

## IN BRIEF

JUNE 2007 • NUMBER 5

The Santa Clara County Children's Health Initiative (CHI) is an innovative effort to expand health insurance coverage of children in the county. CHI has two parts; the first is a new insurance product, Healthy Kids, which covers children in households with incomes up to 300 percent of the federal poverty level who are ineligible for the two major state insurance programs, Medi-Cal and Healthy Families. The second part of CHI is a comprehensive outreach campaign that finds uninsured children and enrolls them in the appropriate program. This evaluation of the Santa Clara County CHI is funded by the David and Lucile Packard Foundation and is conducted by Mathematica® and its subcontractors, the Urban Institute and the University of California at San Francisco.

### Stable Coverage Benefits Healthy Kids Children

by Christopher Trenholm (Mathematica)

*Launched in January 2001 by the Santa Clara County Children's Health Initiative (CHI), the Healthy Kids program provides health insurance coverage to over 13,000 children in the county with household incomes up to 300 percent of the federal poverty level (\$62,000 for a family of four) who are ineligible for the two major state insurance programs in California, Medi-Cal and Healthy Families. The vast majority of Healthy Kids children have household incomes below 250 percent of the federal poverty level, low enough to qualify them for one of the state programs, but they are ineligible for these programs because of their immigration status. This brief presents findings from two surveys of families with incomes below 250 percent of the federal poverty level with a child enrolled in Healthy Kids. Families were first surveyed after their child had been enrolled for about one year. They were surveyed again after their child had been enrolled for about four years. The brief describes changes in children's medical care and other outcomes between these two surveys—that is, during the most recent three years that they had stable Healthy Kids coverage.*

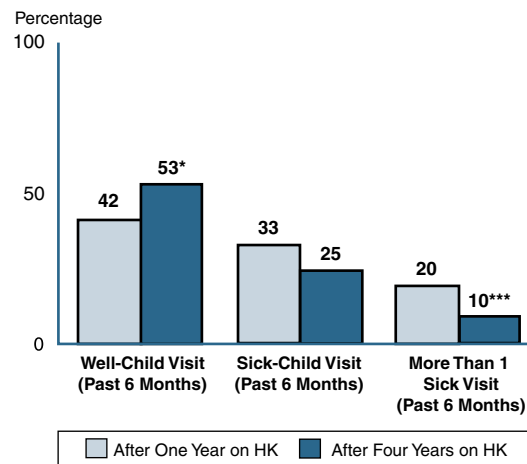
#### Value of Stable Coverage

Stable health insurance coverage can have many benefits for children and their families. For example, studies have shown that children with stable coverage are more likely to receive needed health care from a consistent and appropriate source, such as a usual physician at a health clinic (Summer et al. 2006). Care is also more likely to meet recommended guidelines, including schedules for necessary immunizations and regular preventive visits (Smith et al. 2006; Olson et al. 2005). This, in turn, can decrease illness and medical costs, because significant health problems are either avoided or identified and treated at an early stage. Parents may also experience greater well-being as their confidence in and satisfaction with their child's health care grows.

Findings from the two surveys of children enrolled in the Santa Clara County Healthy Kids program affirm the value of stable coverage. While children remained covered by Healthy Kids, their use of preventive care grew, as did parents' confidence about meeting their child's health care needs. Children also had fewer unmet needs for health care, and their number of sick visits fell.

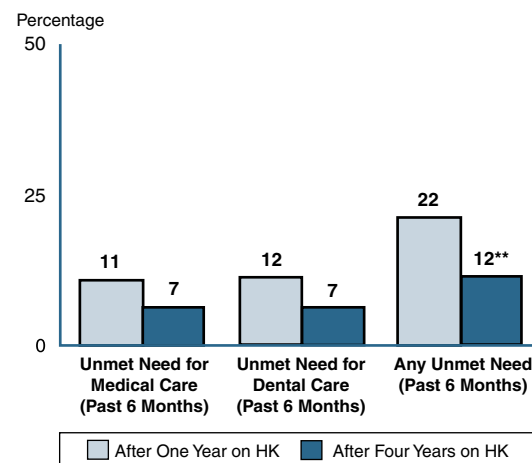
All of these gains are in addition to the sizeable benefits from having Healthy Kids coverage for one year, described in earlier briefs in this series. These benefits include a substantial increase in children's use of preventive, specialty, and oral health care; a large reduction in their unmet needs for health care; and a decline in the number of school days missed because of illness.

