

## Financing and Reimbursement Strategies for Children with Special Health Care Needs: A Series Overview

The Maternal and Child Health Bureau (MCHB)<sup>1</sup> defines children with special health care needs (CSHCN) as

*“those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally.”*

Using this definition, an estimated 12.8% of children in the United States have a special health care need.<sup>2</sup> This large percentage emphasizes the importance of appropriate strategies to finance the health care costs of CSHCN. Traditionally, studies of appropriate financing strategies and appropriate methods for reimbursing health care providers have focused on settings with adult patients. However, an expanding focus on pediatric populations is emerging with the recognition that CSHCN are particularly vulnerable to poor outcomes when their access to health care or the quality of that care is limited.

Developing adequate financing and reimbursement strategies is particularly important for Medicaid and State Children’s Health Insurance Programs (SCHIP) because of the high percentage of CSHCN they insure. Medicaid provides health insurance coverage for one-third of all CSHCN and a relatively high percentage of CSHCN are enrolled in SCHIP.<sup>4,5</sup> Moreover, states are facing growing fiscal pressures, in part due to rapidly escalating costs of

providing public health insurance.<sup>6</sup> Financing strategies that redistribute limited resources according to children’s health status may be appealing to states as they address their fiscal constraints.

State Medicaid and SCHIP initiatives also face challenges in attracting health plans and providers to participate in

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their programs. Ensuring a medical home and good continuity of care is contingent upon building and retaining a strong provider network. About one-half of Medicaid and SCHIP health plans report difficulties in negotiating contracts with primary care providers and specialists, particularly pediatric sub-specialists.<sup>7</sup> These difficulties can reduce access to care for CSHCN. Reimbursement and financing strategies that afford health plans and health care providers greater protection against financial risk are likely to help overcome some of these contracting problems.

Current financing and reimbursement strategies for CSHCN are limited. For

example, states often pay health plans participating in their Medicaid Programs and SCHIP a capitated rate for each enrollee. Typically this rate is based on age, gender, demographic factors, and program eligibility criteria; despite the fact that these adjustments do not distribute the payments according to the children’s health status, placing health plans and providers at financial risk. Some Medicaid Programs and health plans reimburse providers on a fee-for-service (FFS) basis, but often at such reduced rates, that children’s access to care may be compromised. Developing financing and reimbursement strategies that provide larger payments to those caring for CSHCN, while not introducing incentives for over-utilization of services, often seen with FFS systems or under-utilization of services, which may be seen with capitated systems, is essential.

This issue brief is the first in a series designed to provide information about financing and reimbursement strategies for CSHCN. **The purpose of this initial issue brief is to provide an overview of:**

- The datasets and tools used in our analyses to provide a framework for the upcoming issue briefs; and
- The number of CSHCN in public programs and their associated health care expenditures.



Our analysis focuses on state programs such as Medicaid and SCHIP for three primary reasons. First, as previously noted, public programs finance the health care of large percentages of CSHCN. Second, CSHCN enrolled in public programs tend to be among the most vulnerable groups in our society. This is because, in addition to their poor health status, many CSHCN live below or near the poverty line and are disproportionately from minority backgrounds. Both low income and minority status have been shown to place children at a substantial disadvantage in receiving needed health care services.<sup>8,9</sup> Third, state programs that care for CSHCN often do not have available to them the wider range of options that large commercial insurers commonly employ to minimize their financial risks.<sup>10</sup>

#### Future issue briefs in this series will address:

- The utility of commonly used state strategies, such as demographic-based risk adjustment, health-based risk adjustment, carve-outs, and reinsurance for their use in financing and reimbursing care for CSHCN;
- The persistence of high health care expenditures among CSHCN and their implications for financing and reimbursement for public and commercial health plans and providers;
- The optimal design of financing and reimbursement strategies for health plans and provider panels based on their plan or panel size;
- The application of financing and reimbursement strategies for CSHCN in public versus commercial insurance products;
- The optimal design of reinsurance policies for health plans caring for CSHCN;
- The impact of behavioral responses on the part of health plans and providers

when new or alternative reimbursement strategies are introduced;

- The development of financial incentives for meeting health care quality standards; and
- The optimal structure of payments by health plans to providers.

