive Counts

(filenames: mil_l3_m_i_aggregate or mis_l3_m_i_aggregate)

This table will be saved to the "dplocal" folder and moved to the "msoc" folder to be shared with SOC if: 1) the results of the table are based on the MIL table 2) the process did not abort during level 1 or 2 checks.

This table will include data related to the following check(s):

Table 28. MIL Table Aggregate Level 3 Descriptive Counts

Variable Name	Variable Type and Length (Bytes)	Format	Label	Values	Definition / Comments / Guideline
Level	Char(3)	$3.		000=No stratification 001+=Various levels of combinations of stratification variables	
IDFileStatus	Char(1)	$1.	M-I ID file status	Y=MPatID and CPatID from files produced by the M-I Identification program found in M-I Linkage Table N= MPatID or CPatID from files produced by the M-I Identification program *not* found in M-I Linkage Table E= MPatID or CPatID in M-I Linkage Table *not* found in files produced by the M-I Identification program	Ignore null MPatid or null CPatID. Only "Y" values should exist. Purpose is to ensure that all IDs, and only those IDs, from the M-I Identification files are found in the M-I Linkage table.
LinkageStatus	Char(1)	$1.	Linkage status	M=Mother/delivery not linked to infant (Filled MPatID and null CPatID) C=Infant not linked to mother (Filled CPatID and null MPatID) L=Linked mother/delivery to infant (Filled MPatID and filled CPatID)	

Variable Name	Variable Type and Length (Bytes)	Format	Label	Values	Definition / Comments / Guideline
Birth_Type	Num(3)	1.	Singleton vs. multiple	0, 1, 2, 3, 4, 5, 8, or 9	
Year	Char(4)	$4.	Year value	20YY	Based on ADate of EncounterID, or of CBirth_Date
YearMonth	Char(7)	$7	Year and Month value	20YY-##, where ##= 01-12 and dash is delimiter between values for year and month	Based on ADate of EncounterID, or of CBirth_Date
ICD_Ver	Char(1)	$1.	ICD version	9= ICD9 0= ICD10	
AgeGroup	Char(9)	$9.	Age group of mother	10-19 20-44 45-54 Other Infants	Should be in range of 10-54 inclusive
EncType	Char(2)	$2.	Encounter type	IP, ED, AV, IS, or OA	
Sex	Char(1)	$1.	Sex of child	F, M, or O	O=A & U from SCDM table
count	Num(8)	comma15.	Count	1+	Summary count

Table 29. MIS Table Aggregate Level 3 Descriptive Counts

level	IDFilestatus	LinkageStatus	Birth_Type	Year	YearMonth	ICD_Ver	AgeGroup	EncType	sex	count
000										110
001	E									109
001	N									52,899
001	Y									1
002										2
002									F	107
002									M	1

4. Aggregate Level 3 Descriptive Delivery Counts

(filenames: mil_l3_m_i_aggregate_deliv or mis_l3_m_i_aggregate_deliv)

This table will be saved to the "dplocal" folder and moved to the "msoc" folder to be shared with SOC if: 1) the results of the table are based on the MIL table 2) the process did not abort during level 1 or 2 checks.

This table will include data related to the following check(s):

Table 30. MIL Aggregate Level 3 Descriptive Delivery Counts

Variable Name	Variable Type and Length (Bytes)	Format	Label	Values	Definition / Comments / Guideline
Level	Char(3)	$3.		000=No stratification 001+=Various levels of combinations of stratification variables	
IDFileStatus	Char(1)	$1.	M-I ID file status	Y=MPatID from files produced by the M-I Identification program found in M-I Linkage Table N= MPatID from files produced by the M-I Identification program *not* found in M-I Linkage Table E= MPatID in M-I Linkage Table *not* found in files produced by the M-I Identification program	Ignore null MPatid or null CPatID. Only "Y" values should exist. Purpose is to ensure that all IDs, and only those IDs, from the M-I Identification files are found in the M-I Linkage table.
LinkageStatus	Char(1)	$1.	Linkage status	M=Mother/delivery not linked to infant (Filled MPatID and null CPatID) L=Linked mother/delivery to infant(s)	
Birth_Type	Num(3)	1.	Singleton vs. multiple	0, 1, 2, 3, 4, 5, 8, or 9	
Year	Char(4)	$4.	Year value	20YY	Based on ADate of EncounterID
YearMonth	Char(7)	$7	Year and Month value	20YY-##, where ##= 01-12 and dash is delimiter between values for year and month	Based on ADate of EncounterID

Variable Name	Variable Type and Length (Bytes)	Format	Label	Values	Definition / Comments / Guideline
ICD_Ver	Char(1)	$1.	ICD version	9= ICD9 0= ICD10	
AgeGroup	Char(9)	$9.	Age group of mother	10-19 20-44 45-54 Other Infants	Should be in range of 10-54 inclusive
EncType	Char(2)	$2.	Encounter type	IP, ED, AV, IS, or OA	
InfantsLinked	Num(3)	1.	# of infants linked per delivery	0+	Based on unique populated CPatIDs per delivery
Count	Num(8)	comma15.	Count	1+	Summary count

Table 31. MIS Aggregate Level 3 Descriptive Delivery Counts

level	IDFilestatus	LinkageStatus	Birth_Type	Year	YearMonth	ICD_Ver	AgeGroup	EncType	InfantsLinked	count
000										385
001	E									5,896,653
001	N									4,342,178
002									0	46,219
002									1	567,896

V. APPENDIX A: LOOKUP DATASETS

A. CONTROL FLOW

This lookup file controls the execution, order and processing to be completed with each run of the QA package.

Filename: **control_flow.sas7bdat**

Table 32. Control Flow Lookup Dataset

module	execute_flag	Sascode	cc_table	seqno	module_cat	module_util
l1	Y	01.1_mscdm_data_qa_review-level1	X	1	Level 1	N
l2	Y	01.2_mscdm_data_qa_review-level2	X	2	Level 2	N
mil	Y		MILTABLE	3	Core	N
mis	N		MISTABLE	4	Core	N
l3	Y	01.3_mscdm_data_qa_review-level3	X	5	Level 3	N

B. LOOKUP FLAGS

This lookup file includes the identifier, description, outcome, and dependencies of for all level 1, 2, and 3 flag checks performed by this process.

