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Research Brief

Dental Care Utilization Steady Among Working-Age Adults and Children, Up Slightly Among the Elderly

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Key Messages

- *Dental care utilization among working-age adults did not change in 2014.*
- *Dental care utilization continued to increase among elderly adults in 2014 and is at its highest level since the Medical Expenditure Panel Survey began tracking dental care utilization in 1996.*
- *Although not statistically significant, dental care utilization increased 2 percentage points in 2014 among working-age adults with public insurance. This might signal the early impact of Medicaid expansion under the Affordable Care Act, but further research is needed.*

Introduction

Since 2000, there have been significant changes in dental care utilization patterns among the U.S. population. In 2013, dental care utilization was at its highest level ever among children. After nearly a decade of decline, dental care utilization among working-age adults held steady from 2012 to 2013.[1] The overall decline in dental care utilization among working-age adults since 2003 was driven, in part, by a lower percentage of individuals having private dental benefits.[2,3] Dental care utilization among children, particularly those in lower income groups, has increased over the past decade. The gap in dental care use between low-income and high-income children has narrowed dramatically while for adults it has widened.[1,4] Amongst the elderly, dental care utilization has increased since 2000.[1] The American Dental Association's Health Policy Institute (HPI) has been tracking trends in dental care utilization for several years as well as studying the key drivers of recent trends.[2]

In this research brief, we update previous research on dental care utilization patterns using newly released data for 2014, the first year in which many provisions of the Affordable Care

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Act (ACA) went into effect. These provisions include Medicaid expansion and the implementation of state-based and federally-facilitated marketplaces.[5]

Results

Figure 1 shows trends in dental care utilization for children ages 2-18, working-age adults ages 19-64, and the elderly 65 and older from 2000 to 2014. For the first time since 2011, there was a slight downtick in dental care utilization among children in 2014. From 2013 to 2014, children's dental care utilization declined from 48.3 percent of 47.8 percent, but this change was not statistically significant. However, the overall increase in dental care utilization among children from 2000 through 2014 was statistically significant at the 1 percent level.

Dental care utilization among working-age adults remained at 35.5 percent in 2014. The overall decline from 2003 through 2014 was statistically significant at the 1 percent level.

From 2013 to 2014, dental care utilization increased slightly among the elderly. In 2014, 43.6 percent of elderly Americans saw a general practitioner dentist, up from 42.2 percent in 2013, a statistically insignificant change. Among the elderly, the overall increase in dental care utilization from 2000 (38.3 percent) to 2014 was statistically significant at the 1 percent level. As of 2014, dental care utilization among the elderly is at its highest level since the Medical Expenditure Panel Survey (MEPS) began tracking this in 1996.[6]

Figure 2 shows dental care utilization rates for narrower age groups. Between 2013 and 2014, none of the changes were statistically significant. Looking at a longer timeframe, the overall changes in dental care utilization from 2002 to 2014 for adults ages 19-34, 35-49 and 50-64 were statistically significant at the 1 percent level.

Figures 3-5 show dental care utilization rates for children, working-age adults and the elderly by household income based on the federal poverty level (FPL). For poor children (FPL<100%), dental care utilization increased from 39.0 percent in 2013 to 39.9 percent in 2014, but this change is not statistically significant. Among near-poor children (100-200% FPL), dental care utilization decreased from 44.0 percent in 2013 to 39.2 percent in 2014. This change was statistically significant at the 10 percent level. For high-income children (400% + FPL), dental care utilization increased from 57.7 percent in 2013 to 61.1 percent in 2014, a statistically insignificant change. Looking at a longer timeframe, the overall increase in dental care utilization from 2000 to 2014 among poor (FPL<100%), near-poor (100-200% FPL) and high income (400% + FPL) children was statistically significant (Figure 3).

For working-age adults, dental care utilization among the poor (FPL<100%) increased slightly from 2013 (18.6 percent) to 2014 (20.3 percent). Dental care utilization among near-poor adults (100-200% FPL) remained steady from 2013 (21.2 percent) to 2014 (21.8 percent). Dental care use among adults with household income between 200% and 400% of the FPL declined slightly from 2013 (32.2 percent) to 2014 (31.0 percent). Among higher income adults (400% + FPL), dental care utilization also declined slightly from 2013 (49.9 percent) to 2014 (49.2 percent). None of the changes from 2013 to 2014 were statistically significant. Looking at a longer timeframe, the decline in dental care utilization from 2002 through 2014 was statistically significant for near-poor (100-200% FPL), middle-income (200-400% FPL), and high-income (400% + FPL) working-age adults (Figure 4).

