

This Issue Brief presents key findings of a recent study that evaluated a variety of health care measures to compare children up to the age of 18 enrolled in New Hampshire Medicaid, the State Children's Health Insurance Program (SCHIP), and commercial health insurance plans in NH using data collected through the Comprehensive Health Care Information System (NH CHIS) claims database. The study will be used to better inform program and policy decisions. Most significantly, the study found that:

- Children enrolled in NH Medicaid generally do as well or better than their counterparts nationally in accessing and utilizing care, despite the fact that national comparison measures are based on managed care programs and NH Medicaid is fee-for-service. Children enrolled in NH SCHIP generally do better than children enrolled in commercial plans.
- Children's health status was evaluated by applying Clinical Risk Groups (CRG) to the claims data. A higher risk score indicates poorer health status. Medicaid had the highest average CRG risk score, while SCHIP was lower and commercial was lowest.
- Payment rates for children enrolled in NH Medicaid were significantly higher than for children enrolled in SCHIP or CHIS commercial. However, after applying certain exclusions and standardizing for differences in age and health status, the payment rate for children per member per month was lower in NH Medicaid compared with SCHIP and NH CHIS commercial.
- Children enrolled in NH Medicaid in the poorest households had the poorest health and highest utilization and payments compared with children in households with the highest adjusted household income.

The study updates the State Fiscal Year (SFY) 2007 report released in December 2008 on New Hampshire children's health insurance. Nearly all findings were similar between the current and previous studies. However, the SFY2008 study contains additional statistics that assess the health status of children in NH as well as the poverty level of children enrolled in NH Medicaid, and its impact on utilization and payments.

### **Introduction**

Children who have health insurance are more likely to have a usual source of health care, access preventive and other needed health services, and have improved social and emotional development. Having health insurance coverage does not guarantee that all children access care appropriately. Length of enrollment in a health care plan can im-

pact continuity of care. Prevalence of chronic disease (such as asthma or mental health disorders) can influence the amount, type, and cost of care a child receives.

The results of this study suggest that New Hampshire children had higher rates of access to primary care practitioners and well-child visits compared to national benchmarks; however, the results also indicated that some children did not receive these services, especially adolescents. Rates of utilization for other than primary care services were highest for children enrolled in Medicaid, lower for SCHIP, and lowest for NH CHIS commercial.

### **Data Sources**

New Hampshire Medicaid, SCHIP, and NH CHIS commercial eligibility and claims data from services incurred in State Fiscal Year 2008 were used for this study to calculate quality, access to care, and utilization measures, and to assess health status. Where available the study compared these measures to national Healthcare Effectiveness Data and Information Set (HEDIS) benchmarks available from the National Committee for Quality Assurance (NCQA). These measures are used by most health plans to monitor their performance. Severely disabled children covered by Medicaid were excluded from the study.

### **Enrollment and Disenrollment**

Analysis of enrollment data suggested that some children in New Hampshire have possible problems with continuity of insurance coverage. One in four children enrolled at the start of the study in Medicaid, and half of the children enrolled in SCHIP, disenrolled during the year.

#### **Child Disenrollment and Re-enrollment by Plan Type, SFY2008**

	<b>Medicaid</b>	<b>SCHIP</b>
Members with enrollment in July 2006	67,062	7,286
% Disenrolled from plan during year	28%	50%
% Re-enrolled of those disenrolled	23%	11%

Twenty-three percent of the children who disenrolled from Medicaid re-enrolled later in the year compared to 11% in SCHIP. Discontinuity in plan enrollment may have had an impact on access to care, well-child visits or use of preventive services, and utilization of other services for children.

### **Health Status**

The 3M Health Systems Clinical Risk Grouper (CRG) was used to evaluate the health status of children. A higher

CRG score indicates poorer health. Among continuously enrolled members, Medicaid (0.658) had the highest average CRG risk score, while SCHIP (0.495) was lower and CHIS commercial (0.446) was lowest. The finding that health status was poorest for children enrolled in Medicaid, better for SCHIP, and best for CHIS commercial was consistent for each of the past three state fiscal years.

**Average CRG Risk Score by State Fiscal Year and Plan Type, Members Continuously Enrolled**

State Fiscal Year (SFY)	Medicaid	SCHIP	NH CHIS Commercial
SFY2006	0.708	0.518	0.463
SFY2007	0.696	0.506	0.479
SFY2008	0.658	0.495	0.446

One in four children on Medicaid was not healthy based on CRG scores. Although Medicaid covers fewer children than the CHIS commercial population, Medicaid covered a higher proportion (twice as many) of children with significant chronic diseases in multiple organ systems than CHIS commercial. Additionally, children enrolled in Medicaid were least likely to be non-users of health care services (6.8%) compared with children enrolled in SCHIP (14.8%) and CHIS commercial (20.9%) plans.

