



SEPTEMBER 2008 • NUMBER 2

Since 2001, Children's Health Initiatives (CHIs) have emerged in 30 of California's 58 counties to expand health insurance coverage for children. These innovative initiatives typically have two parts: (1) a new insurance product called Healthy Kids that covers children who are ineligible for Medi-Cal and Healthy Families, California's public programs for children in families with incomes up to 250 percent of the federal poverty level; and (2) comprehensive outreach campaigns that find and assist families with enrolling children into any available program. In these counties, which include nearly three-quarters of all uninsured children in the state, Healthy Kids programs currently provide more than 85,000 children with comprehensive health insurance coverage (Stevens, Rice, and Cousineau 2007).

This brief is funded by the David and Lucile Packard Foundation and reports findings from evaluations of CHIs in three Healthy Kids counties: Los Angeles, San Mateo, and Santa Clara.

Three Independent Evaluations of Healthy Kids Programs Find Substantial Gains in Children's Dental Health Care

by Dana Hughes (University of California, San Francisco), Embry Howell (Urban Institute), Christopher Trenholm (Mathematica), Ian Hill (Urban Institute), and Lisa Dubay (Johns Hopkins University)

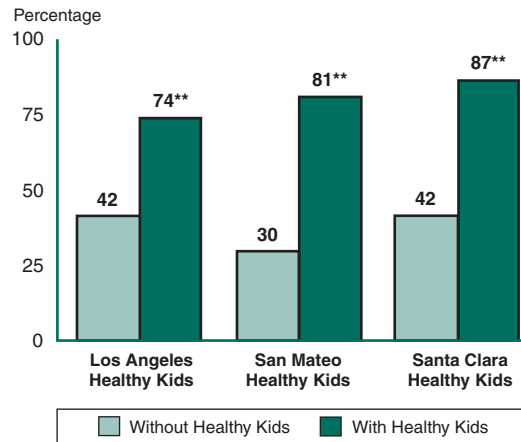
This brief presents highlights from rigorous, independent evaluations of the Healthy Kids programs in three California counties: Los Angeles, San Mateo, and Santa Clara. Launched by Children's Health Initiatives (CHIs) in these counties between 2001 and 2003, the three Healthy Kids programs provide children with comprehensive health insurance coverage, including a broad range of medical, dental, and vision care; prescription drugs; and mental health services. Children are eligible for Healthy Kids if they are ineligible for California's two major state insurance programs, Medi-Cal and Healthy Families, and live in families with incomes up to 300 percent of the federal poverty level (FPL) in Los Angeles and Santa Clara counties, and 400 percent of the FPL in San Mateo County. Most of the children enrolled in Healthy Kids have family incomes at or below the poverty level. This brief describes some of the many positive impacts that Healthy Kids programs have had on children's access and use of dental services. For more information on these and other findings on the three programs, see <http://www.urban.org> and <http://www.mathematica-mpr.com/health/chi.asp>.

Importance of Dental Health Care

Healthy Kids programs provide comprehensive insurance coverage for dental care (along with coverage for other types of health care) to children in low- to moderate-income families who are otherwise unable to access affordable coverage. Three of the largest programs—in Los Angeles, San Mateo, and Santa Clara counties—currently provide insurance coverage to about 60,000 children living in California communities with widely varying demographic characteristics. Before enrolling in Healthy Kids, few of these children had coverage for dental services, placing them at long-term risk for poor oral health and limiting their use of key services, such as routine dental checkups and treatment.

Dental disease is the most common chronic childhood disease (U.S. Department of Health and Human Services 2000). In California, 54 percent of kindergarteners and 71 percent of third graders have a history of tooth decay, and 28 percent of children in both grades have untreated tooth decay. According to the Centers for Disease Control and Prevention (CDC), "The daily reality for children with untreated oral disease is often persistent pain, inability to eat comfortably or chew well, embarrassment at discolored and damaged teeth, and distraction from play and learning" (CDC 2004). Past research shows that provision of dental insurance coverage can improve children's access to dental care, including increased use of dental services and reduced unmet need (Yu et al. 2002; Blackwell et al. 2003; Kenney et al. 2005; Szilagyi et al. 2004).