Among the poor elderly (FPL<100%), dental care utilization increased from 19.4 percent in 2013 to 23.5

percent in 2014, reversing a downward trend that began in 2010. For the near-poor elderly (FPL 100-200%), dental care utilization fell from 29.9 percent in 2013 to 27.5 percent in 2014. Dental care utilization among the elderly with household income between 200% and 400% of the FPL also declined slightly from 2013 (40.3 percent) to 2014 (39.2 percent). For high-income elderly adults, dental care utilization increased from 2013 (57.5 percent) to 2014 (60.7 percent). Changes for all income groups from 2013 to 2014 were not statistically significant (Figure 5).

Figures 6-8 show dental care utilization rates for children, working-age adults and the elderly according to dental benefits status. Among children with private dental benefits, the percentage with a dental visit did not change from 2013 to 2014 (58.5 percent). For children with no dental benefits, dental care utilization fell from 24.9 percent in 2013 to 22.6 percent in 2014. Among children with public dental benefits, dental care utilization declined slightly from 2013 (42.4 percent) to 2014 (41.0 percent). All changes from 2013 to 2014 were statistically insignificant. Looking at a longer timeframe, dental care utilization among children with private dental benefits or public dental benefits increased from 2000 to 2014. These changes were statistically significant at the 1 percent level. However, among children with no dental benefits, dental care utilization declined 7 percentage points from 2000 (29.6 percent). This change was statistically significant at the 5 percent level.

From 2013 through 2014, dental care utilization decreased from 49.3 percent to 48.6 percent among working-age adults with private dental benefits, a statistically insignificant change. Among uninsured working-age adults, dental care utilization declined from 17.1 percent in 2013 to 15.1 percent in 2014, a change that was statistically significant at the 5 percent level. Dental care utilization among working-age adults with public health insurance increased from 2013 (20.0 percent) to 2014 (22.5 percent) (Figure 7). However, this change was not statistically significant.

Among the elderly with private dental benefits, dental care utilization held steady from 2013 (68.6 percent) to 2014 (68.7 percent). Changes from 2013 to 2014 for elderly adults with public insurance or no dental benefits were also not statistically significant (Figure 8).

Discussion

Dental care utilization among working-age adults has remained flat since 2012 after nearly a decade of decline. It still remains to be seen whether dental care utilization, particularly with the implementation of the ACA, will increase or remain flat in the coming years among working-age adults. Among children, dental care utilization declined very slightly from 2013 to 2014. This was the first decline in dental care utilization among children since 2008. We stress, however, this change was not statistically significant. Among the elderly, dental care utilization increased from 2013 to 2014 and is now at its highest level ever as measured by the MEPS. Again, though, the change was not statistically significant.