**Access to Primary Care Practitioners**

Children in SCHIP had higher rates of accessing primary care practitioners than children in Medicaid or NH CHIS commercial plans. Children in SCHIP also accessed a primary care practitioner sooner after enrollment compared with children in Medicaid or NH CHIS commercial plans. Compared to national rates, NH Medicaid and SCHIP had higher rates while CHIS commercial was similar to national commercial rates.

**Percent of Children With Access to Primary Care Practitioner by Plan Type, SFY2008**

New Hampshire			
Age Group	Medicaid	SCHIP	NH CHIS Commercial
0-11 mos	98.2%	NA	95.2%
12-24 mos	97.5%	96.1%	94.5%
25 mos-6 yrs	88.9%	93.3%	89.4%
7-11 yrs	85.9%	91.8%	86.9%
12-18 yrs	90.9%	95.7%	89.8%
National Managed Care Plan Data			
Age Group	Medicaid	Commercial	
12-24 mos	93.4%	96.9%	
25 mos-6 yrs	84.3%	89.4%	
7-11 yrs	85.8%	89.5%	
12-19 yrs	82.6%	86.9%	

NA: SCHIP does not cover children under the age of one

**Well-Child Visits**

The study results indicate that not all children in New Hampshire had well-child visits consistent with guidelines for preventive care. Rates of well-child visits were higher

in SCHIP and NH CHIS commercial compared to Medicaid.

For each plan type, well-child visit rates decreased as age increased. Where national comparison data were available, NH Medicaid was higher than national Medicaid managed care rates (this despite the fact that NH does not have a managed care plan). SCHIP and CHIS commercial rates were also higher than the national commercial rates.

**Percent of Children With a Well-Child Visit to a Primary Care Practitioner by Plan Type, SFY2008**

New Hampshire			
Age Group	Medicaid	SCHIP	NH CHIS Commercial
16-35 months	88.9%	95.4%	89.0%
3-6 years	69.9%	82.7%	77.7%
7-11 years	55.0%	63.0%	61.3%
12-18 years	50.4%	57.3%	55.4%
National Managed Care Plan Data*			
Age Group	Medicaid	Commercial	
3-6 years	65.3%	67.8%	
12-21 years	42.0%	41.8%	

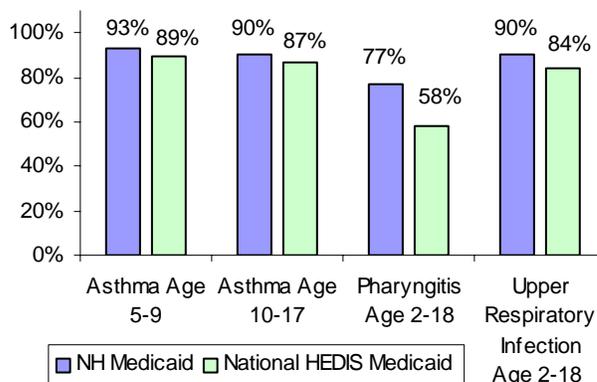
Note: SCHIP does not cover children under the age of one. The SCHIP column is a combination of Medicaid and SCHIP for the 185-300% of federal poverty level group.

\*2008 NCQA HEDIS reporting year on 2007 data.

**Effectiveness of Care Management**

The study results of measures for effectiveness of care indicate that children enrolled in NH Medicaid are consistently receiving more effective care than children in Medicaid managed care plans nationally. The use of appropriate medications to control persistent asthma, appropriate testing for pharyngitis, and no inappropriate use of antibiotics for upper respiratory infections (URIs) were measured.

**Comparison of Appropriate Medication for Children Enrolled in Medicaid to National Medicaid Rates, SFY2008**

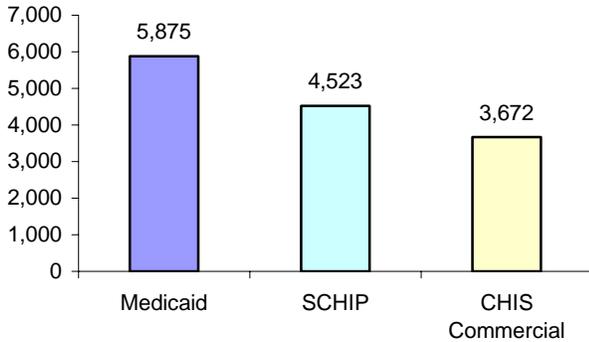


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### Prevalence and Utilization for Mental Health Disorders

The mental health disorder prevalence rate for children enrolled in Medicaid (21.6%) was similar to the prevalence rate for SCHIP (20.0%) but higher than the prevalence rate for NH CHIS commercial (11.7%). For children with a mental health disorder, the psychotherapy visit rate was significantly higher in Medicaid (5,875 per 1,000 members) compared to SCHIP (4,523 per 1,000 members) or NH CHIS commercial (3,672 per 1,000 members).

