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# Health Insurance Coverage of Children in Iowa

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Fifth report in a series

Public Policy Center  
The University of Iowa

Iowa Department of Public Health

Child Health Specialty Clinics



May, 2004

# Health Insurance Coverage of Children in Iowa

## Results from the Iowa Child and Family Household Health Survey

Fifth report in a series

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## **Introduction**

This report presents the results of an analysis of the health insurance coverage of children in Iowa from birth to 18 years of age. The data are derived from the Iowa Child and Family Household Health Survey, which was conducted in the summer of 2000. Prior to this study there was little comprehensive information about health insurance coverage of children in Iowa. In this report, we present the level and types of health insurance coverage children have and compare a number of factors such as demographic characteristics and access to care for children with private insurance, those with Medicaid, and those who were uninsured at the time of the survey.

### **The Iowa Child and Family Household Health Survey**

The 2000 Iowa Child and Family Household Health Survey is the first comprehensive statewide attempt to evaluate the health status, access to care and social environment of children in Iowa.

The telephone interviews included questions about:

- Functional health status
- Special health care needs
- Access to and utilization of health care services including:
  - Medical care
  - Dental care
  - Behavioral and emotional health care
- Health insurance coverage of the child and parent
- School performance
- Child care
- Socialization and self-esteem of the child
- Family environment

The study is a collaborative effort of the University of Iowa Public Policy Center, the Iowa Department of Public Health and the Child Health Specialty Clinics. The intent of the study is to provide information for policymakers and health planners about the status of families with children in Iowa from a social health perspective. It was funded by a competitive grant from the Maternal and Child Health Bureau, Health Resources and Services Administration, and US Department of Health and Human Services.

## SURVEY METHODOLOGY

The 2000 Iowa Child and Family Household Health Survey was a telephone interview conducted with a stratified random sample of 3,200 families with children in Iowa. The interview included approximately 125 questions, depending on the number of questions relevant to the family being interviewed. The survey instrument was developed by the research team after evaluating many existing survey instruments such as the National Survey of American Families (NSAF) and the National Health Interview Survey (NHIS).<sup>1,2</sup> The screening instrument developed by the Foundation for Accountability (FACCT) was used to identify CSHCN.<sup>3</sup>

Calls to identify families with children in Iowa were begun using a random list of phone numbers provided by a private vendor. To allow for regional comparisons, 400 interviews were completed in eight regions of the state. All regions consisted of multiple counties except for Polk and Scott, which were each considered their own region. The design of this study yielded a representative sample of families with children in Iowa.

The survey process began with a screening question to determine if the residence was home to a family with children. If so, the adult most knowledgeable about the health and health care of a randomly selected child under age 18 in the household was asked to complete the interview.

The dispositions of calls made to complete the interviews were as follows:

**Table 1. Participation Rate for 2000 Iowa Child and Family Household Health Survey**

Number completing the interview	3,241
Number of refusals or unable to complete interview	1,349
Participation rate	71%

To make statewide estimates by age categories, the survey results were weighted and post-stratified using the county-level 2000 US Census data.<sup>4</sup> The telephone interviews were conducted between May and October 2000 by the Center for Social and Behavioral Research at the University of Northern Iowa. The University of Northern Iowa Human Subjects review board approved the protocol regarding the telephone interview portion of this study.

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<sup>1</sup> <http://newfederalism.urban.org/nsaf/>

<sup>2</sup> <http://www.cdc.gov/nchs/nhis.htm>

<sup>3</sup> <http://www.facct.org/>

<sup>4</sup> <http://factfinder.census.gov/home/en/sfl.html>

In any telephone-based survey, there is a possibility that results may be biased because those without telephones are not interviewed, and they may have different health conditions and health care needs than those with telephones. In Iowa, it is estimated that three percent of households do not have telephones.<sup>5</sup>

### **Identification of insurance coverage**

Health insurance coverage can be defined in many ways. In this study, coverage was defined at two points in time: (1) at the time of the interview, and (2) at any point in the previous year. To determine insurance coverage at the time of the interview, participants were asked the following:

