



High-Cost Children in Public Health Insurance Programs

Who, Why, and How Much?

Embry M. Howell

Californians are debating whether an initiative to provide health insurance for all children is feasible. One way to cover more children might be to more effectively manage the care (and, by extension, the cost) of children who use the most health services. These children's costs make up most of the overall expense of providing subsidized health care to children in California. Yet, little is known about who the high-cost children enrolled in public insurance programs are or how much they cost.

This brief provides data from San Mateo County, which provides subsidized health insurance to any uninsured child whose family's income is below 400 percent of the federal poverty level. The brief examines two public insurance programs: Medi-Cal, the federal/state program that covers most low-income children in California; and Healthy Kids, a county-based program.¹ More information on the San Mateo Children's Health Initiative and these programs is available in several reports.²

For this brief, high-cost children are those whose annual costs are in the top 10 percent of health care users in their program. This 10 percent grouping has been used in other studies of adult high-cost users. We examined claims and encounter data from the Health Plan of San Mateo for high-cost and other children in order to classify them and compare their usage and cost of services.

Who Are the High-Cost Kids?

High-cost children in both public programs are more likely to be boys and to be adolescents (age 13 or older). High-cost users are less likely to be Latino than other users (figure 1).

High-cost children are more likely to have all types of illnesses, including episodic illnesses—for example, ear infections. But they are much more likely to have expensive chronic conditions, such as asthma, birth defects, and cancer (figure 2). In addition, the disparity between programs is large: Medi-Cal children are much more likely than Healthy Kids children to have these conditions.

What Do They Cost?

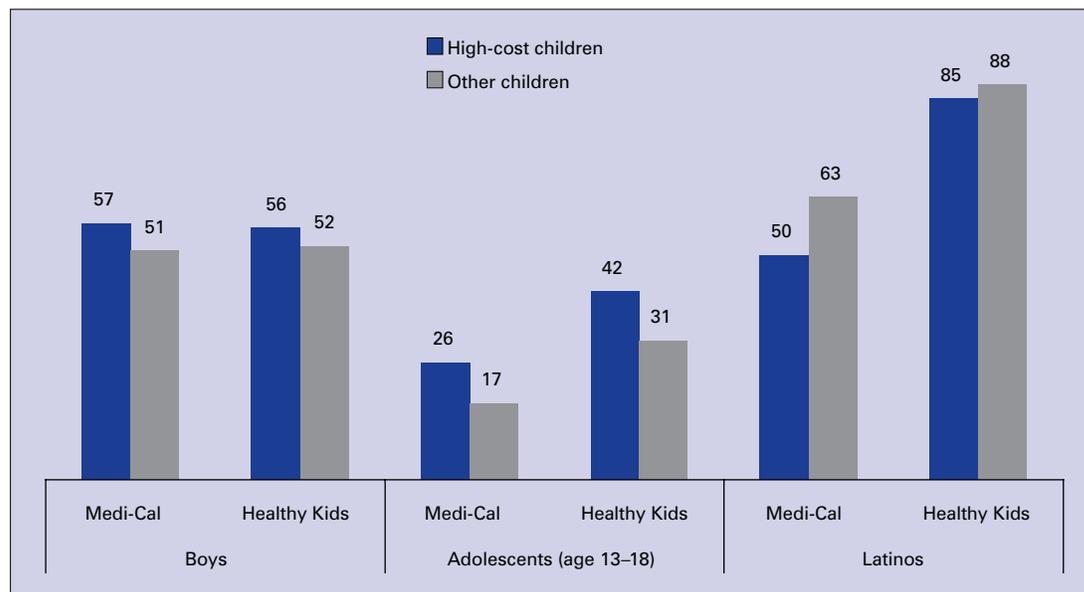
Figure 3 compares the average cost for high-cost children and other children in both programs by type of service. By definition, the high-cost children are much more expensive. Their average annual cost ranges from \$2,434 for Healthy Kids to \$6,522 for Medi-Cal. The high-cost Medi-Cal children are over twice as expensive as the high-cost Healthy Kids children. One reason for this difference is the "share of cost" (spend-down) provisions of Medi-Cal, whereby children become enrolled because of their high cost. On the other hand, other children cost about the same in both programs, only \$265 (Medi-Cal) and \$232 (Healthy Kids) a year, or only about \$20 a month.

The financing burden for children's public health insurance programs is concentrated in a small portion of the population.