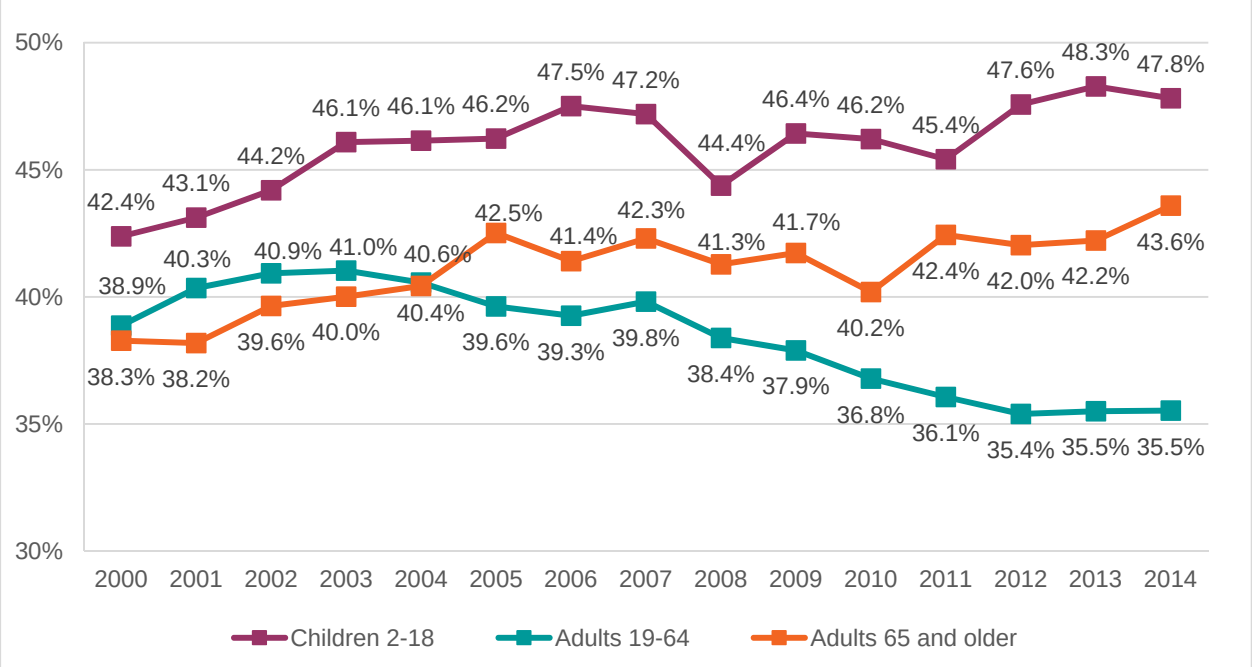
In 2014, the percentage of individuals with private or public dental benefits increased. Due to Medicaid expansion under the ACA, the percentage of working-age adults with public insurance increased 2 percentage points from 2013 to 2014.[7] Many states that expanded Medicaid also provide adult Medicaid dental benefits. It is estimated that over 5.4 million adults gained dental benefits through Medicaid through 2015.[8] Increased Medicaid dental benefits coverage does not necessarily equate to increased access to dental care. Proper enabling conditions need to be in place, such as sufficient Medicaid provider reimbursement and streamlined administrative processes in Medicaid, to attract dental providers to participate in Medicaid programs.[9-11] Still, our analysis

found that dental care utilization among publicly insured working-age adults increased 2.5 percentage points from 2013 to 2014. While this change is not statistically significant, it could be the early signs of the impact of Medicaid expansion. However, we will need additional years of data before we can assess this more robustly.

In 2014, the percentage of working-age adults with private dental benefits also increased 2 percentage points.[7] This could be because adults are purchasing dental coverage in the federally-facilitated marketplaces. In 2016, the take-up rate of stand-alone dental plans in the exchanges was 15.1 percent among adults and 13.2 percent among children. Approximately 1.3 million adults and 114,037 children obtained stand-alone dental coverage in the federally-facilitated marketplaces in 2016.[12] Financial barriers to dental care are also declining for working-age adults, particularly the poor.[8] These developments could explain emerging patterns in dental care utilization.

