



## **Final Findings**

### **Access to Dental Care for California's Adult Immigrants and Their Children: Empirical Analyses, Policy Simulations, and Recommendations**

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Oral diseases are a major cause of infection, tooth loss, and debilitating pain. Oral diseases can also create speech and eating difficulties and inhibit an individual's social interactions. Problems associated with oral diseases often start in childhood and, if left untreated, progressively worsen over time. Studies show that developing caries (cavities or tooth decay) at a young age is associated with a higher risk of developing caries later in life. Early prevention and treatment of caries can easily resolve oral health problems, so regular dental check-ups are essential to maintaining good oral health.

However, many people, particularly immigrants, may not receive regular dental care. Since immigrants (including naturalized citizens and non-citizens, both documented and undocumented) comprise approximately one quarter of our state's population, it is critical to determine whether disparities in access to dental care exist between immigrants and U.S. born citizens. Reducing or eliminating barriers to dental care can ultimately reduce expensive dental and health care procedures, and alleviate much human pain and suffering.

Our study examined California's adult immigrants and their children to determine the likelihood of their visiting a dentist, dental hygienist, or orthodontist. Our study had three objectives:

- To determine the effect of immigration status on the likelihood of an adult visiting a dental provider in the last 12 months;
- To determine the effect of English language fluency on the likelihood of an adult visiting a dental provider in the last 12 months; and
- To determine the effect of English language and/or immigration status on the likelihood of an adult arranging a dental visit for his/her child in the last 12 months.

## **Background**

The available California data suggest that there are currently large disparities in access to dental care between immigrants and U.S. born citizens. Immigrants are less likely to visit a dental provider, less likely to have dental insurance, and more likely to have oral health problems when they do visit a dental provider. Data from the 2003 California Health Interview Survey show only 60.4% of immigrants visited a dental provider in the previous 12 months compared to 72.2% of U.S. born citizens; only 57.6% of immigrants had dental insurance compared to 73.9% of U.S. born citizens; and 28.4% of immigrants could not afford necessary dental care whereas only 13.3% of U.S. born citizens could not afford necessary dental care. Data from the 2001 California Health Interview Survey show that immigrants (adults and children) are far more likely than U.S. born citizens to see a dental provider for problems beyond a routine check-up: 36.5% of immigrants visited a dental provider for dental problems compared to only 26.8% of U.S. born citizens.

Disparities in access to dental care may be due an individual's immigration status, or due to differences in income, education, and fluency in English. According to the 2005 American Community Survey of the U.S. Census, the median earnings of adult immigrants in California are approximately 30%-40% lower than the median earnings of U.S. born citizens. Median earnings for male immigrants are \$31,912 (compared with \$52,384 for native-born males) and median earnings for female immigrants are \$28,485 (compared with \$41,022 for native-born females). Approximately 40% more immigrants live in poverty than do than U.S. born citizens. Given immigrants' low financial earnings, dental care and dental insurance coverage may not be affordable for many immigrant families.

Adult immigrants in California are also less educated than U.S. born citizens, and education is a critical factor in understanding the importance of good oral health. In fact, the 2005 American Community Survey finds that 37.9% of immigrants have less than a high school education compared to only 9.8% U.S. born Californians. In addition, 15.3% of immigrants hold a college degree whereas 20.9% of U.S. born Californians hold a college degree. Lower levels

of education may contribute to immigrants' limited English proficiency and limited literacy skills, both of which may be barriers to oral health care. The 2005 American Community Survey finds that while immigrants in California speak a variety of different languages (90.2% speak a language other than English at home), only 31.5% are able to speak English "very well." Limited English fluency may cause problems in scheduling appointments and accessing needed dental services.

## Methods

In order to find the independent effects of immigrant status and English fluency on access to dental care, we estimated multivariate statistical models of the likelihood that adults or children visited a dental provider during the previous 12 months. This statistical method allowed us to hold constant factors other than immigrant status and English fluency that may influence access to care for both immigrants and non-immigrants. Adult models included information on gender, age, race, education, marital status, family income as a percentage of the Federal Poverty Threshold (100%, 200%, 300% and higher), general health status, English fluency, citizenship status, dental insurance status, year, and took into account all county-level characteristics that did not change over time. Child models included information on gender, age, race, age of the responsible adult/parent, general health status of the child, general health status of the responsible adult/parent, education of the responsible adult/parent, marital status of the responsible adult/parent, family income as a percentage of the Federal Poverty Threshold (100%, 200%, 300% and higher), English fluency of the responsible adult/parent, citizenship status of each responsible adult/parent, dental insurance status, year, and took into account all county-level characteristics that did not change over time. Our data came from the 2001, 2003, and 2005 waves of the California Health Interview Survey (CHIS).

## Findings

To our knowledge, our study is the first to examine the demand for dental care among California's adult immigrants and their children by combining multiple years of data and taking into account all county-level characteristics that did not change over the time period analyzed.

In our statistical analyses, we found that immigration status is associated with the likelihood of adults visiting a dental provider in the past 12 months. However,

immigration status was not the strongest determining factor associated with adult dental visits. Furthermore, our study showed that immigration status did not affect the likelihood of adult arranging a dental visit for his/her child. Specifically, we found that:

- Among adults, non-citizens are less likely than U.S. born citizens to have visited a dental provider in the last 12 months, whereas naturalized citizens are more likely than U.S. born citizens to have visited a dental provider in the last 12 months. English fluency was not associated with having visited a dental provider.
- Among children, neither their parent's/responsible adult's citizenship nor their parent's/responsible adult's English fluency is associated with having visited a dental provider in the last 12 months.
- Dental insurance coverage, either private insurance or state sponsored Denti-Cal coverage, has the strongest association with having visited a dental provider in last 12 months among adults.
- Age has the strongest association with having visited a dental provider in last 12 months among children.
- If Medi-Cal enrollees do not realize they have dental coverage through Denti-Cal, then Denti-Cal has no association with dental visits. This was true of visits to a dental provider in the last 12 months for both adults and children.
- Among adults, private dental insurance coverage and Medi-Cal coverage have the same association with having visited a dental provider in the last 12 months if Medi-Cal enrollees recognize their dental coverage through Denti-Cal.
- Among children, in addition to age, other important factors associated with dental visits are race, family income as a percentage of the Federal Poverty Threshold (300% and above), age of the responsible parent/adult, and the educational level of the responsible parent/adult.
- Among adults, in addition to dental coverage and immigrant status, other important factors associated with dental visits are sex, age, race, education, marital status, family income as a percentage of the Federal Poverty Threshold (200% and above), and general health status.

## **Policy Recommendations**

- **The State should implement an educational campaign to increase adult Medi-Cal enrollees' awareness and knowledge of the Denti-Cal benefits.** New Medi-Cal enrollees need to be clearly informed about Denti-Cal coverage benefits at the time they enroll. Past enrollees should receive reminders about Denti-Cal benefits via mailed postcard notices.
- **The State should expand its Children's Dental Disease Prevention Program (CDDPP), and invest in other innovative dental prevention programs.** Currently, the California Department of Health Services contracts with U.C. San Francisco's School of Dentistry to oversee the California Children's Dental Disease Prevention Program. This program serves more than 320,000 preschool and elementary school children in 32 California counties. Program components include fluoride supplements, dental sealants, and kid-friendly oral health education. Expanding CDDPP would greatly enhance dental health care for underserved children.

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