Funding for this brief provided by

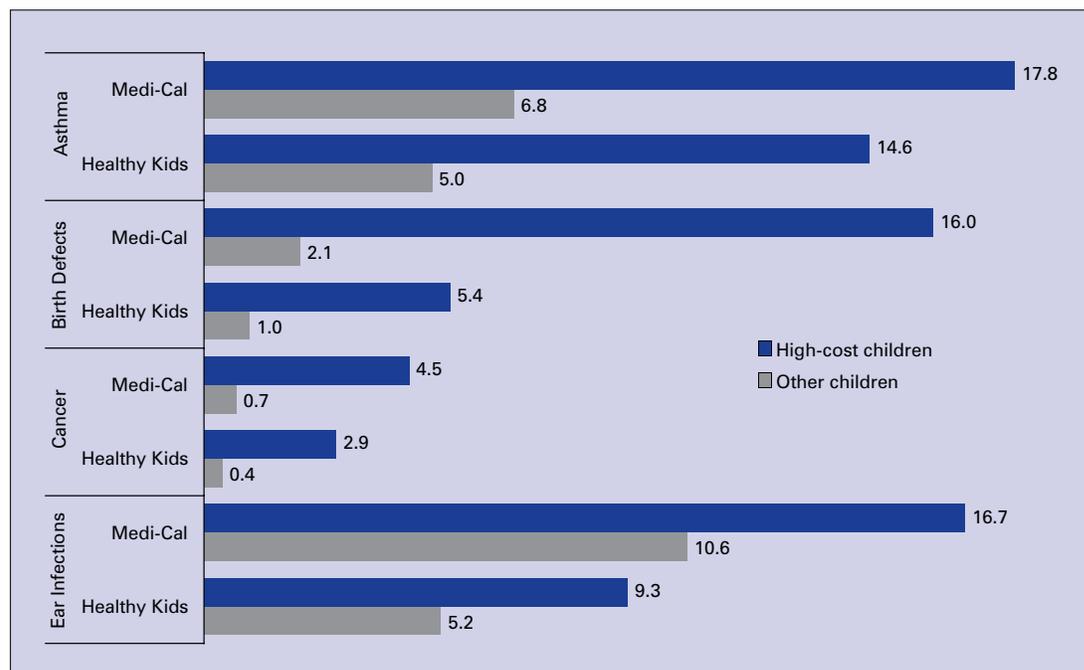


FIGURE 1. Demographic Characteristics, July 2004–June 2005 (percent)



Source: Howell et al. (2006).

FIGURE 2. Diagnoses, July 2004–June 2005 (percent)



Source: Howell et al. (2006).

Why Do They Cost So Much?

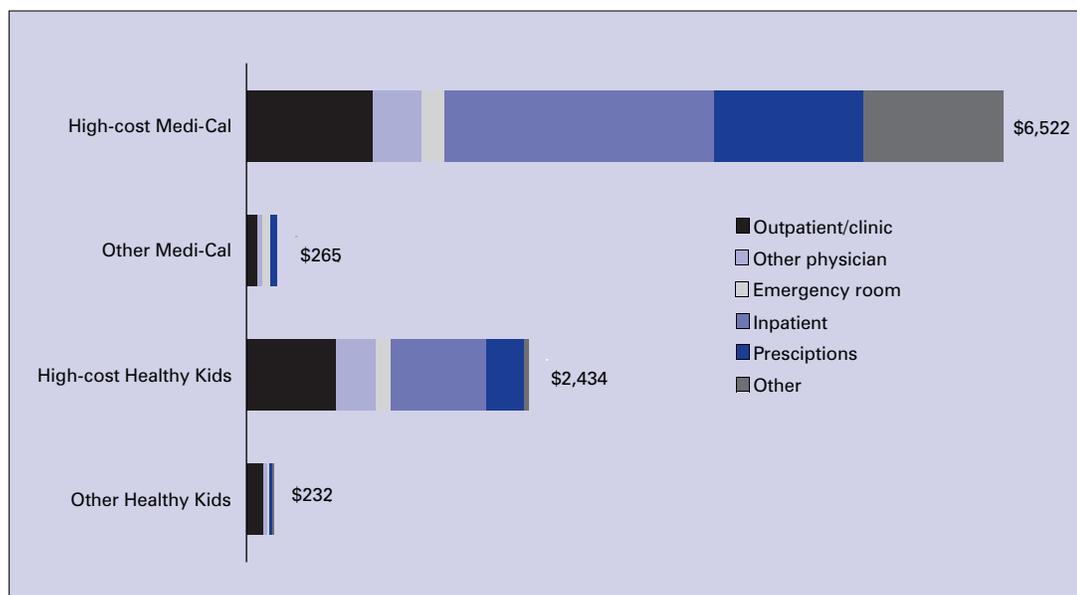
High outpatient/clinic, inpatient hospital, and prescription drug costs are driving the total cost for the highest cost children, as shown in figure 3. Figure 4 further compares annual use of certain key services: preventive care, emergency room visits,

pharmacy services, and hospital care. High-cost children have higher use rates for all types of services, including preventive care. This suggests that once children have contact with the health care system for their chronic conditions, they are more likely to receive preventive care.