#### Data Sets and Tools Used

We employ enrollment and claims databases for children enrolled in Medicaid and SCHIP from several different states in our analyses. The Institute for Child Health Policy houses Medicaid data from ten different states, SCHIP data from four states, and Title V CSHCN data from one state. In our reports and issue briefs, each state is assigned a number to preserve anonymity. The claims and encounter databases contain person-level data that includes International Classification of Disease, 9th Revision, Clinical Modification (ICD-9-CM) codes assigned at the time of the health care encounters, Current Procedure Terminology (CPT) codes, revenue codes, and National Drug Codes (NDC). The databases contain inpatient, outpatient and pharmacy files for the years 1996-2003, depending on the program. For six state Medicaid programs, the database contains data from 1996-1997. The enrollment files contain information about the children's age, gender, family income, and number of months enrolled in the program. Some state enrollment files also contain information about the child's race and ethnicity.

Data for five of the states are obtained directly from the states. Data for six of the Medicaid Programs are obtained through an interagency agreement with the Center for Medicare and Medicaid Services.

Each dataset was validated using protocols that are fully described in a technical report entitled *"The Development of*

*Financing and Reimbursement Strategies for Children with Special Health Care Needs"*,<sup>11</sup> which can be found at [www.ichp.ufl.edu](http://www.ichp.ufl.edu).

To calculate the expenditures for the delivered health care services, CPT codes are linked to the Practice Management Information Incorporated (PMIC)<sup>12</sup> listing of physician fees. In addition, a per diem of \$3,000 is assigned to each day of an inpatient stay. A wholesale price index is used to assign charges to the pharmacy data. Although these fees do not necessarily reflect the states' actual payment experiences, use of the index allows us to compare the performance of the reimbursement strategies across states, holding the fees constant.

The Clinical Risk Groups (CRGs) is used in most of our analyses to categorize enrollees into groups based on their health status and anticipated resource consumption. The CRGs are a categorical clinical system that classifies individuals according to their diagnosed health status.<sup>13</sup>

#### The CRGs include nine core health status groups:

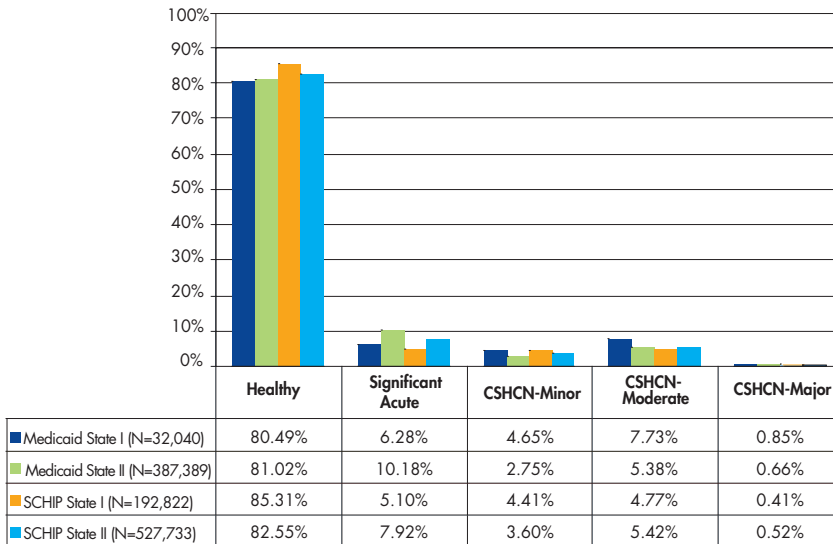
healthy, significant acute, single minor chronic, multiple minor chronic pairs, single dominant or moderate chronic, multiple significant chronic pairs, chronic triplets, catastrophic, and metastatic malignancy.