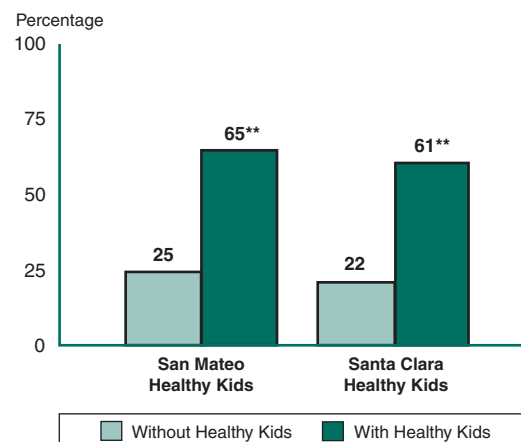
Figure 1: Impact of Healthy Kids on Having a Usual Source for Dental Care



** Difference is statistically significant at p -value < 0.01 .

Los Angeles study includes children ages 4 and 5; San Mateo includes ages 4 to 18; Santa Clara includes ages 3 to 18.

Figure 2: Impact of Healthy Kids on Having a Preventive Dental Visit in Past Six Months



** Difference is statistically significant at p -value < 0.01 .

San Mateo study includes children ages 4 to 18; Santa Clara includes ages 3 to 18.

Impact of Healthy Kids on Children's Dental Health Care

Three ongoing, independent evaluations of Healthy Kids programs in Los Angeles, San Mateo, and Santa Clara counties find overwhelming evidence that the programs have improved both access to and use of dental care services among children who participated. The impact includes not only sharp gains in the use of preventive dental services, but also dramatic gains in the treatment of dental problems (such as cavities) that can have significant, harmful effects on children's health and schooling if left untreated. For Los Angeles, impacts on dental care and access are found for young children under age six, who are the study group for that evaluation. For San Mateo and Santa Clara counties, impacts are found for children of all ages.¹

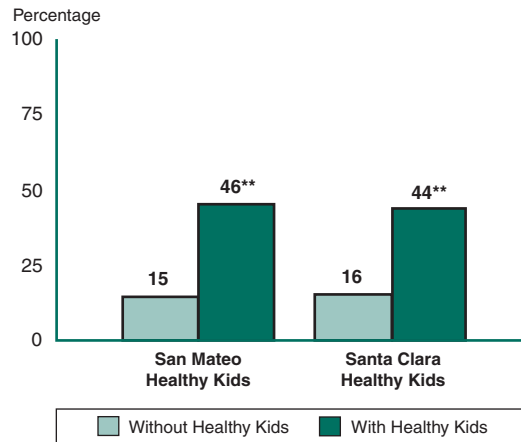
Access to Dental Care Improves

Access to dental care is key to the provision of preventive services, such as fluoride applications and dental sealants, as well as to treating oral health problems like cavities. Two basic indicators of whether children have good access to dental services are whether they have a usual source of dental care and whether they have a recent dental visit. Across all three Healthy Kids programs, children enrolled in the program experienced substantial improvements in both indicators compared to similar children without Healthy Kids coverage.

As seen in Figure 1, the proportion of children with a usual source of dental care increased substantially in Los Angeles

¹ For Los Angeles County, the study of dental care impacts focused only on Healthy Kids children ages 4 and 5; for San Mateo County, it focused on Healthy Kids children ages 4 through 18; and for Santa Clara County, it focused on Healthy Kids children ages 3 through 18. For Los Angeles County, the data available for this brief include two measures (whether a child has a usual dental source and whether a child has any unmet dental needs). They do not include measures of dental care use.

Figure 3: Impact of Healthy Kids Having a Dental Treatment in Past Six Months

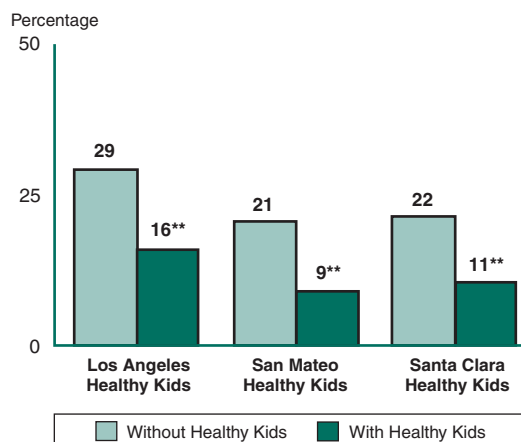


Note: Dental treatment includes a cavity filling or tooth extraction.

