



# Update on Transformed Medicaid Statistical Information System (T-MSIS)

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**Medicaid and CHIP Payment and Access Commission**

Aaron Pervin and Chris Park

April 9, 2021

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# Overview

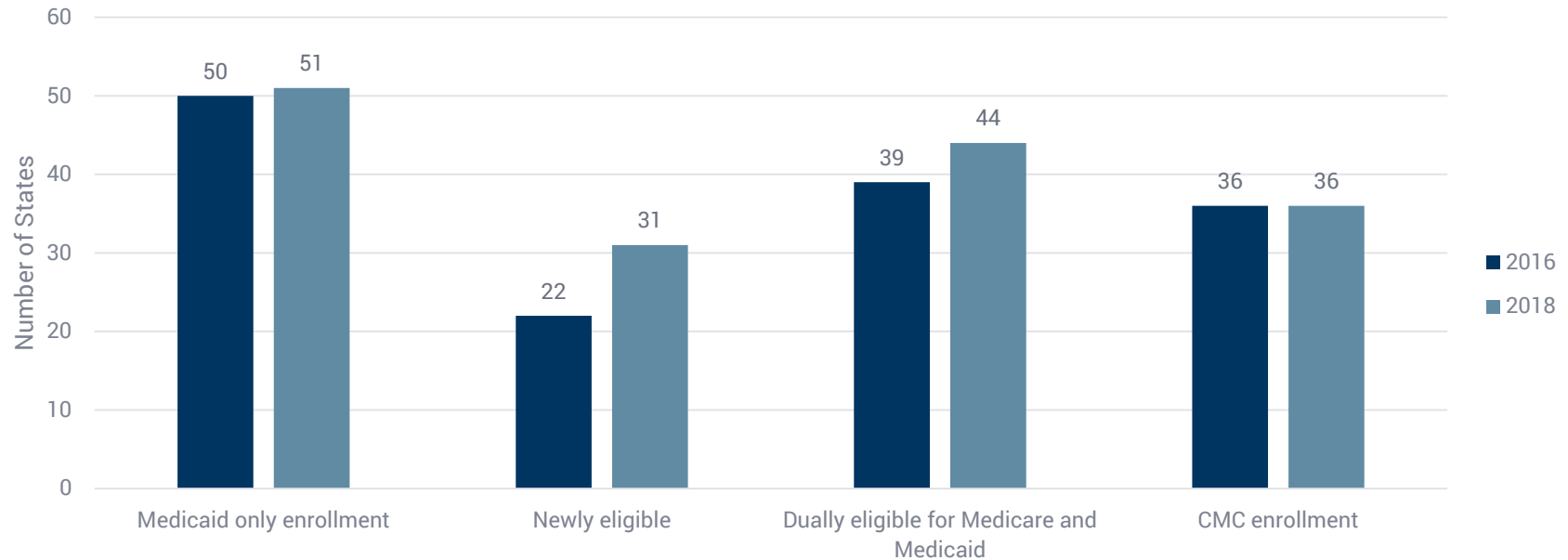
- Background
- Data quality improvement
- Validation of data
- Continuing challenges
- T-MSIS limitations
- Future work

# T-MSIS Background

- Only federal Medicaid data source for person-level information on eligibility, demographics, service use, and spending
  - 1,400 data elements with 2,800 automated quality checks
  - 8 data files: eligibility file, four claim files, provider file, managed care file, third-party liability file
- As of February 2021, all states and two territories are regularly submitting data
- CMS has developed the Data Quality (DQ) Atlas with summary statistics on the quality of state-level data

# Quality of Data Has Improved

## Number of States with Low or Medium Concern on Enrollment, CYs 2016 and 2018



**Notes:** CMC is comprehensive managed care. Newly eligible refers to those who are eligible under Section 1902(a)(10)(A)(i)(VIII) of the Social Security Act and would not have qualified for Medicaid coverage under eligibility rules in place as of December 1, 2009.

