

**MOVING PAST
DISRUPTION
TO IMPROVE
ORAL HEALTHCARE**

Data You Can Use: The DQA State Oral Healthcare Quality Dashboard

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Disclosures

- Dr. Herndon is presenting in her capacity as a methodology consultant to the Dental Quality Alliance.

Measurement in dentistry: where we were

IOM (2011), *Advancing Oral Health In America*, Key Findings and Conclusions

“Oral health lags significantly behind the remainder of the health care system in developing quality measures, and as a result, little is known about the quality of oral health care.”



U.S. Department of Health and Human Services

Centers for Medicare & Medicaid Services

2008 NATIONAL DENTAL SUMMARY

January 2009

Dental Quality Alliance: CMS is interested in forming a Dental Quality Alliance (DQA) and is currently in discussions with the American Dental Association (ADA) to begin this process. The DQA would bring together parties from many aspects of oral health fields including national dental organizations, Federal and State partners, payers and consumers to begin working together on measurements that could be used by States for purposes of improving the delivery of oral health services and the development of quality measures. These measures could ultimately be used to enhance reporting on the CMS form 416 or through state-based value based purchasing initiatives. While children eligible for Medicaid will be the primary area of concern, the DQA will also address dental services for the adult population.

Today: Reliable and Validated Measures



Dental Quality Alliance Measures

Children	Adults/Pregnancy
Oral Evaluation**	Oral Evaluation During Pregnancy (New!)*
Topical Fluoride for Children*	Utilization of Services During Pregnancy (New!)
Sealant Receipt on Permanent 1 st Molars*	Topical Fluoride: Adults at Elevated Caries Risk
Sealant Receipt on Permanent 2 nd Molars	Oral Evaluation: Adults with Diabetes
Care Continuity	Periodontal Evaluation: Adults with Periodontitis
Caries Risk Documentation	Non-Surgical Ongoing Care: Adults with Periodontitis
Ambulatory Care Sensitive ED Visits for Dental Caries	Ambulatory Care Sensitive ED Visits for Non-Traumatic Dental Conditions*
Follow-Up After ED Visits for Dental Caries	Follow-Up after ED Visits for Non-Traumatic Dental Conditions
Utilization of Services	
Preventive Services	
Treatment Services	
Usual Source of Services	
Per Member Per Month Cost of Clinical Services	

Used for QI, Public Reporting, & Payment Programs – Examples:

- Centers for Medicare & Medicaid Services: Medicaid and CHIP Child and Adult Core Sets
- Health Resources & Services Administration: Uniform Data System Reporting
- Covered California – Health Benefit Exchange, Plan Contracts
- State Medicaid and CHIP Programs (Payment Programs, Public Reporting, QI, Plan Contracts)

