

Research Brief

Most Important Barriers to Dental Care Are Financial, Not Supply Related

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The Health Policy Institute (HPI) is a thought leader and trusted source for policy knowledge on critical issues affecting the U.S. dental care system. HPI strives to generate, synthesize, and disseminate innovative research for policy makers, oral health advocates, and dental care providers.

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Key Messages

- *From 2003-2004 to 2011-2012, the percentage of the population reporting they needed dental care but could not get it declined. In both time periods, non-elderly adults were most likely to indicate being unable to obtain needed dental care.*
- *Among a group of eleven types of barriers to receiving needed dental care, financial barriers were mentioned most often. The level of financial barriers was highest among low-income non-elderly adults.*
- *Barriers related to the availability of a dentist were reported by a very small percentage of the population. The percentage indicating such "supply-side" barriers fell from 2003-2004 to 2011-2012.*
- *The results suggest strongly that financial factors are by far the most important reason the population foregoes needed dental care. Looking forward, due to the large numbers of children and adults expected to gain dental coverage under the Affordable Care Act, it is important to monitor access to dental care.*

Introduction

Dental care utilization among children increased considerably in the early 2000s and held steady from 2003 to 2011.¹ The increase in utilization among children was driven entirely by gains among lower income groups. Among the elderly, dental care utilization steadily increased since 2000, which may be associated with an increase in the percentage of the elderly with private dental benefits.^{2,3} However, among non-elderly adults, dental care utilization declined regardless of dental benefit status and income level. According to a recent study, the decline among non-elderly adults was due, in large part, to a decrease in private dental coverage and increases in public health insurance and no dental coverage among this age group.⁴

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Financial barriers are an important reason for not being able to see a dentist. One study reported that one out of five individuals reported being unable to afford needed dental care.⁵ A study focusing on the oral health of adults 18 to 64 years old found that in 2008, among seven given reasons that one may forgo a dental visit for an oral health problem, the main reason was “could not afford/no insurance.”⁶ It was also shown that financial barriers in the dental sector remain high relative to other parts of the healthcare sector.⁷

In addition to financial barriers to care, poor oral health literacy of both individuals and all types of health care professionals can be considered as a barrier. It contributes to poor access because individuals may not understand the importance of oral health care or their options for accessing such care.⁸ The adequacy of the dental workforce in terms of size and geographic distribution has also been considered as a possible barrier. For example, according to a 2009 report, the number of professionally active dentists per 100,000 population was projected to decrease from 2010 to 2020.⁹

In this brief, we examine recent trends in the percentage of the population in the U.S. who indicated that they needed dental care but could not get it. We investigate a broad range of barriers to receiving needed dental care with a focus on financial versus supply-related barriers. We also examine how financial barriers vary by patient age and income level. We then discuss policy implications, particularly as the Affordable Care Act (ACA) is implemented in the coming years.

Data & Methods

In this analysis, we used data from the National Health and Nutrition Examination Survey (NHANES), managed by the National Center for Health Statistics.¹⁰ NHANES is a nationally representative survey of the

resident civilian non-institutionalized U.S. population and is designed to assess the health and nutritional status of adults and children in the United States. It consists of questionnaires administered in the home, followed by a standardized physical examination in a specially equipped mobile examination center (MEC). Every year, since 1999, approximately 5,000 individuals of all ages participate in the survey. Data collected by the NHANES are released to the public in two-year intervals. Each two-year data set includes approximately 10,000 individuals.

The results presented in this brief are based on questions in the oral health questionnaire design to collect information for those two years of age and older. We based our analysis on NHANES data for the years 2003-2004 and 2011-2012 because identical questions regarding barriers to needed care were included in the oral health questionnaire for those years. There were 11 types of barriers respondents could indicate (shown in Figure 2). We aggregated certain barriers into two broad categories: (1) financial barriers and (2) supply-side barriers. Financial barriers included “could not afford the cost,” “did not want to spend the money” and “insurance did not cover procedures.” Supply-related barriers included “dental office too far away” and “office not open at convenient time.”

The data set we used lacked some precision in terms of potential reasons for dental care non-use. For example, the questionnaire did not include a possible response such as “could not find a dentist that accepts my insurance” in the supply-related category or “I exceeded my insurance’s annual max” as a financial barrier. We recognize these shortcomings.