**Source:** MACPAC 2021, analysis of CMS Medicaid Data Quality Atlas

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# Recent Uses of T-MSIS

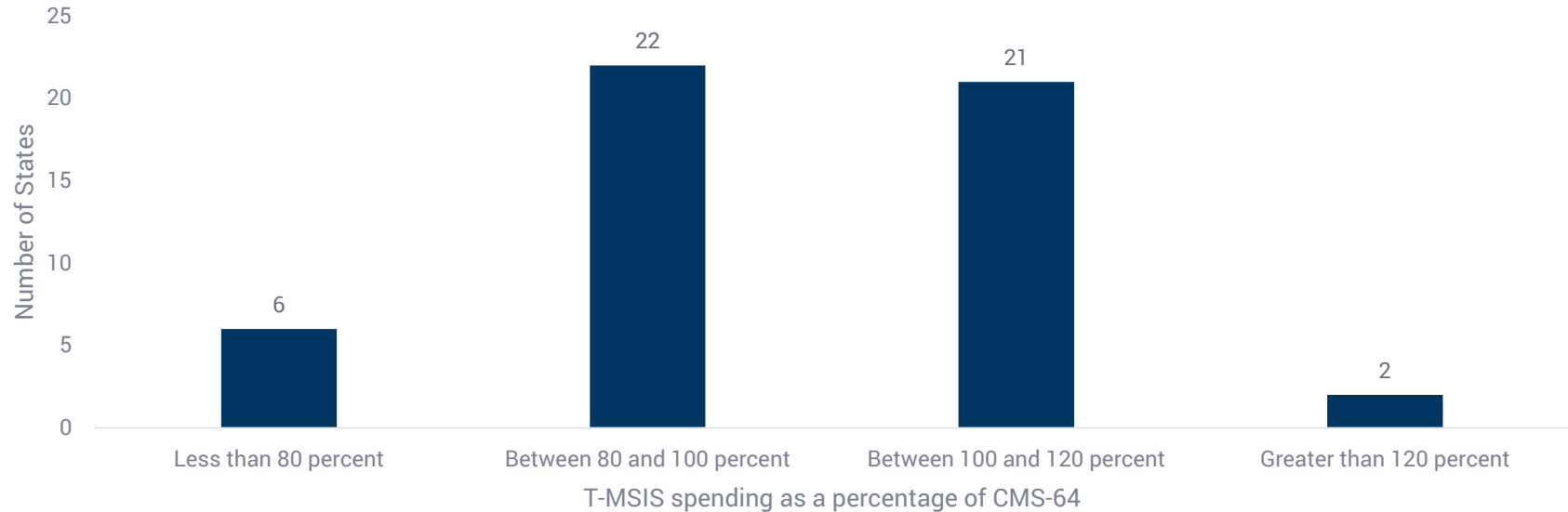
- FY 2018 T-MSIS data were of sufficient quality for certain publications
- 2020 MACStats data book
  - Enrollment and spending by state and eligibility group
- Mandatory report to Congress on non-emergency medical transportation (NEMT)
  - NEMT use by eligibility group and selected diagnoses
  - NEMT spending

# T-MSIS is More Reliable for Certain Types of Analyses

- Aggregated up to larger categories
  - Total enrollment or spending is more accurate than enrollment for a specific eligibility group or spending for a specific service category
  - Larger categories allow for spending adjustments to match the CMS-64
- Using variables and values that were reported in MSIS
- Using variables required for provider payment (e.g., diagnosis or procedure codes)