Filename: **lkp_all_flags.sas7bdat**

Table 33. Lookup Flag Table

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_1_00_00-0_100	Fail	Y	MIL	1	00	00-0	100	NA	NA	NA	NA	NA	0	MIL table does not exist		dplocal.&Prefix.all_l1_flags	NA	Y	NA	
MIL_1_00_00-0_101	Fail	Y	MIL	1	00	00-0	101	NA	NA	NA	NA	NA	0	MIL table is not populated (le 1 record)		dplocal.&Prefix.all_l1_flags	lkp_all_l1	Y	NA	
MIS_1_00_00-0_100	Fail	Y	MIS	1	00	00-0	100	NA	NA	NA	NA	NA	0	MIS table does not exist		dplocal.&Prefix.all_l1_flags	NA	Y	NA	
MIS_1_00_00-0_101	Fail	Y	MIS	1	00	00-0	101	NA	NA	NA	NA	NA	0	MIS table is not populated (le 1 record)		dplocal.&Prefix.all_l1_flags	lkp_all_l1	Y	NA	
DEL_1_00_00-0_100	Fail	Y	DEL	1	00	00-0	100	NA	NA	NA	NA	NA	0	DEL table does not exist		dplocal.&Prefix.all_l1_flags	NA	Y	NA	
DEL_1_00_00-0_101	Fail	Y	DEL	1	00	00-0	101	NA	NA	NA	NA	NA	0	DEL table is not populated (le 1 record)		dplocal.&Prefix.all_l1_flags	lkp_all_l1	Y	NA	
INF_1_00_00-0_100	Fail	Y	INF	1	00	00-0	100	NA	NA	NA	NA	NA	0	INF table does not exist		dplocal.&Prefix.all_l1_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
INF_1_00_00-0_101	Fail	Y	INF	1	00	00-0	101	NA	NA	NA	NA	NA	0	INF table is not populated (le 1 record)		dplocal.&Prefix.all_l1_flags	lkp_all_l1	Y	NA	
MIL_1_01_00-0_110	Fail	Y	MIL	1	01	00-0	110	MPatID	NA	NA	NA	NA	0	MPatID variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_02_00-0_110	Fail	Y	MIL	1	02	00-0	110	MBirth_Date	NA	NA	NA	NA	0	MBirth_Date variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_03_00-0_110	Fail	Y	MIL	1	03	00-0	110	Age	NA	NA	NA	NA	0	Age variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_04_00-0_110	Fail	Y	MIL	1	04	00-0	110	EncounterID	NA	NA	NA	NA	0	EncounterID variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_05_00-0_110	Fail	Y	MIL	1	05	00-0	110	Enctype	NA	NA	NA	NA	0	Enctype variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_06_00-0_110	Fail	Y	MIL	1	06	00-0	110	ADate	NA	NA	NA	NA	0	ADate variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_1_07_00-0_110	Fail	Y	MIL	1	07	00-0	110	DDate	NA	NA	NA	NA	0	DDate variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_08_00-0_110	Fail	Y	MIL	1	08	00-0	110	CPatID	NA	NA	NA	NA	0	CPatID variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_09_00-0_110	Fail	Y	MIL	1	09	00-0	110	CBirth_Date	NA	NA	NA	NA	0	CBirth_Date variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_10_00-0_110	Fail	Y	MIL	1	10	00-0	110	Sex	NA	NA	NA	NA	0	Sex variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_11_00-0_110	Fail	Y	MIL	1	11	00-0	110	CEnr_Start	NA	NA	NA	NA	0	CEnr_Start variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_12_00-0_110	Fail	Y	MIL	1	12	00-0	110	MatchMethod	NA	NA	NA	NA	0	MatchMethod variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_13_00-0_110	Fail	Y	MIL	1	13	00-0	110	Birth_Type	NA	NA	NA	NA	0	Birth_Type variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_1_14_00-0_110	Fail	Y	MIL	1	14	00-0	110	Birth_Type_Primes	NA	NA	NA	NA	0	Birth_Type_Primes variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_01_00-0_110	Fail	Y	MIS	1	01	00-0	110	MPatID	NA	NA	NA	NA	0	MPatID variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_02_00-0_110	Fail	Y	MIS	1	02	00-0	110	MBirth_Date	NA	NA	NA	NA	0	MBirth_Date variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_03_00-0_110	Fail	Y	MIS	1	03	00-0	110	Age	NA	NA	NA	NA	0	Age variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_04_00-0_110	Fail	Y	MIS	1	04	00-0	110	EncounterID	NA	NA	NA	NA	0	EncounterID variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_05_00-0_110	Fail	Y	MIS	1	05	00-0	110	Enctype	NA	NA	NA	NA	0	Enctype variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_06_00-0_110	Fail	Y	MIS	1	06	00-0	110	ADate	NA	NA	NA	NA	0	ADate variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_07_00-0_110	Fail	Y	MIS	1	07	00-0	110	DDate	NA	NA	NA	NA	0	DDate variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_08_00-0_110	Fail	Y	MIS	1	08	00-0	110	CPatID	NA	NA	NA	NA	0	CPatID variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_09_00-0_110	Fail	Y	MIS	1	09	00-0	110	CBirth_Date	NA	NA	NA	NA	0	CBirth_Date variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_10_00-0_110	Fail	Y	MIS	1	10	00-0	110	Sex	NA	NA	NA	NA	0	Sex variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_11_00-0_110	Fail	Y	MIS	1	11	00-0	110	CEnr_Start	NA	NA	NA	NA	0	CEnr_Start variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_12_00-0_110	Fail	Y	MIS	1	12	00-0	110	MatchMethod	NA	NA	NA	NA	0	MatchMethod variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_13_00-0_110	Fail	Y	MIS	1	13	00-0	110	Birth_Type	NA	NA	NA	NA	0	Birth_Type variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_14_00-0_110	Fail	Y	MIS	1	14	00-0	110	Birth_Type_Primes	NA	NA	NA	NA	0	Birth_Type_Primes variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_15_00-0_110	Fail	Y	MIS	1	15	00-0	110	MSubscriberID	NA	NA	NA	NA	0	MSubscriberID variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_16_00-0_110	Fail	Y	MIS	1	16	00-0	110	MSSN	NA	NA	NA	NA	0	MSSN variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_17_00-0_110	Fail	Y	MIS	1	17	00-0	110	MFName	NA	NA	NA	NA	0	MFName variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_18_00-0_110	Fail	Y	MIS	1	18	00-0	110	MMName	NA	NA	NA	NA	0	MMName variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_19_00-0_110	Fail	Y	MIS	1	19	00-0	110	MLName	NA	NA	NA	NA	0	MLName variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_20_00-0_110	Fail	Y	MIS	1	20	00-0	110	FamilyID	NA	NA	NA	NA	0	FamilyID variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_21_00-0_110	Fail	Y	MIS	1	21	00-0	110	CSubscriberID	NA	NA	NA	NA	0	CSubscriberID variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_22_00-0_110	Fail	Y	MIS	1	22	00-0	110	CSSN	NA	NA	NA	NA	0	CSSN variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_23_00-0_110	Fail	Y	MIS	1	23	00-0	110	CFName	NA	NA	NA	NA	0	CFName variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_24_00-0_110	Fail	Y	MIS	1	24	00-0	110	CMName	NA	NA	NA	NA	0	CMName variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_25_00-0_110	Fail	Y	MIS	1	25	00-0	110	CLName	NA	NA	NA	NA	0	CLName variable does not exist		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_01_00-0_112	Fail	Y	MIL	1	01	00-0	112	MPatID	NA	NA	NA	NA	0	MPatID variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_1_02_00-0_112	Fail	Y	MIL	1	02	00-0	112	MBirth_Date	NA	NA	NA	NA	0	MBirth_Date variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_03_00-0_112	Fail	Y	MIL	1	03	00-0	112	Age	NA	NA	NA	NA	0	Age variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_04_00-0_112	Fail	Y	MIL	1	04	00-0	112	EncounterID	NA	NA	NA	NA	0	EncounterID variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_05_00-0_112	Fail	Y	MIL	1	05	00-0	112	EncType	NA	NA	NA	NA	0	EncType variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_1_06_00-0_112	Fail	Y	MIL	1	06	00-0	112	ADate	NA	NA	NA	NA	0	ADate variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_07_00-0_112	Fail	Y	MIL	1	07	00-0	112	DDate	NA	NA	NA	NA	0	DDate variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_08_00-0_112	Fail	Y	MIL	1	08	00-0	112	CPatID	NA	NA	NA	NA	0	CPatID variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_09_00-0_112	Fail	Y	MIL	1	09	00-0	112	CBirth_Date	NA	NA	NA	NA	0	CBirth_Date variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_1_10_00-0_112	Fail	Y	MIL	1	10	00-0	112	Sex	NA	NA	NA	NA	0	Sex variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_11_00-0_112	Fail	Y	MIL	1	11	00-0	112	CEnr_Start	NA	NA	NA	NA	0	CEnr_Start variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_12_00-0_112	Fail	Y	MIL	1	12	00-0	112	MatchMethod	NA	NA	NA	NA	0	MatchMethod variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_13_00-0_112	Fail	Y	MIL	1	13	00-0	112	Birth_Type	NA	NA	NA	NA	0	Birth_Type variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_1_14_00-0_112	Fail	Y	MIL	1	14	00-0	112	Birth_Type_Primes	NA	NA	NA	NA	0	Birth_Type_Primes variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_01_00-0_112	Fail	Y	MIS	1	01	00-0	112	MPatID	NA	NA	NA	NA	0	MPatID variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_02_00-0_112	Fail	Y	MIS	1	02	00-0	112	MBirth_Date	NA	NA	NA	NA	0	MBirth_Date variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_03_00-0_112	Fail	Y	MIS	1	03	00-0	112	Age	NA	NA	NA	NA	0	Age variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_04_00-0_112	Fail	Y	MIS	1	04	00-0	112	EncounterID	NA	NA	NA	NA	0	EncounterID variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_05_00-0_112	Fail	Y	MIS	1	05	00-0	112	EncType	NA	NA	NA	NA	0	EncType variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_06_00-0_112	Fail	Y	MIS	1	06	00-0	112	ADate	NA	NA	NA	NA	0	ADate variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_07_00-0_112	Fail	Y	MIS	1	07	00-0	112	DDate	NA	NA	NA	NA	0	DDate variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_08_00-0_112	Fail	Y	MIS	1	08	00-0	112	CPatID	NA	NA	NA	NA	0	CPatID variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_09_00-0_112	Fail	Y	MIS	1	09	00-0	112	CBirth_Date	NA	NA	NA	NA	0	CBirth_Date variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_10_00-0_112	Fail	Y	MIS	1	10	00-0	112	Sex	NA	NA	NA	NA	0	Sex variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_11_00-0_112	Fail	Y	MIS	1	11	00-0	112	CEnr_Start	NA	NA	NA	NA	0	CEnr_Start variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_12_00-0_112	Fail	Y	MIS	1	12	00-0	112	MatchMethod	NA	NA	NA	NA	0	MatchMethod variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_13_00-0_112	Fail	Y	MIS	1	13	00-0	112	Birth_Type	NA	NA	NA	NA	0	Birth_Type variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_14_00-0_112	Fail	Y	MIS	1	14	00-0	112	Birth_Type_Primes	NA	NA	NA	NA	0	Birth_Type_Primes variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_15_00-0_112	Fail	Y	MIS	1	15	00-0	112	MSubscriberID	NA	NA	NA	NA	0	MSubscriberID variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_16_00-0_112	Fail	Y	MIS	1	16	00-0	112	MSSN	NA	NA	NA	NA	0	MSSN variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_17_00-0_112	Fail	Y	MIS	1	17	00-0	112	MFName	NA	NA	NA	NA	0	MFName variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_18_00-0_112	Fail	Y	MIS	1	18	00-0	112	MMName	NA	NA	NA	NA	0	MMName variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_19_00-0_112	Fail	Y	MIS	1	19	00-0	112	MLName	NA	NA	NA	NA	0	MLName variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_20_00-0_112	Fail	Y	MIS	1	20	00-0	112	FamilyID	NA	NA	NA	NA	0	FamilyID variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_21_00-0_112	Fail	Y	MIS	1	21	00-0	112	CSubscriberID	NA	NA	NA	NA	0	CSubscriberID variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_22_00-0_112	Fail	Y	MIS	1	22	00-0	112	CSSN	NA	NA	NA	NA	0	CSSN variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_23_00-0_112	Fail	Y	MIS	1	23	00-0	112	CFName	NA	NA	NA	NA	0	CFName variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_24_00-0_112	Fail	Y	MIS	1	24	00-0	112	CMName	NA	NA	NA	NA	0	CMName variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_25_00-0_112	Fail	Y	MIS	1	25	00-0	112	CLName	NA	NA	NA	NA	0	CLName variable type does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_02_00-0_113	Fail	Y	MIL	1	02	00-0	113	MBirth_Date	NA	NA	NA	NA	0	MBirth_Date variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_03_00-0_113	Fail	Y	MIL	1	03	00-0	113	Age	NA	NA	NA	NA	0	Age variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_1_05_00-0_113	Fail	Y	MIL	1	05	00-0	113	EncType	NA	NA	NA	NA	0	EncType variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_06_00-0_113	Fail	Y	MIL	1	06	00-0	113	ADate	NA	NA	NA	NA	0	ADate variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_07_00-0_113	Fail	Y	MIL	1	07	00-0	113	DDate	NA	NA	NA	NA	0	DDate variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_09_00-0_113	Fail	Y	MIL	1	09	00-0	113	CBirth_Date	NA	NA	NA	NA	0	CBirth_Date variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_1_10_00-0_113	Fail	Y	MIL	1	10	00-0	113	Sex	NA	NA	NA	NA	0	Sex variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_11_00-0_113	Fail	Y	MIL	1	11	00-0	113	CEnr_Start	NA	NA	NA	NA	0	CEnr_Start variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_12_00-0_113	Fail	Y	MIL	1	12	00-0	113	MatchMethod	NA	NA	NA	NA	0	MatchMethod variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_13_00-0_113	Fail	Y	MIL	1	13	00-0	113	Birth_Type	NA	NA	NA	NA	0	Birth_Type variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_1_14_00-0_113	Fail	Y	MIL	1	14	00-0	113	Birth_Type_Primes	NA	NA	NA	NA	0	Birth_Type_Primes variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_02_00-0_113	Fail	Y	MIS	1	02	00-0	113	MBirth_Date	NA	NA	NA	NA	0	MBirth_Date variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_03_00-0_113	Fail	Y	MIS	1	03	00-0	113	Age	NA	NA	NA	NA	0	Age variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_05_00-0_113	Fail	Y	MIS	1	05	00-0	113	EncType	NA	NA	NA	NA	0	EncType variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_06_00-0_113	Fail	Y	MIS	1	06	00-0	113	ADate	NA	NA	NA	NA	0	ADate variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_07_00-0_113	Fail	Y	MIS	1	07	00-0	113	DDate	NA	NA	NA	NA	0	DDate variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_09_00-0_113	Fail	Y	MIS	1	09	00-0	113	CBirth_Date	NA	NA	NA	NA	0	CBirth_Date variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_10_00-0_113	Fail	Y	MIS	1	10	00-0	113	Sex	NA	NA	NA	NA	0	Sex variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_11_00-0_113	Fail	Y	MIS	1	11	00-0	113	CEnr_Start	NA	NA	NA	NA	0	CEnr_Start variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_12_00-0_113	Fail	Y	MIS	1	12	00-0	113	MatchMethod	NA	NA	NA	NA	0	MatchMethod variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_13_00-0_113	Fail	Y	MIS	1	13	00-0	113	Birth_Type	NA	NA	NA	NA	0	Birth_Type variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_14_00-0_113	Fail	Y	MIS	1	14	00-0	113	Birth_Type_Primes	NA	NA	NA	NA	0	Birth_Type_Primes variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_15_00-0_113	Fail	Y	MIS	1	15	00-0	113	MSubscriberID	NA	NA	NA	NA	0	MSubscriberID variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_16_00-0_113	Fail	Y	MIS	1	16	00-0	113	MSSN	NA	NA	NA	NA	0	MSSN variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_17_00-0_113	Fail	Y	MIS	1	17	00-0	113	MFName	NA	NA	NA	NA	0	MFName variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_18_00-0_113	Fail	Y	MIS	1	18	00-0	113	MMName	NA	NA	NA	NA	0	MMName variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_19_00-0_113	Fail	Y	MIS	1	19	00-0	113	MLName	NA	NA	NA	NA	0	MLName variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_20_00-0_113	Fail	Y	MIS	1	20	00-0	113	FamilyID	NA	NA	NA	NA	0	FamilyID variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_21_00-0_113	Fail	Y	MIS	1	21	00-0	113	CSubscriberID	NA	NA	NA	NA	0	CSubscriberID variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_22_00-0_113	Fail	Y	MIS	1	22	00-0	113	CSSN	NA	NA	NA	NA	0	CSSN variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_23_00-0_113	Fail	Y	MIS	1	23	00-0	113	CFName	NA	NA	NA	NA	0	CFName variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_24_00-0_113	Fail	Y	MIS	1	24	00-0	113	CMName	NA	NA	NA	NA	0	CMName variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIS_1_25_00-0_113	Fail	Y	MIS	1	25	00-0	113	CLName	NA	NA	NA	NA	0	CLName variable length does not conform to specifications		dplocal.&prefix.all_l1_sdcm_comp	lkp_all_l1	Y	NA	
MIL_1_01_00-0_122	Fail	Y	MIL	1	01	00-0	122	MPatID	NA	NA	NA	NA	0	MPatID value contains leading spaces		dplocal.&prefix.all_l1_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_2_02_00-0_258	Fail	Y	MIL	2	02	00-0	258	MBirth_Date	NA	NA	NA	NA	0	MBirth_Date value is not between the min and max, inclusive, of the MBirth_Date in the Mothers delivery file		dplocal.&prefix.all_l1_flags	NA	Y	NA	
MIL_1_03_00-0_126	Fail	Y	MIL	1	03	00-0	126	Age	NA	NA	NA	NA	0	Age contains invalid, out of range, non-missing value.		dplocal.&prefix.all_l1_flags	NA	Y	NA	
MIL_1_04_00-0_122	Fail	Y	MIL	1	04	00-0	122	EncounterID	NA	NA	NA	NA	0	EncounterID value contains leading spaces		dplocal.&prefix.all_l1_flags	NA	Y	NA	
MIL_1_05_00-0_121	Fail	Y	MIL	1	05	00-0	121	EncType	NA	NA	NA	NA	0	EncType variable contains an invalid non-missing value		NA	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_2_06_00-0_258	Fail	Y	MIL	2	06	00-0	258	ADate	NA	NA	NA	NA	0	ADate value is not between the min and max, inclusive, of the ADate in the Mothers delivery file		dplocal.&prefix.all_l1_flags	NA	Y	NA	
MIL_2_07_00-0_258	Fail	Y	MIL	2	07	00-0	258	DDate	NA	NA	NA	NA	0	DDate value is not between the min and max, inclusive, of the DDate in the Mothers delivery file		dplocal.&prefix.all_l1_flags	NA	Y	NA	
MIL_1_08_00-0_122	Fail	Y	MIL	1	08	00-0	122	CPatID	NA	NA	NA	NA	0	CPatID value contains leading spaces		dplocal.&prefix.all_l1_flags	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_2_09_00-0_258	Fail	Y	MIL	2	09	00-0	258	CBirth_Date	NA	NA	NA	NA	0	CBirth_Date value is not between the min and max, inclusive, of the CBirth_Date in the DP Infants file		dplocal.&prefix.all_l1_flags	NA	Y	NA	
MIL_1_10_00-0_121	Fail	Y	MIL	1	10	00-0	121	Sex	NA	NA	NA	NA	0	Sex variable contains an invalid non-missing value		NA	lkp_all_l1	Y	NA	
MIL_2_11_00-0_258	Fail	Y	MIL	2	11	00-0	258	CEnr_Start	NA	NA	NA	NA	0	CEnr_Start value is not between the min and max, inclusive, of the CEnr_Start in the DP Infants file		dplocal.&prefix.all_l1_flags	NA	Y	NA	
MIL_1_12_00-0_121	Fail	Y	MIL	1	12	00-0	121	MatchMethod	NA	NA	NA	NA	0	MatchMethod variable contains an invalid non-missing value		NA	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_1_13_00-0_121	Fail	Y	MIL	1	13	00-0	121	Birth_Type	NA	NA	NA	NA	0	Birth_Type variable contains an invalid non-missing value		NA	lkp_all_l1	Y	NA	
MIL_1_14_00-0_132	Fail	Y	MIL	1	14	00-0	132	Birth_Type_Primes	NA	NA	NA	NA	0	Birth_Type_Primes not populated with valid product of prime number.		dplocal.&prefix.all_l1_flags	NA	Y	NA	
MIS_1_01_00-0_122	Fail	Y	MIS	1	01	00-0	122	MPatID	NA	NA	NA	NA	0	MPatID value contains leading spaces		dplocal.&prefix.all_l1_flags	lkp_all_l1	Y	NA	
MIS_2_02_00-0_258	Fail	Y	MIS	2	02	00-0	258	MBirth_Date	NA	NA	NA	NA	0	MBirth_Date value is not between the min and max, inclusive, of the MBirth_Date in the Mothers delivery file		dplocal.&prefix.all_l1_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_03_00-0_126	Fail	Y	MIS	1	03	00-0	126	Age	NA	NA	NA	NA	0	Age contains invalid, out of range, non-missing value.		dplocal.&prefix.all_l1_flags	NA	Y	NA	
MIS_1_04_00-0_122	Fail	Y	MIS	1	04	00-0	122	EncounterID	NA	NA	NA	NA	0	EncounterID value contains leading spaces		dplocal.&prefix.all_l1_flags	lkp_all_l1	Y	NA	
MIS_1_05_00-0_121	Fail	Y	MIS	1	05	00-0	121	EncType	NA	NA	NA	NA	0	EncType variable contains an invalid non-missing value		NA	lkp_all_l1	Y	NA	
MIS_2_06_00-0_258	Fail	Y	MIS	2	06	00-0	258	ADate	NA	NA	NA	NA	0	ADate value is not between the min and max, inclusive, of the ADate in the Mothers delivery file		dplocal.&prefix.all_l1_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_2_07_00-0_258	Fail	Y	MIS	2	07	00-0	258	DDate	NA	NA	NA	NA	0	DDate value is not between the min and max, inclusive, of the DDate in the Mothers delivery file		dplocal.&prefix.all_l1_flags	NA	Y	NA	