Children over 1 year of age must be in the program for 6 months or longer to be classified by the CRGs and those under 1 year of age must be enrolled for 3 months or longer.

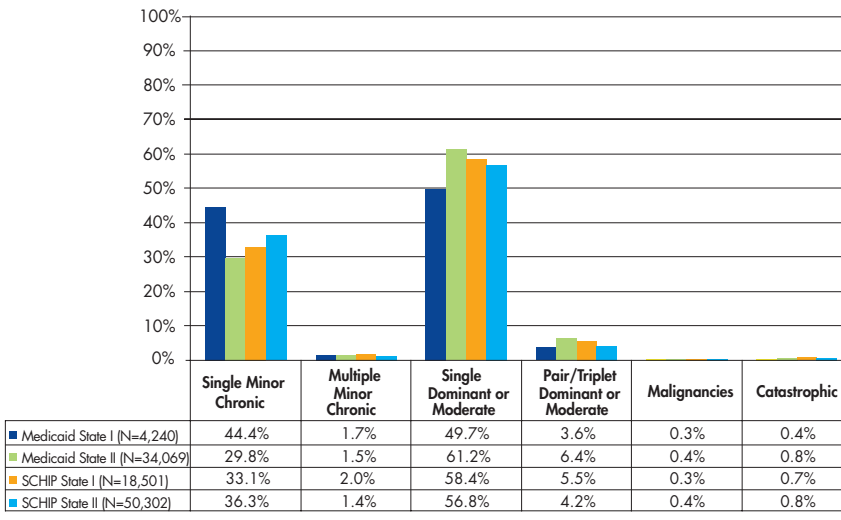
The CRG definition of a chronic health condition contains three components: (a) physical, mental, emotional, behavioral or developmental disorder; (b) expected to last at least 12 months or longer or having



**Figure 1** Distribution of Enrollees by CRG Category



**Figure 2** Distribution of CSHCN by CRG Category



sequelae that last at least 12 months or longer; and (c) requires ongoing treatment and/or monitoring. The CRG definition of a significant acute condition is a serious acute illness that places the individual at risk in the future for needing services of an amount and type greater than that for not chronically ill persons, and possibly at risk for an ongoing chronic health condition. An acute illness is only classified as a significant acute illness if it occurred in the most

recent six months of the base year time period. Chronic and acute illnesses are generally classified only if there has been at least two outpatient encounters for that diagnosis separated by at least a day. There are a few diagnoses that require only one outpatient encounter based diagnosis, and these include the codes for mental retardation, Down's Syndrome, blindness, and procedural codes such as chemotherapy and renal dialysis.

We selected the CRGs because its definition of chronic conditions is closely aligned with the MCHB definition and because of the ease of presenting the information with nine clearly defined categories. However, any of the other systems (i.e., the Chronic Disability Payment System, the Adjusted Clinical Groups, and others) could have been used. For some of the descriptive information presented in this report, we combined the CRG health status groups for CSHCN to reflect CSHCN-Minor, CSHCN-Moderate, and CSHCN-Major. In the latter category, malignant and catastrophic conditions are combined into this single category.

This issue brief reviews the number of CSHCN and their health care expenditures in two state Medicaid Programs and two SCHIP initiatives. One of the Medicaid Programs is a Primary care Case Management (PCCM) Program and the other is a Medicaid Managed Care Organization (MCO) Program. There are 419,429 included in the analyses from the two state Medicaid Programs and 720,555 enrollees from the SCHIP initiatives.

## How Many CSHCN Are There?

Graphs 1 and 2 summarize the children's health status. The graphs reveal the following key points:

1. The majority – between 80% and 85% – of children in the Medicaid and SCHIP programs are “healthy.” (Graph 1).
2. Less than 10% of the Medicaid and SCHIP enrollees are identified as having a special health care need (i.e., as having a minor, moderate, or major chronic condition). The one exception is the Medicaid Program in State 1, where 13% of the enrollees are identified as CSHCN (Graph 1).



