

CHART BOOK



Florida KidCare Quality of Care Measures

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Introduction

Assessing the quality of care for all children is essential. In the case of Medicaid managed care and the State Children's Health Insurance Program (SCHIP), states are required to have performance goals and measures to evaluate the quality of care provided in the program. There are several conceptual frameworks that can be used to organize quality of care assessments. The Institute of Medicine (IOM) has provided a framework for assessing health care quality that includes assessing 1) the effectiveness of care, 2) the access to and timeliness of care, and 3) the patient-centeredness of care. Effectiveness of care refers to providing care that is based on the use of systematically acquired evidence as to its benefit in producing better outcomes than the alternatives, which include doing nothing. Access to and timeliness of care refers to a person being able to receive needed care without undue delays. Insurance coverage is essential for good access to care but it is not a guarantee. Geographic barriers, lack of understanding about how to use the health care system, and other factors, can contribute to poor access to care, even among the insured. Finally, care should be patient-centered; that is, all patients should be treated with dignity and respect and they should be involved in the decision-making about their care.

In addition to the preceding aspects of care, the IOM specifically discusses the important relationship between payment polices and the quality of care provided to enrollees. Ensuring that payment is appropriate for the severity of illness or the case-mix seen among the enrolled population is essential to encourage access to care and the delivery of good quality of care.

Often quality of care assessments are reported for children as a group, without considering their health status. However, children with special health care needs (CSHCN) comprise a unique group who may be more susceptible to adverse health outcomes than healthy children, if there are variations in the quality of their health care. Recent estimates from the 2001 National Survey of CSHCN indicate that 12.8% of children in the United States have a special health care need.³ Previous estimates of the percentages of these children range from 14.8% to 25.2% of the populations studied, depending on the definition of CSHCN used. ^{4,5,6} One study using health care encounter and survey data from an urban health center identified as many as 36% to 44% of the population as having a chronic condition.⁷ Despite

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¹ The National Governors Association; Center for Best Practices. State Efforts to Evaluate the Progress and Success of SCHIP. August 2001.

² The Institute of Medicine. Crossing the Quality Chasm. Washington, DC: National Academy Press; 2001.

³ Blumberg, S, Osborn N, Luke, J, et al. 2003. *Estimating the Prevalence of Uninsured Children: An Evaluation of the Data from the National Survey of Children with Special Health Care Needs*, 2001. Centers for Disease Control and Prevention, National Center for Health Statistics.

⁴ Stein, R. Siler, E. 1999. Operationalizing a Conceptually Based Noncategorical Definition: A First Look at US children with Chronic Conditions. *Archives of Pediatric and Adolescent Medicine*. 153: 68-74.

⁵ Newacheck P, Strickland B, Shonkoff J, et al. 1998. An Epidemiologic Profile of Children with Special Health Care Needs. *Pediatrics*. 102: 117-123.

⁶ Bethell CD, Read D, Neff J, Blumberg SJ, Stein REK, Sharp V, Newacheck r. 2002. Comparison of the Children with Special Health Care Needs Screener to the Questionnaire for Identifying Children with Chronic Conditions – Revised. *Journal of Ambulatory Pediatrics*. 2:49-57.

⁷ Kuhlthau DA, Beal AC, Ferris TG, Perrin JM. 2002. Comparing a Diagnosis List with A Survey Method to Identify Children with Chronic Conditions in an Urban Health Center. *Journal of Ambulatory Pediatrics*. 2:58-62.

differences in how they are identified or in the populations studied, CSHCN require close monitoring to ensure that they have access to high quality health care. 8,9

Purpose

The purpose of this report is to provide a summary of the quality of care provided to enrollees in three components of the Florida KidCare: the Healthy Kids program (SCHIP or Title XXI enrollees only), the Medicaid Primary Care Case Management (PCCM) Program, and the Children's Medical Services Network (CMSN, Title XIX enrollees only).

Specifically, the following aspects of care and their associated quality of care indicators are contained in this report:

- 1) Description of the Enrollees
 - a) Distribution of Enrollees by Nine Clinical Risk Groups
 - b) Distribution of Enrollees by Five Clinical Risk Groups
- 2) Use of Services
 - a) Per Member Per Month (PMPM) Health Care Expenditures
 - b) Percent of Expenditures: Healthy Enrollees Compared to Significant Acute and Chronic
 - c) Per Member Per Month (PMPM) Pharmacy Expenditures
 - d) HEDIS Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life
 - e) HEDIS Adolescent Well-Care Visits
- 3) Effectiveness and Access/Availability of Care
 - a) HEDIS Use of Appropriate Medications for People with Asthma
 - b) Percent of Hospitalizations with a Primary Diagnosis of an Ambulatory Care Sensitive Condition (ACSC)
 - c) Percent of Emergency Room (ER) Use with a Primary Diagnosis of an ACSC
 - d) HEDIS Children's Access to Primary Care Practitioners

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⁸ Newacheck P, McManus M, Fox H, Hung Y, Halfon N. 2000. Access to Health Care for Children with Special Health Care Needs. *Pediatrics*. 105:760-766.

⁹ Shatin D, Levin R, Ireys H, Haller V. 1998. Health Care Utilization by Children with Chronic Illnesses: A Comparison of Medicaid and Employer-insured Managed Care. *Pediatrics*. 102:e44.

- 4) Parents' Satisfaction With Their Children's Medical Homes
 - a) Families' Satisfaction With Their Children's Medical Homes: CAHPS Alternative Scoring
 - b) Kidcare Program Overall: Medical Home Scores By Number of Parent-Reported Condition Consequences
 - c) Kidcare Program Overall: Medical Home Scores By Race and Ethnicity

Data Sources and Measures

Four data sources were used to calculate the quality of care indicators: child-level enrollment information, child-level health care claims/encounter data, pharmacy data, and parent telephone survey data. The enrollment files contained information about the child's age, gender, the KidCare Program component in which the child was enrolled, and the number of months the child was enrolled in the program. The person-level claims/encounter data contained Physician's Current Procedural Terminology (CPT) codes and International Classification of Diseases, 9th Revision (ICD 9-CM) codes. The person-level pharmacy data contains information about filled prescriptions including the drug name, dose, date filled, and refill information. Healthy Kids claims and encounter data were compiled for the time period of January 1, 2003 through December 31, 2003, while Medicaid and CMSN claims and encounter data were compiled for July 1, 2002 through June 30, 2003. Survey data from families whose children were enrolled in the KidCare Program for 12 months or longer were also used. The surveys were conducted from September 1, 2003 through November 30, 2003.

Quality of care measures relying on health care claims and encounter data were calculated using specifications provided in the NCQA Health Employer Data and Information Set (HEDIS) Technical Specifications manual 2003.¹⁰ The only modifications made to the technical specifications were the inclusion of Florida local codes, when necessary, to ensure completeness.