In 2011-2012, respondents who indicated that they had never visited a dentist were not eligible to respond to questions about foregoing needed dental care. Hence, respondents who indicated never visiting a dentist were removed from the analysis for 2003-2004 and

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2011-2012. Our sample only included respondents two years of age and older who reported a dental visit sometime in the past.

We examined trends in barriers to needed dental care for children ages 2 to 20, non-elderly adults ages 21 to 64 and elderly adults ages 65 and over. We also reported results for low and high-income individuals. Low income was defined as less than 133 percent of the Federal Poverty Level (FPL). Upper income was defined as equal to or greater than 133 percent of the FPL. The income and age categories were relatively broad in order to have sufficient sample to present results by age and income.

We tested for statistical significance across time using a chi-squared test. Our point estimates and statistical inferences took into account the complex survey design of the NHANES.

Results

As shown in Figure 1, the percentage of respondents who indicated that during the past 12 months they needed dental care but could not get it fell from 18.2 percent in 2003-2004 to 14.6 percent in 2011-2012, a difference that was found to be statistically significant. The decline among children from 10.3 percent to 6.3 percent and the decline among non-elderly adults from 23.4 percent to 19.7 percent also were statistically

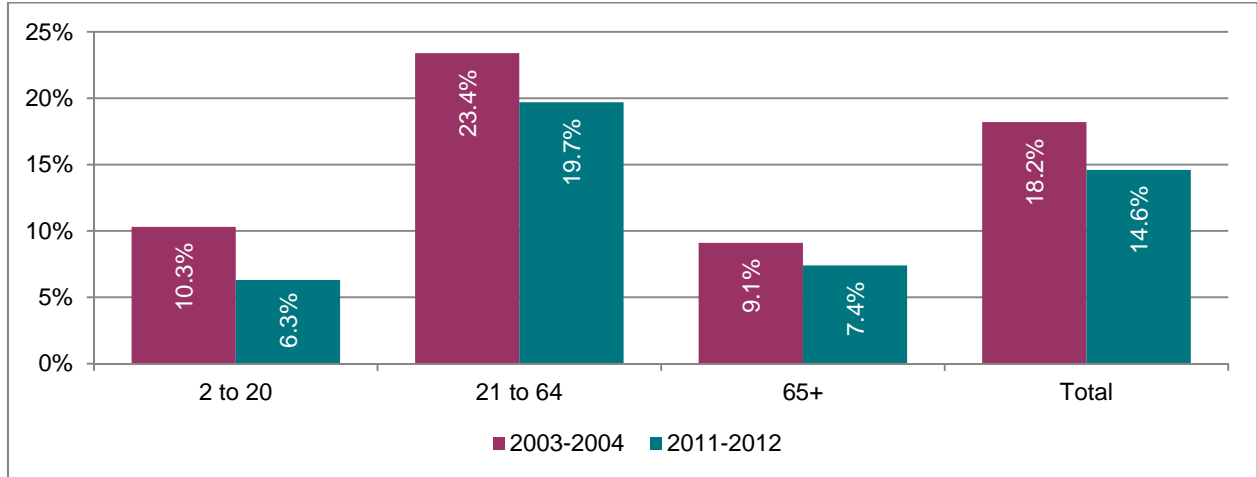
significant. In both periods, non-elderly adults were most likely to report barriers to dental care.

Respondents could indicate as many as 11 reasons for not being able to obtain needed dental care, and the percentage indicating each reason in 2003-2004 and 2011-2012 is shown in Figure 2. Supply-related barriers were mentioned much less often than financial barriers.

As seen in Figure 3, the percentage of individuals indicating supply-related barriers decreased from 1.7 percent to 0.7 percent and this difference was found to be statistically significant. The decline in the percentage indicating financial barriers, from 13.9 percent in 2003-2004 to 12.9 percent in 2011-2012, was not found to be statistically significant.