MIS_1_08_00-0_122	Fail	Y	MIS	1	08	00-0	122	CPatID	NA	NA	NA	NA	0	CPatID value contains leading spaces		dplocal.&prefix.all_l1_flags	lkp_all_l1	Y	NA	
MIS_2_09_00-0_258	Fail	Y	MIS	2	09	00-0	258	CBirth_Date	NA	NA	NA	NA	0	CBirth_Date value is not between the min and max, inclusive, of the CBirth_Date in the DP Infants file		dplocal.&prefix.all_l1_flags	NA	Y	NA	
MIS_1_10_00-0_121	Fail	Y	MIS	1	10	00-0	121	Sex	NA	NA	NA	NA	0	Sex variable contains an invalid non-missing value		NA	lkp_all_l1	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_2_11_00-0_258	Fail	Y	MIS	2	11	00-0	258	CEnr_Start	NA	NA	NA	NA	0	CEnr_Start value is not between the min and max, inclusive, of the CEnr_Start in the DP Infants file		dplocal.&prefix.all_l1_flags	NA	Y	NA	
MIS_1_12_00-0_121	Fail	Y	MIS	1	12	00-0	121	MatchMethod	NA	NA	NA	NA	0	MatchMethod variable contains an invalid non-missing value		NA	lkp_all_l1	Y	NA	
MIS_1_13_00-0_121	Fail	Y	MIS	1	13	00-0	121	Birth_Type	NA	NA	NA	NA	0	Birth_Type variable contains an invalid non-missing value		NA	lkp_all_l1	Y	NA	
MIS_1_14_00-0_132	Fail	Y	MIS	1	14	00-0	132	Birth_Type_Primes	NA	NA	NA	NA	0	Birth_Type_Primes not populated with valid product of prime number.		dplocal.&prefix.all_l1_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_16_00-0_121	Warn	N	MIS	1	16	00-0	121	MSSN	NA	NA	NA	NA	0	MSSN variable contains an invalid non-missing value		NA	lkp_all_l1	Y	NA	
MIS_1_17_00-0_133	Warn	N	MIS	1	17	00-0	133	MFName	NA	NA	NA	NA	0	MFName is not populated with valid characters, alpha or allowable punctuation.		dplocal.&prefix.all_l1_flags	NA	Y	NA	
MIS_1_18_00-0_133	Warn	N	MIS	1	18	00-0	133	MMName	NA	NA	NA	NA	0	MMName is not populated with valid characters, alpha or allowable punctuation.		dplocal.&prefix.all_l1_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_19_00-0_133	Warn	N	MIS	1	19	00-0	133	MLName	NA	NA	NA	NA	0	MLName is not populated with valid characters, alpha or allowable punctuation.		dplocal.&prefix.all_l1_flags	NA	Y	NA	
MIS_1_21_00-0_122	Warn	N	MIS	1	21	00-0	122	CSubscriberID	NA	NA	NA	NA	0	CSubscriberID value contains leading spaces		dplocal.&prefix.all_l1_flags	lkp_all_l1	Y	NA	
MIS_1_22_00-0_121	Warn	N	MIS	1	22	00-0	121	CSSN	NA	NA	NA	NA	0	CSSN variable contains an invalid non-missing value		NA	lkp_all_l1	Y	NA	
MIS_1_23_00-0_133	Warn	N	MIS	1	23	00-0	133	CFName	NA	NA	NA	NA	0	CFName is not populated with valid characters, alpha or allowable punctuation.		dplocal.&prefix.all_l1_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_1_24_00-0_133	Warn	N	MIS	1	24	00-0	133	CMName	NA	NA	NA	NA	0	CMName is not populated with valid characters, alpha or allowable punctuation.		dplocal.&prefix.all_l1_flags	NA	Y	NA	
MIS_1_25_00-0_133	Warn	N	MIS	1	25	00-0	133	CLName	NA	NA	NA	NA	0	CLName is not populated with valid characters, alpha or allowable punctuation.		dplocal.&prefix.all_l1_flags	NA	Y	NA	
MIL_2_01_00-0_221	Fail	Y	MIL	2	01	00-0	221	MPatID	Mbirth_Date	NA	NA	NA	0	MPatID is populated but Mbirth_Date = missing(. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIL_2_01_00-0_221	Fail	Y	MIL	2	01	00-0	221	MPatID	Age	NA	NA	NA	0	MPatID is populated but Age = missing(. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_2_02_00-0_221	Fail	Y	MIL	2	02	00-0	221	Mbirth_Date	Encounter rID	NA	NA	NA	0	Mbirth_Date is populated but EncounterID = missing(. Or blank)		dplocal.&prefix.al l_l2_flags	NA	Y	NA	
MIL_2_02_00-0_221	Fail	Y	MIL	2	02	00-0	221	Mbirth_Date	ADate	NA	NA	NA	0	Mbirth_Date is populated but ADate = missing(. Or blank)		dplocal.&prefix.al l_l2_flags	NA	Y	NA	
MIL_2_02_00-0_221	Fail	Y	MIL	2	02	00-0	221	MBirth_Date	Birth_Ty pe	NA	NA	NA	0	MBirth_Date is populated but Birth_Type = missing(. Or blank)		dplocal.&prefix.al l_l2_flags	NA	Y	NA	
MIL_2_06_00-0_226	Fail	Y	MIL	2	06	00-0	226	Adate	Ddate	NA	NA	NA	0	Adate value occurs after Ddate value		dplocal.&prefix.al l_l2_flags	NA	Y	NA	
MIL_2_08_00-0_221	Fail	Y	MIL	2	08	00-0	221	CPatID	CBirth_D ate	NA	NA	NA	0	CPatID is populated but CBirth_Date = missing(. Or blank)		dplocal.&prefix.al l_l2_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_2_08_00-0_221	Fail	Y	MIL	2	08	00-0	221	CPatID	Sex	NA	NA	NA	0	CPatID is populated but Sex = missing (. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIS_2_01_00-0_221	Fail	Y	MIS	2	01	00-0	221	MPatID	Mbirth_Date	NA	NA	NA	0	MPatID is populated but Mbirth_Date = missing (. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIS_2_01_00-0_221	Fail	Y	MIS	2	01	00-0	221	MPatID	Age	NA	NA	NA	0	MPatID is populated but Age = missing (. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIS_2_02_00-0_221	Fail	Y	MIS	2	02	00-0	221	Mbirth_Date	EncounterID	NA	NA	NA	0	Mbirth_Date is populated but EncounterID = missing (. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIS_2_02_00-0_221	Fail	Y	MIS	2	02	00-0	221	Mbirth_Date	ADate	NA	NA	NA	0	Mbirth_Date is populated but ADate = missing (. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_2_02_00-0_221	Fail	Y	MIS	2	02	00-0	221	MBirth_Date	Birth_Type	NA	NA	NA	0	MBirth_Date is populated but Birth_Type = missing(. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIS_2_06_00-0_226	Fail	Y	MIS	2	06	00-0	226	Adate	Ddate	NA	NA	NA	0	Adate value occurs after Ddate value		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIS_2_08_00-0_221	Fail	Y	MIS	2	08	00-0	221	CPatID	CBirth_Date	NA	NA	NA	0	CPatID is populated but CBirth_Date = missing(. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIS_2_08_00-0_221	Fail	Y	MIS	2	08	00-0	221	CPatID	Sex	NA	NA	NA	0	CPatID is populated but Sex = missing(. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIS_2_01_00-0_221	Warn	N	MIS	2	01	00-0	221	MPatID	MFName	NA	NA	NA	0	MPatID is populated but MFName = missing(. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_2_01_00-0_221	Warn	N	MIS	2	01	00-0	221	MPatID	MLName	NA	NA	NA	0	MPatID is populated but MLName = missing(. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIS_2_15_00-0_221	Warn	N	MIS	2	15	00-0	221	MSubscriberID	MPatID	NA	NA	NA	0	MSubscriberID is populated but MPatID = missing(. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIS_2_08_00-0_221	Warn	N	MIS	2	08	00-0	221	CPatID	CFName	NA	NA	NA	0	CPatID is populated but CFName = missing(. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIS_2_08_00-0_221	Warn	N	MIS	2	08	00-0	221	CPatID	CLName	NA	NA	NA	0	CPatID is populated but CLName = missing(. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_2_15_00-0_221	Warn	N	MIS	2	15	00-0	221	MSubscriberID	CSubscriberID	NA	NA	NA	0	MSubscriberID is populated but CSubscriberID = missing(. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	Y	
MIS_2_21_00-0_221	Warn	N	MIS	2	21	00-0	221	CSubscriberID	CPatID	NA	NA	NA	0	CSubscriberID is populated but CPatID = missing(. Or blank)		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIL_2_02_00-0_254	Fail	Y	MIL	2	02	00-0	254	MBirth_Date	CBirth_Date	NA	NA	NA	0	MBirth_Date and CBirth_Date populated but value of MBirth_Date not greater than CBirth_Date by >= 10 years.		dplocal.&prefix.all_l2_flags	NA	Y	Y	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_2_02_00-0_254	Fail	Y	MIS	2	02	00-0	254	MBirth_Date	CBirth_Date	NA	NA	NA	0	MBirth_Date and CBirth_Date populated but value of MBirth_Date not greater than CBirth_Date by >= 10 years.		dplocal.&prefix.all_l2_flags	NA	Y	Y	
MIL_2_06_00-0_255	Warn	N	MIL	2	06	00-0	255	ADate	CBirth_Date	Ddate	NA	NA	0	CBirth_Date populated but CBirth_Date not between 3 days before ADate through Ddate or Ddate is null and CBirth_Date not between 3 days before through 1 days after ADate		dplocal.&prefix.all_l2_flags	NA	Y	Y	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_2_06_00-0_255	Warn	N	MIS	2	06	00-0	255	ADate	CBirth_Date	Ddate	NA	NA	0	CBirth_Date populated but CBirth_Date not between 3 days before ADate through Ddate or Ddate is null and CBirth_Date not between 3 days before through 1 days after ADate		dplocal.&prefix.all_l2_flags	NA	Y	Y	
MIS_2_19_00-0_257	Warn	N	MIS	2	19	00-0	257	MLName	CLName	NA	NA	NA	0	Records linked but MLName and/or CLName not populated		dplocal.&prefix.all_l2_flags	NA	Y	Y	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_2_17_00-0_257	Warn	N	MIS	2	17	00-0	257	MFName	CFName	NA	NA	NA	0	Records linked but MFName and/or CFName not populated		dplocal.&prefix.all_l2_flags	NA	Y	Y	
MIL_2_08_00-0_211	Fail	Y	MIL	2	08	00-0	211	CPatID	NA	NA	NA	NA	0	Duplicate record(s) present for unique key variable(s): CPatID		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIL_2_01_00-0_217	Fail	Y	MIL	2	01	00-0	217	MPatID	EncounterID	ADate	NA	NA	0	For non-linked records, rows are not distinct by key variables MPatID, EncounterID, and ADate		dplocal.&prefix.all_l2_flags	NA	Y	N	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_2_01_00-0_218	Fail	Y	MIL	2	01	00-0	218	MPatID	CPatID	NA	NA	NA	0	For linked records, rows are not distinct by key variables MPatID and CPatID		dplocal.&prefix.all_l2_flags	NA	Y	Y	
MIL_2_01_00-0_218	Fail	Y	MIL	2	01	00-0	218	MPatID	EncounterID	ADate	CPatID	NA	0	For linked records, rows are not distinct by key variables MPatID, EncounterID, ADate, and CPatID		dplocal.&prefix.all_l2_flags	NA	Y	Y	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_2_01_00-0_219	Fail	Y	MIL	2	01	00-0	219	MPatID	EncounterID	ADate	Mbirth_Date	NA	0	For linked records, value of Mbirth_Date not consistently populated by row and combinations of key variables MPatID and EncounterID		dplocal.&prefix.all_l2_flags	NA	Y	Y	Mbirth_Date
MIL_2_01_00-0_219	Fail	Y	MIL	2	01	00-0	219	MPatID	EncounterID	NA	Adate	NA	0	For linked records, value of Adate not consistently populated by row and combinations of key variables MPatID and EncounterID		dplocal.&prefix.all_l2_flags	NA	Y	Y	Adate_

