Reporting Person-Level Separate CHIP Data to MSIS: A Guide for States

June 29, 2012

Matthew Hodges
Cheryl A. Camillo
Paul M. Montebello
Ashley Zlatinov

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Contract Number:
HHSM-500-2005-00025I

Task Number:
HHSM-500-T0002

Mathematica Reference Number:
06759.710

Submitted to:
Centers for Medicare & Medicaid Services
7111 Security Blvd B2-27-00
Baltimore, MD 21244-1850
Project Officer: Cara Petroski

Submitted by:
Mathematica Policy Research
1100 1st Street, NE
12th Floor
Washington, DC 20002-4221
Telephone: (202) 484-9220
Facsimile: (202) 863-1763
Project Director: Julie Sykes

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CONTENTS

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TABLES

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ACRONYMS

ARRA	American Recovery and Reinvestment Act of 2009
BOE	Basis of eligibility
CER	Comparative Effectiveness Research
CHIP	Children's Health Insurance Program
CMS	Centers for Medicare & Medicaid Services
CPT	Current Procedural Terminology
EL	Eligible file
FFY	Federal fiscal year
HIO	Health Insurance Organization
HMO	Health Maintenance Organization
ICFs-MR	Institutional Care Facilities for the Mentally Retarded
ID	Identification Number
IP	Inpatient hospital claims file
LT	Long term care claims file
MAS	Maintenance assistance status
MAX	Medicaid Analytic eXtract
MCO	Managed Care Organization
MSIS	Medicaid and CHIP Statistical Information System
NF	Nursing Facility
NPI	National Provider Identification
NPPES	National Plan and Provider Enumeration System
OT	Other, non-institutional claims
PACE	Programs for All-Inclusive Care for the Elderly
PCCM	Primary care case management
PHP	Prepaid Health Plan
RX	Prescription drug claims file
SSN	Social Security number
TA	Technical assistance
TANF	Temporary Assistance for Needy Families

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EXECUTIVE SUMMARY

For many years, policymakers and others with an interest in public health insurance coverage have had access to extensive person-level eligibility and claims data for the Medicaid and Medicaid expansion Children's Health Insurance Program (CHIP). Access to comparable data for separate CHIP programs, however, has not been available. To satisfy a growing need for separate CHIP data to examine program transitions, access to services, and quality of care, among other measurement priorities, the Centers for Medicare & Medicaid Services (CMS) contracted with Mathematica Policy Research to provide technical assistance (TA) to states in reporting these data to the Medicaid and CHIP Statistical Information System (MSIS). To date, we have provided comprehensive TA to thirteen states, five of which are now reporting increased person-level CHIP data to CMS.

In this guide, we provide for state stakeholders an overview of the MSIS data structure and submission process and guidance, based on our TA experiences, for reporting complete CHIP data to the system. We describe steps for planning and implementing reporting, common errors to avoid, and available resources, including TA. A future guide for programmers will provide more detail regarding MSIS data layouts and instructions for mapping native data from different sources.

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I. BACKGROUND

Since federal fiscal year (FFY) 1999, the Centers for Medicare & Medicaid Services (CMS) has required states to report complete eligibility[1] and claims data for their Medicaid and Medicaid expansion Children's Health Insurance Program (CHIP) enrollees to the Medicaid and CHIP Statistical Information System (MSIS). Each state must submit to CMS on a federal fiscal year schedule five quarterly electronic files—one eligible (EL) and four claims files—containing data elements specified in the MSIS File Specifications and Data Dictionary (Centers for Medicare & Medicaid Services 2010). The submission schedule is contingent on whether a state chooses to report retroactive eligibility and correction records in its EL file. Retroactive records give states the flexibility to report enrollment that would have been included in an original file if that information had been known at the time of submission. For example, a retroactive record in a Quarter 2 (Q2) file could include three months of retroactive eligibility for Q1. Correction records give states the opportunity to fix errors in previously submitted files. Because retroactive and correction records permit states to report enrollment changes after-the-fact, states that choose to report them should submit all five files no later than 45 days after the end of the FFY reporting quarter (however, they do not need to submit all five files simultaneously). States not using retroactive and correction records should submit the EL file later, approximately 105 days after the end of the FFY reporting quarter, in order to allow enough time to capture retroactive eligibility and make corrections to previously submitted records.

