

# Analysis of the Children's Health Insurance Program in Rural Pennsylvania



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# **Analysis of the Children's Health Insurance Program in Rural Pennsylvania**

*A report by*

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# Introduction

In 1993, Pennsylvania assumed a national leadership role in providing health care coverage for uninsured children with the implementation of the Children's Health Insurance Program (CHIP). The program provides free or low-cost health insurance to children whose families earn too much to qualify for Medicaid but who cannot afford private insurance. Four years later, the Federal Balanced Budget Act of 1997 began providing federal monies to states to support CHIPs.

The health benefits and services of CHIP are provided through state contracts with private insurers. Contractors are limited to specific geographic areas of the state with some areas having more than one CHIP contractor. In September 2003, 133,462 Pennsylvania children were receiving health care coverage through CHIP (PA Insurance Department, October 2003).

Although it is difficult to determine with certainty the actual number of uninsured children living in the commonwealth, CHIP estimates that there are approximately 28,300 children eligible for but not enrolled in CHIP as of October 2003. CHIP provides both free and subsidized benefits for children, dependent upon income. The subsidized program especially may be underused as estimates suggest that about 25

percent of children are eligible for the subsidized program and only 7 percent are enrolled.

The overall goal of this evaluative research study was to generate information useful to policy makers and insurers seeking to improve the health of rural children insured through CHIP. The study focused on three areas relevant to the success of the CHIP program: outreach activities; barriers to acceptance of and access to the CHIP program; and use patterns. One specific area of interest was to further understand the impact of CHIP on each of the five stages of childhood: infant, toddler, pre-school, school-age, and adolescent. Another goal was to gain insights into the discrepancy between enrollment in the free and reduced premium arms of CHIP.



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## Methodology

The setting for this study consisted of four rural counties in Pennsylvania: Indiana, Perry, Potter, and Wayne, which were selected because of their rural composition and varied geographic location. Potter and Wayne are two of six counties identified by the Pennsylvania CHIP as experiencing a low rate of CHIP participation. Potter County is in the north central area of the state and Wayne County is in the northeast. Perry County is one of six rural counties in which there are two established CHIP insurance contractors. Indiana County was selected to represent western Pennsylvania. Demographic information for each county relevant to health care and socioeconomic status is provided in Table 1 on page 4.

### Outreach

Personnel involved in outreach activities for CHIP in each of the four counties were identified and asked to participate in an interview. A letter was sent to each individual explaining the project and requesting either a telephone or personal interview. A copy of the interview tool and a consent form were also included in the materials sent to these individuals. The purpose of the interview was to elicit their perceptions regarding the success of their outreach efforts, the adequacy of the information they provide, their understanding of the program, their need to further enhance their individual outreach efforts, and their

**TABLE 1. COUNTY PROFILES**

	Indiana	Perry	Potter	Wayne
Total Population, 2000	89,605	43,602	18,080	47,722
Population under 18 years	18,865 / 21.1%	11,130 / 25.5%	4697 / 26%	11,447 / 24%
% Rural Population	62.1%	86.3%	100%	83.9%
Average monthly CHIP enrollment from Sept. 1998 to Sept. 1999	922	168	180	439
% Children enrolled in CHIP, avg. over period	4.4%	1.4%	3.8%	3.9%
% Children enrolled in Medicaid HMO, 2002	22%	17.3%	.1%	0%
Live Births, 2001	877	535	235	469
% Population Participating in WIC Program, June 2002	1.9%	1.4%	3%	1.9%
% Population eligible for Medical Assistance, June 2002	12.5%	8.3%	15.3%	11.7%
# Active Primary Care Physicians, 1999	77	27	12	36
# General Acute Care Hospitals, 2000	1	0	1	1

Source: Center for Rural Pennsylvania Online County Profiles, 2002.

perceptions of the barriers related to families' acceptance of CHIP.

Nine of the 11 individuals invited to participate in the study agreed to do so. There were four participants from Indiana County, three from Potter County, and one each from Perry and Wayne Counties. The respondents included two employees of an insurance contractor responsible for outreach, one employee of a County Assistance Office, one county outreach individual, one director of a hospital community services department and four recipients of grants (from the Department of Public Welfare, the Department of Health, and the Insurance Department designed to increase CHIP and Medicaid enrollment in designated geographic areas). In one county, all outreach activities had been turned

over to two grant recipients.

