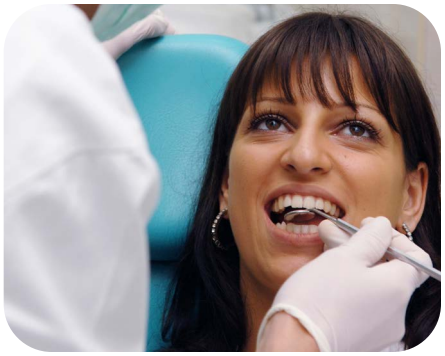
Oral Health Quality Indicators for the Maternal and Child Health (MCH) Population: An Overview





The MCH oral health quality indicators constitute a standardized and aligned quality measurement system designed to promote state efforts to monitor and improve the quality of oral health care for the MCH population. Incorporating indicators into state oral health quality measurement and surveillance plans for reporting over time will help states assess current system performance, identify priority areas, develop action plans to drive improvements in care quality and outcomes, and assess progress in achieving improvement goals.

Background

In 2017, the Center for Oral Health Systems Integration and Improvement (COHSII) was tasked by the Maternal and Child Health Bureau to convene a Quality Indicator Advisory Team (QIAT) to guide and inform the identification and use of existing quality indicators to monitor services delivered in public health programs and systems of care to improve access to and quality of oral health care for the MCH population.

COHSII is a consortium funded by the Maternal and Child Health Bureau, Health Resources and Services Administration. COHSII is led by the National Maternal and Child Oral Health Resource Center in partnership with the Association of State and Territorial Dental Directors and the Dental Quality Alliance. COHSII works with key stakeholders to improve systems of care in support of a quality-improvement, patient-centered approach to address the oral health needs of the MCH population.

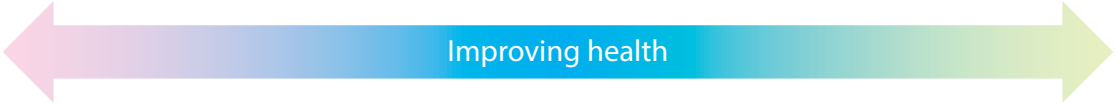
COHSII has developed resources and provided technical assistance to support state implementation of the indicators. This overview describes the process of defining the set of indicators, pilot reporting, and available resources.

Framework

QIAT developed a framework to support quality measurement and improvement spanning from the site of care (i.e., individual practices and clinics) to broader systems of care (e.g., a Medicaid program). The framework provides a conceptual structure of what should be measured and monitored to improve population oral health. In light of estimates that clinical care may contribute as little as 20 percent to health outcomes for chronic diseases, the framework accounts for the significant impact of non-clinical factors and behaviors (e.g., social, economic, and environmental factors and health behaviors) on the oral health of the MCH population.[1]

Framework for Oral Health Quality Performance Measurement and Improvement

Domain	System	Community-Based Systems and Supports	Care
Access	Eligibility Provider availability	Transportation	Appointment availability Provider availability
Utilization	Appropriate site of care Use of services	Appropriate site of care Use of services	Scope of services Appropriate site of care Use of services
Structure	Facilities and equipment Health information technology Leadership coordination Level of funding Policy linked with evidence Provider training Scope of benefits Transitions to adulthood	Facilitating service-delivery programs in community sites Health information technology Supportive environment in a medical-dental neighborhood based on needs	Coding Service-delivery partnerships in community sites Health information technology Leadership coordination Provider training
Process	Care coordination Enrollment Person- or family-centered care Population education	Care coordination Community needs assessment Enrollment (outreach) Person- or family-centered care	Care coordination Culturally competent care Enrollment (assistance) Evidence-based care Person- or family-centered care Referral
Outcome	Health care system experience Health literacy Health status (population) Patient-reported outcomes	Health care system experience Health literacy Health status (community) Patient-reported outcomes	Health care system experience Health literacy Health status (individual) Patient-reported outcomes



Environmental Scan

The framework was used to guide the environmental scan of existing quality indicators. More than 2,000 indicators and more than 200 articles were scanned, resulting in 400 unduplicated indicators included for QIAT's review. Using the environmental scan results and the framework as guides, QIAT identified a set of indicators for:

- Women of child-bearing age and pregnant women
- Infants, children, and adolescents from birth to age 21 (hereafter referred to as "children")

Set of Oral Health Quality Indicators for the Maternal and Child Health Population