*Question 1: Do you have any type of health care coverage for [CHILD] including health insurance, prepaid plans such as HMOs, or government plans such as Medicaid or Title 19? (Yes, No, Don't know/refused)*

*Question 2: What type of health care coverage do you use to pay for most of [CHILD's] medical care? Is it coverage through... (Employer, Someone else's employer, a plan you buy, **hawk-i**, Medicaid, other)*

To determine insurance coverage during the previous year for those currently with insurance (i.e., periods of being uninsured in past year), participants were asked the following:

*Question 1: In the past 12 months, has there been any time when [CHILD] has not had any health insurance coverage? (Yes, No, Don't know/refused)*

## **STATEWIDE RESULTS**

Below is a summary of the results of the Iowa Child and Family Household Health Survey specifically relating to insurance coverage. For those wishing more detail, tables presenting a comparison of the results for many questions for children with private insurance, those enrolled in Medicaid and uninsured children are available in the back of this report.

### **Demographics of children and families in Iowa**

According to the 2000 US Census, there are 737,212 children under the age of 18 living in Iowa (25% of Iowa's population). This is similar to national statistics indicating that 25.7% of children in the United States are under age

*Iowa has half the national rate of uninsured children (62% vs. 12%)*

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<sup>5</sup> Anonymous, 2000 "Telephone Information by State." Survey Sampling, Inc., One Post Road, Fairfield, CT 06430.

Most children in Iowa have insurance through a parent's employer

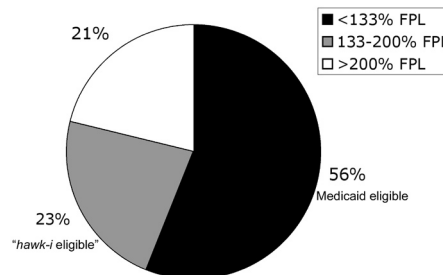
18. The Census data also indicates there are 361,153 families with children under age 18 in Iowa.

Results from the 2000 Iowa Child and Family Household Health Survey indicate that children in Iowa live in family households with an average of 4.5 people (2.1 adults and 2.4 children). Most families had either two (35%) or three (34%) children in the household. One quarter of the children were living in a household with three or more adults. The racial distribution of the children was 90% white, 3% African-American, just over 1% Native American and Asian, and 5% "other." Three percent of Iowa's children were considered to be of more than one race. Three percent were of Spanish or Hispanic origin. Four out of ten children were living in families with household incomes over \$50,000 per year while about one-third (32%) were in families with household incomes below \$25,000 per year.

### Health insurance coverage

About 6% of Iowa children (46,000) were uninsured at the time of the call and another 6% (43,000) were uninsured at some point in the previous year. The percentage of uninsured children from this study matches the findings for a three-year Iowa average from the US Census Bureau's Current Population Survey (1999-2001), which also found that 6% of Iowa children were uninsured.<sup>6</sup> Iowa's rate was half the national average for children (12%) and fifth lowest among all states.

Eighty percent of uninsured children in Iowa were eligible for either Medicaid (56%) or the State Child Health Insurance Program-SCHIP (21%) (SCHIP is called *hawk-i* in Iowa) based on the household income estimate provided during the interview (program eligibility is more complex so this is considered a rough estimate) (Figure 1). Medicaid eligibility for children in Iowa is up to 133% of the federal poverty level (FPL) and between 133% and 200% of FPL for *hawk-i*.



**Figure 1. Percent of Federal Poverty Level and potential program eligibility for uninsured children in Iowa**

<sup>6</sup> Bhandari, S. and Gifford, E. Children with health insurance: 2001. US Census Bureau Current Population report P60-224. August 2003. Available at <http://www.census.gov/hhes/www/hlthins.html>. Last accessed April 22, 2004.

Medicaid received higher ratings than private insurance



The majority of Iowa children (83%) had their primary health insurance coverage through private insurance; 92% of those with insurance had purchased it through an employer. The other 8% had their insurance purchased as an individual policy. About 10% of these children had public insurance through the Medicaid program as their primary insurance and <1% had some other insurance (e.g., *hawk-i*, CHAMPUS) for their primary coverage.