**Figure 1: Change in Children’s Use of Medical Care with Continued Healthy Kids (HK) Coverage**



\* Difference is statistically significant at  $p$ -value < 0.10.  
 \*\*\* Difference is statistically significant at  $p$ -value < 0.01.

**Figure 2: Change in Children’s Unmet Needs with Continued Healthy Kids (HK) Coverage**



\*\* Difference is statistically significant at  $p$ -value < 0.05.

## Healthy Kids Children Have Benefited from Stable Coverage

Comparison of children’s experience after four years of Healthy Kids coverage with their experience after one year showed that children have benefited in many ways from having a reliable source of health coverage. The advantages include the following:

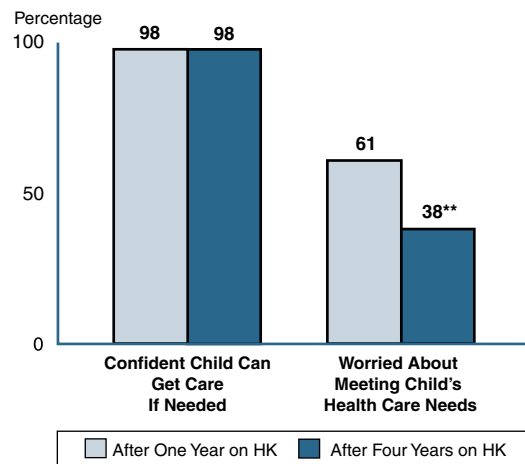
### *Children Received More Preventive Care.*

During the most recent three years of Healthy Kids coverage, children’s use of well-child care grew significantly (Figure 1). After the first year, 42 percent of the children had had a well-child visit in the prior six months. Three years later, this proportion rose to 53 percent, a gain of 11 percentage points.

***Children’s Use of Sick Care Declined.*** The proportion of children with a sick visit fell during this same period, from 33 percent to 25 percent, and the proportion with multiple sick visits fell from 20 percent to 10 percent (Figure 1). While the first change was not statistically significant (meaning that it cannot be attributed to Healthy Kids with a high degree of confidence), the latter change was statistically significant.

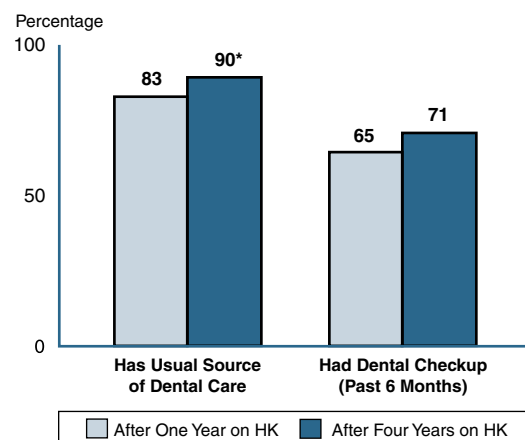
***Children’s Unmet Health Care Needs Declined.*** Parents were less likely to report that their child had an unmet need for health care after remaining enrolled in Healthy Kids (Figure 2). After the first year of Healthy Kids enrollment, 22 percent of parents reported that their child had an unmet health care need, meaning a need for any type of medical or dental care.

**Figure 3: Change in Parent's Concerns About Child's Health Care with Continued Healthy Kids (HK) Coverage**



\*\* Difference is statistically significant at  $p$ -value  $< 0.05$ .

**Figure 4: Change in Children's Dental Access and Use with Continued Healthy Kids (HK) Coverage**



\* Difference is statistically significant at  $p$ -value  $< 0.10$ .

Three years later, only 12 percent reported having an unmet need—a decline of 10 percentage points.

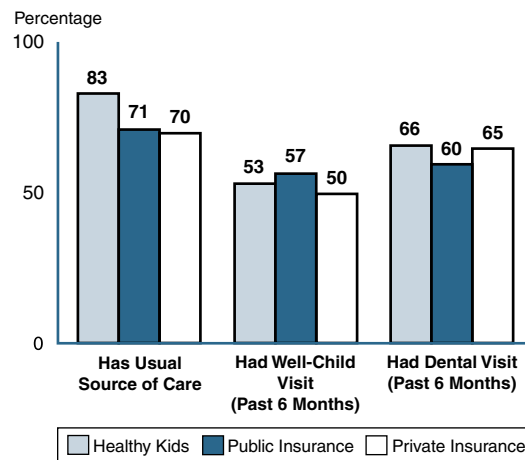
**Parents' Confidence Improved.** An earlier brief in this series found that, after their first year with Healthy Kids coverage, nearly all parents were confident that they could get health care for their child if needed. However, a sizeable number of parents continued to worry about meeting their child's overall health care needs. Three years later, these lingering worries had declined significantly (Figure 3). The proportion of families reporting that they were very or somewhat worried about meeting their child's health care needs fell sharply, from 61 to 38 percent.