States also have the option of choosing the unique personal identifier associated with enrollees and their claims. Forty-four states—including the District of Columbia—assign and

[1] The term "eligibility," as used in this brief and in MSIS documentation, should be considered synonymous with the term "enrollment."

report an MSIS identification number (ID) for each enrollee, while 7 states use an enrollee's Social Security number (SSN) as the identifier.

MSIS files are submitted to CMS by one entity per state, although multiple entities, including contractors, are often involved in creating them. For states with separate CHIP programs administered by agencies or divisions other than those overseeing Medicaid, this means exploring ways to integrate reporting.

Once a state submits a file to CMS, it undergoes two stages of quality review. The first consists of automated validation edits that test whether: each field contains valid data; values for each data element fall within expected ranges; and reported values for two or more data elements are consistent. These validation edits also identify obvious errors that affect the usability of the file; for example, they will detect whether a state reported every enrollee as dually eligible for Medicare and Medicaid. The edits are applied after a file is submitted so that the state knows relatively soon whether the file has passed or failed. If a file fails, CMS alerts the state about the reasons for its rejection in an MSIS Edit Validation Report.

After passing the validation stage, the MSIS file undergoes a second, more intensive data quality review. Mathematica (which has been assisting CMS with this process since 1998) and CMS evaluate means, ranges, frequency distributions, and totals—both within a quarter and in comparison to other quarters—against expected values based on a state's known program characteristics. Mathematica also compares distributions of values to previous quarterly submissions and national averages and to external files containing similar information, such as CMS' National Summary of State Medicaid Managed Care Programs. Once the data quality review is complete, CMS uses the data in the approved files for program analysis and to produce various public-use reports that describe enrollment and expenditures.

CMS has not required states to report separate CHIP data to MSIS, and, prior to 2010, it instructed those that wished to do so to submit only a subset of eligibility data elements (and to exclude all claims information). Twenty-four states with separate CHIP programs chose to do so. On August 4, 2010, CMS issued a revised Data Dictionary (Release 3.1), enabling states to submit complete, separate CHIP eligibility and claims data as of October 1, 2010. CMS is now encouraging states to do so as soon as possible.

Using American Recovery and Reinvestment Act of 2009 (ARRA) funding for comparative effectiveness research (CER), Mathematica and CMS transform MSIS data into Medicaid Analytic eXtract (MAX) files. MAX is a set of annual, person-level data files on eligibility, service utilization, and payments that are derived from MSIS eligibility and claims data. MAX is an enhanced version of MSIS that includes final adjudicated claims based on the date of service and reconciled eligibility status (using retroactive and correction records). MAX data undergo additional quality checks and corrections. They are used for research purposes by CMS staff and the Medicaid and CHIP policy communities. The inclusion of complete, separate CHIP eligibility and claims data offers researchers a more complete understanding of CHIP enrollment and utilization and how they compare to Medicaid. To accomplish CMS' goal of including person-level, separate CHIP data in future MSIS and MAX files, specific funding has been provided for technical assistance (TA) to states to implement or improve their reporting of separate CHIP data. This guide for states, drawn from Mathematica's TA experiences, describes the steps that states should follow, as well as common errors they should avoid.

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II. DATA ELEMENTS AND CROSSWALKS

To report MSIS data successfully, states must understand the data element definitions and values. As noted previously, every state submits one eligible and four claims files to CMS. While this guide provides a general overview of data elements to be reported, a subsequent guide will provide more detail concerning the MSIS record layout for each file type and will serve as a model for reporting all data elements.

A. Eligible File

The MSIS EL file record includes approximately 25 data elements representing quarterly and monthly variables for a specified quarter and federal fiscal year (see Table II.1). Prior to October 2010, states could only report the quarterly variables plus Maintenance Assistance Status (MAS), Basis of Eligibility (BOE), CHIP, and Eligibility Group codes for separate CHIP enrollees. Now states can report more detailed information concerning enrollees' monthly status, including their scope of benefits, managed care plan enrollment, and waiver enrollment. CMS did not add new data elements to the Data Dictionary to enable separate CHIP reporting, but it did add valid values for some elements; for example, it added a value to the Restricted Benefits Flag (scope of coverage) element so that states could report whether separate CHIP enrollees receive a supplemental dental wraparound benefit to employer-sponsored insurance.