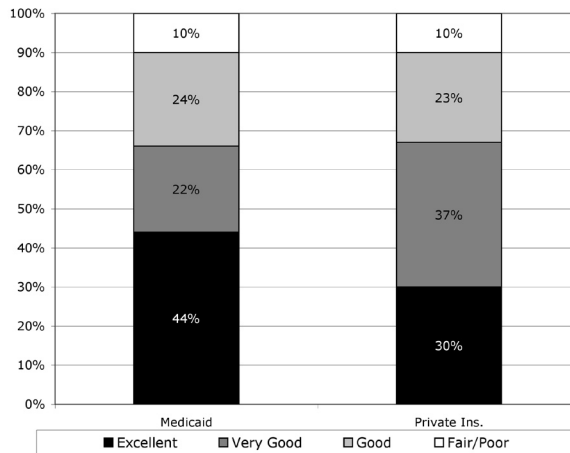
*Latino children were twice as likely as white children to be uninsured*

Over half (56%) of the uninsured children had been covered by Medicaid at some time in their lives. About one in six children (17%) who currently had private health insurance had been enrolled in Medicaid at some point as well. Twenty-two percent of all children covered by Medicaid had been uninsured at some point during the past year.

About 10% of the children had a parent who was uninsured at the time of the call (it was primarily mothers who completed the interview). As might be expected, there was a relationship between the insurance coverage of children and their parents. Eighty-eight percent of children had parents with the same insurance. One quarter of uninsured children had parents with insurance coverage. Also, the parents of almost one-third of children in Medicaid were uninsured. Three percent of children with private insurance had parents who were uninsured.

### Rating insurance coverage

Public insurance coverage through the Medicaid program was rated higher than private health insurance for Iowa children (Figure 2).



**Figure 2. Rating of health insurance coverage**

*The Iowa Medicaid program covers children with lower health status than private insurance plans*

Medicaid coverage was rated as excellent for 44% of children compared to 30% of those with private insurance. One in ten (10%) rated both types of insurance fair or poor.

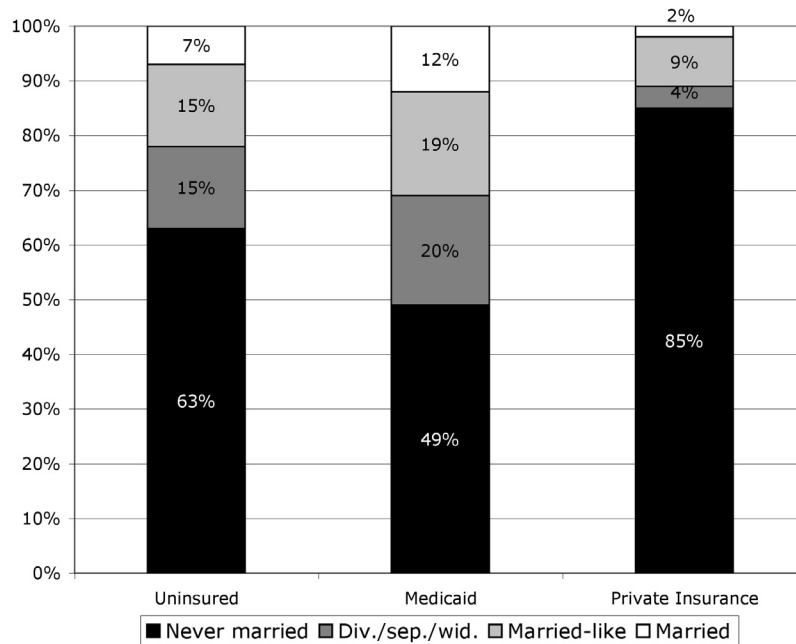
**Factors associated with type of insurance coverage**

Several types of issues were evaluated relative to whether the child had private health insurance, public health insurance through Medicaid or was uninsured. These included demographic characteristics of the child and family, the child’s health status, access to health care and their school and family environment.

