

# Introduction to the Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF)

May 2021

# What Is the Transformed Medicaid Statistical Information System (T-MSIS)?

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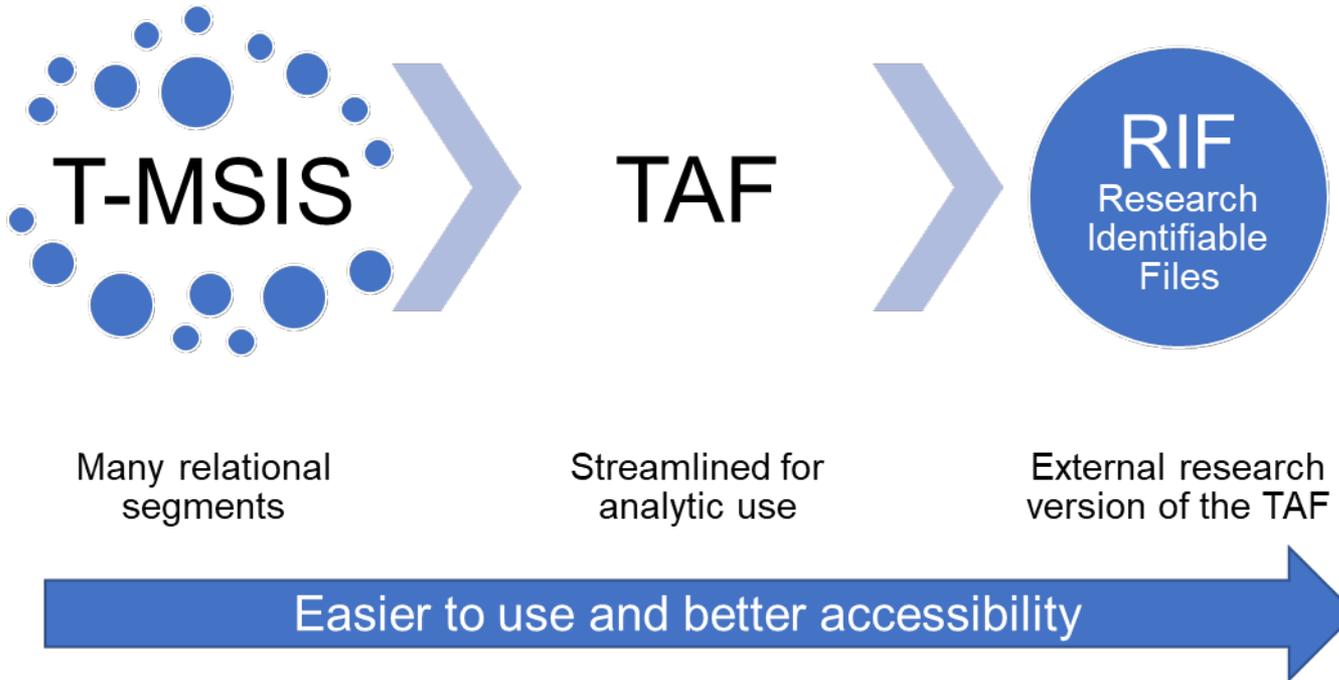
- **Next generation of federal data on Medicaid and the Children's Health Insurance Program (CHIP), replacing the Medicaid Statistical Information System (MSIS)**
- **States and territories submit data from their Medicaid Management Information System to the Centers for Medicare & Medicaid Services (CMS) in the T-MSIS format**
- **T-MSIS data are the basis for the T-MSIS Analytic Files (TAF)**

# What Is the TAF?

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- **An enhanced version of the T-MSIS data tailored to the research needs of those who use Medicaid and CHIP data**
- **Replaces the Medicaid Analytic eXtract (MAX) data as the next generation of research-ready Medicaid and CHIP data**
- **Includes data on:**
  - Beneficiary demographics
  - Eligibility
  - Program enrollment
  - Managed care
  - Providers
  - Service use
  - Payments