With input from the outreach or marketing personnel for each CHIP insurance contractor who agreed to participate, a list of outreach methods conducted during the previous 12 months was compiled for each county. The interviews also produced a list of perceived barriers to access. An analysis of this data identified common themes.

### **Use Patterns**

To identify patterns for children insured through CHIP, the researchers solicited use data from each of the insurance contractors in the study counties. Contractors were asked to provide information regarding demographics and use of specific services for children enrolled in their CHIP program

from July 1, 2000 to September 30, 2001. The CHIP contractor for Wayne County provided only demographic information and therefore could not be included in this analysis.

Three important limitations of the study are recognized. First, the absence of comparison of use patterns for children insured by programs other than CHIP limits the understanding of the influence of CHIP itself on use patterns. Second, the utilization data used in the study may have reliability concerns, such as erroneous coding of services by the health care providers. Finally, the relatively small sample size for the reduced premium CHIP due to non-participation of an insurance contractor serving a large number of children limits the results.

# Findings

## Outreach

Respondents identified the following factors as having positively enhanced or influenced enrollment in CHIP:

- referrals from other human services agencies;
- sensitivity to individuals' religious beliefs;
- recognition of possible negative feelings associated with government "hand-out" programs;
- outreach to agencies who have contact with potential clients; and
- help with the application process and paper work.

These findings overlap with outreach strategies identified as successful since success is defined as enrollment in CHIP. Additionally, external funding was seen as an opportunity to expand outreach efforts.

The following conditions were identified as negatively affecting implementation and effectiveness of outreach strategies: lack of support from local school systems; lack of education; application process; enrollment guidelines; stigma of a government program; religion; and confidentiality. These barriers are discussed in detail below.

***Lack of support from school system*** – Six respondents attempted to provide outreach through the local school districts. Most found this an effective approach but spoke of the difficulty in negotiating with some superintendents. It is generally felt that school nurses are an important conduit, but they cannot facilitate the transmittal of information without approval of the superintendent. Even with a supportive school superintendent, efforts are hindered by the amount of non-related information sent into the homes from school. One respondent also addressed the confusion that sometimes occurs when another CHIP outreach effort occurs just before her planned flier.

***Lack of education*** – A lack of understanding about the program and the application process was identified by two respondents. One stated that some families felt that they were enrolled once they filled out the application. Another identified some families' lack of interest in health insurance since their children were healthy and they were dealing with more pressing issues in their life. Although many respondents used fliers as a valuable method of increasing public awareness of

the program, one respondent expressed concern about the literacy level of some of the target population.

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***Application processing time*** – Two respondents addressed concern about the length of time from submission of an application to its approval. Another expressed a concern that a family's failure to provide the necessary documentation at the initial visit caused delay in enrollment.

***Enrollment guidelines*** – A major concern identified was that many families have to drop their existing paid coverage because they are eligible for CHIP; enrollment guidelines state they must be uninsured. Families are fearful of dropping coverage even though it will save them money because their children will be uninsured for a period of time. One respondent noted the confusing and complicated formulas for determining eligibility based on income guidelines as a huge barrier. Various respondents expressed a desire for higher income guidelines. A final concern expressed by three respondents is the problem of parents having one child eligible for CHIP but another child receiving Medical Assistance. (This situation arises because income guidelines vary depending on the age of the child.) Thus, families may have children with different health care providers based on insurance coverage.

***Stigma*** - The notion of a stigma attached to government programs arose many times. While one respondent suggested CHIP avoided the stigma attached to Medical Assistance, another thought there was a stigma to any governmental program. Another respondent spoke of the poten-

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**Support from the school superintendent was noted to be crucial in the success of any endeavor to increase awareness of CHIP through the schools.**

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tial humiliation of families who saw CHIP in a positive light but did not meet the financial qualifications and were referred to Medical Assistance. Additionally, one respondent said that if families are “seen” at a CHIP enrollment table at a public event, others would know that they are without insurance.

**Religion** – Two respondents mentioned that Amish and Mennonite groups constitute a significant portion of the population of the county but do not traditionally accept any form of health insurance and that their life-style makes outreach efforts difficult.

**Confidentiality** – Confidentiality regulations restricting name sharing among agencies was seen as a barrier by one respondent who stated that while other human service agencies may know of a family’s need for CHIP, they cannot forward the name but only encourage the family to seek out the programs.