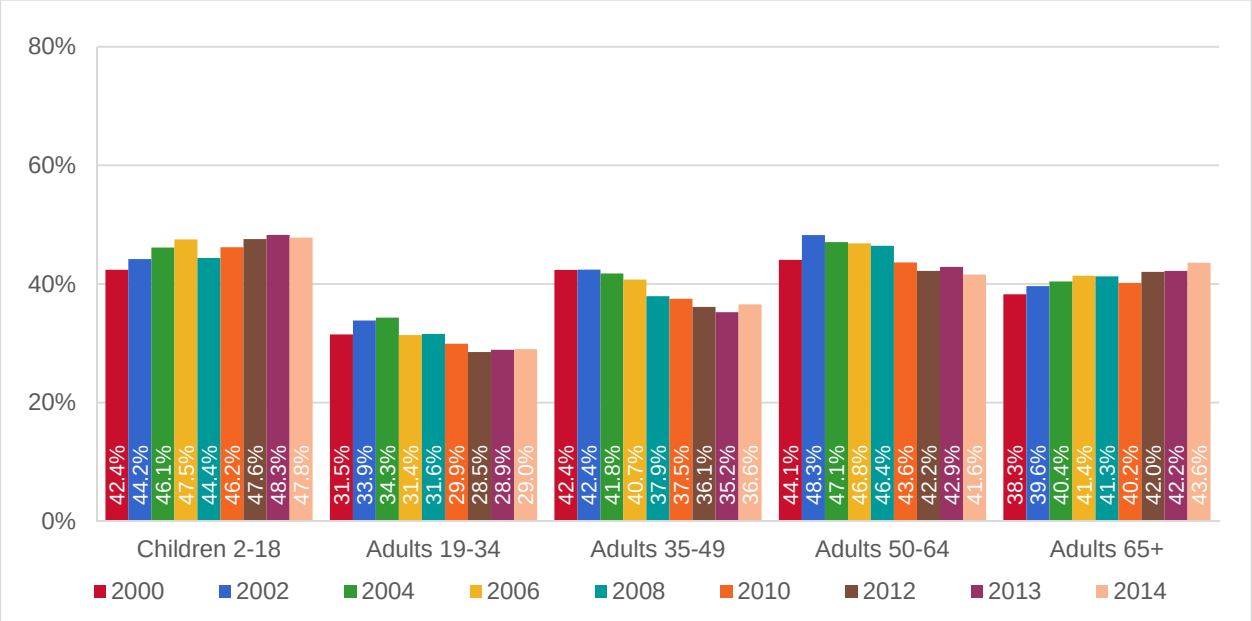
HPI will continue to monitor the impact of the ACA and other market developments on dental care utilization patterns in the United States.

Figure 1: Percentage of the Population with a Dental Visit in the Year, 2000-2014



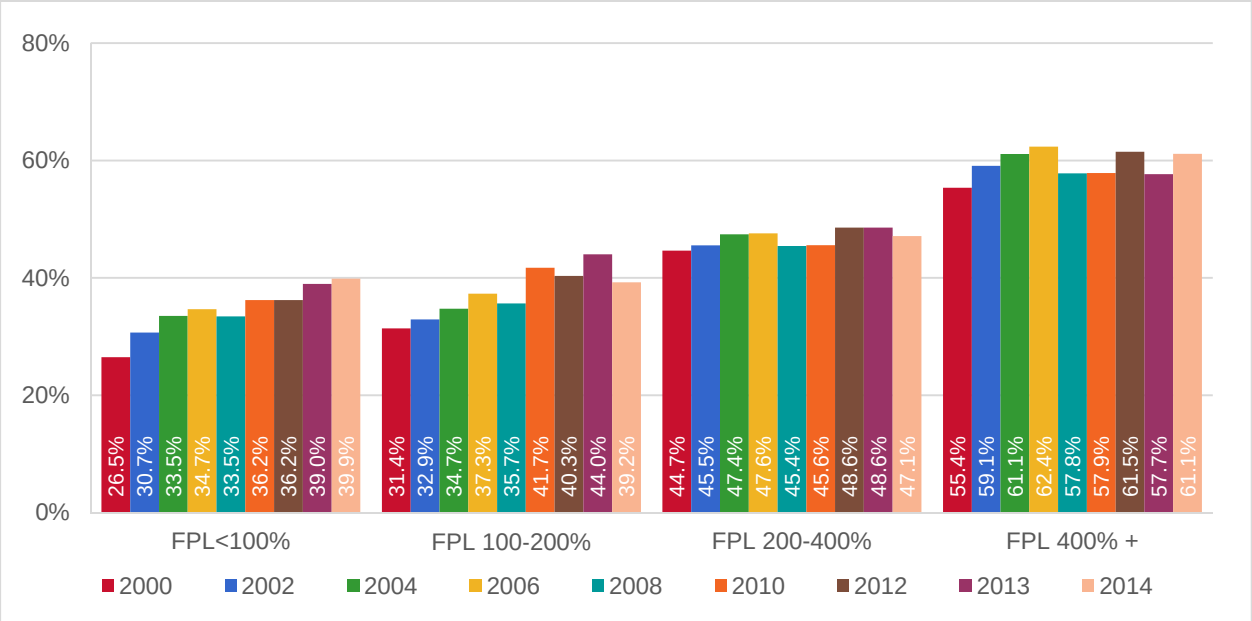
Source: Health Policy Institute analysis of the Medical Expenditure Panel Survey, AHRQ. **Notes**: For children ages 2-18 and adults ages 65 and older, changes were statistically significant at the 1% level (2000-2014). Among adults ages 19-64, changes were statistically significant at the 1% level (2003-2014). Changes from 2013 to 2014 among children, adults 19-64, and the elderly 65 and older were not statistically significant.