# Relationship Between Data Sources



# Purpose of the TAF

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- **Analyzing T-MSIS data can be a challenge**
  - Files are large and complex
  - Updated frequently
- **CMS created the TAF to support analysis, research, and data-driven decisions on key dimensions of Medicaid and CHIP**
  - Expenditures
  - Enrollment patterns
  - Program evaluation
  - Policy assessment
  - Health care quality
  - Provider participation

# TAF File Types-Annual Files

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- **Annual Demographic and Eligibility (DE) file**
  - Demographic, eligibility, and enrollment data on beneficiaries enrolled for at least one day during the calendar year
- **Annual Managed Care Plan (APL) file**
  - Information regarding the characteristics, locations, population enrolled, service areas and operating authorities for all Medicaid- or CHIP-eligible health plans or managed-care entities active at least one day during the calendar year, as submitted to T-MSIS by their respective state agencies.
- **Annual Provider (APR) file**
  - Information regarding the characteristics, taxonomies/classifications, enrollment, affiliated groups, affiliated programs, locations, licensing/accreditations, identifiers and bed types for all Medicaid- or CHIP-eligible providers active at least one day during the calendar year, as submitted to T-MSIS by their respective state agencies.

# TAF File Types-Claims Files

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- **Four monthly claims files**
  - Inpatient hospital services
  - Long-term care services
  - Other services
  - Pharmacy claims
- **Each claims file consists of two separate but linkable files: a claim-header level file and a claim-line level file**

# Data in the TAF Claims Files

File	Data		
Inpatient (IP)	<ul style="list-style-type: none"> <li>• Inpatient hospital claims</li> </ul>		
Long-Term Care (LT)	<ul style="list-style-type: none"> <li>• Nursing facility</li> <li>• Intermediate care facility services for individuals with intellectual disabilities</li> <li>• Mental health facility services</li> <li>• Independent (free-standing) psychiatric wings of acute care hospitals</li> </ul>		
Other Services (OT)	<table border="0"> <tr> <td data-bbox="568 563 1213 836"> <ul style="list-style-type: none"> <li>• Physician services</li> <li>• Outpatient hospital services</li> <li>• Dental services</li> <li>• Other physician services</li> <li>• Clinic services</li> <li>• Laboratory services</li> </ul> </td> <td data-bbox="1213 563 1868 836"> <ul style="list-style-type: none"> <li>• X-ray services</li> <li>• Sterilizations</li> <li>• Home health services</li> <li>• Personal support services</li> <li>• Managed care capitation payments</li> </ul> </td> </tr> </table>	<ul style="list-style-type: none"> <li>• Physician services</li> <li>• Outpatient hospital services</li> <li>• Dental services</li> <li>• Other physician services</li> <li>• Clinic services</li> <li>• Laboratory services</li> </ul>	<ul style="list-style-type: none"> <li>• X-ray services</li> <li>• Sterilizations</li> <li>• Home health services</li> <li>• Personal support services</li> <li>• Managed care capitation payments</li> </ul>
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Pharmacy (RX)	<ul style="list-style-type: none"> <li>• Drugs</li> <li>• Other pharmacy-provided services</li> </ul>		

# Criteria for Including Claims in the TAF

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- **Active claims with service dates during the reference month**
- **Non-denied claim headers**
- **Non-void claim headers**
- **Non-duplicate claim headers**
  - **Five data elements make up the “record key” that identifies unique claim headers:**
    - Submitting state code
    - Original internal control number (ICN)
    - Adjustment ICN
    - Adjustment indicator
    - Adjudication date
  - **All active T-MSIS claim header records that have identical record-key data are excluded**

