National Trends in Dental Care Use, Dental Insurance Coverage, and Cost Barriers: Data & Methods

Dental Care Utilization and Insurance Status

We analyzed data from the Medical Expenditure Panel Survey (MEPS), managed by the Agency for Healthcare Research and Quality (AHRQ). MEPS is a large-scale survey of individuals and families drawn from a nationally representative sample and is the most complete source of data on the cost and use of health care and health insurance coverage, including dental insurance coverage. We focused on the period 2002 to 2023, the most recent year for which data are available (data for 2023 were released in August 2025).[1]

We measured dental care utilization as the proportion of the U.S. population who visited any general practitioner or specialist dentist in the year, the most basic indicator of dental care utilization. The MEPS dental care utilization data does not capture information on the type of care received or whether a treatment plan was completed. Nevertheless, the dental care utilization rate captured by MEPS is an informative measure of whether the U.S. population is seeing a dentist.

We examined trends in dental care utilization for children ages 0-18, working-age adults ages 19-64, and elderly adults ages 65 and over. For each age cohort, we analyzed trends in dental care utilization by household income as a percentage of the federal poverty level (FPL) (FPL <100%, FPL 100-199%, FPL 200-399%, and FPL≥400%), by race/ethnicity (non-Hispanic White, non-Hispanic Black, non-Hispanic Asian, Hispanic, and other race), and by dental benefits status (public, private and uninsured). Public dental benefits include those provided through Medicaid or State Children's Health Insurance Programs (SCHIP). Because pediatric dental services are a mandated benefit,[2] children enrolled in these programs were defined as having comprehensive dental benefits. Medicaid coverage of dental benefits for adults is optional and varies considerably by state. MEPS does not allow us to identify the state of residence, however. Thus, we identified adults covered by Medicaid as publicly insured even though some will have either no dental benefits at all or limited benefits. For calendar years 2002 through 2023, for children and working-age adults, we computed the percentage of individuals that saw any dentist by dental insurance status. By age cohort, we also used the MEPS to calculate the percentage of individuals with private dental insurance, public dental insurance, or were uninsured for dental care. In 2023, AHRQ added a question in the MEPS to determine if respondents have Medicare Advantage (MA) dental benefits. For adults ages 65 and older, starting in 2022, we were able to classify adults with private dental insurance, MA dental benefits, public dental insurance, or with no dental insurance.

Cost Barriers to Care

For cost barriers, we used data from the 2002-2023 National Health Interview Survey (NHIS).[3] The NHIS is a nationally representative survey of the civilian non-institutionalized U.S. population. The NHIS family core component collects information on every member of a sample household, including data on demographics, health characteristics and

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insurance coverage. One adult and one child (ages 0-17) per household were randomly selected to be included in the sample adult and child components.

We compared cost barriers for five categories of health care services: (1) dental care,[4] including check-ups (2) medical services, (3) mental health services, (4) prescription drugs and (5) eyeglasses.[5] The dependent variable in the analysis was a binary variable based on the response to the following question: "During the past 12 months, was there ever a time when you needed [health care service] but did not get it because of the cost?"[6,7]

We examined trends in financial barriers to dental care by age cohort (children ages 0-18, working-age adults ages 19-64, and elderly adults ages 65 and older), by household income (FPL <100%, FPL 100-199%, FPL 200-399%, and FPL≥400%), by race/ethnicity (non-Hispanic White, non-Hispanic Black, non-Hispanic Asian, Hispanic, and other race), and by insurance status (privately insured, publicly insured and uninsured).[8]

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[1] Medical Expenditure Panel Survey. Household Full Year Consolidated Data Files (2002-2023). Agency for Healthcare Research and Quality. Available from: https://meps.ahrq.gov/mepsweb/data_stats/download_data_files.jsp. Accessed September 1, 2025.

[2] Medicaid.gov. Dental care. Centers for Medicare and Medicaid Services. Available from: https://www.medicaid.gov/medicaid/benefits/dental-care. Accessed September 1, 2025.

[3] National Center for Health Statistics. 2002-2023 NHIS Data, Questionnaires and Related Documentation. April 6, 2023. Available from: https://www.cdc.gov/nchs/nhis/data-questionnaires-documentation.htm. Accessed October 4, 2023.

[4] The NHIS did not report dental care measures in 2021.

[5] The NHIS stopped asking about cost barriers to prescription eyeglasses in 2019.

[6] Before 2019, the NHIS cost barrier question for various healthcare services was worded differently: "During the past 12 months, was there any time when you needed [health care service], but didn't get it because you couldn't afford it?" Also, before 2019, the cost barrier question in the sample child component was restricted to respondents ages 2-17. Starting in 2019, the NHIS expanded the cost barrier question to include respondents ages 0-1.

[7] A redesigned NHIS questionnaire with new content and structure was implemented starting in 2019. Moreover, two updates were made to the weighting process for the 2019 Sample Adult and Sample Child data files. For either or both of these reasons, differences could be observed between estimates for 2018 and 2019, even when there was no real change in the population. Data users should exercise caution before combining data from 2018 or years before and 2019.

As for the impact of the updated weighting approach, the change was most likely to have an impact on estimates that are strongly correlated with educational attainment. The weighting change slightly increases the weights for low-education adults because they are less likely to participate in household surveys. According to the National Center for Health Statistics, the impact of the change in the weighting approach had the biggest impact on estimates of cigarette smoking, private health insurance coverage, disability status, and unmet medical care needs due to cost (among the estimates examined). One should exercise caution when comparing rates of unmet medical or dental care before and after 2019.

[8] When reporting dental cost barriers by insurance status, we analyze data from 2008 to 2023 since the NHIS only consistently asks questions pertaining to private dental insurance status starting in 2008.