Figure 2: Percentage of the Population with a Dental Visit in the Year for Select Age Groups, 2000-2014



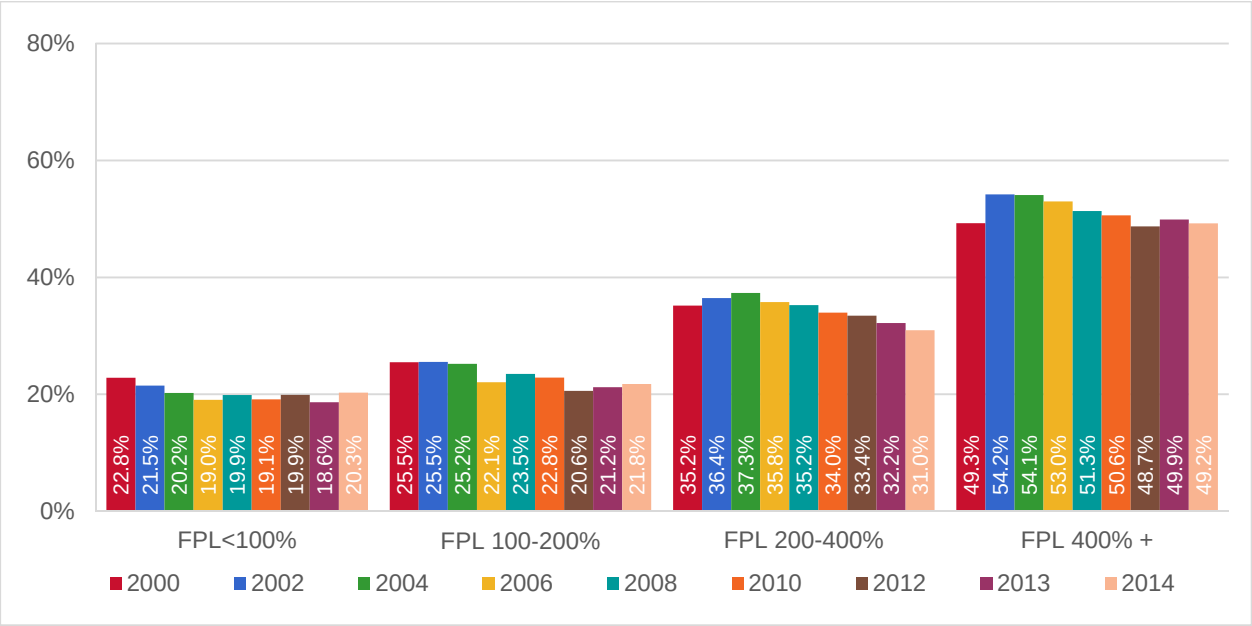
Source: Medical Expenditure Panel Survey, AHRQ. **Notes:** Changes for children and adults ages 65 and older were significant at the 1% level (2000-2014). Changes for adults 19-34, 35-49, and 50-64 were significant at the 1% level (2002-2014). Changes for all age groups from 2013 to 2014 were not were not statistically significant.

Figure 3: Percentage of Children Ages 2-18 with a Dental Visit in the Year for Select Income Groups, 2000-2014