From about 40 percent (Healthy Kids) to about 60 percent (Medi-Cal) of high-cost users had an emergency room visit from July 2004 to June 2005, substantially higher rates than those of other children. The rate of prescription drug use was also much

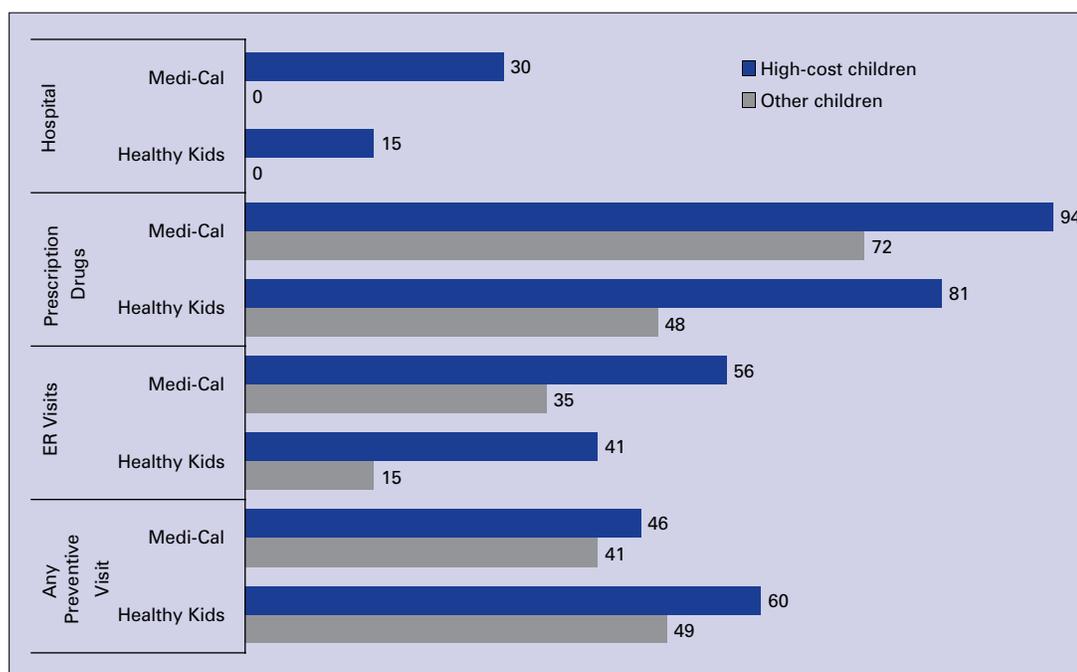
greater. Hospital use was the major marker for being a high-cost child. Only high-cost children had any hospital care—15 percent of high-cost Healthy Kids children and 30 percent of Medi-Cal high-cost children.

FIGURE 3. Average Annual Cost of Care, July 2004–June 2005 (percent)



Source: Howell et al. (2006).

FIGURE 4. Annual Service Use, July 2004–June 2005 (percent)



Source: Howell et al. (2006).

Policy Recommendations

The financing burden for children's public health insurance programs is concentrated in a small portion of the population: children ranked in the top 10 percent in their annual cost. The large majority of kids (90 percent) are very inexpensive. Savings from care management for high-cost children could free up funding for more low-cost children.

Many high-cost children have expensive chronic conditions that could be managed through special chronic care management programs, as recommended by the Center for Health Care Strategies (Bella, Goldsmith, and Somers 2006). Such programs, if properly designed, would benefit the children and their families by helping them access appropriately coordinated health services. These programs could also reduce the cost of care, which is especially high under Medi-Cal. While such care management programs exist for elderly and disabled people, states and localities need to experiment with such programs for children.

There are challenges to implementing chronic care management programs, since identifying high-cost kids prospectively (rather than retrospectively, as in this study) is difficult. Because hospitalization is a clear marker of high-cost status, a program that reaches out to parents when their child is hospitalized could identify many such children. Other ways include using such diagnostic categories as asthma, birth defects, and cancer to target children. Adolescents and boys are more likely to be high-cost kids, so care management programs that reach them well are particularly appropriate.

The data presented here also suggest that innovative financing approaches could ease the local pressures on county-based Children's Health Initiatives around the state. For example, if state financing could

cover some of or all the cost of the high-cost children under Healthy Kids (perhaps through a reinsurance approach), county governments could cover even more uninsured children, including those on the waiting lists for many Healthy Kids programs.

Finally, these data illustrate the importance of using encounter data from plans to examine utilization and costs. Because high cost children may be concentrated in certain plans, states and counties should consider risk-adjusting payment rates to account for this diversity.

