

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

Transcript

May 2021

(Cover slide)

This presentation is an introduction to the Transformed Medicaid Statistical Information System Analytic Files, or TAF. It includes background on content and creation of TAF as well as direction for accessing TAF data and additional guidance.

(Slide 2)

Let's start with a brief introduction to the TAF source data, Transformed Medicaid Statistical Information System, or T-MSIS.

T-MSIS is the next generation of federal data on Medicaid and the Children's Health Insurance Program (CHIP), replacing the Medicaid Statistical Information System (MSIS).

Each state, the District of Columbia, the Virgin Islands, and Puerto Rico 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).

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The TAF is an enhanced version of the T-MSIS data that is tailored to the research needs of those who use Medicaid and CHIP data.

The TAF replaces the Medicaid Analytic eXtract (MAX) data as the next generation of research-ready Medicaid and CHIP data.

The TAF includes data on beneficiary demographics, eligibility, program enrollment, managed care, providers, service use, and payments.

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The graphic displayed on slide 4 represents the relationships across T-MSIS-based data sources.

Each T-MSIS file submission contains sets of data organized into record segments. T-MSIS eligibility files include 20 person-specific record segments. Each segment captures different pieces of information about each individual eligible for Medicaid or CHIP. When related to one another by shared record keys, the segments represent a full record of information for each eligible individual. For claims files, a relational

record segment is either a claim header or a claim line. A full claim record may have one claim header and many claim lines. Headers and lines relate to one another by shared record keys, as well.

To create TAF, T-MSIS data are streamlined for analytic use. The external research version of TAF are known as research identifiable files (or RIF). When producing the RIF from TAF, a unique beneficiary identifier (commonly referred to as the CCW BENE ID) is added to the file to facilitate tracking beneficiaries over time and across states and linking to other CMS data.

As the TAF is created from T-MSIS data and the RIF is created from the TAF, the data become easier to use and more accessible.

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The size, complexity, and frequency of updates to the T-MSIS data make it very challenging to use T-MSIS for analytic purposes.

CMS created the TAF to support analysis, research and data-driven decisions on key dimensions of Medicaid and CHIP, including expenditures, enrollment patterns, program evaluation, policy assessment, health care quality, and provider participation.

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There are currently 7 TAF available for researchers. This slide details information about the annual files.

The Annual Demographic and Eligibility (DE) TAF contains beneficiary-level demographic, eligibility and enrollment data on beneficiaries enrolled for at least one day during the calendar year.

The Annual Managed Care Plan (APL) TAF contains 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.

The Annual Provider (APR) TAF contains 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.

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In addition to the annual files described in the last slide, four monthly claims files are also available. These include data on inpatient hospital services, long-term care services, other services, and pharmacy claims.

Each claims file consists of two separate but linkable files – a claim-header level file and a claim-line level file.

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Descriptions of data within each TAF claims file are detailed in the table on slide 8.

The Inpatient (IP) TAF includes data on inpatient hospital claims.

The Long-Term Care (LT) TAF includes service data on nursing facilities, intermediate care facilities for individuals with intellectual disabilities, mental health facilities, and independent (free-standing) psychiatric wings of acute care hospitals.

The Other Services (OT) TAF includes data on physician services, outpatient hospital services, dental services, other physician services, clinic services, laboratory services, x-ray services, sterilizations, home health services, personal support services, and managed care capitation payments.

The Pharmacy (RX) TAF includes drug data and data on other services provided by pharmacies.

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TAF monthly claims files include active claims with service dates during the reference month.

Only non-denied, non-void, and non-duplicate claim headers are included in claims files.

Five data elements make up the “record key” that identifies unique claim headers. These elements include the submitting state code, the original internal control number (ICN), the adjustment ICN, the adjustment indicator, and the adjudication date.

All active T-MSIS claim header records that have identical record-key data are considered duplicates, and are excluded from the TAF, even if other fields in the records contain unique data.

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TAF claims files only include 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.

Finally, TAF claims files only include final action claim headers, or, rather the last adjudicated claim after all adjustments are made.

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Users familiar with MAX should be aware of important differences between MAX and the TAF.

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.

The TAF includes new file types. The TAF DE corresponds to the 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, including more granular data elements pertaining to managed care, waivers, and Long Term Services & Supports demonstrations and programs.

Submission frequency for T-MSIS, the TAF's source data, is monthly rather than quarterly, as it was for MSIS.

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Some data elements in MAX do not have a perfect TAF analog. For 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, including adult expansion and managed care changes.

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The volume of claims in MAX and in the TAF may also be substantially different due to differences in how the files are created. Key differences between MAX and TAF creation are displayed in the table on slide 13, by topic.

First of all, TAF claims files include separate CHIP claims, while MAX does not.

In MAX, the 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 to create TAF. Illinois is the exception as it has a unique adjustment algorithm.

TAF claims files include claims with "other" claim type codes, including other fee-for-service claim, other capitated payment, other managed care encounter, and other supplemental payment. MAX does not include claims with "other" claim type codes.

MAX production includes many data-cleaning business rules and extensive validation and data quality reviews at the federal level. TAF production involves few data-cleaning business rules, and states are responsible for the quality of their data. Information on the completeness and quality of key TAF data elements is shown on DQ Atlas, available on Medicaid.gov. DQ Atlas is an interactive, web-based tool that allows users to explore the quality and usability of the TAF for their analytic needs.

In MAX, IP, LT, and RX file rows represent claim headers, while OT rows represent claim lines. TAF IP, LT, OT, and RX files are separated into claim header files and claim line files.

Finally, MAX uses state-provided crosswalks to assign the same MSIS ID over time, whereas TAF does not change the MSIS ID submitted by the state. In TAF a CCW BENE ID is added to the TAF to facilitate tracking beneficiaries over time and across states and linking to other CMS data.

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TAF users include CMS and its contractors; other federal agencies such as the Office of the Inspector General, the Government Accountability Office, and the Census Bureau; as well as researchers and nonprofit organizations.

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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) by visiting 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.

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TAF RIF documentation, including a user guide, codebook, and file layouts are available at the Chronic Conditions Warehouse website.

There are a number of additional support materials available at Medicaid.gov and TAF data quality resources for over 80 topics by state and year are available at the DQ Atlas website.

Please visit ResDAC.org for additional support.

Thank you for reviewing this introduction to the TAF.