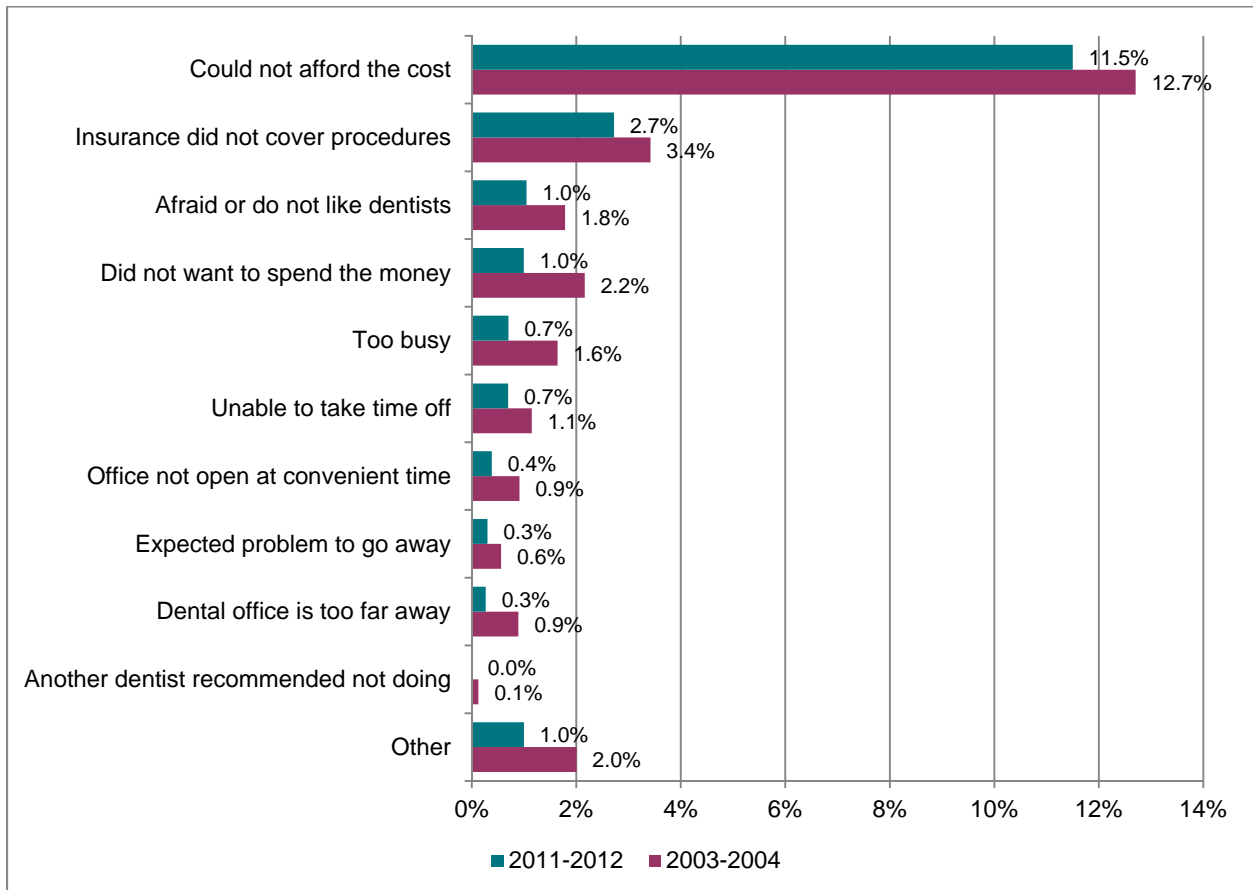
Figure 4 shows the percentage who reported financial barriers to obtaining needed dental care by age and income level. Only the decline among low-income children from 10.0 percent in 2003-2004 to 6.8 percent in 2011-2012 was found to be statistically significant. In both years, low-income non-elderly adults were most likely to report financial barriers to dental care. Supply-side barriers also were highest among low-income non-elderly adults, but declined from 4.0 percent to 1.4 percent (not shown); this decrease was statistically significant. Statistically significant declines in supply-side barriers also were reported by upper-income non-elderly adults (1.8% to 0.6%), upper-income children (2.2% to 1.1%) and low-income elderly (1.9% to 0.4%).