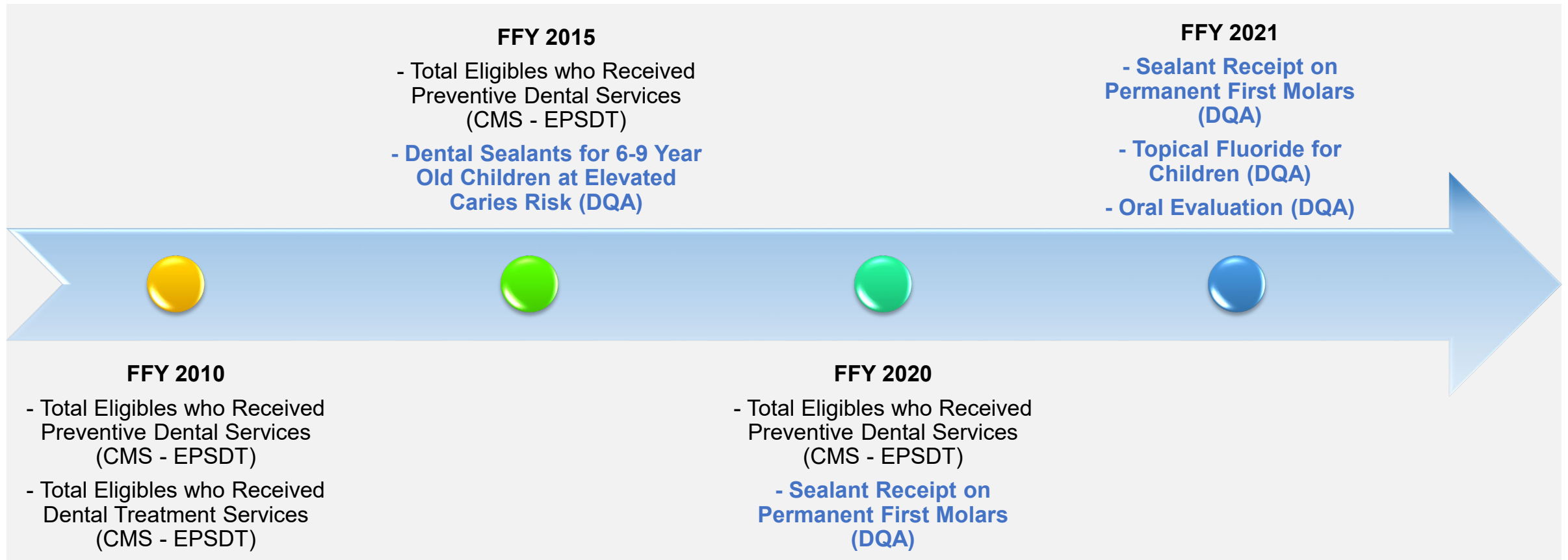
*CMS Child Core Set

*Universal Foundation (proposed)

*CMS Adult Core Set (recommended)

Children: moving from broad utilization indicators to evidence-based quality measures

Centers for Medicare & Medicaid Services: Core Set of Children's Health Care Quality Measures for Medicaid and CHIP - Dental and Oral Health Services



Adults: moving from no oral health measures to evidence-based quality measures

Centers for Medicare & Medicaid Services: Core Set of Adult Health Care Quality Measures for Medicaid

FFY 2013

- Medicaid Adult Core Set established.
- No oral health measures.

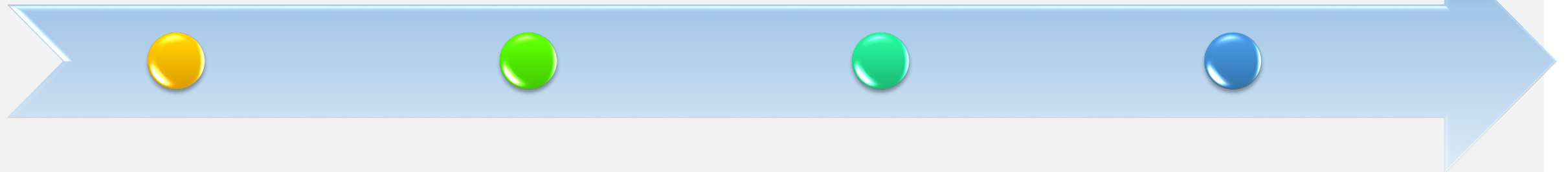
FFY 2025: *Recommended*

Maternal and Perinatal Health

- Oral Evaluation During Pregnancy (DQA)

Dental and Oral Health Services

- Ambulatory Care Sensitive Emergency Department Visits for Non-Traumatic Dental Conditions in Adults (DQA)



Measurement in dentistry: data for testing and reporting measures

Where we were

Testing

- 2-3 programs included

Reporting

- Each state calculates its own measures

Where we are

Medicaid.gov
Keeping America Healthy

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MACBIS

Transformed Medicaid
Statistical Information System
(T-MSIS)

Medicaid & CHIP Research Files

T-MSIS Analytic Files

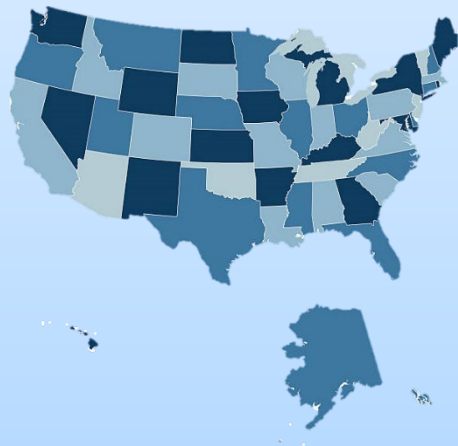
Medicaid Analytic eXtract

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

The Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) Research Identifiable Files (RIF) are a research-optimized version of T-MSIS data and serve as a data source tailored to meet the broad research needs of the Medicaid and CHIP data user community. These files include data on Medicaid and Children's Health Insurance Program (CHIP) enrollment, demographics, service utilization and payments.

What is T-MSIS?