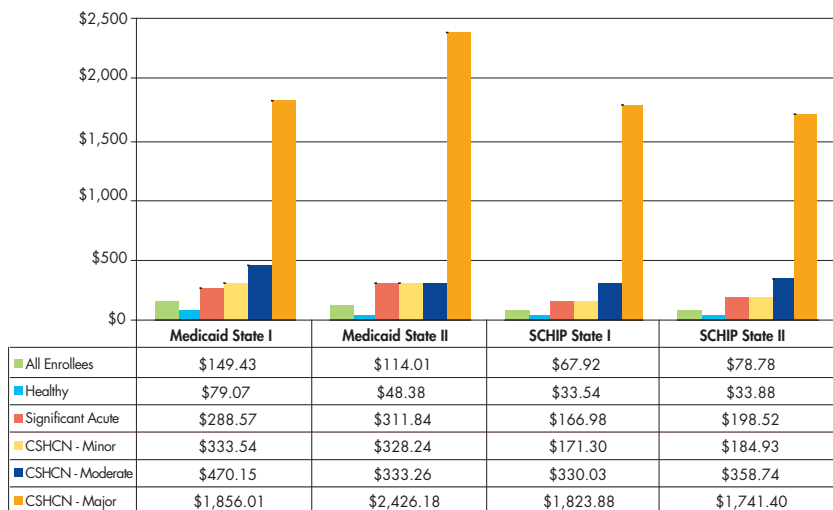
- Two of the seven CRG categories used to identify CSHCN account for the majority (approximately 90 percent) of the population of children considered as CSHCN: Single Minor Chronic Conditions (between 30% and 44% of the CSHCN) and Single Dominant/Moderate Chronic Conditions (between 49% and 61% of the CSHCN) (Graph 2).
- Children with rare and serious conditions (malignancies and catastrophic conditions) comprise a small percentage of the Medicaid and SCHIP enrollee pools. These children represent approximately 1% of those with special needs and less than 0.2% of the entire pediatric enrollees (Graphs 1 and 2).

## What Are Their Health Care Expenditures?

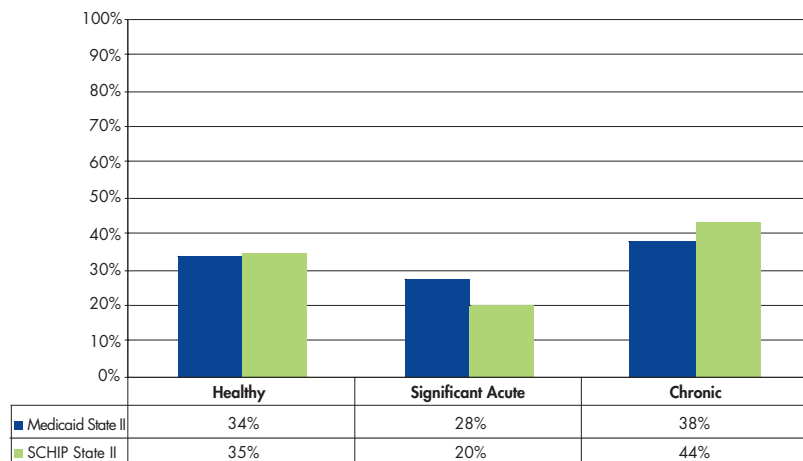
Graphs 3 through 6 characterize the per member per month (PMPM) health care expenditures for children in the state programs. The expenditure categories include inpatient, outpatient, and emergency department (ED) care. As explained above, the dollar amounts are based on the PMIC fee schedule and do not necessarily reflect actual state or health plan expenditures.

- The average health care expenditure for children in public programs is less than \$100 PMPM. However, as the children’s health status becomes poorer, their PMPM health care expenditures increase substantially. The average health care expenditure for children with major chronic conditions exceeds \$1,700 PMPM in every program (Graph 3).
- Although CSHCN account for less than 10% of all pediatric enrollees, they account for approximately 38% to 44% of total health care expenditures, depending on the program (Graph 4).