The Consumer Assessment of Health Plans Survey (CAHPS), Version 3.0 was used to assess families' satisfaction with their children's medical homes. ¹¹ Specifically, we used the Medicaid module with supplemental questions addressing care for CSHCN. The alternative scoring for the CAHPS, which was developed to measure the AAP medical home concept, was used. ¹² The following domains were assessed using the CAHPS items: 1) access to a personal doctor or nurse, 2) accessible care, 3) family-centered, compassionate care, 4) coordinated care, and 5) culturally sensitive care.

Using this alternative scoring method, a mean score was calculated for each of the domains that could range from 0 to 100 points. The developers of this alternative scoring method consider that a mean score of 75 points or better in each of the domains indicates that the child has a medical home. This criterion was chosen because a score of 75 points or more in a domain indicates that the child "usually" or

¹⁰ National Commission on Quality Assurance. HEDIS Technical Specifications, 2003. Washington, DC: National Commission on Quality Assurance; 2002.

¹¹ National Commission on Quality Assurance. HEDIS 2003: Specifications for Survey Measures. Washington, D.C.: 2002.

¹² Bethell CD, Read D, Brockwood K. 2004. "Using Existing Population-Based Data Sets to Measure the American Academy of Pediatrics Definition of a Medical Home for All Children and Children With Special Health Care Needs." *Pediatrics* 113(5):1529-1544.

"always" receives a particular medical home aspect of care (i.e., usual source of care, accessible care, family-centered, compassionate care, coordinated care, and culturally sensitive care).

The CSHCN Screener was used to determine if the child had special health care needs. The CSHCN Screener uses parent reports to assess whether the child 1) has activity limitations when compared to other children of his or her age, 2) needs or uses medications, 3) needs or uses specialized therapies such as physical therapy, 4) has an above-routine need for the use of medical, mental health or educational services, or 5) needs or receives treatment or counseling for an emotional, behavioral or developmental problem. For each of these areas, the respondent is also asked if the child has limitations, medication dependency, or uses/needs services because of a condition that has lasted or is expected to last for 12 months or longer. The CSHCN Screener is based on the following Maternal and Child Health Bureau definition:

CSHCN are children "who have or are at elevated risk for chronic physical, developmental, behavioral, or emotional conditions and who also require health and related services of a type or amount not usually required by children." ¹⁴

If the child had one or more of the consequences listed above due to a condition that had last or was expected to last for 12 months or longer, then he or she was considered to have special health care needs.

The Populations

For the quality of care indicators relying on information found in health care claims and encounter data, the children's quality of care is reported for different health status groups using the Clinical Risk Groups (CRGs), which is fully described in *Section 1. Description of the Enrollees*. The Healthy Kids enrollees (N=290,489) included in the analyses represent a census of Title XXI children who were enrolled in the program for 1) the previously specified time frame and 2) at least six months so that their health status could be classified. Similarly, the CMSN enrollees (N=34,174) included in the analyses represent a census of Title XIX children who were enrolled in the program for 1) the previously specified time frame and 2) at least six months so that their health status could be classified. The Medicaid PCCM enrollees (N=318,708) included in these analyses represent a random sample of children whose parents were selected for possible participation in the KidCare telephone surveys. Parents did not have to participate in the survey for their children's health care use information to be included in these analyses. In addition to the information for enrollees by CRG category, whenever possible, information is also presented for those recent enrollees who cannot be assigned to a CRG category because of their limited experience in the program Results for the Healthy Kids program are presented first in each section followed by the Medicaid PCCM and CMSN results.

Rockville, MD.

Bethell CD, Read D, Stein REK, Blumberg SJ, Wells N, and Newacheck PW. 2002 "Identifying Children With Special Health Care Needs: Development And Evaluation of a Short Screening Instrument." *Ambulatory Pediatric* 2:38-48.
 Maternal and Child Health Bureau. 1995. *Definition of Children with Special Health Care Needs* Division of Services for Children with Special Health Care Needs.

The telephone survey data were obtained from families whose children were enrolled in one of the KidCare Program components for 12 months or longer (see Table 1). Overall, about 30% of families could not be located using the contact information contained in the encounter data. Once located, about 12% of the families refused to participate. Our final response rate was 62%. Telephone calls were made to families from 10 AM to 9 PM, 7 days per week. A minimum of 30 attempts were made to contact families and searches were conducted in an attempt to update the families' contact information. Surveys were conducted in both English and Spanish. Respondents were selected by asking to speak to the person in the family who was most knowledgeable about the child's health. In 96% of the cases, this was the child's mother. In the remaining 4% of the cases, the respondent was the father or a grandparent. We compared families who responded to those who did not in terms of child age, child gender, family income, and health status using the CRGs. No significant differences were found between respondents and non-respondents in any of these categories. When reporting families' satisfaction with their children's medical homes, results are reported for each program and by the number of condition consequences the children were experiencing as a result of their conditions.

Table 1. KidCare Program Components and Coverage Levels, FY 2002-2003

Surveys	Completed Interviews (Sample N)	Confidence Interval (%) P<=0.05	
Children's Medical Services			
CMS – Title XIX	1,135	± 1.80	
CMS – Title XXI	301	±5.47	
Medicaid			
Medicaid HMO enrollees	302	±5.64	
MediPass Only (HMO option not available in county)	300	±5.63	
MediPass (HMO option available)	302	±5.61	
Healthy Kids	301	±5.64	
MediKids	302	±5.58	

Format

A chart book format is used to display the findings in quality of care report for Florida KidCare enrollees. The chart book includes: 1) quality of care indicator results presented in graphs and 2) an accompanying narrative that describes a) the significance of the quality of care indicator, b) the results, and c) the implications of the findings and recommendations for future improvement, if needed.

National averages are not currently available for SCHIP. But, comparisons can be made to Medicaid programs. The National Commission on Quality Assurance (NCQA) gathers data from Medicaid managed care plans nationally and compiles them. NCQA reports the national results at the 25th, 50th, 75th, and 90th percentiles for the participating plans. For comparison purposes to the CHIP findings, the NCQA Medicaid managed care plans results are shown at the 50th percentile and are labeled "average" in the graphs. This is not available for all of the quality of care indicators and is not available based on the children's health status.

¹⁵ The information that NCQA compiles for Medicaid Managed Care Programs can be viewed at www.ncqa.org

SECTION 1. Description of the Enrollees

Introduction

In this section, information about the Healthy Kids, Medicaid PCCM, and CMSN Program enrollees' health status characteristics is presented. The next section contains quality of care indicators, which are presented by enrollees' health status, hence this section provides an important context for subsequent results. The following charts are contained in this section:

CHART 1-1A.	DISTRIBUTION OF UNDUPLICATED ENROLLEES BY CRG CATEGORY: HEALTHY KIDS
CHART 1-1B.	DISTRIBUTION OF UNDUPLICATED ENROLLEES BY CRG CATEGORY: MEDICAID PCCM
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CHART 1-1C. DISTRIBUTION OF UNDUPLICATED ENROLLEES BY CRG CATEGORY: CMSN

CHART 1-2A. DISTRIBUTION OF UNDUPLICATED ENROLLEES BY COLLAPSED CRG CATEGORY: HEALTHY KIDS CHART 1-2B. DISTRIBUTION OF UNDUPLICATED ENROLLEES BY COLLAPSED CRG CATEGORY: MEDICAID PCCM

CHART 1-2C. DISTRIBUTION OF UNDUPLICATED ENROLLEES BY COLLAPSED CRG CATEGORY: CMSN

#### **Description of the Enrollees**

#### DISTRIBUTION OF ENROLLEES BY CRG CATEGORY

**Significance:** The Clinical Risk Groups system classifies individuals into mutually exclusive clinical categories. CRG software reads all ICD-9-CM diagnosis codes from all health care encounters, except those associated with providers known to frequently report unreliable codes (e.g., non-clinician providers and ancillary testing providers). It assigns all diagnosis codes to a diagnostic category (acute or chronic) and body system, and assigns all procedure codes to a procedure category. Each individual is grouped to a hierarchically defined core health status group, and then to a CRG category and severity level, if chronically ill.