B. Claims Files

States submit the four MSIS claims files—Inpatient (IP), Long Term Care (LT), Other (OT), and Prescription Drugs (RX)—to CMS in distinct file formats. Table II.2 summarizes the data found in each file. The names of most MSIS data elements correspond to those commonly found in state systems. However, because claims processing systems vary considerably across states, the field names, definitions, and values that states use internally are not universal.

Table II.1. Eligible (EL) File Elements

Data Element Name
Quarterly Fields
County Code*
Date of Birth*
Date of Death*
Federal Fiscal Year Quarter*
Sex*
HIC Number (Medicare ID)*
MSIS Identification Number (Medicaid ID)*
MSIS Case Number (Medicaid case number)*
Race Codes and Ethnicity Code (multiple fields)*
Race Ethnicity Code (combined field)*
Social Security Number*
Type of Record (current, retroactive, or correction)*
Zip Code*
Monthly Fields
Basis of Eligibility (BOE or eligibility category)*
CHIP Code (Medicaid, Medicaid expansion, or Separate CHIP)*
Days of Eligibility[a]
Dual Eligible Code
Eligibility Group*
Health Insurance (whether the individual has other insurance)
Income Code (optional)
Maintenance Assistance Status (MAS or path of eligibility)*
Managed Care Plan ID (multiple fields)
Managed Care Plan Type (multiple fields)
Restricted Benefits Flag (scope of benefits)
Temporary Assistance for Needy Families (TANF) Cash Flag
Waiver ID (multiple fields)
Waiver Type (multiple fields)

Source: MSIS File Specifications and Data Dictionary (Release 3.1)

* Fields that comprise limited separate CHIP reporting subset

[a] Only to be reported for Medicaid and Medicaid expansion enrollees

Table II.2. MSIS Claims File Type Summary

File Type	Claims/Services Reported	Number of Data Elements Included*
IP	Acute care inpatient hospital services	121
LT	Services provided in nursing facilities (NF), institutional care facilities for the mentally retarded (ICFs-MR), psychiatric hospitals, and independent psychiatric wings of acute care hospitals	31
OT	Provider claims for non-institutional services and services received in hospitals/NFs/ICFs-MR that are not billed as part of long term care or inpatient claims; capitation payment claims; claims for medical and non-medical services received under a waiver	31
RX	Claims for prescription drugs and durable medical equipment provided by a pharmacist under a prescription	23

Source: MSIS File Specifications and Data Dictionary (Release 3.1)

* Excluding elements treated as "filler"

For example:

- One state might use *Claim Form* in the same way another state uses *Claim Type*.[2]
- Two states may define *Specialty Code* differently—one might use a three-character all-alpha value while another uses a three-character numeric value to represent the same specialty.
- One state might categorize psychotherapists and psychologists separately, while others may include them in the same category.
- A few states employ *Procedure Codes* that differ from those found in the Current Procedural Terminology (CPT) of the American Medical Association. These states use and report state-specific procedure formats and codes.

To distinguish claims for separate CHIP enrollees from those for Medicaid or Medicaid expansion CHIP enrollees, Data Dictionary Release 3.1 includes new values (shown in Table II.3) for the Type of Claim data element, which indicates the kind of payment covered by the claim (for example, fee-for-service payment by the separate CHIP program). Alpha values "A"

[2] Conventional names for data elements used by states—but not necessarily reported in MSIS—are presented in italics.

through "E" for separate CHIP claims correspond to numeric values "1" through "5" for Medicaid and Medicaid expansion claims.

Table II.3. Type of Claim Values

Valid Values	Code Definition
1	Medicaid **fee-for-service** claims
2	Medicaid claims representing **capitated payments** to managed care plans
3	Medicaid **encounter claims** simulating claims that would have been generated for patients with capitated arrangements if they had been billed on a fee-for-service basis
4	Medicaid **service-tracking claims** for special purposes (for example, tracking individual services covered in a lump sum billing)
5	Medicaid **supplemental payment** above a capitation fee or above a negotiated rate (for example, additional reimbursement for a federally qualified health center)
A	Separate CHIP **fee-for-service** claims
B	Separate CHIP claims representing **capitated payments** to managed care plans
C	Separate CHIP **encounter claims** simulating claims that would have been generated for patients with capitated arrangements if they had been billed on a fee-for-service basis
D	Separate CHIP **service-tracking claims** for special purposes (for example, tracking individual services covered in a lump sum billing)
E	Separate CHIP **supplemental payment** above a capitation fee or above a negotiated rate (for example, additional reimbursement for a federally qualified health center)

Source: MSIS File Specifications and Data Dictionary (Release 3.1)

CMS did not make any other changes to the claims file formats or elements to accommodate separate CHIP reporting. The remaining claims data elements provide information about the dates and locations of services, diagnoses, procedures, providers, and other payers. They include Adjustment Indicator, Place of Service, first and last dates of service, National Provider ID (NPI), and Internal Control Number. Table II.4 summarizes the most common and important data elements found in MSIS claims files.