**Outreach strategies, activities that work**

The need for public education regarding the benefits offered through CHIP and the development of a trusting relationship between individuals in the community and those participating in outreach activities emerged as

themes in the discussion of outreach strategies. This development of trust was a crucial element for many respondents. No matter

how elaborate the outreach strategies were, respondents felt that families would not enroll if they did not trust the outreach provider. Several stressed the point that each community is unique; there is a need to know the “key” player in the community who can facilitate access to families that may be distrustful of government programs.

School nurses were identified as valuable partners in the outreach efforts since they have special access to school-aged children. Efforts of individual school nurses and cooperating school systems appear to be one of the biggest outreach strategies that reaches school-age children. One respondent mentioned dovetailing CHIP outreach efforts with a car-seat loaner program to reach infants and toddlers.

Phone calls generated following a specific activity allowed one individual to keep up on the economic changes in the community. Several respondents reiterate the fact that the need for CHIP is dependent on the economic situation of the family at a given time. They recognize the need for formalized, on-going efforts to reach families in need. Such activities include: participating in a team of human service agency personnel for educational sessions when a large number of individuals are laid off or fired due to plant restructuring or closing; and sending information through the schools periodically.

Within the context of developing community trust and educating the community regarding the benefits offered through CHIP, three categories of strategies were identified as follows.

• **Involvement with ongoing community activities** – This includes attendance at fairs, parades, and other community gatherings and usually involves setting up information tables or a mobile unit at these activities to provide information about CHIP.

• **Dovetailing operations with existing programs and agencies** – This proved to be a time- and cost-saving strategy for respondents. Perhaps the most important organization to dovetail with is the local school district, since access to school systems was mentioned by four respondents. Support from the school superintendent was noted to be crucial in the success of any endeavor to increase awareness of CHIP through the schools. One respondent provided CHIP applications, information, and self-addressed, stamped envelopes to the school nurses to distribute as they deemed appropriate. Another successfully worked to have the existing emergency cards, which are distributed by the school at the beginning of the school year, revised to include questions that ask families about health insurance coverage. In this case, the school nurse and the outreach individual shared the responsibility for follow-up for those families without insurance for their children. Another effort tar-

geted the schools with a newsletter four times a year. This was seen as very successful because the information gets into homes at various times throughout the school year. This multi-contact approach may “catch” families whose coverage or employment status has changed since the beginning of the school year. One respondent attended school open houses at the beginning of the school year.

Respondents from two counties reported the value of collaboration with the local hospital as a successful outreach strategy. One hospital provides a telephone information line to assist individuals with health related questions. This service identifies families in need of health insurance and results in subsequent referrals to CHIP. These same respondents identified the Hospital and Healthsystem Association of Pennsylvania (HAP) as a vital partner in meeting the health insurance needs of children.

Several respondents noted the value of coordinating outreach with agencies and programs such as Penn State Cooperative Extension, County Assistance Offices, car-seat loaner programs, energy assistance programs, churches, and local food pantries.

Participation in the Rapid Response Team was identified as very important by two respondents. (One respondent stated that this is a state initiative but could not speak to whether or not CHIP representatives are a part of the Rapid Response Team in all counties.) A Rapid Response Team is

composed of representatives of the local employment security office, the County Assistance Office, the United Way, CHIP and sometimes training institutes. The Rapid Response Team is mobilized to address a target audience who are laid off and are losing their employer health insurance.

Three respondents had access to a mobile health unit and provided CHIP fliers or had a poster on the unit as they traveled throughout their areas for other health projects. Two respondents worked with state legislators to notify constituents of the availability of a CHIP outreach individual conducting private enrollment sessions at a certain place. One respondent gained the cooperation of the legislator’s office to actually make appointments for her. This assures that the respondent will actually be meeting with families rather than sitting all day and having no one show up.

• **Direct solicitation activities** – Fliers were the most frequently mentioned strategy to promote public awareness. One individual distributed fliers to laundromats, discount grocery stores, banks and libraries. Another placed them in brochure racks that the local hospital places at 17 sites throughout the county. Another targeted day care centers. One respondent identified the day care and summer programs at libraries and the YMCA as distribution areas for fliers.