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 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. In the CRG logic, an acute illness is only classified as a significant acute 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.

The CRG system classifies children into the following nine health status categories. In addition, there are severity levels within each of the health status categories.

- (1) Healthy: includes children who are enrolled in the program and have not accessed services ("non-users") and children who have used the health care system but did not have a diagnoses indicative of a special need or chronic condition recorded during the time period used for the analysis
- (2) Significant Acute: this includes conditions or acute illnesses that could be precursors to or place the person at risk for developing a chronic disease. Examples in this group are head injury with coma, prematurity, and meningitis
- (3) Single Minor Chronic
- (4) Multiple Minor Chronic
- (5) Single Dominant or Moderate Chronic
- (6) Pairs Dominant and Moderate Chronic in Two Organ Systems

¹⁶ Neff JM, Sharp V, Muldoon J, Graham J, Popalisky J, Gay, J. 2001. Identifying and Classifying Children with Chronic Conditions Using Administrative Data with the Clinical Risk Group Classification System. *Journal of Ambulatory Pediatrics*, 2(1): 72-29.

- (7) Triplets Dominant and Moderate Chronic in Three or More Organ Systems
- (8) Malignancies
- (9) Catastrophic Conditions

The categories are defined below:

- <u>Healthy</u> includes children who were seen for preventive care and for minor illnesses. This category also includes children who were enrolled but did not use health care services during the classification period.
- <u>Significant Acute Conditions</u> are those acute illnesses that could be precursors to or place the person at risk for developing a chronic disease. Examples in this group are head injury with coma, prematurity, and meningitis.
- <u>Minor Chronic Conditions (both single minor and multiple minor)</u> are those illnesses that can usually be managed effectively throughout an individual's life with typically few complications and limited effect upon the individual's ability, death and future need for medical care. This category includes attention deficit / hyperactive disorders (ADHD), minor eye problems (excluding near-sightedness and other refractory disorders), hearing loss, migraine headache, some dermatological conditions, and depression.
- Moderate Chronic Conditions are those illnesses that are variable in their severity and progression, but can be complicated and require extensive care and sometimes contribute to debility and death. This category includes asthma, epilepsy, and major depressive disorders.
- <u>Dominant Chronic Conditions</u> are those illnesses that are serious, and often result in progressive deterioration, debility, death, and the need for more extensive medical care. Examples in this group include diabetes, sickle cell anemia, chronic obstructive lung disease and schizophrenia.
- <u>Chronic Pairs and Triplets</u> are those individuals who have multiple primary chronic illnesses in two (Pairs), or three or more body systems (Triplets).
- <u>Metastatic Malignancies</u> include acute leukemia under active treatment and other active malignant conditions that affect children.
- <u>Catastrophic Conditions</u> are those illnesses that are severe, often progressive, and are either associated with long term dependence on medical technology, or are life defining conditions that dominate the medical care required. Examples in this group include cystic fibrosis, spina bifida, muscular dystrophy, respirator dependent pulmonary disease and end stage renal disease on dialysis.

The use of systems such as the CRGs to create risk profiles is essential to understanding the illness burden within each KidCare program and to place the health care expenditures and health care use patterns in a context. Enrollees over the age of 1 who were enrolled in the program for 6 months or longer and enrollees under the age of 1 who were enrolled for 3 months or longer were included in the analyses. Some continuity of enrollment is required to classify individuals accurately.

For some analyses, the CRG categories were grouped as follows: (1) Healthy, (2) Significant Acute, (3) CSHCN – Minor Conditions (CRG health status categories #3 and #4), (4) CSHCN – Moderate Conditions, (CRG health status category #5), and (5) CSHCN – Major Conditions, (CRG health status categories #6, #7, #8, and #9). These are referred to as the "collapsed" CRG categories. In other analyses, to provide the greatest detail possible, all nine CRG categories are reported. The CRGs also includes considers severity levels within the health status categories and this information is also provided.

Findings: About 87% of the Healthy Kids enrollees and 91% of the Medicaid PCCM enrollees are healthy, but only 31% of CMSN enrollees are similarly classified (see Charts 1-1 A, B, and C). Five percent of Healthy Kids enrollees, 3% of those in the PCCM program, and 5% of CMSN enrollees are classified with significant acute conditions, which may place them at risk for future long-term sequelae. Among Healthy Kids enrollees, 4% have minor chronic and 4% have moderate chronic conditions (see Charts 1-2 A, B, and C). In the Medicaid PCCM sample, 2% have minor chronic conditions and another 3% have moderate chronic conditions. Less than 1% of children in both programs have major chronic conditions. In the CMSN program though, 24% have major chronic conditions, while 9% have minor chronic conditions, and 32% have moderate chronic conditions. Over 9% of CMSN enrollees have a catastrophic condition and about one percent has malignant diagnoses.

Table 2 shows the distribution of enrollees in each of the programs according to severity levels within the CRG health status categories. There are small differences between the Healthy Kids and Medicaid PCCM programs in the enrollees' severity levels. Over 92% of Healthy Kids enrollees are in the lowest severity level compared to 95% of Medicaid PCCM enrollees. Only 40% of CMSN enrollees are classified in the lowest severity level. Moreover, within each health status category, CMSN enrollees have a worse severity than PCCM or Healthy Kids enrollees.