Table II.4. Common and Important Data Elements for MSIS Claims Files

Data Element Name
Adjustment Indicator (original, void, resubmittal, or adjustment)
Amount Charged
Diagnosis Code
Diagnosis Related Group
Internal Control Number (unique claim identifier)
Managed Care Plan ID
Medicaid Amount Paid
MSIS ID
National Provider ID (from NPPES[a])
Place of Service
Procedure Code
Provider Taxonomy
Type of Claim
Type of Service (for example, transportation)
UB-92 Revenue Code (method of billing by facilities)

Source: MSIS File Specifications and Data Dictionary (Release 3.1)

[a] National Plan and Provider Enumeration System

C. Crosswalks

CMS requires states to create documents—known as crosswalks—that map state-specific values for certain MSIS data elements with descriptions and other relevant information not found in the MSIS record. For example, the eligibility crosswalk details how state-specific eligibility groups are mapped to the MAS and BOE categories, a comprehensive set of eligibility pathways to Medicaid and CHIP coverage based on federal statute that facilitate comparisons of distinctive sub-populations across state programs. The managed care crosswalk provides the names and associated plan IDs for all managed care organizations (MCOs) reported in the eligibility and claims files. The waiver crosswalk details active and retired Medicaid and CHIP waivers. Because information detailed in these crosswalks may change over time, states are required to maintain and periodically update them, including when initiating separate CHIP reporting.

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III. REPORTING CHECKLIST

States can utilize the following checklist (Table III.1) to facilitate their reporting of separate CHIP data to MSIS.

Table III.1. Checklist for Reporting Separate CHIP Data to MSIS

Convene planning meeting(s) of those with:	
Knowledge of separate CHIP program details	❑
Separate CHIP and Medicaid data and data systems expertise	❑
Medicaid staff responsible for MSIS reporting (including contractors)	❑
Other stakeholders	❑
Review the MSIS Data Dictionary Release 3.1	
Overall format (pp. 2-20)	❑
Eligibility reporting details (pp. 21-63)	❑
Comprehensive eligibility crosswalk (pp. 143-154)	❑
Claims reporting details (pp. 64-136)	❑
Types of Service reference (pp. 155-164)	❑
Develop a reporting plan with:	
Goals and objectives	❑
Multiple phases of reporting for different populations covered	❑
Timeline	❑
Communications plan	❑
Estimate the required level of effort	❑
Create crosswalks of eligibility groups, managed care plans, and waivers	❑
Specify intended reporting using the MSIS record layout template	❑
Create MSIS extract file(s)	❑
Link, merge, and deduplicate data from separate sources	❑
Review data for completeness and accuracy (prior to submitting)	
Limited eligibility data	❑
Complete eligibility data	❑
Fee-for-service claims	❑
Capitation claims (if state uses managed care)	❑
Encounter claims (if state uses managed care)	❑
Begin submitting data to CMS	❑

The first step for incorporating separate CHIP data into MSIS is to convene stakeholders to develop a reporting plan with goals and objectives, a timeline, and an internal communications strategy. After meeting, all participants should agree with the task objective (reporting CHIP data to MSIS) and understand their roles and responsibilities. To ensure the consistency of Medicaid and CHIP data reporting, inclusion of state Medicaid staff and/or contractors responsible for MSIS reporting is critical. Indeed, a great challenge for many states will be bridging distinctly separate programs, staff, and especially, data systems, which are often incompatible and lack interfaces that would permit immediate reporting of separate CHIP data.

States with separate data systems will need to develop a unified data extraction process to accommodate the requirement that MSIS files come from a single entity. Central to the challenge is the need to match, merge, and reconcile data from these different systems. For example, because eligibility reporting will accommodate only one instance of enrollment per month, states should not provide data that are duplicative or contradictory, such as two IDs for the same person.

