

## Dental Care Utilization Among Children Dashboard: Data & Methods

We collected Medicaid data from CMS-416 state annual early and periodic screening, diagnostic, and treatment (EPSDT) participation reports from 2012 to 2021. The CMS-416 is a form that each state Medicaid program submits to CMS on an annual basis, and it includes children under age 21 eligible for EPSDT services. Data files are released annually, usually in the fall for the previous year.

We accessed private dental insurance claims data from Merative™ MarketScan® Research Databases for the years 2012 to 2021. The database aggregates dental insurance claims across the industry submitted by dental providers for reimbursement from the patient's private dental plan or dental encounter data if the patient was enrolled in a capitated dental plan. Each record represents a specific service provided to the patient. The data set utilized in this study intentionally excludes the commercially insured from South Carolina due to contractual reasons.

Dental care utilization was defined as total number of children receiving any dental service divided by the total number of children that were enrolled in insurance, calculated for each year between 2012 and 2021. We restricted children to ages 1-20 who were enrolled for at least 90 continuous days. In CMS-416 reports, this was calculated as Line 12a (total eligible receiving any dental services) divided by Line 1b (total individuals eligible for EPSDT for 90 continuous days) for ages 1-20. In the MarketScan Databases, this was calculated as the number of children ages 1-20 who had any type of dental claim divided by the number of children enrolled, for children enrolled for at least 90 continuous days in that year. We also calculated state specific utilization rates for both Medicaid and private insurance using the same methodology. In CMS-416 state reports, there were some states where CMS had suppressed the data, which did not allow for us to calculate utilization rates for that year. In the MarketScan Databases, we repressed utilization rates from South Carolina and Idaho due to either contractual restrictions or data quality concerns.

For adults enrolled in Medicaid, we utilized Medicaid claims data from T-MSIS. Due to limited data availability from many states prior to 2016, we only examined adult Medicaid data for calendar years 2016-2021. Data files are released annually. Dental care utilization was defined as the total number of adults receiving any dental service divided by the total number of adults that were enrolled in Medicaid, calculated for each year between 2016 and 2021. Among those enrolled for at least 90 continuous days, an enrollee utilizing dental services has at least 1 claim with a CDT code (D0100-D9999). We restricted adults to individuals ages 21-64.

For the commercially insured adult population, we extracted dental claims from Merative™ MarketScan® Research Databases for the years 2012 to 2021. Dental care use for commercially insured adults ages 21-64 was calculated as the number of adults ages 21-64 who had any type of dental claim divided by the number of adults enrolled for at least 90 continuous days.

### **Suggested Citation**

American Dental Association. Dental care utilization among children dashboard. Health Policy Institute. 2023. Available from: <https://www.ada.org/resources/research/health-policy-institute/child-dental-care-utilization-dashboard>.