Figure 1: Percentage Indicating They Needed Dental Care but Could Not Get It in the past 12 Months by Age



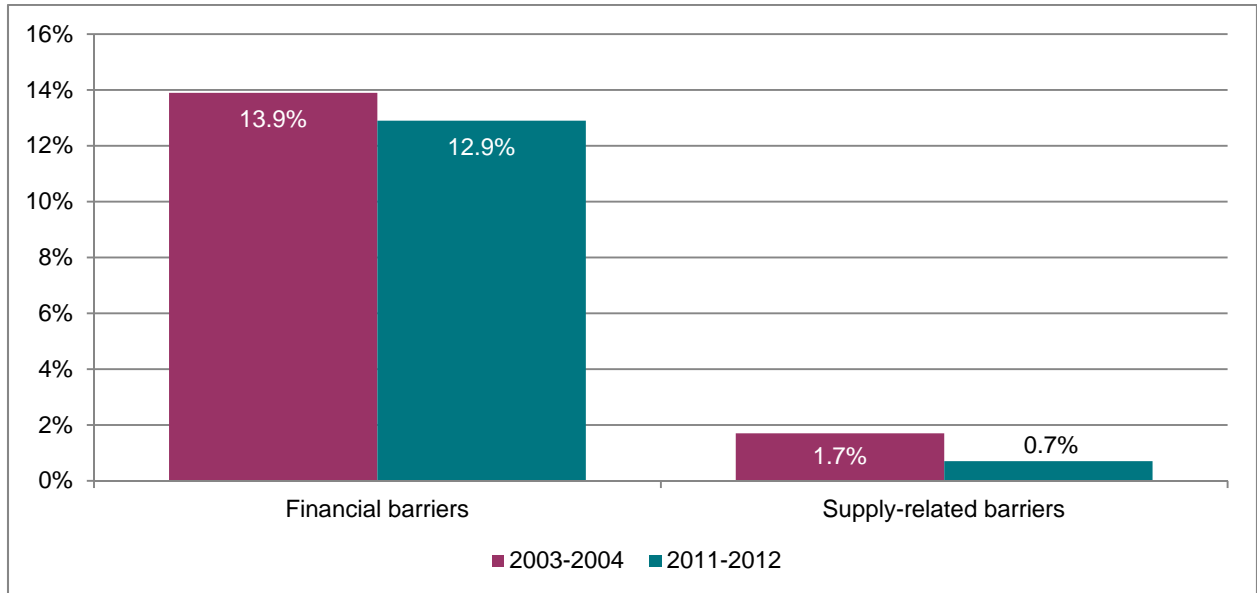
Source: 2003-2004 and 2011-2012 NHANES. **Notes:** Change from 2003-2004 to 2011-2012 was statistically significant at the 1% level for total and for adults 21 to 64 years of age. Change from 2003-2004 to 2011-2012 was statistically significant at the 5% level for children 2 to 20 years of age.

Figure 2: Reasons for Not Obtaining Needed Dental Care



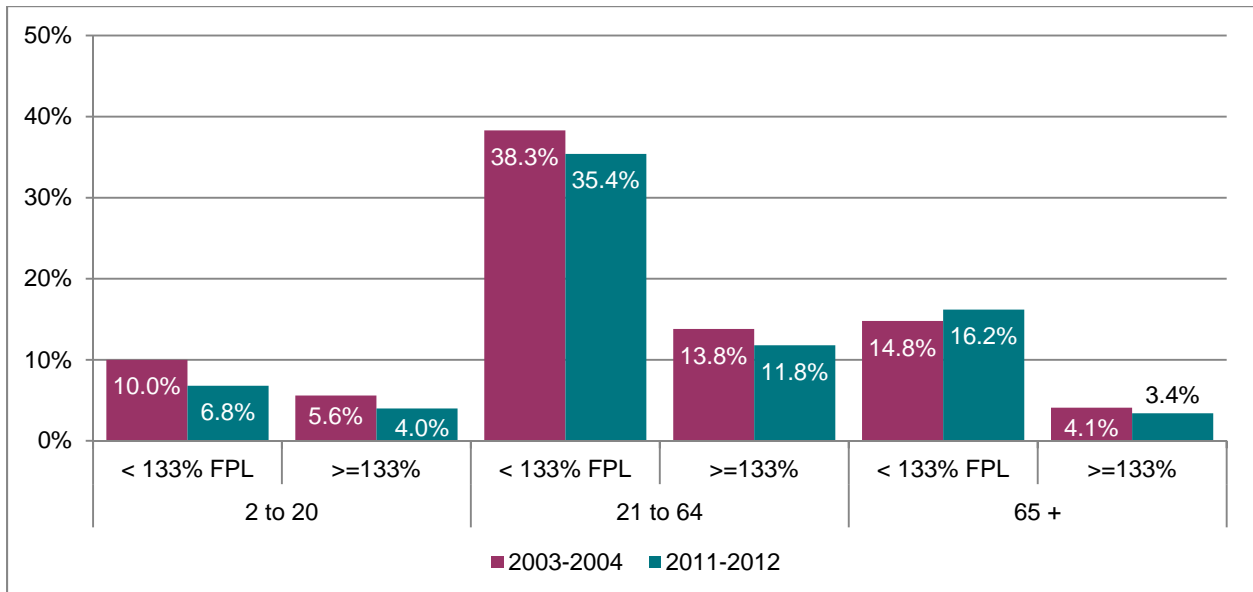
Source: 2003-2004 and 2011-2012 NHANES.