States will also need to consult the MSIS Data Dictionary for guidance on reporting eligibility and claims (addressed in the previous section of this guide). This will require agreement among all parties on the overall data format, proper eligibility and claims values, specification of a comprehensive eligibility crosswalk as well as crosswalks for managed care and waiver reporting, and proper coding of the Type of Service data element.

One issue to address in the CHIP reporting plan is whether to implement it in phases or all at once. Although CMS encourages states to report the complete set of files as soon as possible, they can choose to incorporate separate CHIP data in the EL file first, followed by the claims files, or vice versa. A state's circumstances may dictate the specific process. For example, states may have CHIP programs that cover different populations for whom data reside in separate systems, resulting in eligibility data for one group becoming available sooner than data for another. Under these circumstances, states are encouraged to report what is currently available, but to do so while working to incorporate the remaining data. Claims reporting may also occur incrementally. States may find it easier to report one set of claims than another. For example, separate CHIP programs with managed care delivery systems may be able to report monthly capitation payments but not the associated managed care encounter data.

Another issue to address up front is the level of effort required to accommodate separate CHIP reporting. MSIS contractors might have contracts whose limited scopes of work do not

incorporate additional duties tied to extracting, assembling, and migrating separate CHIP eligibility and claims data. In addition, the resource and budget restrictions of many state programs may limit their ability to crosswalk data elements, develop programming specifications, and write program code. A wave of new activity brought about by health reform has absorbed the attention and strained the resources of Medicaid and CHIP programs and taxed their information technology systems, many of which are difficult to reprogram due to age and obsolescence. States wanting to collect and report person-level CHIP data to MSIS so they can have a standardized Medicaid/CHIP data source for their own analytical purposes must establish this activity as a priority at all necessary levels.

Once data are compiled and extracted, states should have a procedure for assessing all fields for completeness and accuracy prior to submitting the files to CMS. At this time, CMS does not support a test environment, and privacy concerns prohibit Mathematica from receiving the data directly from states to review. However, states choosing to receive TA from Mathematica can provide a set of "dummy" records for review and analysis that may address concerns about incomplete or incorrect data that would otherwise fail the CMS validation or data quality review processes.

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IV. COMMON REPORTING ERRORS TO AVOID

There are common errors that states should avoid when reporting MSIS data to CMS. Table IV.1 provides a checklist to help states prevent these errors.

Table IV.1. Checklist for Correctly Reporting Separate CHIP Data to MSIS

Consistency in use of unique identifiers over time	❑
Correct use of retroactive and correction records	❑
Correctly reporting claims adjustments	❑
Correctly reporting the Type of Service field	❑
Consistent enrollment and claims reporting	
Consistency in reporting eligibility using CHIP Code and claims using Type of Claim	❑
Use of same unique identifiers on eligibility and claims	❑
Matching Plan IDs on eligibility and claims records	❑
Consistency in reporting eligibility using Plan Type and claims using Type of Service	❑
Consistent ratios of reported enrollment-to-capitation claims	❑
Correctly reporting encounter claims data elements	
Reporting amounts paid to providers in the Amount Charged field	❑
Reporting actual payments, not the fee-for-service equivalent	❑
Accurately handling claims adjustments	❑

A. Inconsistent Enrollee Identifiers

According to the MSIS Data Dictionary, "Once unique permanent personal identification numbers are assigned to [enrollees], they must be consistently used to identify that individual, even if the individual is re-enrolled in a subsequent time period." By assigning unique, permanent personal identifiers, CMS and states can track individuals' enrollment and utilization of services over time and enable longitudinal analyses related to both. Issues arising from differences in personal identifiers assigned to individual enrollees may occur under one or more of the following conditions:

- **Transfers occurring between Medicaid and separate CHIP.** Many individuals transition between Medicaid and CHIP. If states integrate data from separate Medicaid and CHIP systems—each with its own identification conventions—for MSIS reporting, they must assign a unique, permanent identifier (either MSIS ID or SSN) to each individual. To do this, they might need to crosswalk identification numbers. A forthcoming document will address this subject in greater detail.