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_2_01_00-0_219	Fail	Y	MIL	2	01	00-0	219	MPatID	EncounterID	NA	EncType	NA	0	For linked records, value of EncType not consistently populated by row and combinations of key variables MPatID and EncounterID		dplocal.&prefix.all_l2_flags	NA	Y	Y	EncType
MIL_2_01_00-0_219	Fail	Y	MIL	2	01	00-0	219	MPatID	EncounterID	NA	Birth_Type	NA	0	For linked records, value of Birth_Type not consistently populated by row and combinations of key variables MPatID and EncounterID		dplocal.&prefix.all_l2_flags	NA	Y	Y	Birth_Type

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_2_01_00-0_219	Fail	Y	MIL	2	01	00-0	219	MPatID	ADate	NA	EncounterID	NA	0	For linked records, value of EncounterID not consistently populated by row and combinations of key variables MPatID and ADate		dplocal.&prefix.all_l2_flags	NA	Y	Y	EncounterID
MIL_2_01_00-0_219	Fail	Y	MIL	2	01	00-0	219	MPatID	ADate	NA	Mbirth_Date	NA	0	For linked records, value of Mbirth_Date not consistently populated by row and combinations of key variables MPatID and ADate		dplocal.&prefix.all_l2_flags	NA	Y	Y	MBirth_Date

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL_2_01_00-0_219	Fail	Y	MIL	2	01	00-0	219	MPatID	ADate	NA	Birth_Type	NA	0	For linked records, value of Birth_Type not consistently populated by row and combinations of key variables MPatID and ADate		dplocal.&prefix.all_l2_flags	NA	Y	Y	Birth_Type
MIS_2_08_00-0_211	Fail	Y	MIS	2	08	00-0	211	CPatID	NA	NA	NA	NA	0	Duplicate record(s) present for unique key variable(s): CPatID		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIS_2_01_00-0_217	Fail	Y	MIS	2	01	00-0	217	MPatID	EncounterID	ADate	NA	NA	0	For non-linked records, rows are not distinct by key variables MPatID, EncounterID, and ADate		dplocal.&prefix.all_l2_flags	NA	Y	N	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_2_01_00-0_218	Fail	Y	MIS	2	01	00-0	218	MPatID	CPatID	NA	NA	NA	0	For linked records, rows are not distinct by key variables MPatID and CPatID		dplocal.&prefix.all_l2_flags	NA	Y	Y	
MIS_2_01_00-0_218	Fail	Y	MIS	2	01	00-0	218	MPatID	EncounterID	ADate	CPatID	NA	0	For linked records, rows are not distinct by key variables MPatID, EncounterID, ADate, and CPatID		dplocal.&prefix.all_l2_flags	NA	Y	Y	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_2_01_00-0_219	Fail	Y	MIS	2	01	00-0	219	MPatID	EncounterID	ADate	Mbirth_Date	NA	0	For linked records, value of Mbirth_Date not consistently populated by row and combinations of key variables MPatID, EncounterID, and ADate		dplocal.&prefix.all_l2_flags	NA	Y	Y	Mbirth_Date
MIS_2_01_00-0_219	Fail	Y	MIS	2	01	00-0	219	MPatID	EncounterID	NA	Adate	NA	0	For linked records, value of Adate not consistently populated by row and combinations of key variables MPatID and EncounterID		dplocal.&prefix.all_l2_flags	NA	Y	Y	Adate