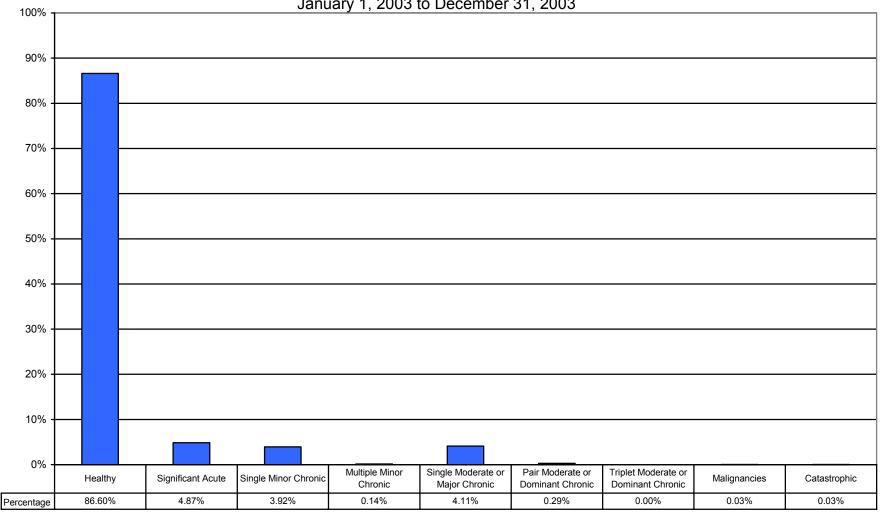
Implications: The health status of children in the Healthy Kids Program and the random sample of Medicaid PCCM enrollees is similar, with about 87% to 90% of children in both programs classified as healthy. Little information is available to make comparisons to other Title XXI and PCCM Programs. However, as one example, a higher proportion of Florida PCCM child enrollees are classified as healthy compared to Texas PCCM child enrollees (90% and 83%; respectively). Among Title XXI enrollees, 84% in Texas compared to 87% in Florida Healthy Kids are classified as healthy. The more favorable case-mix of enrollees in Florida (as evidence by a higher proportion of healthy enrollees) may be due to the fact that Florida actively pre-screens enrollees for the presence of special health care needs and refers them to CMSN for further eligibility screening and possible enrollment. Thus, in Florida children with more moderate to severe special health care needs are not in the PCCM or Title XXI Programs, rather they are served through CMSN. In Texas, children with moderate to severe special health care needs remained enrolled in the PCCM or Title XXI and are not served through a separate system of care.

Almost 70% of enrollees in CMSN have significant acute or chronic conditions. All children in CMSN must meet medical eligibility criteria. Children in CMSN who were classified as healthy are those children who did not use health care services during the classification period or they were only seen for minor conditions such as otitis media or upper respiratory infections and their underlying chronic conditions were not recorded. Children with acute or chronic conditions require the same basic primary care as healthy children and also may require specialized services. The quality of care that these children receive for both routine and specialized care should be assessed routinely. Understanding the health status of the program's enrollees is the first step in examining the quality of care that they receive.

#### CHART 1-1A. DISTRIBUTION OF UNDUPLICATED ENROLLEES BY CRG CATEGORY

#### **HEALTHY KIDS**

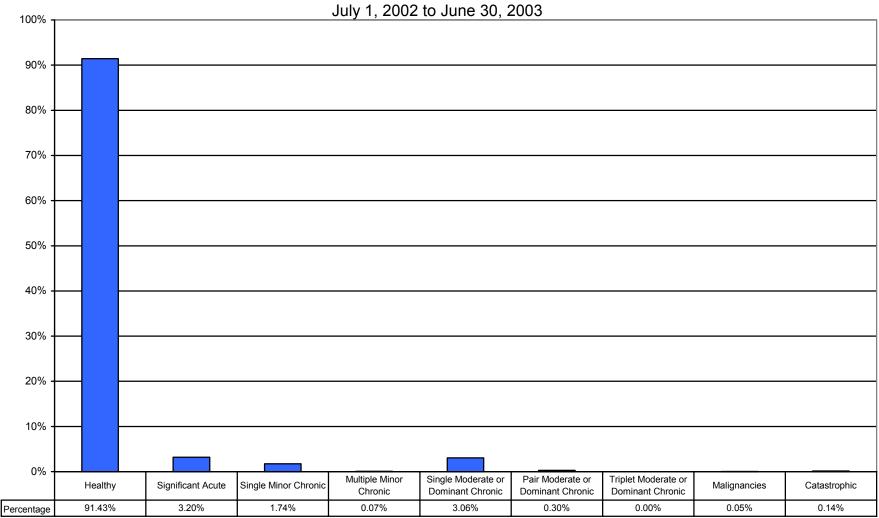
N=290,489 (an additional 85,389 new enrollees not assigned to CRGs)
January 1, 2003 to December 31, 2003



#### CHART 1-1B. DISTRIBUTION OF UNDUPLICATED ENROLLEES BY CRG CATEGORY

#### **MEDICAID PCCM**

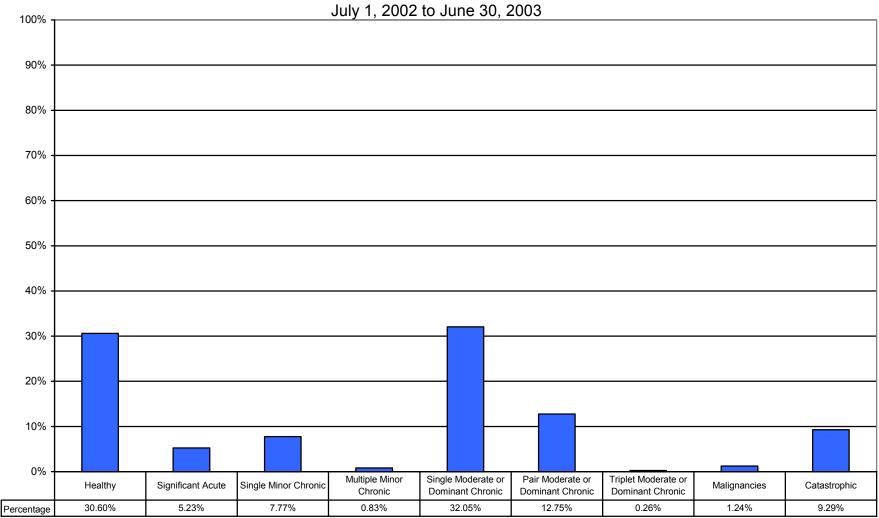
N=318,708 (an additional 56,455 new enrollees not assigned to CRGs)



#### CHART 1-1C. DISTRIBUTION OF UNDUPLICATED ENROLLEES BY CRG CATEGORY

#### **CMSN**

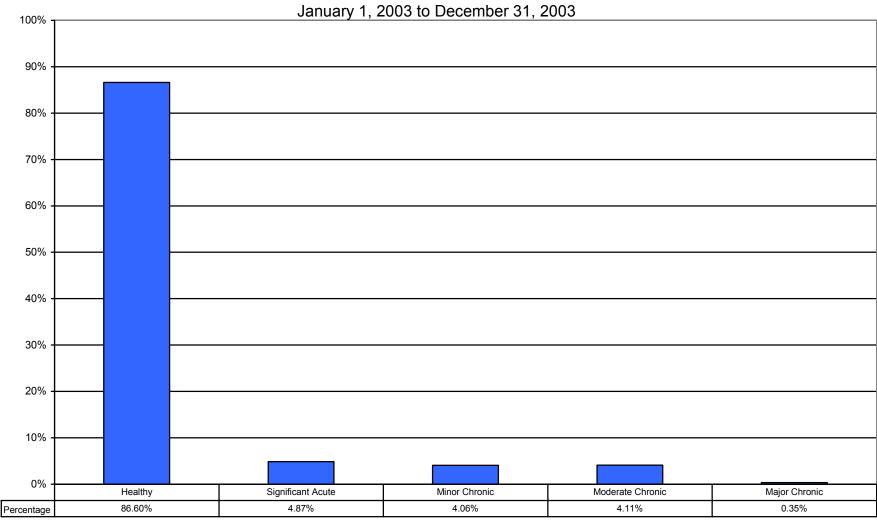
N=34,174 (an additional 3,089 new enrollees not assigned to CRGs)