- **Mistaken assignment of new IDs.** Some individuals who lose eligibility for a period of time might later re-establish it. These individuals should retain the same identifiers for reporting purposes.
- **New systems and vendors.** States might replace their contractors, fiscal agents, eligibility systems, or Medicaid Management Information Systems (MMIS). In such cases, their management of personal identifier assignments should ensure continuity.

B. Retroactive and Correction Record Reporting Errors

States submitting retroactive and correction records in their EL files have the advantage of reporting more accurate data over time because they capture months of enrollment and data element changes that may not be captured by states reporting on the slightly delayed schedule. Reporting retroactive and correction records can, however, increase the potential for unintended errors. Because these records typically affect multiple past quarters, they might introduce problems that go undetected during the standard MSIS data quality review. For example, states may report correction records that apply intended changes but inadvertently erase other, valid values for the quarter. Errors might not be flagged until the data are reconciled and processed to create the annual MAX person-level file, at which point it is too late to correct them in MSIS. In providing TA, Mathematica can work with states to diagnose and correct problems stemming from the misapplication of retroactive and correction records.

C. Reporting Claims Adjustments

States could find claims adjustments difficult to report. To accurately calculate performance metrics, such as average amount paid for a Medicaid service, states need to report adjustments correctly. Methods of reporting adjusted claims differ widely across states. Some states adjust individual claims at the detail level, while others simply "void" the original and replace it with a resubmittal. Still others void the original and replace it with a new original. All of these methods are acceptable; in selecting one, a state should clearly understand its ultimate impact on reporting. Doing so could avoid problems such as duplicate claims reporting.

D. Errors Reporting Type of Service

Type of Service is an MSIS-specific data element that classifies procedures into a limited number of specific categories (for example, Type of Service "09" = Dental). States sometimes find this field difficult to report. Unlike other claims data elements, Type of Service is a "derived" field, meaning its values are contingent on other data elements. Claims systems do not store it as a standard field; instead, its value is calculated from one or more associated fields. Typical fields used to create Type of Service include *Claim Form* (for example, CMS-1500), *Claim Type* (Outpatient Hospital), *Provider Specialty* (Cardiology), and *Procedure Code* (90801: Psychological Diagnostic Interview Examination). This list is not all-inclusive. Despite some similarities, the manner in which states use field names native to their systems to categorize claims by Type of Service is unique to each state. Developing programming code to assign claims correctly can be difficult and time-consuming, and subtle differences can easily be overlooked.

E. Inconsistent Enrollment and Claims Reporting

Ideally, states will report enrollment and service usage that is consistent across the EL and claims files. However, the following inconsistencies might sometimes occur:

- **Inconsistent program assignment.** The CHIP Code in the monthly portion of the eligibility record designates whether an individual is enrolled in Medicaid, Medicaid expansion CHIP, or separate CHIP, or is not enrolled in any program. The Type of Claim field reported in each of the four claims files establishes whether a claim has been paid by the Medicaid program or the separate CHIP program. Individuals should have separate CHIP claims for services received while they were separate CHIP enrollees and Medicaid claims for services received while they were Medicaid enrollees. In instances in which individuals are enrolled in both separate CHIP and Medicaid or Medicaid expansion CHIP during the quarter, the state should expect to report claims paid under both programs. Problems occur when an enrollee's claims do not accurately reflect his or her enrollment status—for example, when a child reported as enrolled in separate CHIP has associated Medicaid or Medicaid expansion claims. In such cases, states usually can identify misreporting by looking at claims for children who were enrolled only in separate CHIP during the quarter. In general, these children should have no Medicaid or Medicaid expansion claims during the quarter.

- **Use of different unique identifiers on EL and claims files.** If data for these file types lack a common primary key to identify unique individuals, there will be no way to link service usage with enrollment. (In some cases, states may report "orphan" claims with no associated enrollee. This typically occurs when dates of service and eligibility do not coincide, or the claim is adjudicated after disenrollment.)
- **Inconsistent Plan IDs on the EL and claims files.** Prior to submitting the first file with separate CHIP data, states with managed care delivery systems should supply a crosswalk of MCOs serving their programs and adhere to this list when reporting the Plan IDs in all MSIS files. Linking issues may arise when reported IDs are inconsistent across files—when, for example, an EL file includes one ID while a corresponding claims file includes another for the same plan.
- **Inconsistent Plan Type and Type of Service reporting.** MCOs fall into three categories in the Data Dictionary: (1) comprehensive health plans, like health maintenance organizations (HMOs), health insurance organizations (HIOs), or Programs for All-Inclusive Care for the Elderly (PACE); (2) Prepaid Health Plans (PHPs) contracted to provide limited services, such as dental, behavioral health, and transportation; and (3) Primary Care Case Management (PCCM) programs that include providers who are responsible for the provision and coordination of medical services to enrollees. The EL file Plan Type has values that correspond to the Type of Service element on capitation payments. Table IV.2 details this relationship. A mismatch between the respective values for these two variables could result in errors that make the data unreliable.[3]
- **Inconsistent reporting of managed care enrollment and capitation payments.** Under normal circumstances, total member months of enrollment for the quarter should approximate the number of capitation payments reported because many states submit one capitation claim per member-month of enrollment. There are exceptions, however; for example, some states opt to make multiple payments per person per month.