Two respondents placed ads in local newspapers or used the free advertisement paper available in some areas. One

respondent goes door to door in mobile home parks distributing information. Incentive gifts, which included color-on magnets and trash bags with the statement “All children need health insurance, Call the County Human Services Office to enroll,” were also used.

### **Measuring success**

No respondent identified a targeted numerical enrollment goal. One noted her frustration when she attempted to locate statistics on the actual number of uninsured children in her county. When asked how success was determined related to outreach, some respondents noted that even activities that resulted in a few enrollments are considered successful. A few discussed the emerging improvements that are in place to allow them to track applications. This will eventually tell them which activities have led to successful enrollments.

Representatives of the insurance contractors are able to track the number of applications for initial service as well as for re-enrollments by a code on the application. Two non-contractor individuals receive enrollment totals from the outreach person of the insurance contractor. Others judge the success of an effort by the number of brochures or applications distributed.

### **Barriers perceived by outreach personnel**

The lack of dental care, transportation, and providers were all identified as barriers to adequate health care for CHIP enrollees. The most frequently mentioned problem was dental care. The shortage of providers for dental

care was identified as a major problem in all four counties. One individual noted that dental providers were unclear regarding what care would be reimbursed and sometimes wait months before knowing if a specific service they had provided will be reimbursed. One agency has a mobile dental unit but had to shut down their regular dental clinic to run the mobile clinic due to a staffing shortage. Another respondent reported that one CHIP contractor in the county has 61 dental providers while the other has two for the entire county.

Seven of the respondents identified transportation needs as a significant problem for some families. One stated that “people can find a way if they really have to, but it can be costly.” One respondent from a rural county spoke of the poor road system and the difficulties in travel during the winter months. Another addressed concern for families who must leave the county for specialized services or basic services not provided within the county.

### **Identification of use patterns**

For purposes of discussion, the age groups examined in this study are classified as follows: adolescents (born 1981-1987), school age (born 1988-1995), pre-school (born 1996-1997), toddlers (born 1998-1999), and infants (born after 1999). To assess use patterns, various types of patient encounters with health care providers were considered. The following factors were selected:

**Well child visits** - These are the foundation of preventive care. Although the younger children would be expected to have more than one visit during

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### ***Dental care, transportation, and lack of providers were all identified as barriers to adequate health care for CHIP enrollees.***

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the 15 months of the study, older children should have had one visit as well.

**Blood lead levels** - These are particularly important in the younger children and are required for the Early Periodic Screening and Developmental Testing (EPSDT).

**Visits to the primary care provider (PCP) for illness or injury** - These are essential for child health.

**Surgery, both in the office and in the outpatient setting** - This is not required for every child but is useful when comparing use with other variables.

**Non-surgical hospitalizations** - This also contributes to the knowledge regarding use differences among type of enrollment, type of primary care provider, and insurance contractor.

• **Preventive dental care** - This was identified as an area of concern during conversations with outreach personnel.

Table 2 presents the age distribution of the children in the sample of use data. Table 3 presents service use by age. Since older children have different health care needs than younger ones, comparison of use for various services is not a reliable measure.

Of concern is that greater than 65 percent of school-age children and

adolescents (those born before 1996) did not have a well child visit during the 15-month period of the study. Furthermore, there is an extremely low use of dental services for this group of children. Although the frequency of well child visits for children born in 1999 is higher than for those born before 1999, 21 percent of children born in 1999 did not have even one well child visit.

### ***Use patterns for reduced premium, free CHIP enrollees***

The three insurance contractors who supplied use data had 1,317 children enrolled in the free program and 62 enrolled in the reduced fee program. Females constituted 51 percent of the free program enrollees and 55 percent of the reduced fee enrollees.

Significant differences in use of services for blood lead levels and preventive dental care exist between the two groups. Table 4 illustrates the number of children, by CHIP program, who used each service.

### **Comparing use patterns of CHIP by primary care provider**

For the purposes of analysis, the categories of family practitioner, general practitioner, and “other” are combined to form the “other” category. A pediatrician is the primary care provider for 42 percent of those enrolled in the free program and 44 percent of those enrolled in the reduced fee program. Table 5, on page 11, presents the number of children who used each service by type of primary care provider.