** Difference is statistically significant at p -value < 0.01 .

San Mateo study includes children ages 4 to 18; Santa Clara includes ages 3 to 18.

Figure 4: Impact of Healthy Kids on Unmet Need for Dental Care in Past Six Months



** Difference is statistically significant at p -value < 0.01 .

Los Angeles study includes children ages 4 and 5; San Mateo includes ages 4 to 18; Santa Clara includes ages 3 to 18.

County as a result of Healthy Kids coverage, from 42 percent to 74 percent. Likewise, in San Mateo and Santa Clara counties, the proportion of children with a usual source of dental care more than doubled, reaching over 80 percent as a result of Healthy Kids coverage. For Los Angeles, this impact on dental care access is found for young children (ages 4 and 5)—the study group for that evaluation—while for San Mateo and Santa Clara counties, the impact is found for both younger and older children.

The proportion of children with a dental visit in the past six months also dramatically improved as a result of Healthy Kids. In both counties where this indicator was measured (San Mateo and Santa Clara counties), the proportion of children with a dental checkup in the past six months rose from about 25 percent without Healthy Kids to more than 60 percent with Healthy Kids (Figure 2). Moreover, the proportion of children who received a dental treatment in the past six months (such as a cavity filling or tooth extraction) nearly tripled with Healthy Kids coverage—from about 15 to 45 percent in both counties (Figure 3).

Unmet Need for Dental Care Declines

Children with unmet dental care needs—meaning a need for preventive dental care or dental treatment that goes unaddressed—are more likely than other children to experience oral health problems. In all three counties, children enrolled in Healthy Kids experienced dramatically lower levels of unmet dental needs compared to similar children without Healthy Kids coverage (Figure 4). In Los Angeles County, unmet need for dental services for young children fell from 29 percent without Healthy Kids to 16 percent with Healthy Kids. In San Mateo and Santa Clara counties, unmet need for dental care for young and older children likewise fell sharply, from around 20 percent without Healthy Kids to around 10 percent with Healthy Kids.

Conclusions and Next Steps

Healthy Kids programs in Los Angeles, San Mateo, and Santa Clara counties significantly improved children's access to and use of dental services. In three different counties located in different regions of the state, children with Healthy Kids coverage experienced dramatic improvements in their access to and use of dental care. Similarly, children with Healthy Kids experienced sharp reductions in their unmet need for dental services. These robust results suggest that ensuring that all children have dental coverage could substantially improve dental care use among other uninsured children. Given that dental disease is the most common chronic childhood disease, the provision of dental coverage is a powerful tool for relieving immediate suffering and improving children's health and well-being.

STUDY METHODS

Data for this brief were collected from household surveys conducted in Los Angeles, Santa Clara, and San Mateo counties as part of comprehensive evaluations of the Children's Health Initiatives in these counties. The Los Angeles survey was conducted between April and December 2005 with 1,087 families; the San Mateo survey was conducted between April 2006 and January 2007 with 1,404 families; and the Santa Clara survey was conducted from August 2003 to July 2004 with 1,235 families. Response rates on these surveys were 86 percent, 77 percent, and 89 percent, respectively.

All surveys were conducted via computer-assisted telephone interviews, primarily in Spanish and English. Each survey asked families about a sampled child who had enrolled in the Healthy Kids program. In Los Angeles, the sampled children were under age 6; in the other two counties, the sampled children ranged from ages 0 to 18. While there were some differences in the types of questions asked and in the wording of some questions across the three surveys, the differences do not affect the results presented in this brief.