# State Spending Reported in T-MSIS Versus CMS-64

## Comparison of Spending Between T-MSIS and CMS-64, FY 2018



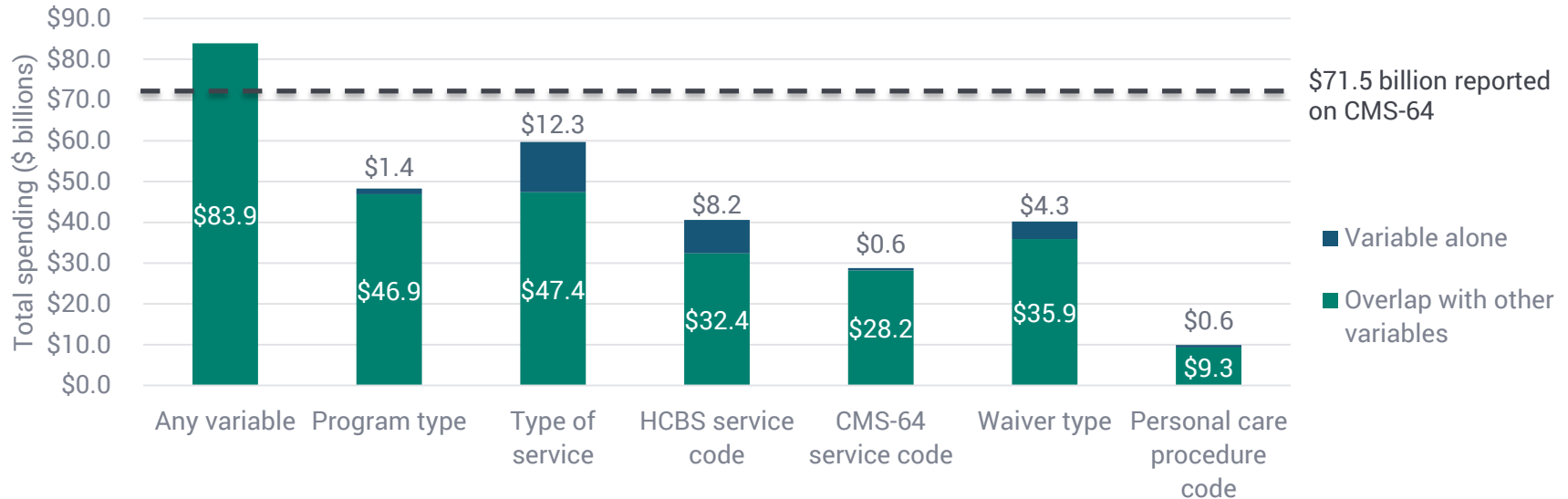
**Source:** MACPAC, 2021, analysis of T-MSIS and CMS-64 net expenditure financial management report

# More Granular Analyses Require Additional Validation Work

- Population-specific or service-specific data
  - Cannot make adjustment to match CMS-64 reliably
  - States may not consistently report at the more detailed level (e.g., reporting newly eligible adults in other adult categories)
  - States may not report similar information consistently across multiple variables (e.g., non-institutional long-term services and supports (LTSS))
- Encounter data
  - More states are reporting encounter data compared to MSIS, but we must still check to see if all plans in a state are reporting sufficient encounter data