**Demographics of child and family**

The children who were uninsured or covered by Medicaid tended to be younger, with over one third (34-38%) between the ages of 0-4 compared to 23% of those with private insurance. Latino children were almost twice as likely to be uninsured as white children (11% vs. 6%) and were more likely to be covered by Medicaid (24% vs. 9%). Children covered by Medicaid were the lowest income group of the three with 75% having incomes at 133% or less of the federal poverty level (FPL) (all children have to be in families with incomes of 133% of FPL or less to qualify for Medicaid when income is calculated more precisely according to program guidelines).

*Uninsured children were least likely to have a regular source of medical care and were most likely to have unmet medical care needs.*



**Figure 3. Marital status by insurance coverage**

Children with private insurance were much more likely to be in families where parents were married or in a marriage-like relationship. Ninety percent of children with private insurance were living in such a household vs. 69% of those covered by Medicaid and 78% of the uninsured children. The parents of children with private insurance also tended to have a higher level of education with over one third (35%) having a four-year college degree or more compared to 14% of uninsured children and 7% of children with Medicaid insurance.

### *Children's health status*

Uninsured children had the highest overall health status, while Medicaid-enrolled children were reported to be in the lowest health state. Seventy-one percent of uninsured children were reported to be in excellent health compared to 68% of those with private insurance and 50% of those covered by Medicaid. Medicaid-enrolled children were also more likely to have a special health care need as defined using a series of questions developed by the Foundation for Accountability (see [www. facct.org](http://www.facct.org)). One third of the children covered by Medicaid were determined to have a special health care need compared to 16% covered by private insurance and 10% of the uninsured.

### *Access to medical care*

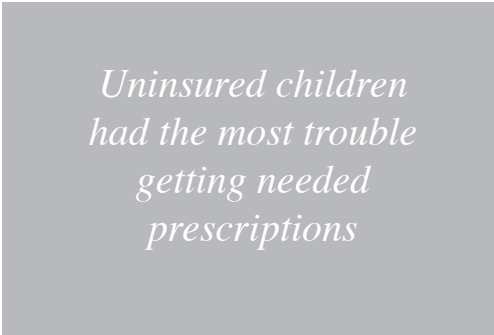
Five different dimensions of access to medical care were evaluated in this study: (1) having a regular source of medical care, (2) need and unmet need for medical care, (3) emergency room visits in the past year, (4) receipt of preventive care and (5) prescription medications. In general, uninsured children were reported to have lower access to medical care than children covered by either Medicaid or a private health insurance plan.

### *Regular source of medical care*

Parents were asked if they had one person they considered their child's regular doctor or nurse to gauge whether the child had a regular source of medical care. Uninsured children were much less likely to have a regular source of medical care with about three quarters (75%) reporting they had a personal doctor or nurse compared to over 90% of children covered by Medicaid (92%) or private insurance (91%).

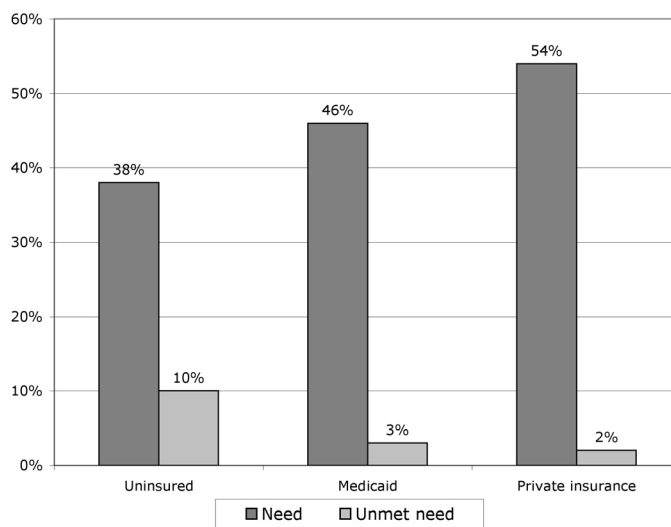
### *Need and unmet need for medical care*

Uninsured children had the lowest percent needing medical care in the previous year but the highest percent with unmet need for care (defined as having been stopped from receiving needed medical care in the previous year).(See Figure 4.)