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_2_01_00-0_219	Fail	Y	MIS	2	01	00-0	219	MPatID	EncounterID	NA	EncType	NA	0	For linked records, value of EncType not consistently populated by row and combinations of key variables MPatID and EncounterID		dplocal.&prefix.all_l2_flags	NA	Y	Y	EncType
MIS_2_01_00-0_219	Fail	Y	MIS	2	01	00-0	219	MPatID	EncounterID	NA	Birth_Type	NA	0	For linked records, value of Birth_Type not consistently populated by row and combinations of key variables MPatID and EncounterID		dplocal.&prefix.all_l2_flags	NA	Y	Y	Birth_Type

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_2_01_00-0_219	Fail	Y	MIS	2	01	00-0	219	MPatID	ADate	NA	EncounterID	NA	0	For linked records, value of EncounterID not consistently populated by row and combinations of key variables MPatID and ADate		dplocal.&prefix.all_l2_flags	NA	Y	Y	EncounterID
MIS_2_01_00-0_219	Fail	Y	MIS	2	01	00-0	219	MPatID	ADate	NA	Mbirth_Date	NA	0	For linked records, value of Mbirth_Date not consistently populated by row and combinations of key variables MPatID and ADate		dplocal.&prefix.all_l2_flags	NA	Y	Y	MBirth_Date

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_2_01_00-0_219	Fail	Y	MIS	2	01	00-0	219	MPatID	ADate	NA	Birth_Type	NA	0	For linked records, value of Mbirth_Date not consistently populated by row and combinations of key variables MPatID and ADate		dplocal.&prefix.all_l2_flags	NA	Y	Y	Birth_Type
MIS_2_19_00-0_218	Warn	N	MIS	2	19	00-0	218	MLName	MFName	CLName	CFName	NA	0	For linked records, rows are not distinct by key variables MLName, MFName, CLName, and CFName		dplocal.&prefix.all_l2_flags	NA	Y	Y	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_2_19_00-0_214	Warn	N	MIS	2	19	00-0	214	MLName	MFName	NA	MPatID	NA	0	MPatID value not consistently populated across rows for distinct combinations of MLName and MFName		dplocal.&prefix.all_l2_flags	NA	Y	NA	MPatID
MIS_2_19_00-0_214	Warn	N	MIS	2	19	00-0	214	MLName	MFName	NA	Mbirth_Date	NA	0	Mbirth_Date value not consistently populated across rows for distinct combinations of MLName and MFName		dplocal.&prefix.all_l2_flags	NA	Y	NA	Mbirth_Date
MIS_2_25_00-0_272	Warn	N	MIS	2	25	00-0	272	CLName	CFName	NA	NA	NA	0	Duplicate rows for CLName, CFName for any record		dplocal.&prefix.all_l2_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_2_25_00-0_273	Warn	N	MIS	2	25	00-0	273	CLName	CFName	Sex	Cbirth_Date	NA	0	Duplicate rows for CLName, CFName,Sex,Cbirth_Date for any record		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIL-DEM_2_01_00-0_201	Fail	Y	MIL-DEM	2	01	00-0	201	MPatID	PatID	NA	NA	NA	0	MPatID value present in MIL table, but not in the DEM table		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIL-DEM_2_01_00-0_203	Fail	Y	MIL-DEM	2	01	00-0	203	MPatID	PatID	NA	NA	NA	0	MPatID variable length is not consistent between tables		dplocal.&prefix.all_l2_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL-DEM_2_02_00-0_208	Fail	Y	MIL-DEM	2	02	00-0	208	Mbirth_Date	Birth_Date	PatID	NA	NA	0	Tables linked on PatID, Mbirth_Date is populated, but Mbirth_Date not equal to Birth_Date in table DEM		dplocal.&prefix.all_l2_flags	NA	Y	NA	PatID
MIL-DEM_2_07_00-0_201	Fail	Y	MIL-DEM	2	07	00-0	201	CPatID	PatID	NA	NA	NA	0	CPatID value present in MIL table, but not in the DEM table		dplocal.&prefix.all_l2_flags	NA	Y	NA	PatID
MIL-DEM_2_07_00-0_203	Fail	Y	MIL-DEM	2	07	00-0	203	CPatID	PatID	NA	NA	NA	0	CPatID variable length is not consistent between tables		dplocal.&prefix.all_l2_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL-DEM_2_08_00-0_208	Fail	Y	MIL-DEM	2	08	00-0	208	Cbirth_Date	Birth_Date	PatID	NA	NA	0	Tables linked on PatID, Cbirth_Date is populated, but Cbirth_Date not equal to Birth_Date in table DEM		dplocal.&prefix.all_l2_flags	NA	Y	NA	PatID
MIL-DEM_2_09_00-0_208	Fail	Y	MIL-DEM	2	09	00-0	208	Sex	Sex	PatID	NA	NA	0	Tables linked on PatID, Sex is populated, but Sex not equal to Sex in table DEM		dplocal.&prefix.all_l2_flags	NA	Y	NA	PatID
MIL-ENC_2_04_00-0_201	Fail	Y	MIL-ENC	2	04	00-0	201	EncounterID	EncounterID	NA	NA	NA	0	EncounterID value present in MIL table, but not in the ENC table		dplocal.&prefix.all_l2_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL-ENC_2_04_00-0_203	Fail	Y	MIL-ENC	2	04	00-0	203	EncounterID	EncounterID	NA	NA	NA	0	EncounterID variable length is not consistent between tables		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIL-ENC_2_06_00-0_208	Fail	Y	MIL-ENC	2	06	00-0	208	Adate	ADate	EncounterID	NA	NA	0	Tables linked on EncounterID, Adate is populated, but Adate not equal to ADate in table ENC		dplocal.&prefix.all_l2_flags	NA	Y	NA	EncounterID
MIL-ENC_2_07_00-0_208	Fail	Y	MIL-ENC	2	07	00-0	208	Ddate	ddate	EncounterID	NA	NA	0	Tables linked on EncounterID, Ddate is populated, but Ddate not equal to ddate in table ENC		dplocal.&prefix.all_l2_flags	NA	Y	NA	EncounterID

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIL-ENR_2_01_00-0_201	Fail	Y	MIL-ENR	2	01	00-0	201	MPatID	PatID	NA	NA	NA	0	MPatID value present in MIL table, but not in the ENR table		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIL-ENR_2_07_00-0_201	Fail	Y	MIL-ENR	2	07	00-0	201	CPatID	PatID	NA	NA	NA	0	CPatID value present in MIL table, but not in the DEM table		dplocal.&prefix.all_l2_flags	NA	Y	NA	PatID
MIS-DEM_2_01_00-0_201	Fail	Y	MIS-DEM	2	01	00-0	201	MPatID	PatID	NA	NA	NA	0	MPatID value present in MIS table, but not in the DEM table		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIS-DEM_2_01_00-0_203	Fail	Y	MIS-DEM	2	01	00-0	203	MPatID	PatID	NA	NA	NA	0	MPatID variable length is not consistent between tables		dplocal.&prefix.all_l2_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS-ENR_2_01_00-0_201	Fail	Y	MIS-ENR	2	01	00-0	201	MPatID	PatID	NA	NA	NA	0	MPatID value present in MIS table, but not in the ENR table		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIS-DEM_2_02_00-0_208	Fail	Y	MIS-DEM	2	02	00-0	208	Mbirth_Date	Birth_Date	PatID	NA	NA	0	Tables linked on PatID, Mbirth_Date is populated, but Mbirth_Date not equal to Birth_Date in table DEM		dplocal.&prefix.all_l2_flags	NA	Y	NA	PatID
MIS-ENC_2_04_00-0_201	Fail	Y	MIS-ENC	2	04	00-0	201	EncounterID	EncounterID	NA	NA	NA	0	EncounterID value present in MIS table, but not in the ENC table		dplocal.&prefix.all_l2_flags	NA	Y	NA	

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS-ENC_2_04_00-0_203	Fail	Y	MIS-ENC	2	04	00-0	203	EncounterID	EncounterID	NA	NA	NA	0	EncounterID variable length is not consistent between tables		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIS-ENC_2_06_00-0_208	Fail	Y	MIS-ENC	2	06	00-0	208	Adate	ADate	EncounterID	NA	NA	0	Tables linked on EncounterID, Adate is populated, but Adate not equal to ADate in table ENC		dplocal.&prefix.all_l2_flags	NA	Y	NA	EncounterID
MIS-ENC_2_07_00-0_208	Fail	Y	MIS-ENC	2	07	00-0	208	Ddate	ddate	EncounterID	NA	NA	0	Tables linked on EncounterID, Ddate is populated, but Ddate not equal to ddate in table ENC		dplocal.&prefix.all_l2_flags	NA	Y	NA	EncounterID

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS-DEM_2_08_00-0_201	Fail	Y	MIS-DEM	2	08	00-0	201	CPatID	PatID	NA	NA	NA	0	CPatID value present in MIS table, but not in the DEM table		dplocal.&prefix.all_l2_flags	NA	Y	NA	PatID
MIS-DEM_2_08_00-0_203	Fail	Y	MIS-DEM	2	08	00-0	203	CPatID	PatID	NA	NA	NA	0	CPatID variable length is not consistent between tables		dplocal.&prefix.all_l2_flags	NA	Y	NA	
MIS-ENR_2_08_00-0_201	Fail	Y	MIS-ENR	2	08	00-0	201	CPatID	PatID	NA	NA	NA	0	CPatID value present in MIS table, but not in the ENR table		dplocal.&prefix.all_l2_flags	NA	Y	NA	PatID