#### CHART 1-2A. DISTRIBUTION OF UNDUPLICATED ENROLLEES BY COLLAPSED CRG CATEGORY

#### HEALTHY KIDS

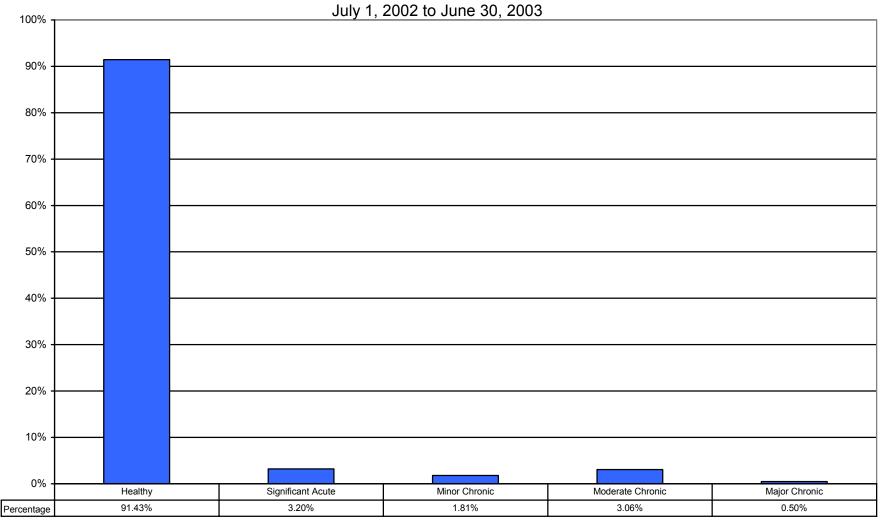
N=290,489 (an additional 85,389 new enrollees not assigned to CRGs)



#### CHART 1-2B. DISTRIBUTION OF UNDUPLICATED ENROLLEES BY COLLAPSED CRG CATEGORY

#### **MEDICAID PCCM**

N=318,708 (an additional 56,455 new enrollees not assigned to CRGs)



#### CHART 1-2C. DISTRIBUTION OF UNDUPLICATED ENROLLEES BY COLLAPSED CRG CATEGORY

#### **CMSN**

N=34,174 (an additional 3,089 new enrollees not assigned to CRGs)

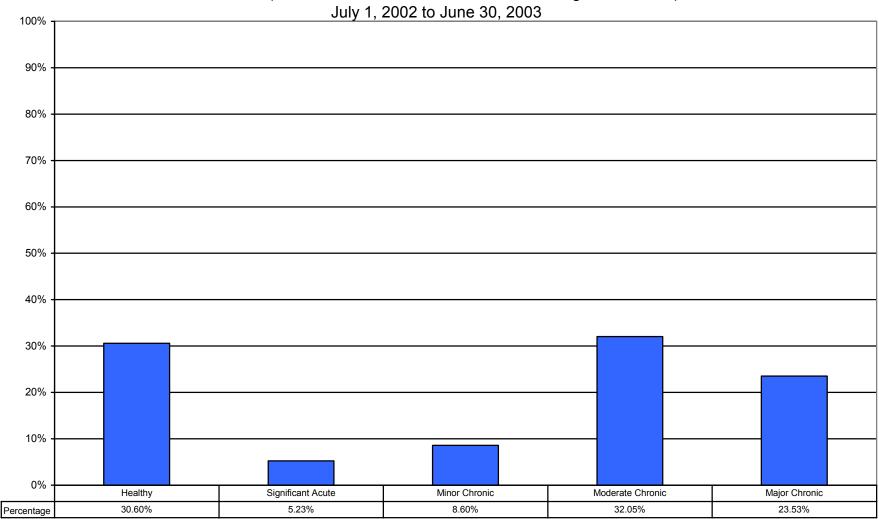


Table 2. Severity Levels: Healthy Kids, Medicaid PCCM, and CMSN Program

#### Florida Healthy Kids Program

#### **Levels of Severity**

Status	0	1	2	3-4	5-6
Healthy	100.00%	0.00%	0.00%	0.00%	0.00%
Significant Acute	100.00%	0.00%	0.00%	0.00%	0.00%
Single Minor Chronic	0.00%	90.21%	9.79%	0.00%	0.00%
Multiple Minor Chronic	0.00%	69.66%	3.16%	27.18%	0.00%
Single Dominant or Moderate Chronic	0.00%	66.78%	24.95%	7.90%	0.37%
Pair Dominant or Moderate Chronic	0.00%	60.80%	24.77%	12.44%	2.00%
Triplet Dominant or Moderate Chronic	0.00%	0.00%	0.00%	0.00%	0.00%
Malignancies	0.00%	17.05%	52.27%	29.55%	1.14%
Catastrophic	0.00%	26.97%	59.55%	12.36%	1.12%
CRG Unassigned	82.26%	10.36%	4.31%	2.62%	0.45%
Totals by Level of Severity - Number	348,467	21,169	4,860	1,322	66
Percentage Distribution by Level of Severity	92.71%	5.63%	1.29%	0.35%	0.02%

#### **Medicaid PCCM Program**

### Levels of Severity

Status	0	1	2	3-4	5-6
Healthy	100.00%	0.00%	0.00%	0.00%	0.00%
Significant Acute	100.00%	0.00%	0.00%	0.00%	0.00%
Single Minor Chronic	0.00%	89.39%	10.61%	0.00%	0.00%
Multiple Minor Chronic	0.00%	68.64%	0.46%	30.91%	0.00%
Single Dominant or Moderate Chronic	0.00%	64.28%	26.09%	9.25%	0.38%
Pair Dominant or Moderate Chronic	0.00%	59.81%	22.22%	14.33%	3.63%
Triplet Dominant or Moderate Chronic	0.00%	0.00%	33.33%	50.00%	16.67%
Malignancies	0.00%	8.54%	56.71%	34.15%	0.61%
Catastrophic	0.00%	27.11%	44.65%	26.20%	2.05%
CRG Unassigned	99.23%	0.61%	0.11%	0.04%	0.00%
Totals by Level of Severity - Number	357,622	12,436	3,708	1,311	86
Percentage Distribution by Level of Severity	95.32%	3.32%	0.99%	0.35%	0.02%

