

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 New Hampshire. 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.
- As NH's children grow into adolescence, use of preventive services decreased among all populations and use of Emergency Department and Inpatient services increased.
- Medicaid's payment rates per child were 1.6 times higher than SCHIP and commercial rates despite lower reimbursement rates for services, reflecting a population with significantly more chronic illnesses and higher use of the ED and inpatient services.

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### **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. During 2005–2006, children in New Hampshire were more likely to have private health insurance (76%) compared to the national average (60%).

Having health insurance coverage does not guarantee that all children access care appropriately. Length of enrollment (or retention) in a health care plan can impact 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 for non-primary care utilization measures were highest for children enrolled in Medicaid, lower for SCHIP and lowest for NH CHIS commercial.

Finally, the impact of higher chronic disease rates and higher inpatient and outpatient emergency department utilization rates for children enrolled in Medicaid was reflected in part by plan payments; Medicaid payments per child covered (when adjusted for services not included in the other plans) were about 1.6 times higher than SCHIP and NH CHIS commercial.

Since this was the first time these health care measures were used to compare children enrolled in Medicaid, SCHIP, and commercial insurance, this report will serve as a baseline for future studies to allow for an examination of trends in the measures and for monitoring any initiatives or policy actions taken as a result of the findings in this report.

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### **Data Sources**

This is the first report on New Hampshire children's health insurance incorporating New Hampshire Medicaid data and the recently available Comprehensive Health Care Information System (NH CHIS) commercial health care claims database. New Hampshire Medicaid, SCHIP, and NH CHIS commercial administrative eligibility and claims data from services incurred in State Fiscal Year 2006 were used for this study to calculate quality, access to care, and utilization measures. 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 in Medicaid were excluded from the study.

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### **Enrollment and Disenrollment**

Analysis of enrollment data suggested that some children in New Hampshire have potential 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, SFY2006**

	<b>Medicaid</b>	<b>SCHIP</b>
Members with enrollment in July 2005	65,192	6,869
% Disenrolled from plan during year	25%	50%
% Re-enrolled of those disenrolled	18%	8%

Eighteen percent of the children who disenrolled from Medicaid re-enrolled later in the year compared to 8% 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.\*

### 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 were either better or similar to national Medicaid and CHIS commercial rates for this measure in the younger age groups, and slightly worse in the 7–11 year old group.

#### Percent of Children with Access to Primary Care Practitioner by Plan Type, SFY2006

New Hampshire			
Age Group	Medicaid	SCHIP	NH CHIS Commercial
0–11 mos	98.3%	NA	92.6%
12–24 mos	97.5%	97.1%	95.0%
25 mos–6 yrs	88.9%	93.6%	89.3%
7–11 yrs	76.2%	86.9%	NA
12–18 yrs	81.2%	89.8%	NA
National Managed Care Plan Data*			
Age Group	Medicaid	Commercial	
12–24 mos	92.4%	97.0%	
25 mos–6 yrs	82.8%	89.3%	
7–11 yrs	82.9%	88.6%	
12–19 yrs	80.5%	86.1%	

NA: SCHIP does not cover children under the age of one and there were not enough years of CHIS data for multiple year measures.  
\*2006 NCQA HEDIS reporting year on 2005 data.

### 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 were lower with older ages. For example, within Medicaid 75% of children age 16–35 months had a well-child visit compared to 46% of adolescents age 12–18 years. By plan type, rates of well-child visits were higher for SCHIP and NH CHIS commercial compared to Medicaid for each age group. The well-child visit rate for children age 3–6 years was higher for children in SCHIP (77.5%) or NH CHIS commercial (77.2%) compared to Medicaid (69.9%).

\* NH CHIS commercial data, is not presented here, although available in the main report, because of methodological issues surrounding the lack of data on all insured residents and the ability to track them all across insurance carriers. The data cannot be used to measure the total number of New Hampshire children with health insurance or the number of uninsured children or fully explore transitions between plan types.

Where national comparison data were available, NH Medicaid was higher than national Medicaid managed care rates (this in spite of the fact that NH does not have a managed care plan). SCHIP and CHIS commercial rates were both higher than the national commercial rate for the 3–6 year age group. The composite Medicaid-SCHIP rate for the first 15 months of life for children first covered by Medicaid, then SCHIP, was only slightly lower than the national commercial rate.