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS-DEM_2_09_00-0_208	Fail	Y	MIS-DEM	2	09	00-0	208	Cbirth_Date	Birth_Date	PatID	NA	NA	0	Tables linked on PatID, Cbirth_Date is populated, but Cbirth_Date not equal to Birth_Date in table DEM		dplocal.&prefix.all_l2_flags	NA	Y	NA	PatID
MIS-DEM_2_10_00-0_208	Fail	Y	MIS-DEM	2	10	00-0	208	Sex	Sex	PatID	NA	NA	0	Tables linked on PatID, Sex is populated, but Sex not equal to Sex in table DEM		dplocal.&prefix.all_l2_flags	NA	Y	NA	PatID
MIL_2_12_00-0_274	Fail	Y	MIL	2	12	00-0	274	MatchMethod	NA	NA	NA	NA	0	For linked records, MatchMethod contains invalid non-missing values		dplocal.&prefix.all_l2_flags	NA	Y	Y	EncounterID

FlagID	FlagType	AbortYN	TableID	level	VarID	TestID	CheckID	Variable1	Variable2	Variable3	Variable4	Ms_Test_Name	Result_Type	Flag_Descr	Dataset	DatasetOut	Lookup_Table	Flag Y/N	Linked	AddVars
MIS_2_12_00-0_274	Fail	Y	MIS	2	12	00-0	274	MatchMethod	NA	NA	NA	NA	0	For linked records, MatchMethod contains invalid non-missing values		dplocal.&prefix.all_l2_flags	NA	Y	Y	Encounterl D
MIL_2_12_00-0_275	Fail	Y	MIL	2	12	00-0	275	MatchMethod	NA	NA	NA	NA	0	For non-linked records, MatchMethod contains invalid non-missing values		dplocal.&prefix.all_l2_flags	NA	Y	N	Encounterl D
MIS_2_12_00-0_275	Fail	Y	MIS	2	12	00-0	275	MatchMethod	NA	NA	NA	NA	0	For non-linked records, MatchMethod contains invalid non-missing values		dplocal.&prefix.all_l2_flags	NA	Y	N	Encounterl D

C. LEVEL 1 FLAGS

This lookup file includes additional detail required to execute a subset of level 1 checks included in this process.

Filename: **lkp_all_l1.sas7bdat**

Table 34. Level 1 Flags Lookup Dataset

TabID	VarID	Variable	VarType	VarLength	KeyVar	CrossVar	ObsReq	ValidValueType	ValidValue	FlagCondition
DEM	01	PatID	C	255	K	X	ALL			
DEM	02	Birth_Date	N	4			SOME			
DEM	03	Sex	C	1			ALL	list_values	A|F|M|U	Sex not in ('A','F','M','U')
ENC	01	PatID	C	255	K	X	ALL			
ENC	02	EncounterID	C	255	K	X	ALL			
ENC	03	ADate	N	4			ALL			
ENC	04	DDate	N	4			SOME			
ENR	01	PatID	C	255	K	X	ALL			
MIL	01	MPatID	C	255	K	X	NONE			
MIL	02	MBirth_Date	N	4			NONE			
MIL	03	Age	N	3			NONE			
MIL	04	EncounterID	C	255	K	X	NONE			
MIL	05	EncType	C	2		X	NONE	list_values	AV|ED|IP|IS|OA	EncType not in ('AV','ED','IP','IS','OA')
MIL	06	ADate	N	4			NONE			
MIL	07	DDate	N	4			NONE			
MIL	08	CPatID	C	255	K	X	NONE			
MIL	09	CBirth_Date	N	4			NONE			
MIL	10	Sex	C	1			NONE	list_values	A|F|M|U|O	Sex not in ('A','F','M','U','O')
MIL	11	CEnr_Start	N	4			NONE			
MIL	12	MatchMethod	C	2			ALL	list_values	RE|SI|LA|OT|NA|BC|N1|N2|N3	MatchMethod not in ('RE','SI','LA','OT','NA','BC','N1','N2','N3')
MIL	13	Birth_Type	N	3			NONE	list_values	0|1|2|3|4|5|8|9	Birth_Type not in (0,1,2,3,4,5,8,9)
MIL	14	Birth_Type_Primes	N	8			NONE	numeric	product prime	Birth_Type_Primes not in (primes)
MIS	01	MPatID	C	255	K	X	NONE			
MIS	02	MBirth_Date	N	4			NONE			
MIS	04	EncounterID	C	255	K	X	NONE			

TabID	VarID	Variable	VarType	VarLength	KeyVar	CrossVar	ObsReq	ValidValueType	ValidValue	FlagCondition
MIS	05	EncType	C	2		X	NONE	list_values	AV|ED|IP|IS|OA	EncType not in ('AV','ED','IP','IS','OA')
MIS	06	ADate	N	4			NONE			
MIS	07	DDate	N	4			NONE			
MIS	08	CPatID	C	255	K	X	NONE			
MIS	09	CBirth_Date	N	4			NONE			
MIS	10	Sex	C	1			NONE	list_values	A|F|M|U|O	Sex not in ('A','F','M','U','O')
MIS	11	CEnr_Start	N	4			NONE			
MIS	12	MatchMethod	C	2			ALL	list_values	RE|SI|LA|OT|NA|BC|N1|N2|N3	MatchMethod not in ('RE','SI','LA','OT','NA','BC','N1','N2','N3')
MIS	13	Birth_Type	N	3			NONE	list_values	0|1|2|3|4|5|8|9	Birth_Type not in (0,1,2,3,4,5,8,9)
MIS	14	Birth_Type_Primes	N	8			NONE	numeric	product prime	Birth_Type_Primes not in (primes)
MIS	15	MSubscriberID	C	50			NONE			
MIS	16	MSSN	C	9			NONE	only	numbers	notdigit(trim(MSSN)) gt 0
MIS	17	MFName	C	20			NONE	only	names	notalpha(strip(MFName)) gt 0 or (index(MFName, '-') eq 0)
MIS	18	MMName	C	20			NONE	only	names	notalpha(strip(MMName)) gt 0 or (index(MMName, '-') eq 0)
MIS	19	MLName	C	20			NONE	only	names	notalpha(strip(MLName)) gt 0 or (index(MLName, '-') eq 0)
MIS	20	FamilyID	C	50			NONE			
MIS	21	CSubscriberID	C	50			NONE			
MIS	22	CSSN	C	9			NONE	only	numbers	notdigit(trim(CSSN)) gt 0
MIS	23	CFName	C	20			NONE	only	names	notalpha(strip(CFName)) gt 0 or (index(CFName, '-') eq 0)
MIS	24	CMName	C	20			NONE	only	names	notalpha(strip(CMName)) gt 0 or (index(CMName, '-') eq 0)
MIS	25	CLName	C	20			NONE	only	names	notalpha(strip(CLName)) gt 0 or (index(CLName, '-') eq 0)

VI. APPENDIX B: ADDITIONAL OUTPUT DATASETS

These files will be created with every execution of the package but their placement will be dependent on abort status and whether the MIL or MIS table is being. If the process aborts, this output will be saved to the "dplocal" folder and if it does not, it will be saved to the "msoc" folder and provided to the SOC if and only if it is based on the MIL table.

Filenames: **mil_l1_cont** or **mis_l1_cont**

Table 35. MIL or MIS Level 1 Contents Dataset

Variable	Description	Length	Type	Format	Label	Source	Derivation	Order
DPID	2 character Data Partner identifier	2	Char			Common Components macro variable DPID	Assigned by the SOC	1
SiteID	1-4 character site identifier	4	Char			Common Components macro variable SiteID	Assigned by the SOC	2
LIBNAME	Library Name	8	Char			SCDM table metadata	SAS proc contents procedure performed on MIL or MIS tables – Applies to all variables except for the last one documented	3
MEMNAME	Library Member Name	32	Char			SCDM table metadata		4
MEMLABEL	Data Set Label	256	Char			SCDM table metadata		5
TYPEMEM	Special Data Set Type (From TYPE=)	8	Char			SCDM table metadata		6
NAME	Variable Name	32	Char			SCDM table metadata		7
TYPE	Variable Type	8	Num			SCDM table metadata		8
LENGTH	Variable Length	8	Num			SCDM table metadata		9
VARNUM	Variable Number	8	Num			SCDM table metadata		10
LABEL	Variable Label	256	Char			SCDM table metadata		11
FORMAT	Variable Format	32	Char			SCDM table metadata		12