**Dental Access Continued.** An earlier brief also found that Healthy Kids children experienced dramatic improvements in their dental access after their first year on the program. Three years later, this access showed signs of improving further (Figure 4). Most notably, the proportion of children with a usual source for dental care rose from 83 percent to 90 percent. The proportion of children who received a dental checkup also rose between the two surveys, but the change was not statistically significant.

### Healthy Kids Children Look Much Like Other Insured Children in the State

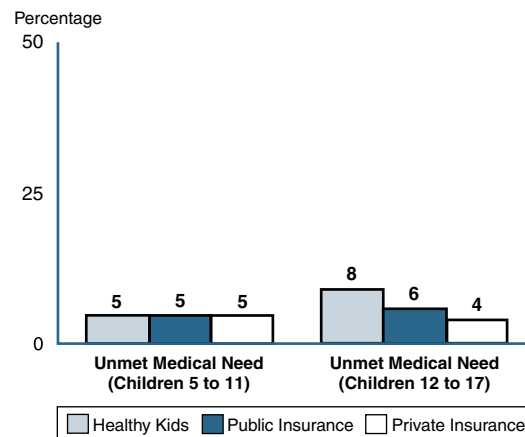
As a result of stable Healthy Kids coverage, utilization of health care by children in the study sample now appears similar

**Figure 5: Children’s Health Care Access and Use, by Insurance Coverage Type (Ages 12 to 17)**



Notes: Estimates for children with public (Medi-Cal or Healthy Families) and private insurance include Latino children from families with household income below 300 percent of the federal poverty level, a sociodemographic group comparable to Healthy Kids. Estimates are based on data from the 2003 and 2005 California Health Interview Surveys.

**Figure 6: Children’s Unmet Needs for Medical Care, by Insurance Coverage Type**



Notes: Estimates for children with public (Medi-Cal or Healthy Families) and private insurance include Latino children from families with household income below 300 percent of the federal poverty level, a sociodemographic group comparable to Healthy Kids. Estimates are based on data from the 2003 and 2005 California Health Interview Surveys.

to the utilization by other insured children in California. When compared to insured children with similar sociodemographic characteristics, children ages 12 to 17 in the study sample were just as likely as other insured children to have a usual source of care, to have a preventive medical visit, and to have a preventive dental visit (Figure 5). A similar pattern was evident among children ages 5 to 11 (not shown); although no comparison data are available on well-child visits. For both age groups, there was little or no difference in unmet needs for medical care (Figure 6). Across all three insurance types, unmet needs were low, ranging from just 4 to 8 percent.

**References**

Olson, Lynn M., Suk-fong S. Tang, and Paul W. Newacheck. “Children in the United States with Discontinuous Health Insurance Coverage.” *New England Journal of Medicine*, vol. 353, no. 4, July 28, 2005.

Smith, Philip J., John Stevenson, and Susan Y. Chu. “Associations Between Childhood Vaccination Coverage, Insurance Type, and Breaks in Health Insurance Coverage.” *Pediatrics*, vol. 117, no. 6, June 2006.

Summer, L. and Cindy Mann. “Instability of Public Health Insurance Coverage for Children and Their Families: Causes, Consequences, and Remedies.” *The Commonwealth Fund*, June 2006.

## What Do These Findings Mean?

This study shows that the longer children maintain health insurance coverage, the more they can benefit. When children remained enrolled in Healthy Kids, their use of preventive care rose, sick visits fell, and unmet needs for health care declined. As a result, their health care use and needs began to look like those of similar insured children in the state.

Of course, benefiting from stable coverage requires that children remain enrolled for a longer time. Fortunately, for Healthy Kids children, this is often the case. Among the children in our initial sample who had been enrolled for one year, close to two-thirds remained in Healthy Kids three years later. Moreover, most who left Healthy Kids had either reached the age limit of 18 or moved out of the county, making them ineligible for further coverage.

