



# Improving Access to Needed Health Care Improves Low-Income Children’s Quality of Life

**RAND RESEARCH AREAS**

- THE ARTS
- CHILD POLICY
- CIVIL JUSTICE
- EDUCATION
- ENERGY AND ENVIRONMENT
- HEALTH AND HEALTH CARE
- INTERNATIONAL AFFAIRS
- NATIONAL SECURITY
- POPULATION AND AGING
- PUBLIC SAFETY
- SCIENCE AND TECHNOLOGY
- SUBSTANCE ABUSE
- TERRORISM AND HOMELAND SECURITY
- TRANSPORTATION AND INFRASTRUCTURE
- WORKFORCE AND WORKPLACE

## Key findings:

- Enrollment in a government-sponsored health insurance program improved low-income California children’s access to needed health care services.
- Enrollment in the program also reduced disparities in use of needed health care services across ethnic and language groups.
- These improvements translated into gains in low-income children’s health-related quality of life.

children’s access to doctors and other health services. Less is known, however, about the program’s broader effects on children’s lives.

A research team led by RAND analyst Michael Seid examined SCHIP’s effect on children’s access to needed health services and on their quality of life. The analysis focused on a sample of California families who had recently enrolled in that state’s SCHIP. The study found that, after enrollment, children received needed health care services more frequently and also reported quality-of-life improvements, such as doing better in school, feeling better physically, and getting along better with peers.

## Children in SCHIP Had Less Forgone Care and Fewer Problems Obtaining Care . . .

Analysts first assessed SCHIP’s effect on low-income children’s use of needed health services. Beginning in 2001, analysts followed nearly 3,500 SCHIP-enrolled children (ages 2 to 16) for two years. To measure changes in access to care, one parent per family was surveyed at three points in time: the beginning of enrollment, after one year, and after two years. The analysis highlighted two measures of access:

The State Children’s Health Insurance Program (SCHIP) is a joint federal-state effort to provide health insurance to children whose family incomes are too high for Medicaid but too low to allow the family to obtain private coverage. Created in 1997, the program represents the largest expansion of government spending for children’s health care since the creation of Medicaid. Studies have shown that SCHIP has increased

This product is part of the RAND Corporation research brief series. RAND research briefs present policy-oriented summaries of individual published, peer-reviewed documents or of a body of published work.

Corporate Headquarters  
1776 Main Street  
P.O. Box 2138  
Santa Monica, California  
90407-2138  
TEL 310.393.0411  
FAX 310.393.4818

© RAND 2006

www.rand.org

## This Highlight summarizes RAND Health research reported in the following publication:

Seid M, Varni JW, Cummings L, and Schonlau M, “The Impact of Realized Access to Care on Health-Related Quality of Life: A Two-Year Prospective Cohort Study of Children in the California State Children’s Health Insurance Program,” *Journal of Pediatrics*, Vol. 149, No. 3, September 2006, pp. 354–361.

*forgone care*—needed care that is not received—and *problems seeking care*.

Results showed that, over time, SCHIP increased the proportion of parents who reported no forgone care, from 84 percent to 93 percent. SCHIP enrollment also increased the proportion of parents who reported no problems in seeking care, from 81 percent to 84 percent (Figure 1).

In addition, SCHIP reduced ethnic- and language-group disparities in access. Just before enrollment, 17 percent of black parents and 16 percent of Latino parents reported that their children had forgone needed care the previous year, compared with 13 percent of white parents. By the end of the second year, these differences were substantially reduced: to 7 percent reported by black parents, 8 percent by Latino parents, and 6 percent by white parents.

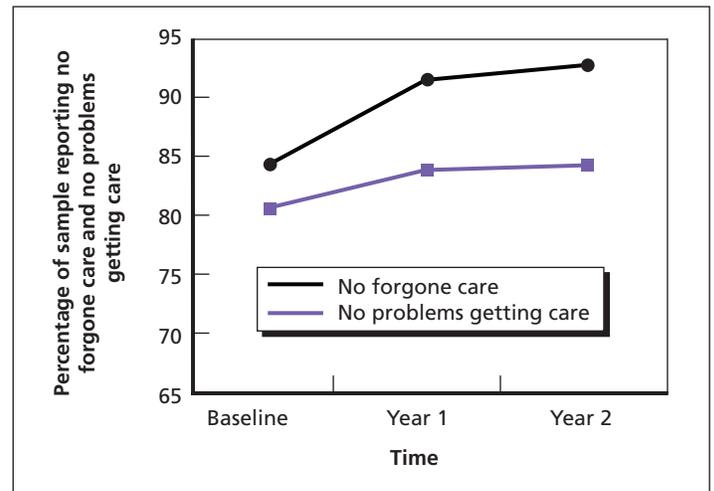
### ...And Reported Improvements in Health-Related Quality of Life

Next, the analysts sought to link these changes in getting needed care to changes in the children’s health-related quality of life. *Health-related quality of life* refers to perceived physical and mental health over time. To measure the children’s health-related quality of life, analysts used the Pediatric Quality of Life Inventory™ (PedsQL™), a scale that measures a range of outcomes—physical, social, emotional, and school-related—on a single 100-point scale.