Women of Child-Bearing Age and Pregnant Women

Access

W1. Percentage of pregnant women reporting difficulty getting dental care (data source: Pregnancy Risk Assessment Monitoring System)

W2. Percentage of pregnant women who had insurance to cover dental care during pregnancy (data source: Pregnancy Risk Assessment Monitoring System)

Utilization

W3. Percentage of pregnant women who reported having their teeth cleaned by a dentist or dental hygienist during pregnancy (data source: Pregnancy Risk Assessment Monitoring System)

W4. Percentage of women of child-bearing age (ages 18–44) who report having a visit to a dentist or dental clinic in the past year (data source: Behavioral Risk Factor Surveillance System)

Outcome

W5. Percentage of pregnant women reporting that they needed to see a dentist for a problem during pregnancy (data source: Pregnancy Risk Assessment Monitoring System)

Children

Access

C1. Dentists who actively participate in Medicaid per 1,000 EPSDT-eligible enrolled children (data source: Medicaid enrollment and claims)

Utilization

C2. Percentage of children who had a dental visit in the past 12 months (data source: Medicaid enrollment and claims)*

C3. Percentage of children at elevated risk receiving preventive dental services (data source: Medicaid enrollment and claims)*

Process

C4. Percentage of children at elevated risk receiving at least two topical fluoride applications as a dental service (data source: Medicaid enrollment and claims)*

C5. Percentage of children at elevated risk receiving at least two topical fluoride applications as an oral health service (data source: Medicaid enrollment and claims)*

C6. Percentage of enrolled children who have ever received sealants on permanent first molar teeth by the 10th birthdate (data source: Medicaid enrollment and claims)*

C7. Percentage of enrolled children who have ever received sealants on permanent second molar teeth by the 15th birthdate (data source: Medicaid enrollment and claims)*

Outcome

C8. Percentage of kindergarten children with dental caries experience (treated or untreated tooth decay) (data source: Basic Screening Survey)

C9. Percentage of third-grade children with dental caries experience (treated or untreated tooth decay) (data source: Basic Screening Survey)

C10. Percentage of kindergarten children with urgent dental treatment needs (data source: Basic Screening Survey)

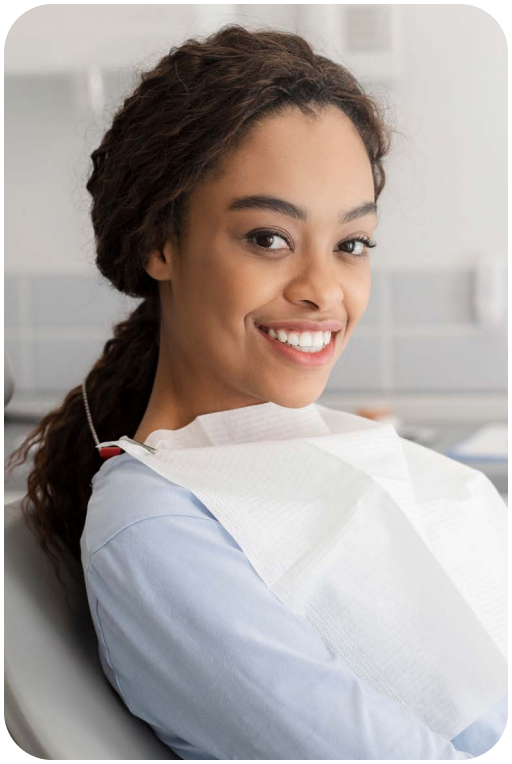
C11. Percentage of third-grade children with urgent dental treatment needs (data source: Basic Screening Survey)

*Developer and steward: Dental Quality Alliance

Pilot Implementation

Five states—Georgia, Illinois, Iowa, Michigan, and Rhode Island—were selected to pilot the process of reporting on the quality indicators. Pilot states were recruited from the pool of states that selected the Title V national performance measure for oral health. Each state was asked to form a team that included the MCH director, the oral health program director, a Medicaid oral health contact, information technology specialists and data analysts, and other state staff (e.g., epidemiologists, a representative from Medicaid managed care). States are learning how the indicators can enable assessments of current system performance and identify areas that can be targeted for improvement.