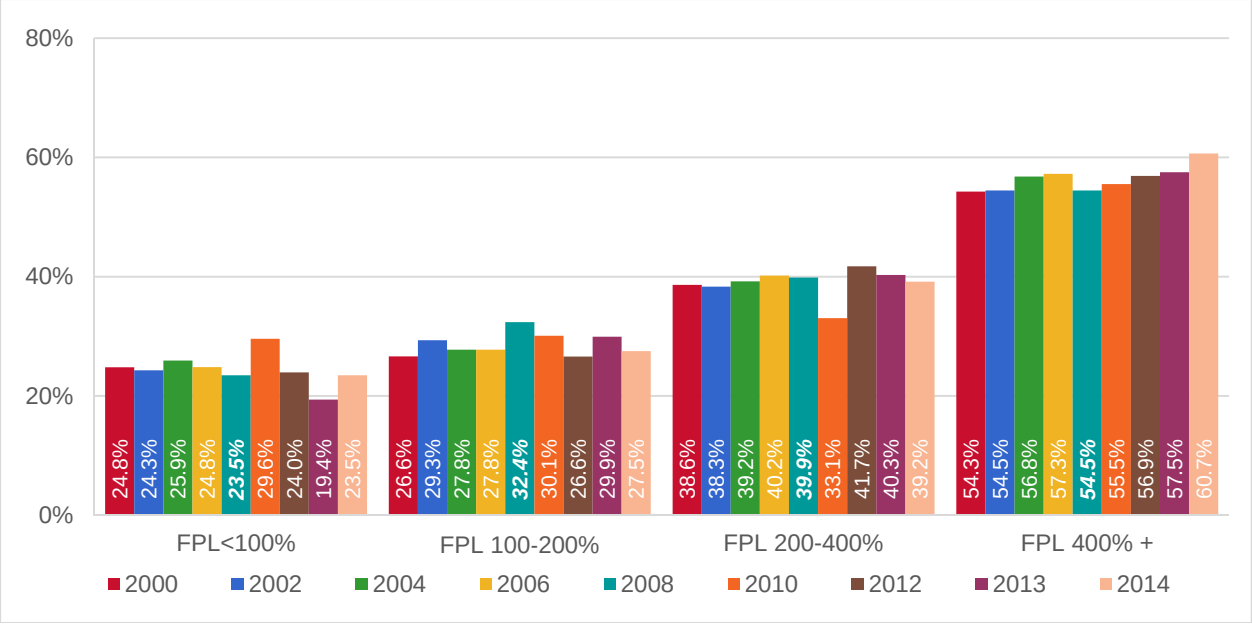
Source: Medical Expenditure Panel Survey, AHRQ. **Notes**: Changes were significant at the 1% level for FPL<100% (2000-2014). Changes for FPL 100-200% and FPL 400%+ were significant at the 5% level (2000-2014). The change from 2013 to 2014 for FPL 100-200% was statistically significant at the 10% level. Changes among other income groups were not statistically significant from 2013 to 2014.

Figure 4: Percentage of Adults Ages 19-64 with a Dental Visit in the Year for Select Income Groups, 2000-2014



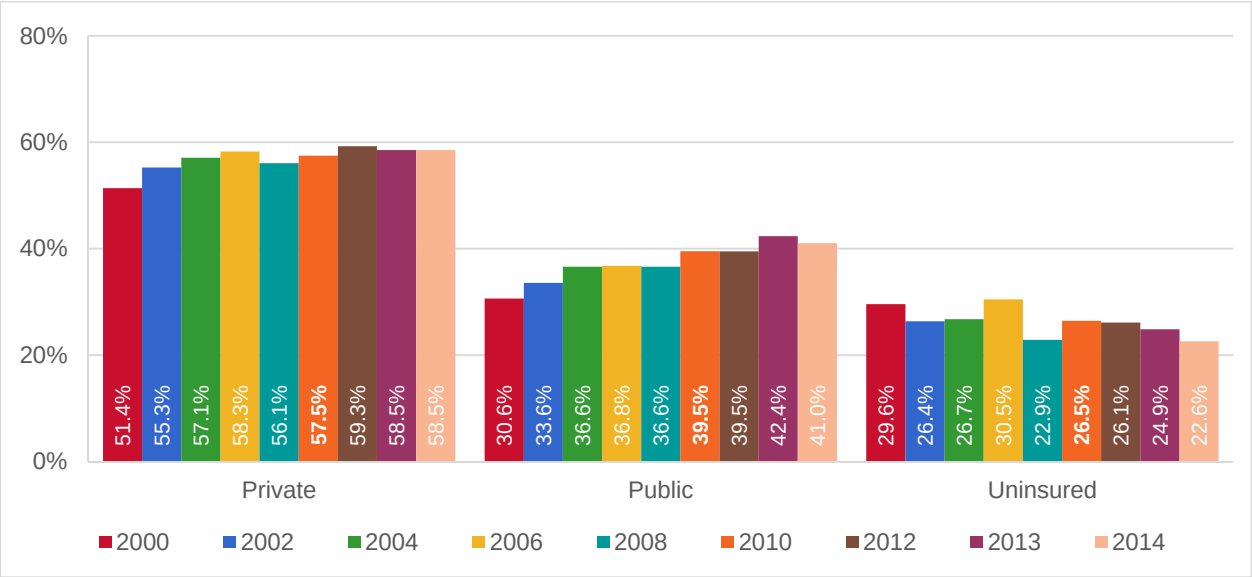
Source: Medical Expenditure Panel Survey, AHRQ. **Notes:** Changes were significant at the at the 1% level for FPL 100-200%, FPL 200-400% and FPL 400% + (2002-2014). Changes from 2013 to 2014 were not statistically significant.