The stability of Healthy Kids coverage speaks to the critical gap in health insurance that the program has filled. Before the creation of Healthy Kids, few eligible families had access to comprehensive coverage, either public or private. Indeed, nearly half the children in our sample never had health insurance coverage before enrolling. An additional one-third had coverage only for high-cost services, such as emergency room visits and hospitalizations.

Most likely, many children maintained Healthy Kids coverage because it was simple to renew. On the follow-up survey, 70 percent of parents reported that it was very easy to complete the renewal application. Fewer than 5 percent reported that it was very or even somewhat difficult. Given the barriers these families may face in terms of language and acculturation to the health care system, their positive experience speaks to the success of the program's efforts to retain children. Examples include making culturally appropriate renewal assistance widely available and following up intensively with families who have not submitted a renewal application. These and other types of family-friendly procedures can serve as a model for other public insurance programs trying to maintain stable coverage for children.

These latest findings add to the following earlier results showing that the Santa Clara County CHI and Healthy Kids program improved the well-being of children and families:

- During its first two years, the CHI added an estimated 13,000 children, who would not have otherwise enrolled, to the Medi-Cal and Healthy Families programs. For each child enrolled in Healthy Kids, CHI enrolled close to one additional child in Medi-Cal or Healthy Families.
- Healthy Kids sharply increased access to and use of health care. After their first year in Healthy Kids, the proportion of children with a usual source of medical care doubled, the proportion with a well-child visit rose 80 percent, and the proportion with an unmet medical need fell by half. Impacts were similarly dramatic for children's dental care. For example, the proportion of children who received a recent dental checkup rose, from 22 to 61 percent.
- Healthy Kids improved children's health and reduced missed school days. The proportion of parents reporting their child was in fair or poor health fell after the first year in Healthy Kids, from 18 to 12 percent. The proportion of children who missed three or more school days because of illness fell by half, from 11 to 5 percent.

## STUDY METHODS

The evaluation of the Santa Clara County Children's Health Initiative included two surveys of families with a child enrolled in Healthy Kids. The first was conducted in 2003-2004 with the parents of 634 children whose family income was below 250 percent of the federal poverty level and who had been enrolled in Healthy Kids for about one year. The survey, which had a response rate of 90 percent, included questions about the child's health and health care needs, access to health care, and utilization of various services, such as dental care and preventive medical care. The 2006-2007 follow-up survey was conducted with the same parents to measure how their child's health care outcomes had changed during the previous three years. By this time, 405 of the original 625 children remained enrolled in Healthy Kids, while 220 had left the program (most often because they had left the county or reached the program's age limit of 18 years).

This brief focuses on findings from a subsample of 372 children who remained enrolled in Healthy Kids at the time of the follow-up survey and whose parents were successfully reinterviewed. (The group represents 92 percent of the 405 children from the original sample who remained enrolled.) Findings are derived from regression models that control for numerous changes—apart from time on Healthy Kids—that might affect children's outcomes between the two surveys. Among these are the child's age, the length of time the child lived in Santa Clara County, the family's income and employment, and the location of their residence in the county. By controlling for these factors, the regression models raise confidence that the changes reported in the brief can be attributed to sustained Healthy Kids coverage. The significance tests (*p*-values) reported in the brief are based on standard errors from the regression models. The standard errors take into account the nonindependence (clustering) of the sample for the surveys, which arises from reinterviewing the same families.

Comparisons to other insured children in the state are based on data from the Ask-CHIS web-based program, available at [www.chis.ucla.edu/main/default.asp](http://www.chis.ucla.edu/main/default.asp). To improve comparability, the population of children in the CHIS sample was limited to Latino children in income ranges comparable to those of children on Healthy Kids. The measures chosen for comparison in the brief (for example, dental visits) were selected because they covered an equivalent time period, typically the most recent six months.

For additional information on these and many other results from the evaluation of the Santa Clara County CHI, see the study webpage at [www.mathematica-mpr.com/health/chi.asp](http://www.mathematica-mpr.com/health/chi.asp). We are grateful for the assistance of the CHI partner organizations in conducting this evaluation. For more information on the Santa Clara County CHI, see [www.chikids.org](http://www.chikids.org).

Mathematica® is a registered trademark of Mathematica Policy Research, Inc.



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

(609) 799-3535  
[www.mathematica-mpr.com](http://www.mathematica-mpr.com)

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

(415) 476-9000  
[www.ucsf.edu](http://www.ucsf.edu)

**Urban Institute**  
2100 M Street, NW  
Washington, DC 20037

(202) 833-7200  
[www.urban.org](http://www.urban.org)