#### Percent of Children With a Well-Child Visit to a Primary Care Practitioner by Plan Type, SFY2006

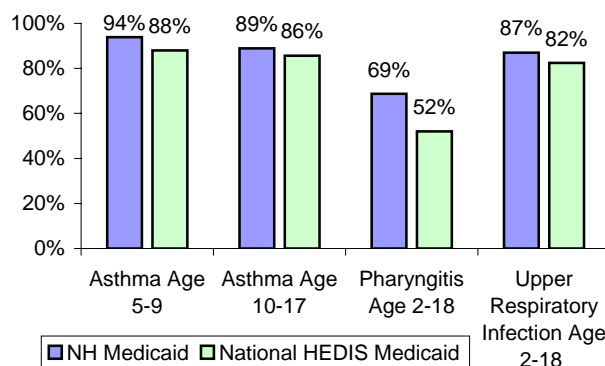
New Hampshire			
Age Group	Medicaid	SCHIP	NH CHIS Commercial
16–35 months	75.1%	92.4%	81.0%
3–6 years	69.9%	77.5%	77.2%
7–11 years	51.5%	57.4%	56.6%
12–18 years	46.3%	55.8%	51.8%
6+ visits in the first 15 months	62%	66% (see note)	NA
National Managed Care Plan Data*			
Age Group	Medicaid	Commercial	
3–6 years	63.3%	65.5%	
12–21 years	40.6%	38.7%	
6+ visits in the first 15 months	48.6%	71.0%	

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.  
NA: Not enough years of CHIS data for multiple year measures.  
\*2006 NCQA HEDIS reporting year on 2005 data.

### Effectiveness of Care Management

The study results of measures of effectiveness of care indicate that NH Medicaid children 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, SFY2006



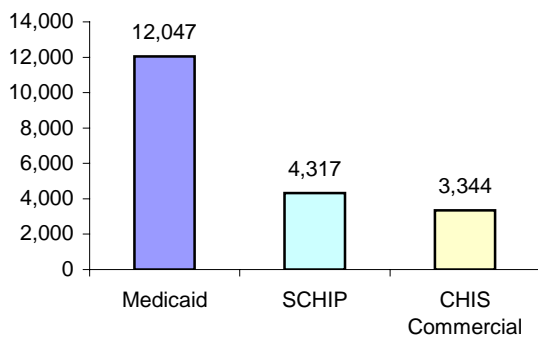
Because of lack of data, asthma medication measures for SCHIP and NH CHIS commercial could not be calculated

in this study. For appropriate testing for pharyngitis, rates were higher for children on SCHIP (80.4%) than NH CHIS commercial (72.4%) and Medicaid (68.7%). Rates for all three plan types for children not inappropriately dispensed an antibiotic for URIs was similar for all three plans (about 87%).

### Prevalence and Utilization for Mental Health Disorders

The mental health disorder prevalence rate for children enrolled in Medicaid (21.0%) was similar to the prevalence rate for SCHIP (20.1%); both were higher than the prevalence rate for NH CHIS commercial (12.6%). For children identified with a mental health disorder, the visit rate with mental health specialists was significantly higher in Medicaid (12,046.5 per 1,000 members) compared to SCHIP (4,316.6 per 1,000 members) or NH CHIS commercial (3,343.5 per 1,000 members).

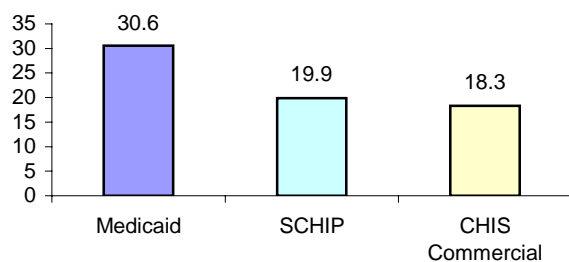
#### Mental Health Specialist Visit Rates per 1,000 Members with a Mental Health Disorder by Plan Type, SFY2006



### Hospital Utilization

Excluding newborns and infants (age 0–11 months, and not eligible for SCHIP), the inpatient hospitalization rate for children enrolled in Medicaid (30.6 per 1,000 members) was higher than SCHIP (19.9 per 1,000 members) or the NH CHIS commercial rate (18.3 per 1,000 members).

#### Inpatient Utilization Rates per 1,000 Members, Excluding Infants, SFY2006

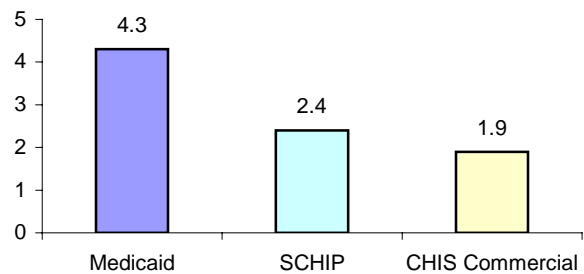


Rates of hospitalizations in all plan types were higher for 12–18 year olds than 3–11 year olds (Medicaid and SCHIP

about 2.5 times higher and NH CHIS commercial 1.6 times higher).