#### **CMSN Program**

#### **Levels of Severity**

Status	0	1	2	3-4	5-6
Healthy	100.00%	0.00%	0.00%	0.00%	0.00%
Significant Acute	100.00%	0.00%	0.00%	0.00%	0.00%
Single Minor Chronic	0.00%	85.05%	14.95%	0.00%	0.00%
Multiple Minor Chronic	0.00%	59.72%	3.53%	36.75%	0.00%
Single Dominant or Moderate Chronic	0.00%	45.16%	37.45%	14.38%	3.01%
Pair Dominant or Moderate Chronic	0.00%	41.32%	20.89%	25.60%	12.19%
Triplet Dominant or Moderate Chronic	0.00%	8.89%	13.33%	40.00%	37.78%
Malignancies	0.00%	7.35%	42.18%	47.87%	2.61%
Catastrophic	0.00%	19.48%	36.59%	38.64%	5.30%
CRG Unassigned	82.26%	10.36%	4.31%	2.62%	0.45%
Totals by Level of Severity - Number	14,784	10,150	6,902	4,339	1,088
Percentage Distribution by Level of Severity	39.68%	27.24%	18.52%	11.64%	2.92%

#### **SECTION 2.**

#### **Use of Services**

#### Introduction

Assessment of health care service use is a key component of any quality of care evaluation. Aggregate service use and specific health care use indicators (i.e., well-child visits, inpatient use, and emergency room encounters) are both (1) indicators of access to care and (2) indicators of quality of care. Assessing health care use as an indicator of quality of care is particularly important when contracting with MCOs because of the *perception* that financial and utilization review arrangements with providers may restrict the enrollees' access to needed health care. For example, MCOs often require a physician to seek prior authorization before rendering certain types of services in an effort to reduce health care use and control costs. Health care expenditures for children in each of the health status categories as defined by the CRGs were calculated for the Healthy Kids, Medicaid PCCM, and CMSN Programs. Because actual paid amounts are not available for the Healthy Kids enrollees' encounters, the Florida Medicaid fee schedule was applied to all health care claims and encounter data. The prescription drug costs were calculated using a wholesale price index (WPI), which very likely overstates the exact amount paid for the prescriptions.

In addition to examining the children's health care expenditures, several HEDIS use of service measures were included. The measures were selected to provide a comprehensive picture of health care use within both programs and include well-child and adolescent measures. The charts contained in this section are listed below:

CHART 2-1A. PER MEMBER PER MONTH HEALTH CARE EXPENDITURES BY CRG CATEGORY: HEALTHY KIDS CHART 2-1B. PER MEMBER PER MONTH HEALTH CARE EXPENDITURES BY CRG CATEGORY: MEDICAID PCCM CHART 2-1C. PER MEMBER PER MONTH HEALTH CARE EXPENDITURES BY CRG CATEGORY: CMSN

CHART 2-2A. PER MEMBER PER MONTH HEALTH CARE EXPENDITURES BY COLLAPSED CRG CATEGORY: HEALTHY KIDS

¹⁷ Chang DI, Burton A, O'Brian J, Hurley RE. Honesty as good policy: Evaluating Maryland's Medicaid managed care program. *The Milbank Quarterly*. 2003;81:389-414.

¹⁸ Newacheck PW, Stein REK, Walker DK, Gortmaker SL, Kuhlthau K, Perrin JM. Monitoring and evaluating managed care for children with chronic illnesses and disabilities. *Pediatrics*. 1996;98:952-958

- CHART 2-2B. PER MEMBER PER MONTH HEALTH CARE EXPENDITURES BY COLLAPSED CRG CATEGORY: MEDICAID PCCM
- CHART 2-2C. PER MEMBER PER MONTH HEALTH CARE EXPENDITURES BY COLLAPSED CRG CATEGORY: CMSN
- CHART 2-3A. PERCENT OF EXPENDITURES: HEALTHY COMPARED TO SIGNIFICANT ACUTE AND CHRONIC CONDITIONS: HEALTHY KIDS
- CHART 2-3B. PERCENT OF EXPENDITURES: HEALTHY COMPARED TO SIGNIFICANT ACUTE AND CHRONIC CONDITIONS: MEDICAID PCCM
- CHART 2-3C. PERCENT OF EXPENDITURES: HEALTHY COMPARED TO SIGNIFICANT ACUTE AND CHRONIC CONDITIONS: CMSN
- CHART 2-4A. PER MEMBER PER MONTH PHARMACY EXPENDITURES BY CRG CATEGORY: HEALTHY KIDS
- CHART 2-4B. PER MEMBER PER MONTH PHARMACY EXPENDITURES BY CRG CATEGORY: MEDICAID PCCM
- CHART 2-4C. PER MEMBER PER MONTH PHARMACY EXPENDITURES BY CRG CATEGORY: CMSN
- CHART 2-5A. PER MEMBER PER MONTH PHARMACY EXPENDITURES BY COLLAPSED CRG CATEGORY: HEALTHY KIDS
- CHART 2-5B. PER MEMBER PER MONTH PHARMACY EXPENDITURES BY COLLAPSED CRG CATEGORY: MEDICAID PCCM
- CHART 2-5C. PER MEMBER PER MONTH PHARMACY EXPENDITURES BY COLLAPSED CRG CATEGORY: CMSN
- CHART 2-6A. HEDIS WELL-CHILD VISITS IN THE 3RD, 4TH, 5TH, AND 6TH YEARS OF LIFE BY COLLAPSED CRG CATEGORY: HEALTHY KIDS
- CHART 2-6B. HEDIS WELL-CHILD VISITS IN THE 3RD, 4TH, 5TH, AND 6TH YEARS OF LIFE BY COLLAPSED CRG CATEGORY: MEDICAID PCCM
- CHART 2-6C. HEDIS WELL-CHILD VISITS IN THE  $3^{RD}$ ,  $4^{TH}$ ,  $5^{TH}$ , AND  $6^{TH}$  YEARS OF LIFE BY COLLAPSED CRG CATEGORY: CMSN
- CHART 2-7A. HEDIS ADOLESCENT WELL CARE VISITS BY COLLAPSED CRG CATEGORY: HEALTHY KIDS
- CHART 2-7B. HEDIS ADOLESCENT WELL CARE VISITS BY COLLAPSED CRG CATEGORY: MEDICAID PCCM
- CHART 2-7C. HEDIS ADOLESCENT WELL CARE VISITS BY COLLAPSED CRG CATEGORY: CMSN

#### **Use of Services**

## PMPM HEALTH CARE EXPENDITURES BY CRG CATEGORY PERCENT OF EXPENDITURES: HEALTHY COMPARED TO SIGNIFICANT ACUTE AND CHRONIC

**Significance**: The importance of examining children's health care expenditures, particularly in managed care environment and the use of the CRGs was described in preceding sections.

**Findings**: Charts 2-1 A, B, and C show the per member per month (PMPM) health care expenditures by CRG category. Overall, Healthy Kids enrollees have PMPM expenditures of about \$74. However these charges vary from a low of \$55 PMPM for those who are healthy to a high of \$962 PMPM for those with catastrophic conditions. In comparison, Medicaid enrollees have PMPM expenditures of \$69, with healthy enrollees averaging \$30 PMPM and those with moderate or major chronic conditions affecting two or three body systems averaging \$10,186 PMPM. Chronic triplets are also the most expensive condition for CMSN, averaging \$9,129 PMPM. Overall, CMSN averaged \$1212 PMPM; only \$158 was spent on average PMPM for enrollees classified as healthy.