## **Criteria for Including Claims in the TAF (cont'd)**

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- **Claim lines that correspond to included claim headers**
  - Corresponding headers and lines have the same data elements in the record key
  - All lines (including denied lines) that correspond to accepted headers are included in the TAF line-level file
  - All lines that correspond to excluded headers are excluded from the TAF claims files
- **Final action claim headers—last adjudicated claim after all adjustments are made**

# Differences Between MAX and the TAF

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- **MAX files are organized by state and year, whereas the TAF DE is organized by year only, and TAF claims files are organized by month**
- **New types of files in the TAF**
  - The TAF DE file corresponds to eligibility information in the MAX Person Summary file
  - The TAF APL and APR do not have corresponding MAX files
- **The TAF includes hundreds of additional data elements compared with MAX**
- **Submission frequency for T-MSIS, the TAF's source data, is monthly rather than quarterly, as it was for MSIS**

## **Differences Between MAX and the TAF (cont'd)**

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- **Some data elements in MAX do not have a perfect TAF analog**
  - **Example: In MAX, a beneficiary's eligibility for Medicaid or CHIP is based on MSIS definitions of maintenance assistance status and basis of eligibility, whereas eligibility in the TAF is based on the T-MSIS eligibility group code**
- **The volume of claims in MAX and in the TAF may be very different because substantial policy changes were made during the transition from MSIS to T-MSIS (e.g., adult expansion and changes in managed care)**

# Differences Between MAX and the TAF by Topic

Topic	MAX	TAF
CHIP claims	Does not include separate CHIP claims	Claims files include separate CHIP claims
Adjustment algorithm	Adjustment algorithm to create ‘final action event’ records is tailored to each state’s unique way of adjusting claims	A uniform adjustment algorithm applies to all states, except Illinois, which has its own adjustment algorithm
Claim type “other”	Does not include claims with “other” claim type codes	Claims files include claims with “other” claim type codes <sup>a</sup>
Data quality	Production includes many data-cleaning business rules and extensive validation and data-quality reviews at the federal level	Production includes few data-cleaning business rules, and states are responsible for the quality of their data
Headers and lines	IP, LT, and RX file rows represent claim headers, and OT rows represent claim lines	IP, LT, OT, and RX files are each separated into claim header files and claim line files
Beneficiary identification (ID)	MAX uses state-provided crosswalks to assign the same MSIS ID over time	CCW BENE ID is added to the TAF to facilitate tracking beneficiaries over time and across states, and linking to other CMS data

# TAF Users

Center for Medicaid and CHIP Services	Center for Medicare and Medicaid Innovation	CMS Center for Program Integrity	CMS Office of the Actuary
CMS Office of Enterprise Data and Analytics	Office of Inspector General	Government Accountability Office	Congressional Budget Office
Medicaid and CHIP Payment and Access Commission	Census Bureau	Agency for Healthcare Research and Quality	Assistant Secretary for Planning and Evaluation
Centers for Disease Control and Prevention	Contractors for CMS and other federal agencies	Kaiser Family Foundation	Researchers

## How to Access the TAF RIF

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- **Users may access the TAF RIF in the CMS Virtual Research Data Center, also known as the Chronic Conditions Data Warehouse**
- **Users outside of CMS may request access to the TAF RIF through the Research Data Assistance Center (ResDAC) – [www.ResDAC.org](http://www.ResDAC.org)**
- **Access to the TAF RIF is provided to researchers, government agencies, and contractors approved under a data use agreement for research purposes subject to the provisions of the Privacy Act system of records notice for these data**

# Documentation and Support

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- **TAF RIF Documentation available at the [Chronic Conditions Data Warehouse website](#)**
  - TAF RIF User Guide
  - Codebook
  - File layouts
- **Additional Support Materials available at [Medicaid.gov](#)**
  - TAF availability chart (indicates when states transitioned to T-MSIS)
  - Crosswalk of MAX-to-TAF support materials
  - TAF technical guidance documents
- **TAF data quality resources available at [DQ Atlas](#)**
- **Support is available at [ResDAC](#)**