Challenges and Opportunities

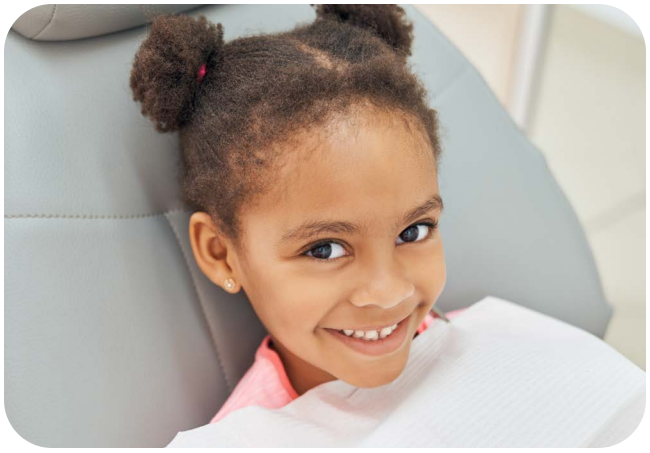


Challenges

- Identifying processes and resources to add questions to survey-based data sources (e.g., Pregnancy Risk Assessment Monitoring System)
- Identifying resources and capacity to analyze data
- Identifying common terminology and priorities across state agencies
- Establishing interagency relationships necessary to form partnerships and share data across state programs

Opportunities

- Creating and participating in interagency committees or initiatives to promote the alignment of oral health care performance assessment and quality improvement priorities
- Demonstrating the value of oral health data collection
- Partnering with state agencies to leverage funding toward common goals
- Establishing processes and systems for sharing data across state agencies
- Using quality indicators to enable better assessments of current performance and drive improvement in care delivery and health outcomes
- Integrating MCH quality indicators into state oral health surveillance and quality improvement efforts



Reference

1. McGovern L, Miller G, Hughes-Cromwick P. 2014. *The Relative Contribution of Multiple Determinants to Health Outcomes*. Princeton, NJ: Robert Wood Johnson Foundation.

Resources

Oral Health Quality Indicators for the Maternal and Child Health Population: User Guide and Technical Specifications

A user guide was developed to provide guidance on implementing quality indicators for the MCH population. The guide includes guidelines for data collection, preparation, and reporting as well as detailed technical specifications for how to calculate each indicator.

Quality Indicator Reporting Templates

Excel-based templates for each quality indicator were created to assist states with reporting the indicators. The templates include reporting the overall scores for each indicator as well as scores by specific population characteristics such as age and race/ethnicity. The templates also include auto-populated charts.

Readiness Assessment: Oral Health Quality Indicators for the Maternal and Child Health (MCH) Population

The readiness assessment is designed to assist states with assessing their ability to access the required data and evaluate their capacity to calculate the quality indicators. It is intended to be completed by staff in the state oral health program in partnership with the state MCH director, Medicaid staff, epidemiologists, and data analysts within those agencies (and other state programs serving the MCH population). It also explores requirements for accessing data that may not currently be collected or easily accessible within the state and for expanding capacity to implement the quality indicators.

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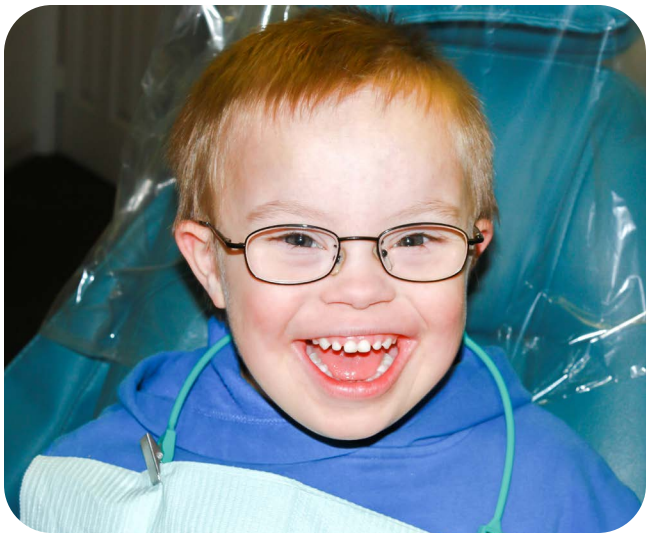

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Cite as

National Maternal and Child Oral Health Resource Center and Dental Quality Alliance. 2020. *An Overview of Oral Health Quality Indicators for the Maternal and Child Health (MCH) Population.* Washington, DC: National Maternal and Child Oral Health Resource Center, and Chicago, IL: Dental Quality Alliance.

This publication was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an annual award totaling $1,000,000 with no funding from nongovernmental sources. This information or content and conclusions are those of the authors and should not be construed as the official policy of HRSA, HHS, or the U.S. government, nor should any endorsements be inferred.

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