Notes

1. Complete data were not available for kids enrolled in the Healthy Families (SCHIP) in San Mateo County. An analysis of partial data (those Healthy Families children enrolled in the Health Plan of San Mateo) showed that the Healthy Families children resemble Healthy Kids enrollees in their cost and use patterns.
2. For example, see Howell et al. (2004).

References

- Bella, Melanie, Stephen Goldsmith, and Stephen Somers. 2006. "Medicaid 'Best Buys' for 2007: Promising Reform Strategies for Governors." Hamilton, NJ: Center for Health Care Strategies. Available at http://www.chcs.org/usr_doc/Medicaid_Best_Buys_2007.pdf.
- Howell, Embry, Dana Hughes, Brigitte Courtot, and Louise Palmer. 2006. "Evaluation of the San Mateo County Children's Health Initiative: Third Annual Report." Washington, DC: The Urban Institute.
- Howell, Embry, Dana Hughes, Holly Stockdale, and Martha Kovac. 2004. "Evaluation of the San Mateo Children's Health Initiative: First Annual Report." Washington, DC: The Urban Institute.

Acknowledgment

The author acknowledges the substantial help in preparing this brief from S.T. Mayer of the San Mateo Health Department, Vicky Shih of the Health Plan of San Mateo, and Louise Palmer and Dawn Miller of the Urban Institute.

Savings from care management for high-cost children could free up funding for more low-cost children.



About the Author

Embry M. Howell is a principal research associate with the Urban Institute's Health Policy Center. Dr. Howell's research interests include maternal and child

health policy, the health care safety net, Medicaid, and the role of community-based nonprofits. She is the project director for the evaluation of the San Mateo County Children's Health Initiative, and she plays a key role in similar evaluations in Los Angeles and Santa Clara counties.

About the Children's Health Initiative.

In January 2003, partners in San Mateo County, California, launched the Children's Health Initiative (CHI), a program designed to ensure that 100 percent of the county's children have access to comprehensive health insurance coverage. The partners—key public and private organizations in the county—have assembled a diverse funding base for the initiative. The goal is to provide health insurance coverage to uninsured children in the county through two strategies: (1) increasing the number of children enrolled in the existing public health insurance programs, Healthy Families and Medi-Cal; and (2) establishing a new health insurance product, Healthy Kids, for children who are not entitled to other forms of public or employer-based insurance. This brief is one of a series of briefs and reports reporting on the results from a five-year evaluation of the San Mateo CHI. Other findings are available <http://www.urban.org>.

Methods. In San Mateo County, California, most publicly insured children are enrolled in the county-sponsored health plan, the Health Plan of San Mateo (HPSM). To study high-cost children, we obtained tables from the HPSM for children continuously enrolled from July 2004 to June 2005. To identify the high-cost children, the HPSM summarized the cost per child across users and sorted the data to identify the children who fell into the top 10 percent of cost (called the "high-cost user") group. Note that the tables apply only to users of services (and therefore those with some cost), as opposed to all enrollees. Using this method, Healthy Kids had 220 high-cost kids during the period, compared with 1,973 other kids; Medi-Cal had 1,092 high-cost kids and 9,828 other kids. For all study children, we requested tables identifying their demographic characteristics, diagnoses, use by type of service, and cost by type of service. Because the HPSM pays all providers according to fee-for-service reimbursement, and because all Medi-Cal and Healthy Kids enrollees in the county are members of the HPSM, there were complete claims data for all children in the study.

Address Service Requested

To order additional copies
of this publication, call
202-261-5687
or visit our online bookstore,
<http://www.uiypress.org>.



The Urban Institute's Health Policy Center (HPC) was established in 1981 to study the public policy issues surrounding the dynamics of the health care market and health care financing, costs, and access. Research topics include health insurance coverage and costs, incentives for public and private provider reimbursement, reform of the long-term care system, and malpractice tort law and insurance. HPC researchers also examine Medicare and Medicaid benefits and proposals, assess proposed reforms in the private medical market, and study ways to expand health insurance coverage for children, among other issues.

The Health Policy Briefs series provides analysis and commentary on key health policy issues facing the nation. Topics include Medicare and Medicaid policy, changes in private health care markets, strategies for expanding health insurance, and the rising costs of health care. The series will include both data briefs and perspectives on national debates.

The views expressed are those of the author and do not necessarily reflect those of the Urban Institute, its board, its sponsors, or other authors in this series. Permission is granted for reproduction of this brief, with attribution to the Urban Institute.

THE URBAN INSTITUTE

2100 M Street, NW
Washington, DC 20037

Copyright © 2007

Phone: 202-833-7200

Fax: 202-467-5775

<http://www.urban.org>