Medicaid/CHIP
eligibility and claims
data for all states



DQA approved for data
access:

- Calendar years 2014–2020
- Dental, Medical, Pharmacy Claims and Enrollment Data

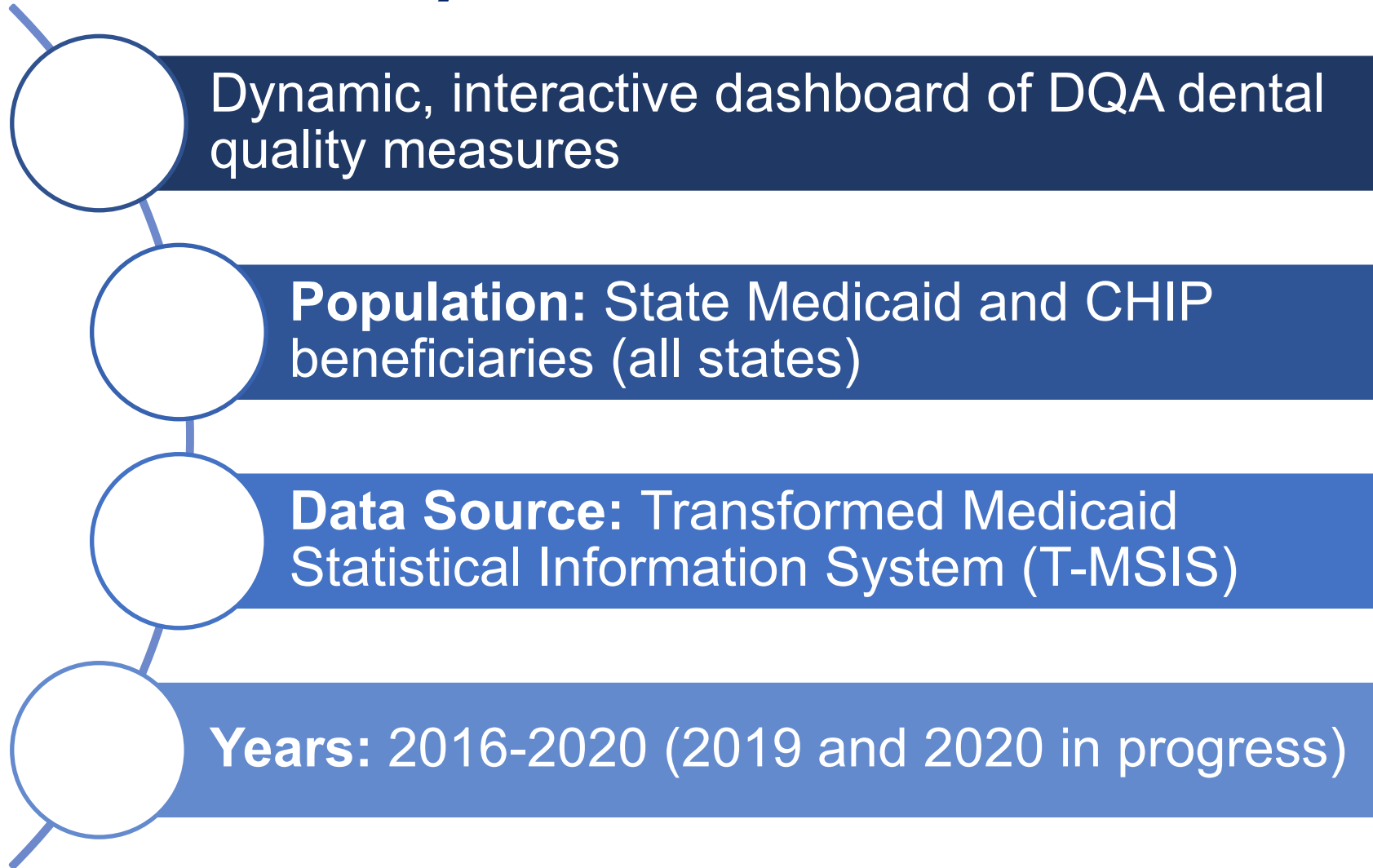


- Includes facility and professional claims; inpatient and outpatient

Objectives:

- Conduct oral healthcare quality measurement research
- Use findings to develop state-level reports using DQA measures
- Identify opportunities for measure refinement and development
- Develop technical assistance resources from learnings to support DQA measure implementation

Dental Quality Alliance's State Oral Healthcare Quality Dashboard



CHILDREN



MEASURES

- Utilization of Services (dental, oral health, and dental or oral health)
- Oral Evaluation (dental)
- Care Continuity for Children (dental)
- Caries Risk Documentation (dental or oral health)
- Topical Fluoride (dental, oral health, and dental or oral health)
- ED Visits for Dental Caries
- 7-Day Follow-Up after ED Visit for Dental Caries (dental)
- 30-Day Follow-Up after ED Visit for Dental Caries (dental)