#### Psychotherapy Visit Rates per 1,000 Members With a Mental Health Disorder by Plan Type, SFY2008



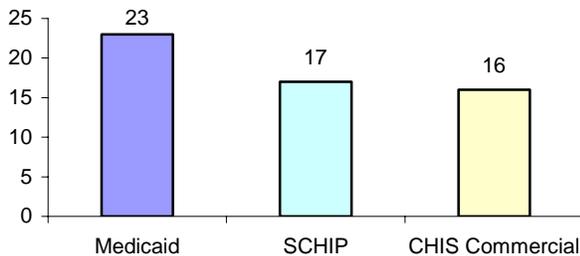
Children enrolled in Medicaid with a mental health disorder diagnosis had higher use rates of all mental health services than CHIS commercial.

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### Hospital Utilization

Excluding newborns and infants (age 0–11 months), and standardizing for differences in health status (CRG) and age, the inpatient hospitalization rate for Medicaid (23.3 per 1,000 members) was significantly higher than the SCHIP rate (16.6 per 1,000 members) or the NH CHIS commercial rate (15.8 per 1,000 members).

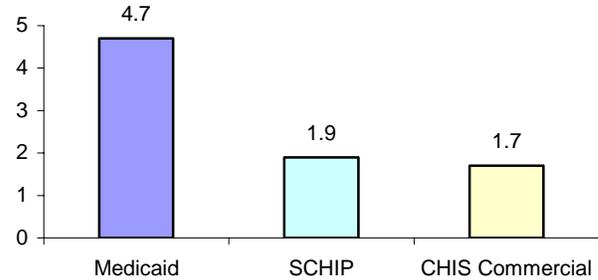
#### Inpatient Standardized Utilization Rates per 1,000 Members, Excluding Infants, SFY2008



For five selected Ambulatory Care Sensitive conditions (those where inpatient hospitalization rates are influenced by rates of appropriate ambulatory care, i.e., asthma, dehydration, bacterial pneumonia, urinary tract infections, and gastroenteritis), the inpatient hospitalization rate for children enrolled in Medicaid (4.7 per 1,000 members) was

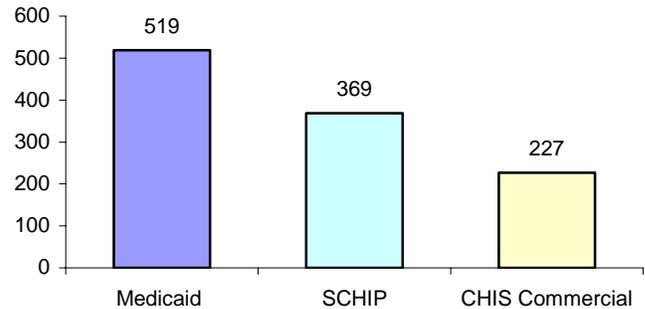
higher than the SCHIP rate (1.9 per 1,000 members) and almost triple the rate for NH CHIS commercial (1.7 per 1,000 members).

#### Ambulatory Care Sensitive Condition Inpatient Utilization Rates per 1,000 Members, Excluding Infants, SFY2008



The rate for ED visits, standardized for differences in health status (CRG) and age, for children enrolled in Medicaid (519 per 1,000 members) was more than double the rate for children enrolled in NH CHIS commercial (227 per 1,000 members). Children enrolled in SCHIP also had a higher rate (369 per 1,000 members) compared to NH CHIS commercial.