**TABLE 2. SAMPLE OF CHILDREN ENROLLED IN CHIP BY AGE GROUP**

Birth Year	1981-1987	1988-1992	1993-1995	1996	1997	1998	1999	After 1999	Total
Number	571	473	177	33	38	42	29	16	1379

**TABLE 3. TYPE OF SERVICES BY AGE OF CHILD**

Birth Year	Total number of children	Well child visit	PCP visit for injury/illness	Surgery in office	Surgery out-patient site	Hospitalization non-surgical	Mental health emergency care	Preventive dental care
1981-1987	571	191	371	39	16	10	35	68
	% served	33.4%	64.9%	6.8%	2.8%	1.8%	6.2%	11.9%
1988-1992	473	148	307	14	5	0	12	81
	% served	31.3%	64.9%	3%	1%	0%	2.5%	17.1%
1993-1995	177	61	118	8	4	3	2	47
	% served	34.5%	66.7%	4.5%	2.3%	1.7%	1.1%	26.6%
1996	33	19	20	0	1	4	0	6
	% served	57.6%	60.6%	0%	3%	13.8%	0%	18.2%
1997	38	21	23	0	1	0	0	2
	% served	55.3%	60.5%	0%	2.6%	0%	0%	5.3%
1998	42	27	30	2	0	1	0	2
	% served	64.3%	71.4%	5%	0%	2.4%	0%	4.8%
1999	29	23	23	0	1	2	0	0
	% served	79.3%	79.3%	0%	3.4%	6.9%	0%	0%
After 1999	16	9	6	2	1	1	0	0
	% served	56.3%	37.5%	14.3%	6.25%	6.7%	0%	0%

**TABLE 4. TYPE OF SERVICE BY FREE OR REDUCED PROGRAM**

Type of CHIP program	Total number of children	Well child visit	Blood lead levels*+	PCP visit for injury/illness	Surgery in office	Surgery out-patient site	Hospitalization non-surgical	Mental health emergency care	Preventive dental care*
Free	1317	475	2	860	61	47	19	49	204
	% served	36%	1.4%	65.3%	4.6%	3.6%	1.5%	3.7%	15.5%
Reduced fee	62	24	1	38	4	2	0	0	2
	% served	38.7%	11%	61.3%	6.45%	3.2%	0%	0%	3.3%

+ Only children born after 1995 were considered for the statistical analysis of this variable since the concerns regarding lead levels are primarily focused on young children.

\*Significant at  $p < .01$

# Conclusions

This research yielded some useful insights into the CHIP program in rural Pennsylvania concerning outreach strategies, access to health care and use patterns.

## Evaluation of outreach activities

To evaluate the cost-effectiveness of each activity, a tracking method is needed to correlate outreach activities targeted to a specific geographic area with applications from that area. Currently, the definition of “successful” strategies is a personal conclusion rather than one measured against defined criteria. Since there are no statistics for each county to identify the exact number of children in need of health insurance, outreach personnel use other parameters.

A respondent in one county felt there was a lack of communication between her organization and CHIP since she did not receive feedback relevant to whose CHIP applications were successful. Only those working for the outreach arm of the insurance contractor had access to numbers of new enrollees at any given time. The monthly number of enrollees by county, provided by CHIP, was not seen as helpful for many respondents because those numbers do not reflect children terminated from the program versus new enrollees.

## Outreach strategy types

The respondents involved in outreach strategies agreed on the value of identifying key informants or agencies within the local community and of establishing a sense of trust and rapport with the community of interest. They noted that this process may take up to a year, thus outreach success may appear low at first while these initial stages of trust development are emerging. Respondents also concurred that strategies that work in one area may be less successful in another for a variety of reasons. One example provided was the varied level of cooperation from school districts in facilitating outreach efforts.

Currently, general sweeping outreach strategies are favored. Dovetailing outreach efforts with existing programs, community activities, and agencies is seen as a time and cost-reducing strategy. However, such collaboration warrants some effort to be further coordinated, funded, and encouraged. One successful example of this combined approach is to coordinate questions related to health care coverage with the school emergency cards and have the school nurse

provide information to families in need.

Few age-specific strategies are identified other than those within the school system. Therefore, the relatively high number of school-age children and adolescents enrolled in CHIP compared with the number of pre-schoolers, toddlers, and infants enrolled may reflect efforts to publicize CHIP within school systems. This fact supports the need to evaluate outreach strategies to determine efforts that might facilitate enrollment of the youngest children.