*Uninsured children  
had the most trouble  
getting needed  
prescriptions*

*Substance use was a problem in the homes of 22% of uninsured children - a higher rate than either Medicaid-enrolled or privately insured children*



**Figure 4. Need and unmet need for medical care in previous year**

*Emergency room visits*

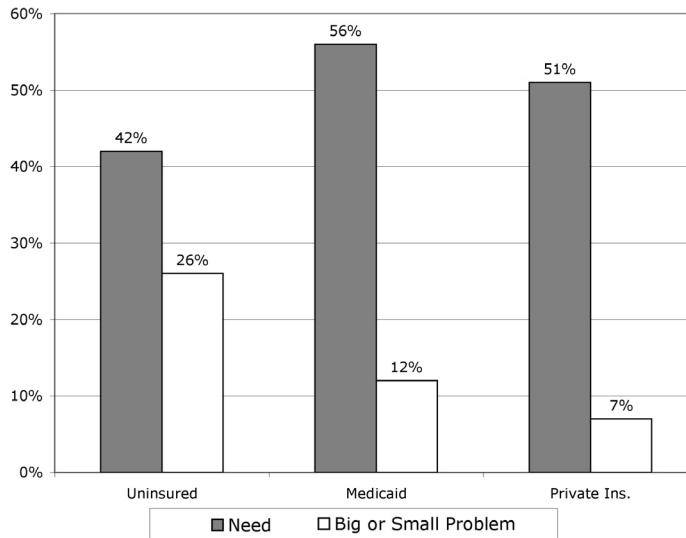
Children covered by Medicaid were most likely to have made an emergency room visit in the previous year (47% vs. 35% of the uninsured children and 30% of those with private insurance).

*Preventive care*

Children in Medicaid were least likely to have had a preventive visit in the previous year (53% vs. 65% of the uninsured children and 70% of those with private insurance) and were most likely not to have had a preventive visit in 2 years or more (17%). While the receipt of age-specific anticipatory guidance (i.e., preventive counseling about things such as watching what your child eats and using a car seat or bike helmet) was low for all groups, the uninsured were least likely to report receiving such counseling (21% vs. 28% for the other two groups).

*Prescription medications*

As with medical care, the uninsured had the lowest reported need for prescription drugs but the most difficulty in getting them when needed (Figure 5). Forty-two percent of uninsured children needed prescription medications compared with 56% of Medicaid-enrolled and 51% of privately insured children. However, over a quarter (26%) of uninsured children had a problem getting prescriptions filled, compared to 12% of Medicaid-enrolled and 6% of privately insured children.



**Figure 5. Need and problem getting prescription medications in previous year**

### *Alcohol and family environment*

Three concepts were evaluated regarding associations between health insurance coverage and the school and family environment: the level of the child’s school engagement, worries about paying for health care, and substance use problems in the home.

### *School engagement*

A series of four questions were used to evaluate the degree to which school-age children in Iowa were engaged in school. These questions included how much the child cared about doing well, needed to be forced to complete homework, did just enough homework to get by and completed homework on time. Children covered by Medicaid were most likely to be reported to have low engagement in school, while the uninsured were most likely to have high school engagement.

### *Worry about paying for health care*

About half of uninsured children had parents who worried “a great deal” about paying for the health care of their child compared with 16% of parents of Medicaid-enrolled children and 5% of privately

*Children with health needs were more likely to acquire insurance during the year than healthy children*

*A quarter of children in Iowa do not have dental insurance*

*There is a higher level of unmet need for dental care than for medical care*

insured children. Conversely, 71% of privately insured children and 65% of Medicaid-enrolled children had parents who did not worry “at all” about paying for their child’s care, while 19% of parents of uninsured children had no worries.