Figure 3: Percentage Indicating Financial and Supply-Related Barriers to Needed Dental Care



Source: 2003-2004 and 2011-2012 NHANES. **Notes:** Change from 2003-2004 to 2011-2012 in the percentage indicating supply-related barriers was significant at the 1% level.

Figure 4: Percentage Indicating Financial Barriers to Obtaining Needed Dental Care by Age and Income Level



Source: 2003-2004 & 2011-2012 NHANES. **Notes:** Change from 2003-2004 to 2011-2012 in the percentage indicating financial barriers among low-income children was significant at the 5% level.

Discussion

We found that the percentage of the population who needed dental care but could not get it fell from 2003-2004 to 2011-2012, and that the overall decline was due to declines among children and non-elderly adults. To shed more light on this decrease, we also examined a broad range of barriers to receiving dental care. Our analysis focused on financial barriers and barriers related to the availability of a dentist. The percentage of individuals reporting financial barriers to dental care was much greater than the percentage of people reporting a supply-related barrier to dental care.

The level of financial barriers was relatively low among children, and low-income children were less likely to report a financial barrier in 2011-2012 than in 2003-2004. Combined with an increase in utilization from 2000 to 2011 among publically insured children,¹¹ this suggests that the public safety net, through state Medicaid and CHIP programs, has been effective in making dental care more accessible to children, regardless of income level. States are required to provide dental benefits to children covered by Medicaid and the Children's Health Insurance Program (CHIP).¹²

Low-income, non-elderly adults consistently experience the highest levels of financial barriers to dental care. Dental benefits for adults have slowly eroded in state Medicaid programs and fewer adults have private dental benefits.¹³ Research has shown that this decline in coverage has led to a decline in utilization among non-elderly adults, especially among the poor¹⁴ and has led to increased emergency room visits for dental conditions among young adults.¹⁵

Supply-related barriers were reported by relatively small percentages of the population and this has declined over time. The overall decline could be due to an increase in the number of dentists during this period of time although further research is needed.¹⁶

In light of our findings, suggestions that a shrinking dentist workforce is a major constraint to dental care use may need to be re-evaluated.^{17,18} In fact, a recent study argues that the supply of dental care providers will continue to grow as a result of an increasing number of dental school graduates, dentists postponing retirement, and a greater use of dental auxiliaries.¹⁹

However, our findings regarding supply-related barriers need to be considered in the context of the ACA. As a result of the ACA, up to 8.7 million children are expected to gain dental benefits by 2018.²⁰ Of this total, 3.2 million will gain dental benefits through Medicaid. Approximately 8.3 million adults are eligible to gain Medicaid dental benefits in 2014.²¹ In addition, through April 19, 2014, about 1.1 million adults obtained private dental coverage through stand-alone dental plans in the new health insurance marketplaces.²² The large number of individuals gaining dental benefits will likely result in increased demand for dental care and may lead to increases in supply-related barriers in the future. This remains an important area of future research that the Health Policy Institute is pursuing.

It should also be noted that expanded Medicaid coverage does not guarantee increased access to dental care. It is important that policy makers put into place the enabling conditions to ensure the expansion population can access care. Evidence strongly shows that these conditions include expanded outreach to Medicaid beneficiaries and dental care providers,²³ improved provider incentive structures – including streamlined administrative structures and adjusted fees^{24,25,26,27} – and innovative practice models.^{28,29}

The Health Policy Institute will continue to monitor the implementation of the ACA and its impact on dentistry, including the ability of the dental workforce to respond to the oral health needs of newly covered Americans.

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