#### Outpatient Emergency Department Visit Rates per 1,000 Members, SFY2008

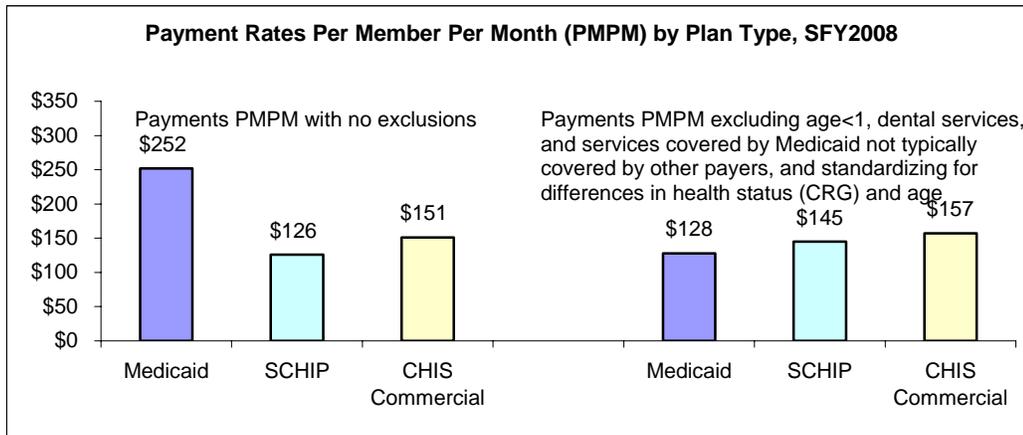


For conditions for which an alternative setting of care is likely to be more appropriate (e.g., upper respiratory infection, ear infection, bronchitis), the outpatient ED use rate for children enrolled in NH Medicaid (240 per 1,000 members) was higher than SCHIP (114 per 1,000 members) and NH CHIS commercial (58 per 1,000 members).

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### Payments

During SFY2008 the payment rate for Medicaid (\$252 PMPM) was higher than SCHIP (\$126 PMPM) and CHIS commercial (\$151 PMPM), before any standardization or adjustment to make the PMPMs more comparable. This reflected higher utilization and higher prevalence of disease in the Medicaid population, that SCHIP does not cover infants, the health status (based on CRG) of children enrolled in Medicaid is poorer than children enrolled in SCHIP or CHIS commercial, and Medicaid pays for services typically not covered by commercial plans.



had a payment rate (\$167 PMPM) that was nearly 1.5 times higher than the rate for children in households with the highest adjusted household income (\$116 PMPM).

### Limitations

This study is based primarily on administrative claims data collected for the purpose of making

However, when excluding special services specific to Medicaid, newborns and infants (age 0–11 months), and standardizing for differences in health status (CRG) and age, the payment rate for children per member per month (PMPM) was lower in Medicaid (\$128 PMPM) compared with SCHIP (\$145 PMPM) or NH CHIS commercial (\$157 PMPM).

financial payments. While it can be an efficient and less costly method to report on health care utilization and payments, administrative claims data may under-report some diagnostic conditions or services.

Differences in utilization and payment measures among Medicaid, SCHIP, and NH CHIS commercial may be influenced by differences in the health status of the children covered or differences in the insurance plan delivery model and benefit structure.

### Poverty Level

The relative health status (based on CRG risk scores) of children enrolled in Medicaid indicates that children with continuous enrollment in the poorest households (0% FPL) had the poorest health as indicated by a higher average clinical risk score (0.812) compared with children in households with the highest adjusted household income (134%-184% FPL) whose average CRG risk score was 0.580.

### Discussion and Next Steps

Children enrolled in NH Medicaid are consistently receiving more effective care than children in Medicaid managed care plans nationally. However, NH children enrolled in Medicaid had poorer health status and higher inpatient and emergency department utilization than children enrolled in SCHIP or CHIS commercial plans. Payment rates per member per month were lower in NH Medicaid than SCHIP or CHIS commercial after certain exclusions and adjustments. Within Medicaid, poverty was a strong predictor of health status, utilization, and payment rates.

### Medicaid Utilization and Payments Comparison by Poverty Level, SFY2008

Measure	Poverty Level (FPL)			
	0%	1%-99%	100%-133%	134%-184%
Inpatient Hospitalization Rate per 1,000	38	30	26	20
Outpatient ED Visits per 1,000	676	623	529	477
Office-Clinic Visits per 1,000	3,414	3,430	3,447	3,512
Payments PMPM after exclusions	\$167	\$148	\$127	\$116

Several additional studies addressing topics in more depth are under way or planned, including the following:

Children on Medicaid in the poorest households had significantly higher utilization of inpatient hospitalization and ED services than children in households with the highest adjusted household income. In contrast, office-clinic visit rates increased slightly as household income increased. Children enrolled in Medicaid in the poorest households

- characteristics of children in Medicaid who did not receive a well-child visit;
- birth certificate claims linkage and associated outcomes and cost; and
- evaluation of coexisting mental disorders and multiple medication use for children with mental disorders.

### About the New Hampshire Comprehensive Health Care Information System

The New Hampshire Comprehensive Health Care Information System (NH CHIS) is a joint project between the New Hampshire Department of Health and Human Services (NH DHHS) and the New Hampshire Insurance Department (NHID). The NH CHIS was created by state statute (RSA 420-G:11-a) to make health care data "available as a resource for insurers, employers, providers, purchasers of health care, and state agencies to continuously review health care utilization, expenditures, and performance in New Hampshire and to enhance the ability of New Hampshire consumers and employers to make informed and cost-effective health care choices." For more information about the CHIS please visit [www.nhchis.org](http://www.nhchis.org) or [www.nh.gov/nhchis](http://www.nh.gov/nhchis).