#### *Substance use in the home*

Uninsured children were most likely to be in families where substance use was reported to be a problem. Twenty-two percent of uninsured children were in a home where substance use was reported to be either a big problem (11%) or a small problem (11%) compared to 13% of children enrolled in Medicaid and 9% of those with private insurance.

#### ***Children who were uninsured in the past year***

For currently insured children who had been uninsured at some point in the past year, 62% now had private insurance and 38% were covered by Medicaid insurance. There were significant differences between children who were uninsured at the time of the call and children who had insurance but had been uninsured at some point in the previous year. The children who were uninsured during the past year were generally sicker and used more services than uninsured children. They were less likely to be rated in excellent health (47% vs. 70%), were more likely to have special health care needs (29% vs. 10%), were more likely to need medical care in the previous year (51% vs. 39%), had more unmet need for medical care (18% vs. 10%), were more likely to have been to the emergency room in the previous year (47% vs. 35%), and were more likely to have needed prescription drugs (56% vs. 43%).

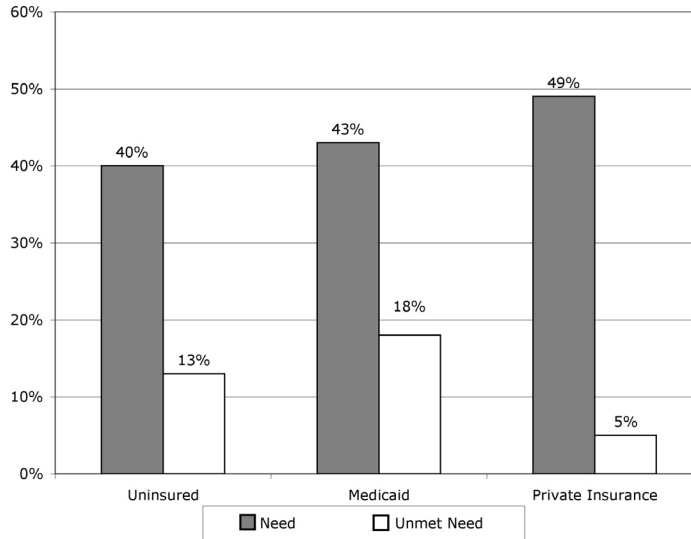
#### **Dental insurance coverage**

There were significantly more children in Iowa without dental insurance than without medical insurance. Twenty-five percent of Iowa children did not have dental insurance at the time of the interview. Ten percent of children received dental insurance through the Medicaid program, while the remainder (65%) received dental coverage through private insurance. All of the children who were dentally uninsured were either medically uninsured or had private medical insurance, since Medicaid provides comprehensive dental coverage for all children.

Unlike for medical care and prescription drugs, the percentage of children reported to need dental care in the previous year was similar for the dentally uninsured, those covered by Medicaid, and those with private dental insurance. Even though they had dental insurance coverage, Medicaid

*Privately insured children are most likely to get regular dental check-ups*

enrollees reported the highest percentage of unmet need for dental care (18%) (Figure 6). The unmet need for dental care was also higher than the unmet need for medical care for all three groups.



**Figure 6. Need and unmet for dental care**

How recently the child received their last dental check-up was related to type of dental insurance coverage. Eighty-one percent of the privately insured children had a dental check-up in the previous year compared to 63% of both the children without dental insurance and the children covered by Medicaid.

*Most uninsured children are eligible for public insurance in Iowa - either Medicaid or S-SCHIP (**hawk-i**)*

**Conclusions**

Although the rate of uninsured children in Iowa is lower than in most states, there were roughly 50,000 to 100,000 Iowa children who were either uninsured or were at significant risk of being uninsured. This does not include the unidentified number of children who were underinsured in the event of a catastrophic health event.

*Providing insurance for families could improve coverage and utilization of services*

Public insurance programs (i.e., Medicaid and **hawk-i**) appear to be playing an important role of providing

transitional insurance coverage for children in the state. Over half of uninsured children had been covered by Medicaid at some point in their life. In addition, one in six children with private insurance had also been enrolled in Medicaid at some point in the past. About 80% of uninsured children were eligible for either Medicaid or *hawk-i*. While the reasons these children remain uninsured varies, the importance of education and outreach is clear. For example, at the time of the survey only about half of the parents had heard of the *hawk-i* program.