[3] Currently, neither stage of data quality validation includes performing relational tests to look for consistency in reported managed care values between file types. This is due to the submission by states of eligibility and claims files at different time periods.

Table IV.2. Eligible File Plan Type Values and Corresponding Claims File Type of Service Values

Plan Type	Plan Type Definition	Type of Service	Type of Service Definition
01	Comprehensive	20	Capitated payment (HMO/HIO/PACE)
02	Dental	21	Capitated payments (PHP)
03	Behavioral health	21	Capitated payments (PHP)
04	Prenatal/Delivery	21	Capitated payments (PHP)
05	Long term care	20 or 21*	Capitated payment (HMO/HIO/PACE) Capitated payments (PHP)
06	PACE	20	Capitated payment (HMO/HIO/PACE)
07	PCCM	22	Capitated payments for PCCM
08	Other	21	Capitated payments (PHP)

Source: MSIS File Specifications and Data Dictionary (Release 3.1)

* Long term care plans can be considered comprehensive or limited, depending on the specific program.

F. Problems with Reporting Managed Care Encounter Data

Many states have managed care delivery systems. Problems associated with integrating encounter data in MSIS can be substantial and could be exacerbated in the states where different agencies administer Medicaid and separate CHIP programs.

Aside from merging Medicaid and CHIP data fields and formats, some states find it difficult to report encounter data, usually for two reasons. The first is that many MCOs do not report encounters to the state. Normally, states overcome this obstacle through contractual language with the MCOs. The second is that some among MCOs that do report encounters do not correctly report the payments they make to providers for services included in encounter claims. Again, states often resolve this with contractual language specifying the data MCOs must report. In some instances, states and their vendors might not know how to report managed care services or expenditures correctly. The Data Dictionary instructs users on how to report both procedures and expenditures—that is, the actual amounts paid by Medicaid. Since managed care states do not pay providers directly, however, their liability for encounters is technically zero. Therefore, they should (1) report the Medicaid Amount Paid as $0, and (2) report in the Medicaid Amount Charged field the actual amount paid by MCOs to providers, not the fee-for-service equivalent.

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V. AVAILABLE RESOURCES

The realities of integrating separate data systems and a lack of prior experience in reporting data in the MSIS format could make reporting separate CHIP data to MSIS challenging. This guide has provided background, a reporting checklist, and guidance on known problems to avoid, all modeled on a TA approach Mathematica has developed.

To date, Mathematica has provided comprehensive TA to 13 states—in person, via teleconference, webinars, and through other communications media—and we are currently available to provide such assistance to additional interested states. Each TA arrangement takes into account a state's unique circumstances and needs. We work closely with state staff to establish a reporting plan, resolve problems, and foster progress—for example, by helping them create crosswalks to identify Type of Service correctly—all at no cost to the states. Since 2011, five states that have received TA have subsequently reported increased person-level separate CHIP data.

Mathematica has also developed other resources that may assist states. For example, we have created an MSIS record layout for each file type as a guide for programmers for reporting all data elements. The guide can be used as a crosswalk to map states' data elements into MSIS data elements. This guide will help ensure that the definition and values of MSIS data elements map appropriately to states' data.

Additional resources include forthcoming guides sharing best practices for merging and linking data from separate systems and potential policy and research uses for person-level, separate CHIP data. Mathematica will also hold webinars for TA and non-TA states to share tips and common strategies for working through reporting problems.

States may contact Mathematica for TA and other resources by e-mailing ccamillo@mathematica-mpr.com.

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