In order to address problems related to the health care of children in foster care, policymakers need detailed information about health status, health care utilization, and Medicaid expenditures. This policy brief summarizes a study examining health care utilization and expenditures paid by Medicaid for children in foster care in California, Florida, and Pennsylvania. Data were obtained from the State Medicaid Research Files for the most recent years available in each state (1994 and 1995 for California and Florida, 1993 and 1994 for Pennsylvania). The study population was made up of children under age 19 with a foster care placement during the year. The 3 comparison groups included children under age 19 who received adoption assistance, Aid to Families with Dependent Children, or Supplemental Security Income benefits because of disability. Among the main findings of the study are the following: (1) children in foster care represent between one and three percent of Medicaid children but between four and eight percent of Medicaid expenditures; (2) most children were enrolled in Medicaid before they entered foster care, but between one-third and one-half lost their Medicaid coverage when they left foster care; (3) children in foster care were more likely than other groups of Medicaid children to have a mental health or substance abuse problem; and (4) health care utilization varied considerably across the three states, with foster children in California less likely to receive health care services than foster children in the other two states. (KB)
Children in Foster Care:

Challenges in Meeting Their Health Care Needs Through Medicaid

March 2001

Margo Rosenbach
Children in Foster Care:

Challenges in Meeting Their Health Care Needs Through Medicaid

March 2001

Margo Rosenbach

MATHEMATICA
Policy Research, Inc.

P.O. Box 2393
Princeton, NJ 08543-2393
(609) 799-3535
www.mathematica-mpr.com
Children in Foster Care: Challenges in Meeting Their Health Care Needs Through Medicaid

Children in foster care are of special interest to policymakers because they are a particularly vulnerable group. Many have physical, emotional, or developmental problems, sometimes resulting from abuse or neglect they have suffered. Yet there have been ongoing concerns about the adequacy of the health care services they receive. These concerns have grown as managed care has become a more dominant form of health care delivery for this group.

To complicate matters, existing data provide only a limited snapshot of these children's health-related characteristics. To address problems related to the health care of children in foster care, policymakers must have detailed information about health status, health care utilization, and expenditures.

This publication summarizes a study Mathematica Policy Research, Inc., conducted for the Office of the Assistant Secretary for Planning and Evaluation in the U.S. Department of Health and Human Services. The data source is the State Medicaid Research Files (SMRF), a series of analytic files maintained by the Health Care Financing Administration (HCFA) containing Medicaid eligibility and claims data. Three states—California, Florida, and Pennsylvania—were selected for this study based on the following criteria: (1) the availability of Medicaid claims and enrollment data in the SMRF files, (2) the ability to identify foster care children in the SMRF files, (3) an identifiable foster care population of at least 10,000 children, (4) the degree to which children were enrolled in Medicaid managed care, and (5) variation in features of state foster care systems.

The study period for California and Florida was 1994 and 1995; for Pennsylvania, it was 1993 and 1994 (representing the most recent years of data available in each state). The study population was made up of children under age 19 with a foster care placement during the year. The three comparison groups included children under age 19 who received adoption assistance, Aid to Families with Dependent Children (AFDC), or Supplemental Security Income (SSI) benefits because of disability. The study captures only health care utilization and expenditures that were paid by Medicaid. Foster care children may have received health care that was not billed to Medicaid or that was paid by other sources. As a result, the study understates the total amount and cost of health care services provided to children in foster care.

Findings in Brief

The main findings from the study include:

- Children in foster care represent between 1 and 3 percent of Medicaid children but between 4 and 8 percent of Medicaid expenditures.
- Most children were enrolled in Medicaid before they entered foster care, but between one-third and one-half lost their Medicaid coverage when they left foster care.
- Children in foster care were more likely than other groups of Medicaid children to have a mental health or substance abuse condition.
- Health care utilization varied considerably across the three states studied.
Children in foster care had less continuous Medicaid coverage than children receiving SSI benefits and children in families receiving adoption assistance.

In all three states, significant numbers of children lost Medicaid in the month they left foster care.

Disproportionately Large Medicaid Expenditures

Medicaid expenditures for children in foster care were disproportionately large, relative to their share of Medicaid enrollment. Although they made up between 1 and 3 percent of the children enrolled in Medicaid in 1994, they accounted for 4 to 8 percent of Medicaid expenditures. Yet, children receiving SSI, who made up between 2 and 5 percent of those enrolled in Medicaid, were responsible for 15 to 27 percent of total expenditures. Although AFDC children represented the largest share (51 to 58 percent), their share of expenditures was smaller (38 to 50 percent).