Figure 5: Percentage of Adults 65 and Older with a Dental Visit in the Year for Select Income Groups, 2000-2014



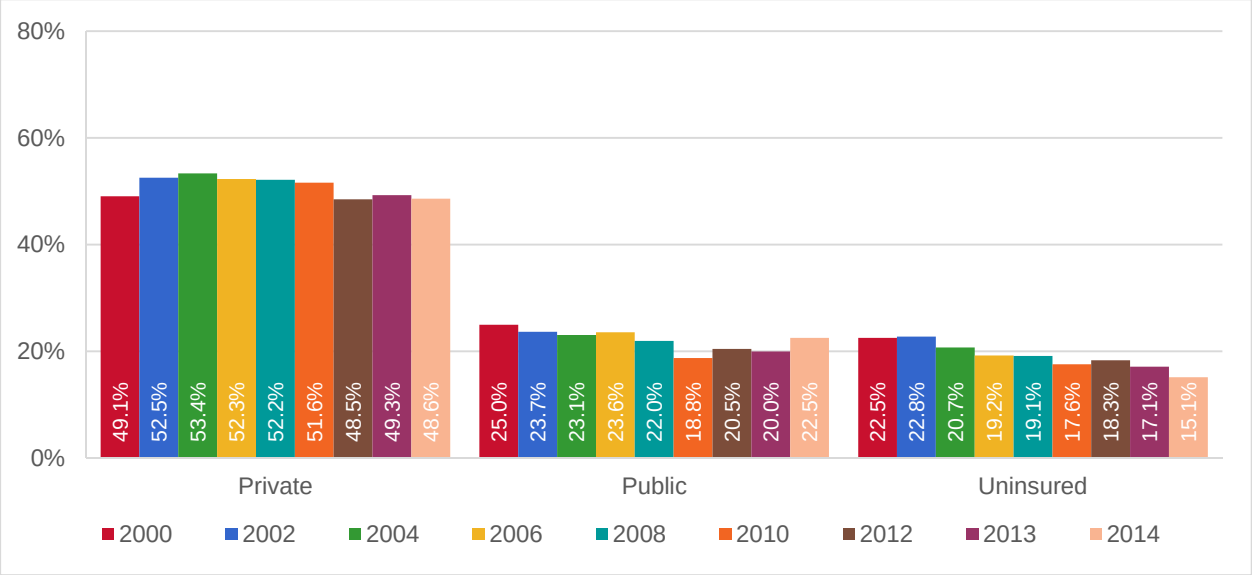
Source: Medical Expenditure Panel Survey, AHRQ. **Notes**: Changes were significant at the 5% level for FPL 400% + (2000-2014). Changes from 2013 to 2014 were not statistically significant for any income group.

Figure 6: Percentage of Children Ages 2-18 with a Dental Visit in the Year by Dental Benefits Status, 2000-2014