To measure the impacts of Healthy Kids within each county, two groups of children were sampled and compared in each county: 1) "established enrollee" children who had been enrolled in Healthy Kids for roughly one year; and 2) "recent enrollee" children who were selected for the sample at the time they were enrolling in Healthy Kids. The established enrollee samples serve as the treatment groups for the studies by providing a measure of the access and use of health care services among children who have Healthy Kids coverage. Survey questions asked about these children's access, use, and other health care experiences in their most recent six months in the program. The recent enrollee samples serve as the comparison groups for the studies. Survey questions asked about these children's health care experiences in the six-month period before they enrolled in Healthy Kids, providing a measure of what the experiences of established enrollee children would have been in the absence of Healthy Kids. Impact estimates are based on regression models that control for important demographic and socioeconomic characteristics that might differ between the two groups, such as the child's age and race/ethnicity, the parents' income, and length of time the family has lived in the county.

Acknowledgments

The authors of this brief thank the evaluation funders and research teams for their support. The evaluation of the Los Angeles County CHI, funded by First 5 LA and the California Endowment, is conducted by the Urban Institute and partners the University of Southern California, the University of California at Los Angeles, Mathematica Policy Research, and Castillo & Associates. The evaluation of the San Mateo CHI is funded by San Mateo County, the Sequoia Health Care District, the Peninsula Health Care District, First 5 San Mateo County, and the David and Lucile Packard Foundation and conducted by the Urban Institute and partners Mathematica Policy Research, Aguirre International, and the University of California at San Francisco. The evaluation of the Santa Clara CHI is funded by the David and Lucile Packard Foundation and conducted by Mathematica Policy Research and partners the Urban Institute and the University of California at San Francisco. The authors also thank the many outstanding colleagues who contributed to the research on which this brief is based: Martha Kovac and Betsy Santos at Mathematica Policy Research, Genevieve Kenney and Louise Palmer at the Urban Institute, Sean Orzol at the University of Michigan, and Moira Inkelas at the University of California at Los Angeles. Finally, the authors thank staff at each of the county health plans for their assistance in completing the survey data collection, as well as the many Healthy Kids families who graciously provided their time and attention by completing survey interviews.

References:

- Blackwell, D.L., J.L. Vicerie, and E.A. Wondimu. "Summary Health Statistics for U.S. Children: National Health Interview Survey 2000." *Vital and Health Statistics*, series 10, no. 213, 2003.
- Centers for Disease Control and Prevention. "Fact Sheet: Children's Oral Health." May 2000, updated October 4, 2004.
- Dental Health Foundation. "Mommy, It Hurts to Chew." The California Smile Survey. Oakland, CA: February 2006.
- Kenney, G.M., J.R. McFeeters, and J.Y. Yee. "Preventive Dental Care and Unmet Dental Needs Among Low-Income Children." *American Journal of Public Health*. vol. 95, no. 8, August 2005, pp. 1360-1366.
- Newacheck, P.W., M. Pearl, D.C. Hughes, and N. Halfon. "The Role of Medicaid in Ensuring Children's Access to Care." *Journal of the American Medical Association*, vol. 280, no. 20, November 25, 1998, pp. 1789-1793.
- Stevens, G.D., K. Rice, and M.R. Cousineau. "Children's Health Initiatives in California: The Experiences of Local Coalitions Pursuing Universal Coverage for Children." *American Journal of Public Health*. vol. 97, no. 4, April 2007.
- Szilagyi, P.G., A.W. Dick, J.D. Klein, L.P. Shone, J. Swanziger, and T. McInerny. "Improved Access and Quality of Care After Enrollment in the New York State Children's Health Insurance Program (SCHIP)." *Pediatrics*, vol. 113, no. 5, 2004, pp. 395-404.
- U.S. Department of Health and Human Services. "Oral Health in America: A Report of the Surgeon General." Rockville, MD: National Institute of Dental and Craniofacial Research, September 2000.
- Yu, S.M., H.A. Bellamy, M.D. Kogan, J.L. Dunbar, R.H. Schwalbert, and M.A. Schuster. "Factors That Influence Receipt of Recommended Preventive Pediatric Health and Dental Care." *Pediatrics*, vol. 110, no. 6, 2002, p. 73.



Mathematica Policy Research, Inc.
PO Box 2393
Princeton, NJ 08543-2393

(609) 799-3535
www.mathematica-mpr.com

**The University of California,
San Francisco**
San Francisco, CA 94143

(415) 476-9000
www.ucsf.edu

Urban Institute
2100 M Street, NW
Washington, DC 20037

(202) 833-7200
www.urban.org