Coverage Disruptions

Research has shown that continuous, year-round health insurance coverage is related to improved access to care. Children in foster care had less continuous Medicaid coverage than children receiving SSI benefits and children in families receiving adoption assistance. Only 7 in 10 foster care children were enrolled continuously in Medicaid for all of 1994.

![Figure 1: Medicaid Coverage Before and After Enrollment in Foster Care, 1994 and 1995](image)

Although the majority of children were enrolled in Medicaid before they entered foster care, one-third to one-half were not enrolled in Medicaid during the month after their foster care eligibility ended.

In all three states, significant numbers of children lost Medicaid in the month they left foster care. Only California had more children enrolled in Medicaid after foster care, compared with the number enrolled before foster care.
Children in foster care were more likely than other groups of Medicaid children to have a mental health or substance abuse condition—either alone or in combination with a physical condition.

Children receiving SSI or adoption assistance had more continuous Medicaid coverage than children in foster care (80 to 90 percent were covered for the entire year). In general, foster care children and AFDC children had similar patterns of continuity in Medicaid coverage, except in Florida, where turnover for AFDC children was much higher (only 56 percent were enrolled the full year).

**High Rates of Mental Health and Substance Abuse Conditions**

Children in foster care were more likely than other groups of Medicaid children to have a mental health or substance abuse condition—either alone or in combination with a physical condition. They also had a higher likelihood of co-morbidities than AFDC and adoption assistance children, but they were less likely than SSI children to have multiple diagnoses.

We used the Chronic Illness and Disability Payment System (CDPS), developed by Richard Kronick and colleagues at the University of California at San Diego, to identify children with physical or mental conditions, based on diagnoses in Medicaid claims data (Kronick et al. 2000). These data were not available for Florida, since diagnoses were not listed on outpatient claims.

About one in three foster care children in California had a CDPS condition (32 percent), versus two in five in Pennsylvania (41 percent). The most common conditions in the foster care population were mental conditions (18 percent in California; 24 percent in Pennsylvania). The most common physical conditions were those associated with the central nervous system (5 percent) and pulmonary conditions (6.5 percent).
SSI children were more likely than foster care children to have a CDPS condition, because of the higher rate of physical conditions among SSI children. The rate of physical conditions was two to three times higher for SSI children than foster care children. On the other hand, the rate of mental health conditions was slightly higher for foster care children.

AFDC children were less likely than foster care children to have a CDPS condition, on the order of about one-half the rate. This was entirely due to lower rates of mental health conditions.

Children receiving adoption assistance were less likely than foster care children to have a CDPS condition (11 percent in California; 29 percent in Pennsylvania). This could be a function of either risk selection in the adoption process (that is, healthier children are adopted) or the more stable risk profile of children who have been in adoptive families for several years.

Varying Utilization Across States; Inadequate Preventive Care

Health care utilization patterns varied considerably across states. In general, foster care children in California were less likely to receive health care services than children in the other two states. Over 80 percent of the foster care children in Florida and Pennsylvania had at least one provider visit in 1994, compared to 65 percent in California.
In California, foster care children also were less likely than AFDC and SSI children to see a provider during the year. In the other two states, foster care children were more likely than AFDC children to see a provider. In Florida, they were also more likely than the SSI population to see a provider during the year.

The likelihood that foster care children received a preventive check-up during 1994 ranged from 28 percent in Florida to 41 percent in Pennsylvania. In California and Pennsylvania, foster care children were more likely than other Medicaid children to have a preventive check-up during the year. Nevertheless, many foster care children did not receive routine check-ups, despite recommendations for an annual physical and mental health assessment each year. In addition, very few received an assessment during the first two months of a foster care placement. Interestingly, children with no prior Medicaid coverage received early assessments more often, suggesting that providers were more likely to perform assessments on those who were newly enrolled in Medicaid.

Foster care children were far more likely to receive dental care than other groups of Medicaid children. Sixty percent of foster care children in Pennsylvania and 44 to 45 percent in California and Florida had at least one dental visit in 1994, compared with 28 to 38 percent of the AFDC population and 31 to 35 percent of the SSI population.