Dashboard: Features

FILTERS

- State
- Years
- Program: Medicaid or Medicaid & CHIP
- Service Type: Dental, Oral Health, Dental or Oral Health
- Stratification by Population Characteristics
 - Age
 - Geographic Location
 - Language
 - Race/Ethnicity
 - Sex

OTHER FEATURES

- National Comparison Report
- Time Trend Report
- State Measure Comparison Report
- Measure and stratification data quality assessments

Dashboard: Data Quality Assessments



❖ Key element of dashboard:

- Overall quality indicator for each measure, state, year, program, and type of service combination

❖ Methods (in brief)

- Assessed data quality for each critical data element used to calculate the measure
- Used CMS Data Quality Atlas quality evaluations for relevant topics (e.g., program enrollment, claims volume, service use, diagnosis/procedure codes)
- Conducted independent assessments for additional fields (e.g., provider taxonomy codes, CDT codes, dental claims completeness)
- Aligned cut-points and data quality categories with Data Quality Atlas
- Assignment based on data element with greatest level of “concern”

Data Quality Indicator Categories (adapted from CMS Data Quality Atlas)

Low concern

No major problems identified that would affect measure scores.

Medium concern

Some problems identified that may affect measure scores; effects expected to be modest.

High concern

Major problems in data completeness or reliability that are likely to significantly affect measure scores.

Unusable


Extreme problems in data completeness or reliability.

Okay to report with some caution
for medium concern

Not recommended to report

Note: These quality assessments reflect such evaluations as data field completeness and legitimate codes. They do not reflect data quality from the perspective of incomplete capture of codes in claims data at the care site level due to such factors as state policies such as reimbursement (e.g., caries risk documentation).