Charts 2-2 A, B, and C show the charges for the PMPM health care expenditures for the collapsed CRG health status categories. The Healthy Kids Program has higher health care expenditures for healthy enrollees than Medicaid PCCM (\$55 versus \$30) but lower expenditures for those with major chronic conditions (about \$639 versus \$2,472). Expenditures by the CMSN program are higher than the other two programs for all CRG categories. Major chronic conditions are the most expensive category for CMSN, averaging \$3,360 per month for each enrollee.

As expected, expenditures associated with those who have significant acute or chronic conditions consume large shares of the KidCare health care dollars (see Charts 2-3 A, B, and C). Although enrollees with significant acute or chronic conditions comprise only 13% of the Healthy Kids enrollee pool, they account for almost 29% of the health care expenditures. Medicaid enrollees with significant acute or chronic conditions comprise only 9% of the program enrollment, but they account for 51% of the health care expenditures. Almost 70% of the CMSN enrollees are classified as having a significant acute or chronic condition and they comprise 91% of the expenditures by the CMSN program.

Implications and Recommendations: When Congress enacted the Title XXI legislation creating the State Children's Health Insurance Program, there was a widespread belief that enrollees in this program would be healthy. The majority of Healthy Kids enrollees in Florida are in fact healthy. However, a substantial share of enrollees have significant acute or chronic conditions. As seen in public insurance programs nationally, the few enrollees with chronic conditions account for a large share of the health care dollars. Coordinated care case management and targeted disease management programs may have a positive impact on promoting quality of care while controlling health care expenditures.

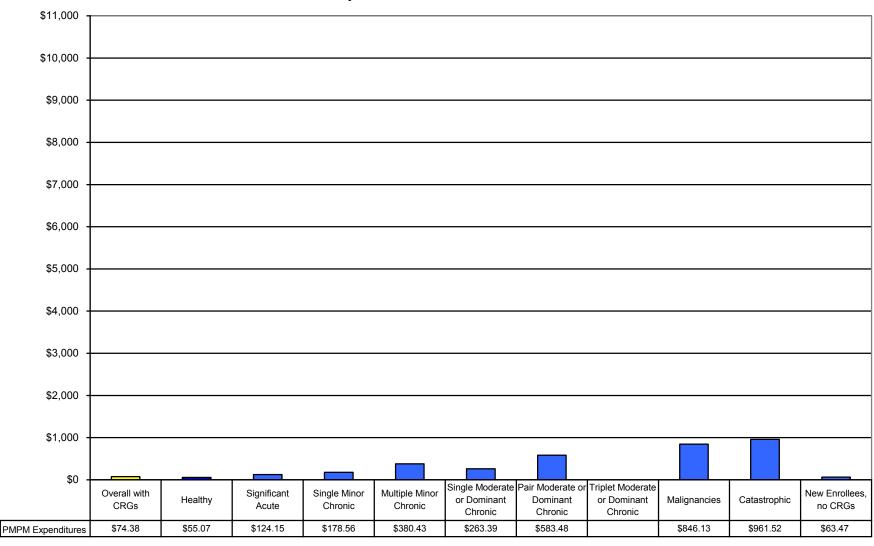
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¹⁹ Szilagyi PG, Shenkman E, Brach C. et al. (2003). Children With Special Health Care Needs Enrolled in the State Children's Health Insurance Program (SCHIP): Patient Characteristics and Health Care Needs. *Pediatrics*, 112: e508 - 520.