The likelihood of foster care children receiving mental health or substance abuse treatment services varied substantially across states, from 23 percent in California to 38 percent in Florida. Foster care children were more likely than other groups of Medicaid children—including those receiving SSI—to receive mental health or substance abuse services. Most received treatment on an outpatient basis. The average number of outpatient visits per user varied widely (6 in California; 18 in Florida; 22 in Pennsylvania).

**Wide Range of Medicaid Expenditures**

Average Medicaid expenditures varied widely across states but were lowest in California, consistent with the lower utilization in that state. In general, expenditures were highest for the SSI population and second-highest for foster care children.

Average monthly Medicaid expenditures for foster care children ranged more than twofold, from $154 in California to $375 in Florida, with Pennsylvania averaging $293. Medicaid spending for foster care children was two or more times higher than the average for all Medicaid children. Average monthly Medicaid expenditures for SSI children were between four and seven times higher than expenditures for all Medicaid children. Medicaid expenditures for AFDC children were well below the average for all Medicaid children.

Infants in foster care had by far the highest average monthly expenditures, driven primarily by high inpatient costs. Spending also varied by health condition. Compared to spending for foster care children with no CDPS condition, spending was 10 to 12 times higher for those with both physical and mental conditions, and 5 to 7 times higher for those with either a physical or mental condition.
what accounts for the significant variation in diagnoses, utilization, and expenditure patterns across states?

**The Policy Picture**

These findings provide important guidance for policy and practice—to improve the delivery of health care services to children in foster care, especially in the changing health care environment. Four main implications emerge from this study:

- **Continuity of coverage is important.** Discontinuities in health insurance coverage can have an adverse effect on access to care. Policymakers should focus on ways to improve continuity of health insurance coverage for children in foster care.

- **Medicaid may be underutilized as a funding source.** States have considerable flexibility in how they use Medicaid to pay for services for children in foster care. Medicaid can fund a comprehensive continuum of care, ranging from screening and assessment to follow-up treatment and ongoing therapies. Evidence of state-level variation in Medicaid expenditures suggests that states differ in the use of Medicaid to serve children in foster care.

- **A broad-based concept of care coordination is needed.** The low level of compliance with screening and assessment protocols underscores the importance of care coordination as a vehicle for overcoming structural barriers to care, especially fragmentation between the child welfare and health care systems. A broad-based concept of care coordination is especially relevant for foster care families, whose needs may involve multiple systems of care, such as public health, child welfare, mental health, schools, and juvenile justice.

- **The structure of managed care systems should recognize foster care children’s needs.** This study highlights the foster care population’s special needs, especially the need for behavioral health care services. Because children in foster care represent only 1 to 3 percent of the child Medicaid population, policymakers may lose sight of their needs...
We cannot tell from claims data whether variations in utilization levels are the result of overutilization in some groups or underutilization in others.

When designing programs for larger and more visible groups. Payment mechanisms (such as risk adjustment or risk corridors), provider networks, benefit packages (especially coverage of mental health services), and provider education all need to be designed with the special needs of the foster care population in mind.

Focus on the Future

Like all research studies, this one raised questions that could be explored in future studies. The first involves state-level variation—what accounts for the significant variation in diagnoses, utilization, and expenditure patterns across states? This study has taken a first step to document the differences. Further work is needed to explain them. Possible factors include the role of child welfare and health agencies in coordinating and advocating for health care services for children in foster care; the role of the courts in mandating health care for children in foster care; characteristics of state programs (such as the use of health passports, level of staff caseload, and availability of transportation services); variations in the Medicaid benefit package; availability of providers to serve the population; provider knowledge concerning services needed by the population; generosity of reimbursement rates; differences in case mix; and level of stigma about accessing services.

Another question raised by the study involves the extent of unmet need. We cannot tell from claims data whether variations in utilization levels are the result of overutilization in some groups or underutilization in others. Without external benchmarks against which to evaluate patterns of care, coupled with more detailed clinical assessments, we cannot tell whether lower rates of utilization are indicative of access barriers or simply lower health care needs. To gain a better understanding of unmet needs in the foster care population, policymakers and researchers could perform a medical records review or conduct a survey of foster care families and caseworkers.