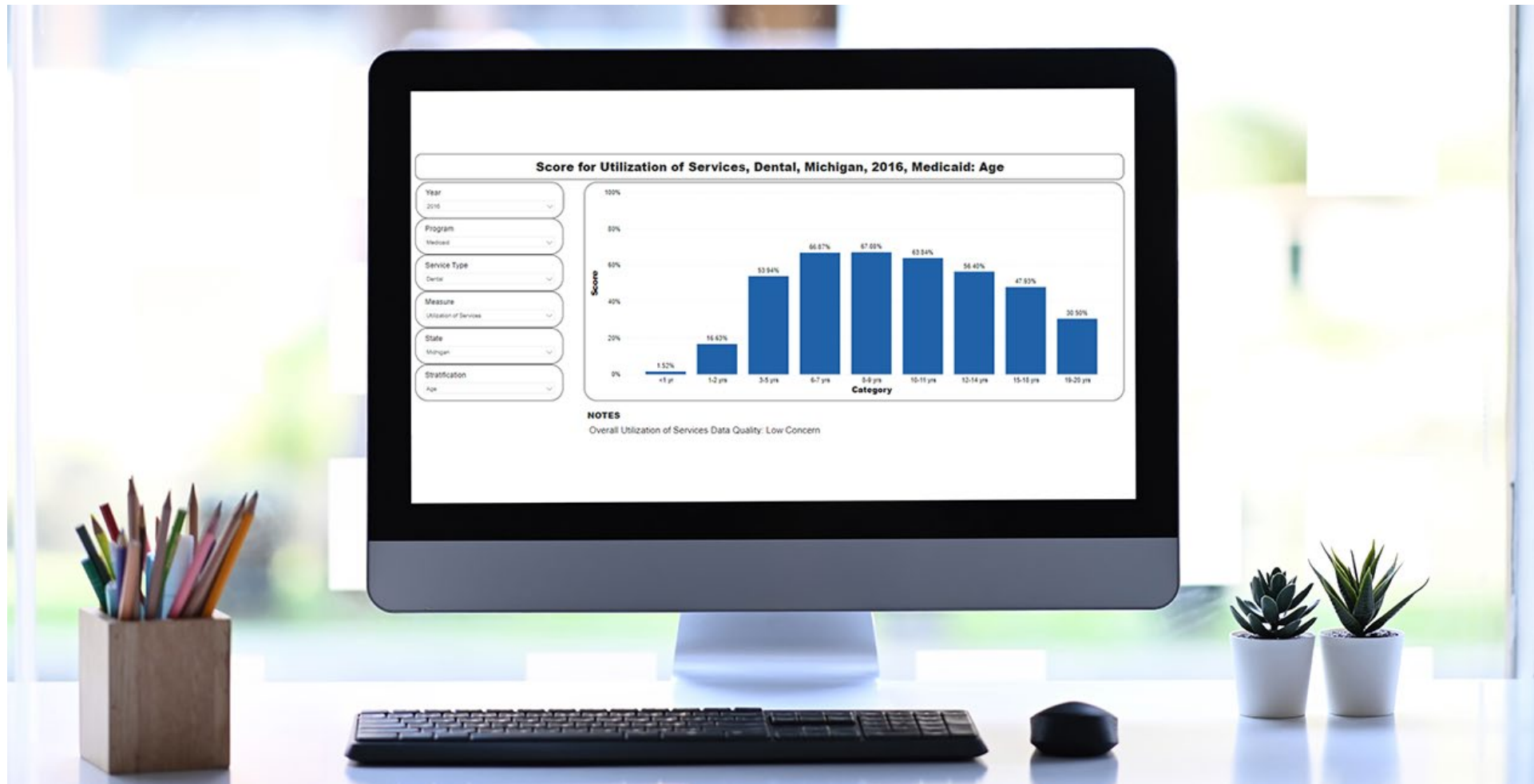
Dashboard: Data Quality Reporting



Why include measure scores in the dashboard when known data quality is poor?

- Allows users, including state Medicaid and CHIP programs, to understand how data quality impacts measure score performance, and states can work on addressing the quality of data submissions to CMS.
- Other users of T-MSIS data may report on dental-related topics for all states without due consideration to data quality. The DQA dashboard enables users of those reports to understand how reporting reliability may be affected by data quality.

Let's go to the dashboard!



<https://www.ada.org/resources/research/dental-quality-alliance/dqa-improvement-initiatives>

Data Quality Findings



Data Quality: Critical Data Elements

- Measure score data quality classifications of “high concern” or “unusable” ranged from 10% to 55% of states across state/measure/year combinations.

Data Quality: Stratification Variables – Needed to Assess Disparities

- Data on age, sex assigned at birth, and geographic location are well filled.
- 2/3 of states are missing more than 10% of race/ethnicity data, and 1/2 of states are missing more than 20% of race/ethnicity data

Dashboard Take-Aways: Disparities

Among states with sufficiently complete data to reliably examine variations in quality measures by race and ethnicity, in general:

- Lowest scores among: non-Hispanic black and non-Hispanic American Indian/Alaskan Native
- Highest scores among: non-Hispanic Asian and Hispanic children

However, patterns in disparities may vary across measures and across states.

Source: Herndon, J.B., Ojha, D. (2022) Racial and Ethnic Disparities in Oral Healthcare Quality among Children Enrolled in Medicaid and CHIP. *Journal of Public Health Dentistry*. 81(S1):89-102.

Turning Data into Action: Recommendations



- Use dashboard **data quality indicators** to identify opportunities to improve data collection quality to support reliable measure reporting.
- Use dashboard **measure reports** to identify areas with performance gaps to focus improvement efforts.
- Use dashboard **filters** to examine measure scores by population characteristics to identify disparities in care to focus interventions to improve health equity.



- **Additional Years – 2019 and 2020 (release date: June 2023)**
- **Additional Pediatric Measures**
- **Adult Measures**

T-MSIS Data Acknowledgement & Resources



- DQA Oral Healthcare Dashboard reports are part of a research project titled "The State of Oral Healthcare Use, Quality and Spending: Findings from Medicaid and CHIP Programs," made possible through Data Use Agreement (DUA) RSCH-2020-55639 with the Centers for Medicare and Medicaid Services.
- Centers for Medicare & Medicaid Services, T-MSIS Data: <https://www.medicaid.gov/medicaid/data-systems/macbis/medicaid-chip-research-files/transformed-medicaid-statistical-information-system-t-msis-analytic-files-taf/index.html>
- T-MSIS Analytics Files (TAF) Data Quality Atlas: <https://www.medicaid.gov/dq-atlas/welcome>

For More Information



Email DQA: dqa@ada.org

DQA Website: www.ada.org/dqa

Dashboard: <https://www.ada.org/resources/research/dental-quality-alliance/dqa-improvement-initiatives>

Measure specifications: <https://www.ada.org/resources/research/dental-quality-alliance/dqa-dental-quality-measures>

Advancing performance measurement
as a means to improve oral health,
patient care, and safety through
a consensus-building process.



THE JOURNEY CONTINUES!