## Opportunities for and barriers to outreach

Grant monies have provided direct assistance to families in the form of individual guidance in completing the applications. Grants have also funded information and marketing activities to increase awareness and knowledge of eligibility for the CHIP program. Those conducting outreach in counties not receiving supplemental resources find these activities economically burdensome. This direct assistance is necessary as respondents concur that the income guidelines related to the age of the child increase the difficulty in determining eligibility for families with children in various age brackets. If a tracking method were established, it would be possible to determine the effect of outside funding on CHIP enrollment. This information would inform legislators and other administrators about cost-effective strategies and may encourage economic relief for existing agencies.

Efforts to remove the stigma of government programs warrant further attention as well. The respondents applaud the efforts to make the insurance cards for CHIP recipients appear like other insurance cards, the newer commercials and advertisements that are increasing CHIP awareness, and other efforts to include questions or advertisements about CHIP with other existing programs. However, it may be necessary to continue exploring other methods of removing the stigma of applying for a government program. Suggestions from respondents included a universal application process that could be shared among governmental agencies when one program rejects an application, rather than requiring separate applications for each program. While they recognize the need for confidentiality, responders also identify a need to streamline the application process to achieve the goal of providing health care coverage for all children.

TABLE 5. TYPE OF SERVICES BY PRIMARY CARE PROVIDER TYPE

PCP Type	Well child visit*	Blood lead levels+	PCP Visit for injury/illness	Surgery in office*	Surgery outpatient site	Hospitalization non-surgical	Mental health emergency care	Preventive dental care
Pediatrician % served	44%	2.2%	64.2%	2.2%	2.6%	1.4%	3.1%	9.3%
Other % served	30.5%	1.6%	65.8%	6.5%	3.5%	1.3%	3.9%	19.3%

+ Only children born after 1995 were considered in the statistical analysis for this variable since the concerns regarding lead levels are primarily focused at young children.

\*Significant at  $p < .001$

### Access to health care

The concern regarding the gap in dental care coverage for children was validated in the review of use data. Outreach personnel discussed the use of mobile services, but noted that this may stress the resources of the existing stand alone dental clinics. Some respondents report large numbers of children seen through their clinics and fear that current providers may tire of the lengthy approval process and subsequent delay in payment noted earlier in this study. Efforts need to be aimed at enhancing the number of CHIP dental providers to relieve the burden on existing dental providers. Further research should address the availability of dental services within each county, the level of participation by dental providers in CHIP, and family satisfaction with dental services.\*

While efforts exist to relieve transportation problems, further exploration of measures to address this issue is also necessary. The mobile services in some areas are

seen as successful, and perhaps funding to enhance the mobile centers would help alleviate this problem.

### Use Patterns

The difference in enrollment by age group is surprising. School-age children and adolescents are represented at a higher frequency than pre-schoolers, toddlers, and infants. Since the youngest children are most in need of health supervision and immunizations, further investigation is warranted to determine if other programs, such as Medicaid, are servicing these children. This difference may also be a direct result of the more intensive outreach activities directed through the schools.

Well child visits provide the best category of comparison since there are a recommended number of well child exams for each age group. According to the Maternal and Child Health Bureau of the U.S. Department of Health and Human Services (2000), the suggested number of visits is as

follows: infants, nine times during the first year; toddlers and pre-schoolers, annually; school-age children, annually at ages 6, 8, and 10; and adolescents, annually. Most children counted as receiving a visit at least once received only one well child visit. Therefore, enrollment in CHIP may not be ensuring that children receive appropriate preventive care.

For the use of services in the free program versus the reduced premium CHIP, a significant difference in blood lead levels and preventive dental care was found. However, the numbers receiving these services are small, so no definitive conclusions can be drawn. Further investigation into these two services is warranted.

Although pediatricians provided more well-child visits (44 percent) than did other providers (30.5 percent), the low levels of well-child visits across primary care provider type is also of concern. Clearly, there are barriers to care not addressed by insurance coverage that need to be identified.

\* *Editor's Note:* In 2002, the Center for Rural Pennsylvania sponsored a research project to analyze both the supply of and demand for dental services among indigent populations in Pennsylvania. The supply analysis is looking at medial assistance and state license data, and examining recruitment efforts and the use of dental school rural practicums. The demand analysis is examining medical assistance data, school-screening data, and original survey data. The results of the research will be available in 2004.

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