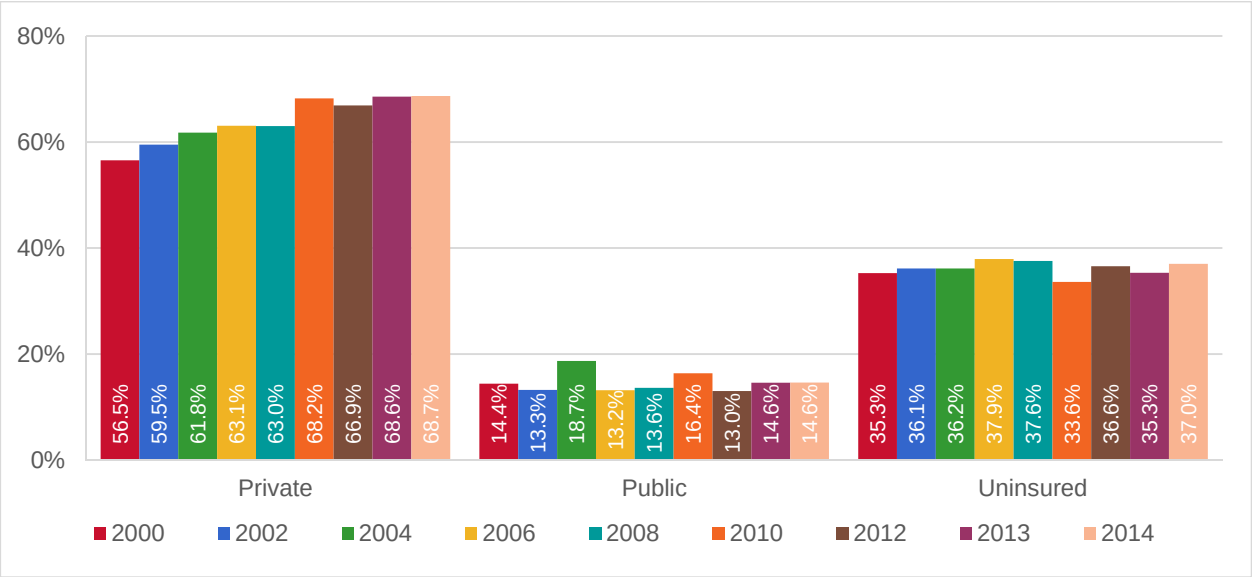
Source: Medical Expenditure Panel Survey, AHRQ. **Notes:** The increase in dental care utilization form 2000 to 2014 among children with private or public dental benefits was significant at the 1% level. The decline in dental care utilization among the uninsured from 2000 to 2014 was statistically significant at the 5% level. Changes from 2013 to 2014 were not statistically significant.

Figure 7: Percentage of Adults Ages 19-64 with a Dental Visit in the Year by Dental Benefits Status, 2000-2014



Source: Medical Expenditure Panel Survey, AHRQ. **Notes**: The decline in dental care utilization from 2013 to 2014 among the uninsured was statistically significant at the 5% level. Changes in dental care utilization among those with private or public dental benefits were not statistically significant from 2013 to 2014. Changes were significant at the 1% level for the uninsured (2000-2014). Changes were significant at the 1% level for private (2004-2014).

Figure 8: Percentage of Adults Ages 65 and Older with a Dental Visit in the Year by Dental Benefits Status, 2000-2014



Source: Medical Expenditure Panel Survey, AHRQ. **Notes**: Changes were significant at the 1% level for privately insured elderly adults (2000-2014). Changes from 2013 to 2014 were not statistically significant for elderly adults with private dental benefits, public benefits or no dental benefits.

Data & Methods

We analyzed data from the Medical Expenditure Panel Survey (MEPS) that is managed by the Agency for Healthcare Research and Quality (AHRQ). We focused on the period 2000 to 2014, the most recent year for which data are available (data for 2014 were released in September 2016). The MEPS is recognized as the most reliable data source for dental care utilization at the national level.[13]

We measured dental care utilization as the proportion of the population who visited a general practice (GP) dentist in the year. This is the most basic indicator of dental care utilization. It does not indicate the type of care received, the total amount of care received, or whether a treatment plan was completed. Nevertheless, it is an informative measure of whether the population is seeing the dentist.

We examined trends in dental care utilization for children ages 2-18, working-age adults ages 19-64, and elderly adults ages 65 and older. For each age cohort, we analyzed trends in dental care utilization by household income and dental benefits status. We classified dental benefits into three categories: 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, children enrolled in these programs were defined as having dental benefits. Medicaid coverage of dental benefits for adults is optional and varies considerably by state.[14] However, the MEPS does not allow us to identify the state of residence. Thus, we simply identify adults covered by Medicaid as publicly insured even though the majority will have either no dental benefits at all or very limited benefits. Because Medicare does

not provide dental benefits,[15] persons who only had Medicare coverage were considered uninsured for dental care. We test for statistical significance across time using a chi-squared test. Our point estimates and statistical inferences take into account the complex survey design of the MEPS.

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