**Figure 3 Average PMPM Total Expenditures in Medicaid and SCHIP by CRG Category**



**Figure 4 Distribution of Total Expenditures across CRG Categories in Medicaid and SCHIP Programs (State II)**



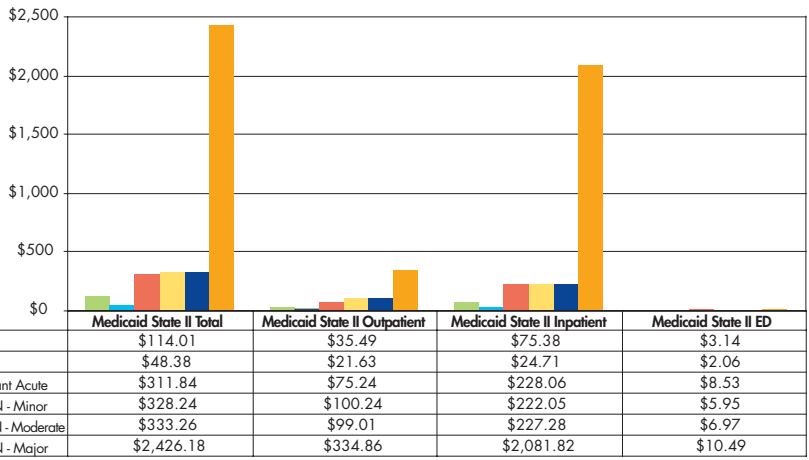
- Inpatient care accounts for the greatest portion of the health care expenditures. (Graphs 5 and 6 employ data from one state, State II, to illustrate this more general finding.)
- The observed pattern of health care expenditures within a program is quite similar across states. However, Medicaid and SCHIP programs often exhibit different expenditure patterns (Graphs 3 – 6).

## Policy Implications

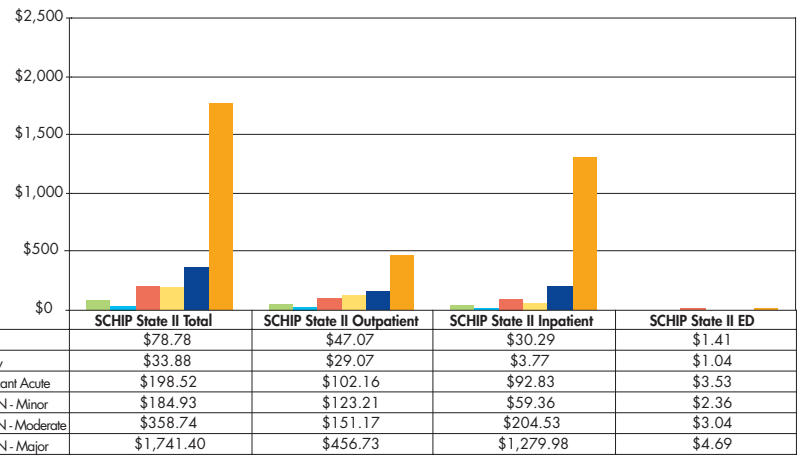
We find that CSHCN consume a large portion of the health care dollar. Consequently, health plans and providers caring for these children may



**Figure 5 Average PMPM Expenditures in a Medicaid Program by CRG Categories (State II)**



**Figure 6 Average PMPM Expenditures in SCHIP by CRG Category (State II)**



be placed at financial risk if they are not adequately compensated. If the financial risk is sufficiently severe, health plans and providers may limit the numbers of CSHCN in their programs or panels, thereby reducing access to care for this vulnerable group.

The National Center on Financing for CSHCN is launching an issue brief series to address critical issues related to the design of financing and reim-

bursement strategies for CSHCN. These issue briefs are intended for a broad audience, including state program administrators, public and private health plan administrators, health care providers, researchers, and families. Technical reports and chart books will also be made available to supplement the information in the issue briefs. The issue briefs, reports, and chart books can be found at [www.ichp.ufl.edu](http://www.ichp.ufl.edu).

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