Study Limitations

Although this study has shed light on patterns of diagnoses, utilization, and expenditures for children in foster care, the generalizability of the results may be limited for several reasons:

- **The data are for three states.** Although this is an improvement over previous studies that focused on a single state, the results cannot be generalized to all states or to the nation as a whole. Using multiple states demonstrates the extent of variation and can provide useful comparisons to other states.

- **The data were from the mid-1990s.** We used the most recent data available at the time, but more recent data would be desirable to ascertain whether patterns have changed.

- **The analyses of diagnosed conditions, expenditures, and utilization exclude children enrolled in managed care.** The SMRF did not gather encounter data for capitated services, so children enrolled in managed care were excluded from this study. To the extent that utilization patterns differ systematically for children in foster care who are enrolled in managed care, the differences will not be captured in the analysis.

Using the SMRF for research purposes has some other limitations. The file has no provider specialty, which precluded us from looking at this aspect of continuity of care, or specialty
interest has grown in developing performance measures to track the effectiveness of child welfare services.

referral patterns. In addition, not all states report such basic data as diagnoses, but to our knowledge there is no central database that indicates which SMRF files contain specific data elements and with what degree of completeness. Many states also use state-specific procedure codes, but the definitions are not uniformly available to researchers. States can also differ in the way they code type-of-service categories, especially for mental health. Furthermore, the SMRF contains only a single eligibility category each month, hampering our efforts to identify children receiving SSI benefits who were placed in foster care. Finally, it is unclear whether the date of foster care placement on the eligibility file is accurate. This affects all analyses of pre- and post-placement utilization.

What’s Next?

As the health care needs of children in foster care have garnered increasing attention, interest has grown in developing performance measures to track the effectiveness of child welfare services. This study shows how utilization and expenditure measures can be operationalized using Medicaid data. Additional analyses, based on more recent data, would help portray how children in foster care are faring in the new millennium— including whether they are receiving more continuous coverage and more comprehensive care as a result of state efforts to improve their health care.

About the Author

Margo Rosenbach is a vice president at Mathematica and director of the firm’s Cambridge office. She also leads Mathematica’s state health policy studies area and directs the firm’s national evaluation of SCHIP for HCFA. Her research interests include Medicaid and Medicare managed care, chronic illness and disability, and children’s health insurance.

About Mathematica Policy Research

Mathematica, a nonpartisan policy research firm, conducts research and surveys for federal and state governments, foundations, and private sector clients. The employee-owned company has conducted some of the most important evaluations of health care, education, nutrition, welfare, employment, and early childhood policies and programs in the United States. Mathematica strives to improve public well-being by bringing the highest standards of quality, objectivity, and excellence to bear on the provision of information collection and analysis to its clients.

How to Get the Full Report

Printed copies of the full report on which this brief is based can be ordered for $13.00 from Jackie Allen, Publications, Mathematica Policy Research, Inc., P.O. Box 2393, Princeton, NJ 08543-2393, (609) 275-2350, jallen@mathematica-mpr.com. Include $3.50 per order for postage and handling. This brief and other publications can also be downloaded from our web site at www.mathematica-mpr.com. The full report is also available on the web at http://aspe.hhs.gov/hsp/fostercare-health00/.
<table>
<thead>
<tr>
<th>Quantity</th>
<th>Title and Document (PR) Number</th>
<th>Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Postage and Handling $3.50
Total $  

**Send to:**

- [ ] Mr.  - [ ] Mrs.  - [ ] Ms.  - [ ] Other.  
  Please specify  

**Name:**

**Affiliation:**

**Address:**

**City:**

**State:**  
**Zip:**

**Telephone:** (   )  
**Fax:** (   )  

**E-Mail Address:**

**Web Address:**

**Ordering Information:**

U.S. orders are shipped via first-class mail. The postage and handling charge is $3.50 per order. Contact us for information about alternate means of shipping within the U.S. For orders outside the continental U.S., inquire by e-mail, phone, or fax for shipping costs.

Make checks payable to Mathematica Policy Research, Inc. If you wish to order using a credit card, please go to our website at www.mathematica-mpr.com/publications.asp.

Please send this form with your payment to:

Jacqueline Allen  
Publications Department  
Mathematica Policy Research, Inc.  
P.O. Box 2393  
Princeton, NJ 08543-2393
NOTICE

Reproduction Basis

☑ This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☐ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").