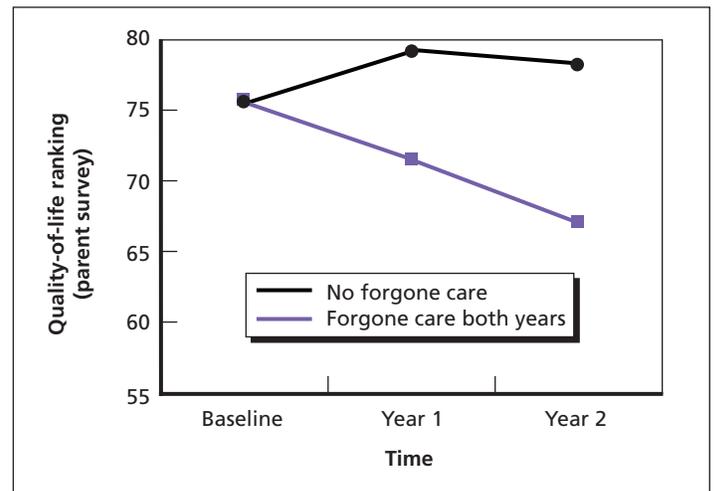
Analysis showed that when parents reported problems getting care and forgone care in the past year, children had lower scores on the PedsQL™ for that period, even after accounting for other factors. To illustrate this finding, the analysts graphed PedsQL™ scores for children at each time point. For children whose parents reported forgone care before enrollment, the graphs in Figure 2 show that getting needed care led to significant improvements in health-related quality of life: from 75 at baseline to 79 after the first year and 78 after the second. By contrast, children who had forgone care at baseline and continued to forgo care during both years experienced declines in their health-related quality of life: from 75 at baseline to 72 after the first year and 67 after the second.

Children who reported no forgone care and no problems getting care scored about 8 percentage points higher on the quality-of-life survey than children who reported some forgone care—a difference that is clinically important. To put this difference into clinical perspective, the scores for children with forgone care in both Year 1 and Year 2 are similar to those of newly diagnosed pediatric cancer patients receiving treatment. Parent-reported child health-related quality of life showed similar results.

**Figure 1**  
**Forgone Care and Problems Obtaining Care Decreased After Two Years of SCHIP Enrollment**



**Figure 2**  
**Children with Forgone Care Before SCHIP Enrollment Experienced Improved Quality of Life, Whereas Continued Forgone Care Led to Declines**



### Implications for Policy

The study drew three implications for policy. First, given that SCHIP enrollment reduced ethnic disparities in access to care, the program holds promise as an approach to reducing health disparities across ethnic groups.

Second, even with the decline in forgone care, 7 percent of enrollees experienced forgone care in their second year of enrollment. This result suggests that policies and interventions that help overcome barriers to care among insured children should receive greater attention.

Third and most important, this is the first research to document that SCHIP implementation can change children's quality of life. SCHIP is due for federal reauthorization in 2007: In deciding whether to reauthorize or expand the program, policymakers should consider its effect on children's quality of life. ■

---

Abstracts of all RAND Health publications and full text of many research documents can be found on the RAND Health web site at [www.rand.org/health](http://www.rand.org/health). The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark.

**RAND Offices** Santa Monica, CA • Washington, DC • Pittsburgh, PA • Jackson, MS • Doha, QA • Cambridge, UK



# HEALTH

THE ARTS  
CHILD POLICY  
CIVIL JUSTICE  
EDUCATION  
ENERGY AND ENVIRONMENT  
HEALTH AND HEALTH CARE  
INTERNATIONAL AFFAIRS  
NATIONAL SECURITY  
POPULATION AND AGING  
PUBLIC SAFETY  
SCIENCE AND TECHNOLOGY  
SUBSTANCE ABUSE  
TERRORISM AND  
HOMELAND SECURITY  
TRANSPORTATION AND  
INFRASTRUCTURE  
WORKFORCE AND WORKPLACE

This PDF document was made available from [www.rand.org](http://www.rand.org) as a public service of the RAND Corporation.

This product is part of the RAND Corporation research brief series. RAND research briefs present policy-oriented summaries of individual published, peer-reviewed documents or of a body of published work.

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world.

---

## Support RAND

[Browse Books & Publications](#)

[Make a charitable contribution](#)

## For More Information

Visit RAND at [www.rand.org](http://www.rand.org)

Explore [RAND Health](#)

View [document details](#)

## Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use.