Variable	Description	Length	Type	Format	Label	Source	Derivation	Order
FORMATL	Format Length	8	Num			SCDM table metadata		13
FORMATD	Number of Format Decimals	8	Num			SCDM table metadata		14
INFORMAT	Variable Informat	32	Char			SCDM table metadata		15
INFORML	Informat Length	8	Num			SCDM table metadata		16
INFORMD	Number of Informat Decimals	8	Num			SCDM table metadata		17
JUST	Justification	8	Num			SCDM table metadata		18
NPOS	Position in Buffer	8	Num			SCDM table metadata		19
NOBS	Observations in Data Set	8	Num			SCDM table metadata		20
ENGINE	Engine Name	8	Char			SCDM table metadata		21
CRDATE	Create Date	8	Num	DATETIME16.		SCDM table metadata		22
MODATE	Last Modified Date	8	Num	DATETIME16.		SCDM table metadata		23
DELOBS	Deleted Observations in Data Set	8	Num			SCDM table metadata		24
IDXUSAGE	Use of Variable in Indexes	9	Char			SCDM table metadata		25
MEMTYPE	Library Member Type	8	Char			SCDM table metadata		26
IDXCOUNT	Number of Indexes for Data Set	8	Num			SCDM table metadata		27
PROTECT	Password Protection (Read Write Alter)	3	Char			SCDM table metadata		28
FLAGS	Update Flags (Protect Contribute Add)	3	Char			SCDM table metadata		29
COMPRESS	Compression Routine	8	Char			SCDM table metadata		30
REUSE	Reuse Space	3	Char			SCDM table metadata		31

Variable	Description	Length	Type	Format	Label	Source	Derivation	Order
SORTED	Sorted and/or Validated	8	Num			SCDM table metadata		32
SORTEDBY	Position of Variable in Sortedby Clause	8	Num			SCDM table metadata		33
CHARSET	Host Character Set	8	Char			SCDM table metadata		34
COLLATE	Collating Sequence	8	Char			SCDM table metadata		35
NODUPKEY	Sort Option: No Duplicate Keys	3	Char			SCDM table metadata		36
NODUPREC	Sort Option: No Duplicate Records	3	Char			SCDM table metadata		37
ENCRYPT	Encryption Routine	8	Char			SCDM table metadata		38
POINTOBS	Point to Observations	3	Char			SCDM table metadata		39
GENMAX	Maximum Number of Generations	8	Num			SCDM table metadata		40
GENNUM	Generation Number	8	Num			SCDM table metadata		41
GENNEXT	Next Generation Number	8	Num			SCDM table metadata		42
TRANSCOD	Character Variables Transcoded	3	Char			SCDM table metadata		43
TABID	3 character abbreviation for source SCDM table	3	Char			inputfiles.control_flow. module	Where execute_flag=Y and cc_table NE X	44

Table 36. MIL or MIS Level 1 Dataset 2 Example Output

DPID	SiteID	TABID	LIBNAME	MEMNAME	MEMLABEL	TYPEMEM	NAME	TYPE	LENGTH	VARNUM	LABEL	FORMAT
MS	OC	MIL	MSCDM	MIL			EncType	2	2	3	Encounter Type	
MS	OC	MIL	DPLocal	MIL			Encounter ID	2	20	1	Mothers delivery encounterID	
MS	OC	MIL	DPLocal	MIL			MatchMethod	2	2	13		
MS	OC	MIL	DPLocal	MIL			adate	1	4	4	Admission date for mothers delivery encounter	MMDDYY
MS	OC	MIL	DPLocal	MIL			birth_type	1	8	7	# of babies born	
MS	OC	MIL	DPLocal	MIL			birth_type_primes	1	8	8	All birth types	
MS	OC	MIL	DPLocal	MIL			cbirth_date	1	4	11	Child birth date	MMDDYY
MS	OC	MIL	DPLocal	MIL			cenr_start	1	8	10	Earliest infant enrollment start date	DATE
MS	OC	MIL	DPLocal	MIL			cpatid	2	20	9	Child patient ID	$
MS	OC	MIL	DPLocal	MIL			ddate	1	4	5	Discharge date for mothers delivery encounter	MMDDYY
MS	OC	MIL	DPLocal	MIL			mbirth_date	1	4	6	Mother birth date	MMDDYY

DPID	SiteID	TABID	LIBNAME	MEMNAME	MEMLABEL	TYPEMEM	NAME	TYPE	LENGTH	VARNUM	LABEL	FORMAT
MS	OC	MIL	DPLocal	MIL			mpatid	2	20	2	Mother patient ID	$
MS	OC	MIL	DPLocal	MIL			sex	2	1	12	Child sex	

Filenames: **mil_l1_nobs** or **mis_l1_nobs**

Table 37. MIL or MIS Level 1 Number of Observations

Variable	Description	Length	Type	Format	Label	Source	Derivation	Order
DPID	2 character Data Partner identifier	2	Char			Common Components macro variable DPID	Assigned by the SOC	1
SiteID	1-4 character site identifier	4	Char			Common Components macro variable SiteID	Assigned by the SOC	2
TABID	3 character abbreviation for source SCDM table	3	Char			inputfiles.control_flow. module	Where execute_flag=Y and cc_table NE X	3
MemType	Library Member Type	8	Char			SCDM table metadata	"SAS proc contents procedure	4
Count_Obs	Observations in Data Set	8	Num			SCDM table metadata	SAS proc contents procedure	5

Table 38. MIL or MIS Level 1 Number of Observations Example Output

DPID	SiteID		TABID	MemType	Count_Obs
XX	YY		MIL	Data	57,859

FIlenames: **mil_l1_record_count** or **mis_l1_record_count**

Table 39. MIL or MIS Level 1 Record Count

Variable	Description	Length	Type	Format	Label	Source	Derivation	Order
DPID	2 character Data Partner identifier	2	Char			Common Components macro variable DPID	Assigned by the SOC and populated by the DP at the site	1
SiteID	1-4 character site identifier	4	Char			Common Components macro variable SiteID	Assigned by the SOC and populated by the DP at the site	2
TabID	3 character abbreviation for source SCDM table	3	Char			inputfiles.control_flow.module	Where execute_flag=Y and cc_table NE X	3
VarID	2 character variable identifier	2	2			Input file		4
variable	Variable name	21	Char			SCDM table	NA	5
count	Count of populated records	8	Num	COMMA13.		NA	NA	6
count_null	Count of null records (blank or missing)	8	Num	COMMA13.	Null Record Count	SCDM table	NA	7
pct_null	Proportion of null value count to total number of record count by variable and table	8	Num	8.2	Percent Null	SCDM table	Count_null/total record count*100	9

Table 40. MIL or MIS Level 1 Record Count Example Output

DPID	SiteID	TabID	Varid	Variable	count	count_null	Pct_Null
XX	YY	MIL	01	MPatID	13,927	14,617	40.97
XX	YY	MIL	02	MBirth_Date	13,927	14,617	40.97
XX	YY	MIL	03	EncounterID	13,927	14,617	40.97
XX	YY	MIL	04	EncType	13,927	14,617	40.97
XX	YY	MIL	05	ADate	13,927	14,617	40.97
XX	YY	MIL	06	DDate	12,279	16,265	45.58
XX	YY	MIL	07	CPatID	26,143	2,401	6.73

Filenames: **mil_etl_version** or **mis_etl_version**

Table 41. MIL or MIS ETL Version

Variable	Description	Length	Type	Format	Label	Source	Derivation	Order
MSDPID	Unique Data Partner Site identifier	6	Char			CC.dpid|siteid	Upcase{dpid}{siteid}	1
DPID	2 character Data Partner identifier	2	Char			Common Components macro variable DPID	Assigned by the SOC and populated by the DP at the site	2
SiteID	1-4 character site identifier	4	Char			Common Components macro variable SiteID	Assigned by the SOC and populated by the DP at the site	3
ETL_CC	ETL number from Common Components	8	Num			ETL #	qa.msoc.etl_version.ETL	4
ETL_{tabid}	ETL number from MIL/MIS table	8	Num			ETL #	Header of MIL/MIS table	5

Table 42. MIL or MIS ETL Version Sample

MSDPID	DPID	SiteID	ETL_CC	ETL_MIL
XXYY	XX	YY	7	7

Filenames: **mil_signature** or **mis_signature**

Table 43. MIL or MIS Signature File

Variable	Description	Length	Type	Format	Label	Source	Derivation	Order
Variable	Metadata variable	14	Char			See functional specs	NA	1
Value	Metadata value	21	Char			See functional specs	NA	2

Table 44. MIL or MIS Signature File Example Output

Variable	Value
DPID	MS
SiteID	OC
MSReqID	mblink_qar_v999_msoc_xxx
MSProjID	mblink
MSWPType	qar
MSWPID	V999
MSDPID	msoc
Table	mil
MSVerID	xxx
QAVer	4.0.2
SCDMVer	6.0.2
Module	Enr
OSABBR	WIN
OSNAME	X64_7PRO
SASVersion	9.4
SASVersionLong	9.04.01M4P110916
RunType	FORE
NCPU	4
StartTime	21MAR2018:10:07:18.70
StopTime	21MAR2018:10:30:20.15
Seconds	1380
RunTime	0 h 23 m 2 s