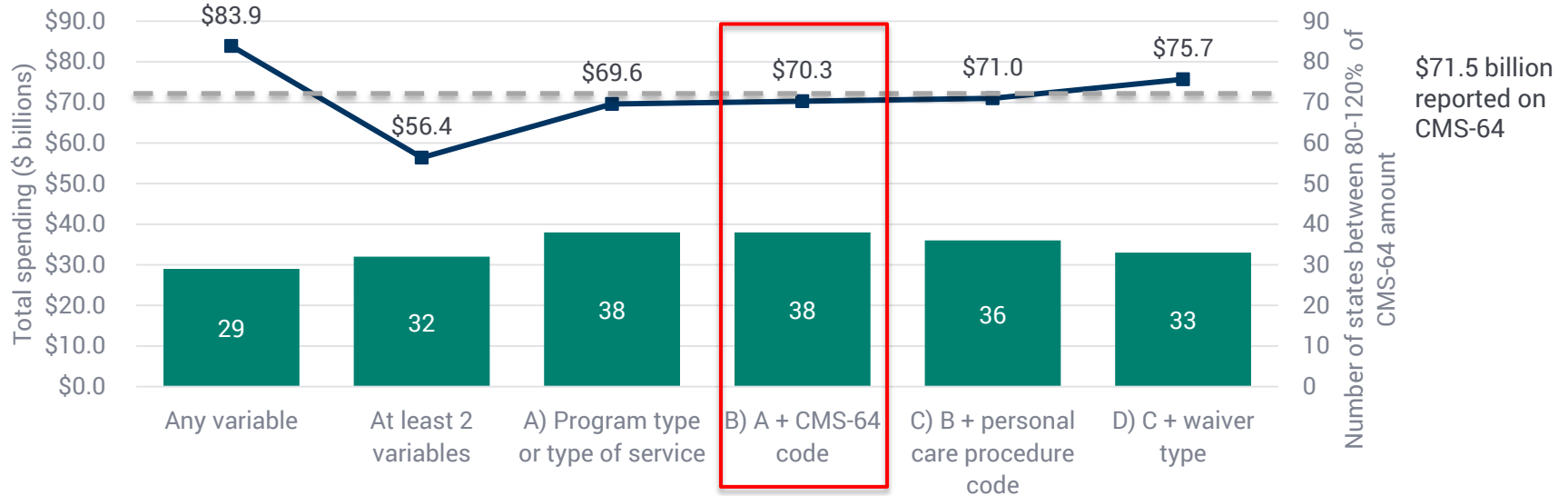
# Non-Institutional LTSS Spending Under Different Variables, FY 2018



**Note:** LTSS is long-term services and supports. HCBS is home and community based service. Represents fee-for-service spending. Any variable represents the total amount of spending identified by program type, type of service, HCBS service code, CMS-64 service code, waiver type, or personal care procedure code. Overlap with other variables indicates that this amount of spending was also identified by one of the other variables. Variable alone indicates that this amount of spending was only identified by this particular variable.

**Source:** MACPAC, 2021, analysis of T-MSIS and CMS-64 net expenditure financial management report

# Combining Non-Institutional LTSS Variables, FY 2018



**Note:** LTSS is long-term services and supports. Amounts represent fee-for-service spending. Any variable represents the total amount of spending identified by program type, type of service, HCBS service code, CMS-64 service code, waiver type, or personal care procedure code. At least two variables indicates that the claim was identified as non-institutional LTSS by two or more variables.

**Source:** MACPAC, 2021, analysis of T-MSIS and CMS-64 net expenditure financial management report

# Validating Encounter Data

- States are submitting more encounter data in T-MSIS compared to MSIS
- Our work identified many NEMT encounter claims (61.5 million) from both comprehensive managed care and transportation plans
  - Only looked at a subset of all encounters
  - Not all plans in a state were submitting similar amounts of encounter data
- More work is needed to determine whether encounter data is complete for other analyses
  - For example, CMS has identified eight states as having inpatient encounter data that is either a high concern or unusable

# Ongoing Analytical Challenges

- Use and spending of services that are broadly defined
  - Services that do not have a specific type of service value or a well defined set of procedure codes (e.g., behavioral health and social determinants of health)
- Data by race and ethnicity
  - Frequently reported as unknown or missing
  - Not required at the time of application
- Data for earlier periods may not be as complete as more recent years

# T-MSIS Does Not Contain Certain Information

- T-MSIS data come from eligibility records and claims
- T-MSIS does not capture information only available through a survey
  - Measures of unmet need
  - Beneficiary satisfaction
- T-MSIS does not capture outcomes from medical records (e.g., lab test results)

# 2021-2022 Work Plan

- 2021 MACStats
- Data book for beneficiaries dually eligible for Medicare and Medicaid
- Enrollment and spending under the Money Follows the Person program
- Utilization of preventive services among beneficiaries with a behavioral health diagnosis
- Assess completeness and accuracy of additional variables



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