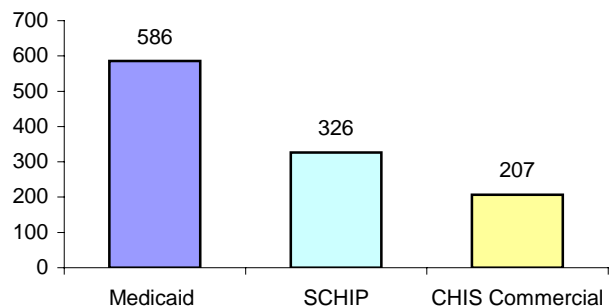
For five selected Ambulatory Care Sensitive conditions (those where inpatient hospitalization rates are influenced by rates of appropriate ambulatory care, i.e., asthma, dehydration, bacterial pneumonia, urinary tract infections, and gastroenteritis) the inpatient hospitalization rate for children enrolled in Medicaid (4.3 per 1,000 members) was higher than the SCHIP rate (2.4 per 1,000 members) and more than double the rate for NH CHIS commercial (1.9 per 1,000 members).

#### Ambulatory Care Sensitive Condition Inpatient Utilization Rates per 1,000 Members, Excluding Infants, SFY2006



The rate for outpatient emergency department visits for children enrolled in Medicaid (586 per 1,000 members) was almost three times the rate for children enrolled in NH CHIS commercial (207 per 1,000 members); children enrolled in SCHIP also had a higher rate (326 per 1,000 members) compared to NH CHIS commercial.

#### Outpatient Emergency Department Visit Rates per 1,000 Members, SFY2006



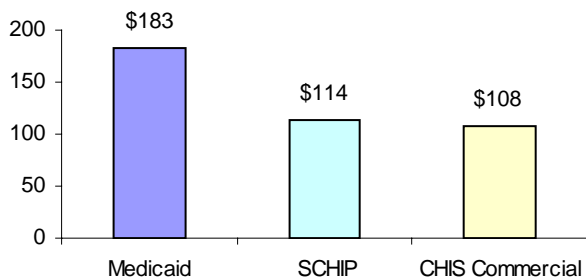
For conditions for which an alternative setting of care is likely to be more appropriate (e.g., upper respiratory infection, ear infection, bronchitis), the outpatient emergency department use rate for children enrolled in NH Medicaid (243 per 1,000 members) was higher than SCHIP (112 per 1,000 members) or NH CHIS commercial (60 per 1,000 members). Rates of ED visits were about 1.5 times higher for children age 12–18 years than those age 7–11 years across all plan times.

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## Payments

Excluding newborns and infants (age 0–11 months), the comparative payment rates for children per member per month (PMPM) were higher in Medicaid (\$183 PMPM) compared with SCHIP (\$114 PMPM) and NH CHIS commercial (\$108 PMPM) despite Medicaid's much lower reimbursement rates. This reflects higher utilization and higher prevalence of disease in the Medicaid population, as well as some services covered by Medicaid not typically covered by commercial health insurance and lack of service limits in Medicaid.

### Payment Rates per Member per Month (PMPM) by Plan Type, Excluding Infants, SFY2006



Note: Payments include plan and member payments and prepaid amounts on capitated claims as submitted on administrative claims (no non-claim specific payments are included). Dental and private non-medical care institution service claims are not included.

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## Limitations

NH CHIS commercial population contains information only on New Hampshire residents whose claims are included in the NH Comprehensive Health Care Information System database (members whose policies were purchased in New Hampshire). This study is based primarily on administrative claims data collected primarily for the purpose of making 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 between 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. Medicaid is a fee-for-service program that covers services without co-payments and that

covers a wide variety of services that have limited or no benefit coverage in commercial plans, although some adjustment was made for this in the payment rate analysis by the removal of dental and private non-medical care institution service claims.

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## Discussion and Next Steps

Prevalence of chronic disease and inpatient and emergency department utilization were higher in children enrolled in NH Medicaid, and to a lesser extent in the SCHIP program, compared to children enrolled in NH CHIS commercial plans. However, children in SCHIP had equivalent or higher rates of primary care practitioner access or well-child visits compared to children in NH CHIS commercial. While children enrolled in NH commercial plans appear to have HEDIS rates for access and well-child care that are higher than the national average, the rates indicate that there is still room for improvement in the future. A question for New Hampshire might be how much more improvement is possible.

This report provided baseline SFY2006 measures; future reporting will evaluate trends, using this baseline. Additional value could be gained from in-depth study of the following:

- enrollment, disenrollment and transitions between plan types for Medicaid and SCHIP;
- access and utilization in the adolescent population;
- children's mental health issues and psychotropic medication use;
- components of per member per month payments;
- children in foster care; and
- variation in measures by geography.

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### 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).