There was also a strong relationship between the health insurance coverage of children and their parents. Almost nine out of 10 insured children had parents with the same insurance coverage. The greater likelihood of children being insured in families where the parents were married may be due to the additional chance of receiving employer-based health insurance coverage through two adults rather than one. Conversely, 25% of uninsured children had parents who were insured and 30% of children enrolled in Medicaid had parents who were uninsured. The vastly different Medicaid income eligibility criteria for adults and children would account for some of this difference for Medicaid. Thinking about how children and families seek services, providing insurance coverage to families, rather than to individual children or adults, would greatly improve both overall insurance coverage and utilization of services. Studies have indicated that children with uninsured parents are much less likely to utilize services than children with parents who have insurance.<sup>7</sup>

Higher satisfaction ratings by Medicaid enrollees compared to those with private health insurance could be related to several factors. First, Medicaid insurance coverage may be less complex, from the insured's perspective, than some private insurance plans. Second, Medicaid offers a comprehensive benefit package based on what is needed to keep a child healthy compared to an employer-based plan in which covered services are based on what an employer can afford. Third, there are no out-of-pocket expenses for Medicaid-covered services for children. And fourth, health care coverage expectations for Medicaid enrollees could be lower than people with private insurance. These results were similar to findings from a study conducted with Iowa Medicaid enrollees where Medicaid coverage for children was rated higher than private insurance on factors including ability to meet their

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<sup>7</sup> Hanson KL. "Is Insurance for Children Enough? The Link Between Parents' and Children's Health Care Use Revisited." *Inquiry* 1998; Volume 35, pp.294-302.

<sup>8</sup> Damiano PC, Tyler MA, Momany ET. *Evaluating Iowa Medicaid Managed Care Plans: the Consumer Perspective*. Final report to the Iowa Department of Human Services, May 2004.

<sup>9</sup> Hoffman C and Wang M. *Health Insurance Coverage in America 2001 Data Update* 2003, pp.29.



child's health care needs, and types of services covered.<sup>8</sup>

The association between insurance coverage and the child's health status were different from findings in some other national studies.<sup>9</sup> Uninsured children in Iowa were rated in better overall health and less likely to be defined as having a special health care need than those with private insurance or with Medicaid coverage. Uninsured children were also less likely to have needed health care in the previous year. Access barriers associated with not having health insurance were apparent, however, with uninsured children being most likely to report unmet need for medical care and problems getting prescription drugs.

Although uninsured children and children who had been uninsured in the previous year are both at higher risk of having problems accessing care, these two groups appeared very different. The significantly lower health status (and associated higher health care costs) of the children who were uninsured during the year may have created a more urgent incentive for parents to seek out insurance coverage for their children. The higher unmet need for care among uninsured children may indicate that not all parents are able to seek out insurance during times of need. Children who obtained health insurance during the year were twice as likely to transition to private insurance than to Medicaid.

Oral health is often considered separately from medical health and thus dental insurance is often provided separately from medical insurance. Children were four times more likely to be without dental insurance than medical insurance. The Medicaid program includes comprehensive medical and dental benefits for children, however, Medicaid's comprehensive list of covered services did not correlate with better access to care. Medicaid enrollees had the highest unmet need for dental services. Many studies have identified low dentist participation in Medicaid as one of the key reasons for the higher unmet need for care.

### **Policy recommendations**

- 1) Increase education and outreach to enroll as many eligible children as possible into Medicaid and *hawk-i*. This could cover four out of every five uninsured children in Iowa.
- 2) Identify options for covering families and not just children in Medicaid and *hawk-i*.
- 3) Improve access to dental care for Medicaid enrollees by either increasing provider reimbursement or establishing a dental specific Medicaid. In Michigan, the Medicaid dental program is operated by a private insurance carrier that is familiar to dentists in the state; a model such as this might prove beneficial to Medicaid enrollees in Iowa.