#### CHART 2-1A. PER MEMBER PER MONTH HEALTH CARE EXPENDITURES BY CRG CATEGORY

#### **HEALTHY KIDS**

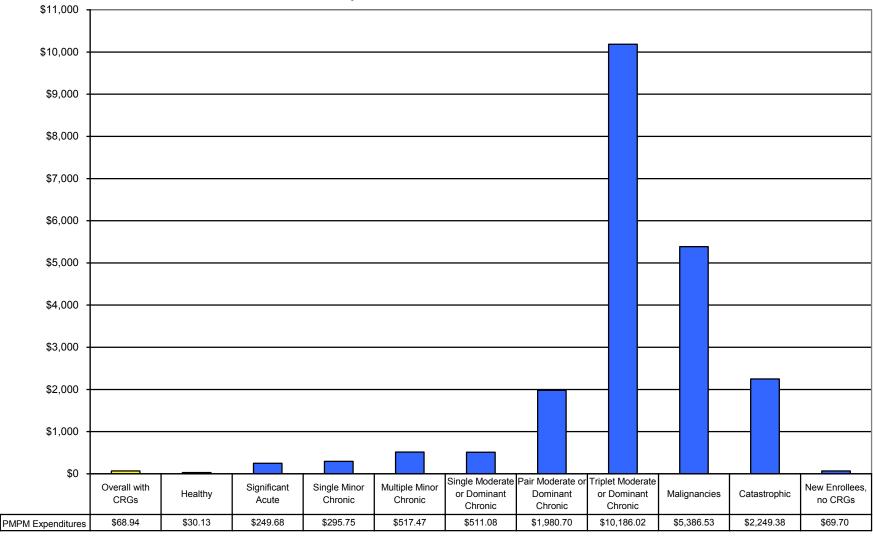
January 1, 2003 to December 31, 2003



#### CHART 2-1B. PER MEMBER PER MONTH HEALTH CARE EXPENDITURES BY CRG CATEGORY

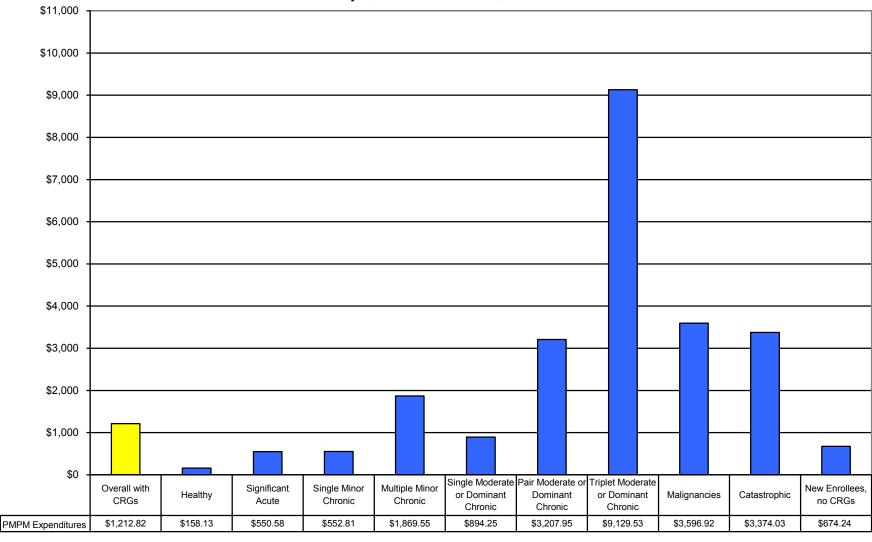
#### MEDICAID PCCM

July 1, 2002 to June 30, 2003



#### CHART 2-1C. PER MEMBER PER MONTH HEALTH CARE EXPENDITURES BY CRG CATEGORY

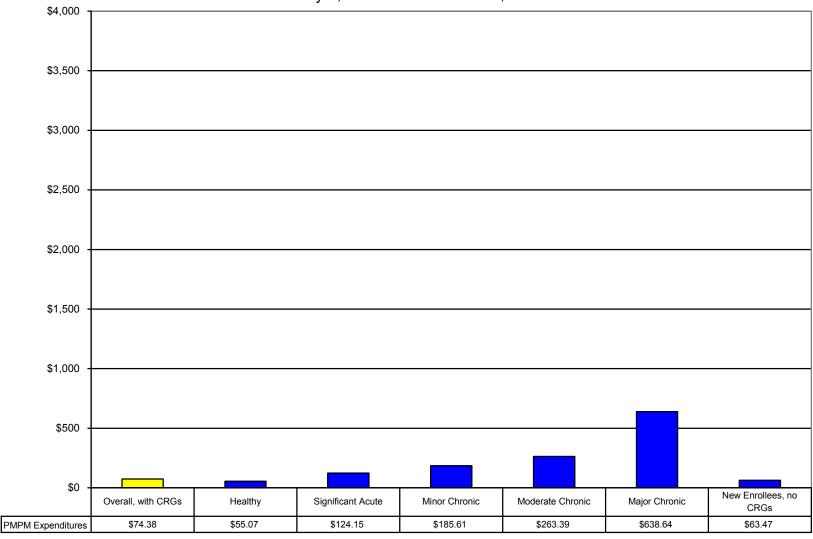
**CMSN**July 1, 2002 to June 30, 2003



#### CHART 2-2A. PER MEMBER PER MONTH HEALTH CARE EXPENDITURES BY COLLAPSED CRG CATEGORY

#### **HEALTHY KIDS**

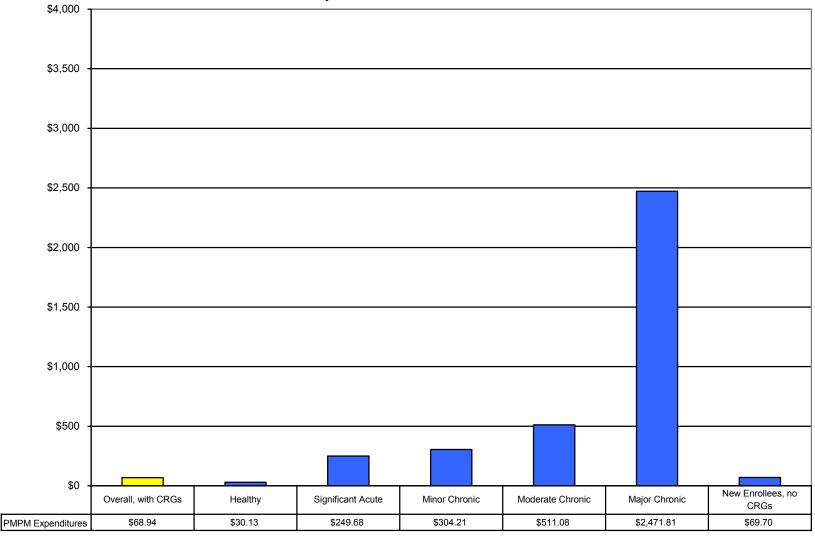
January 1, 2003 to December 31, 2003



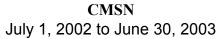
#### CHART 2-2B. PER MEMBER PER MONTH HEALTH CARE EXPENDITURES BY COLLAPSED CRG CATEGORY

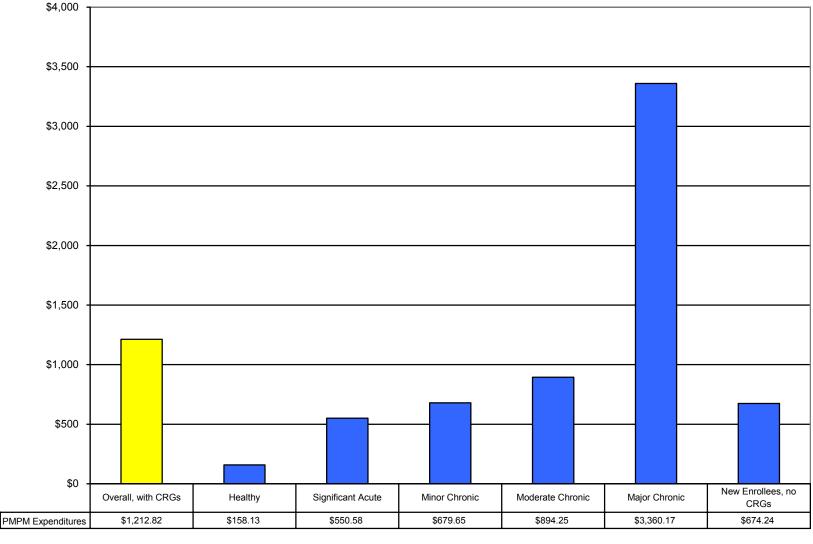
#### **MEDICAID PCCM**

July 1, 2002 to June 30, 2003



#### CHART 2-2C. PER MEMBER PER MONTH HEALTH CARE EXPENDITURES BY COLLAPSED CRG CATEGORY

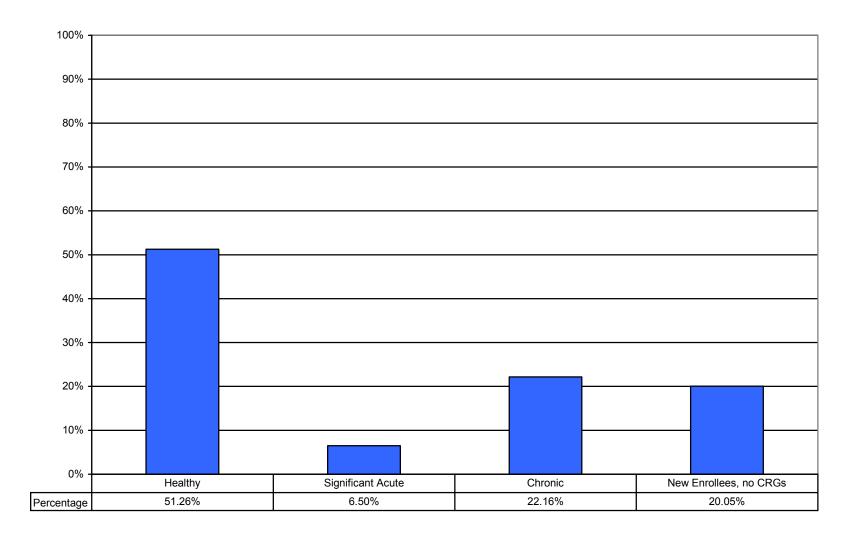




#### CHART 2-3A. PERCENT OF EXPENDITURES FOR HEALTHY, SIGNIFICANT ACUTE AND CHRONIC CONDITIONS

#### **HEALTHY KIDS**

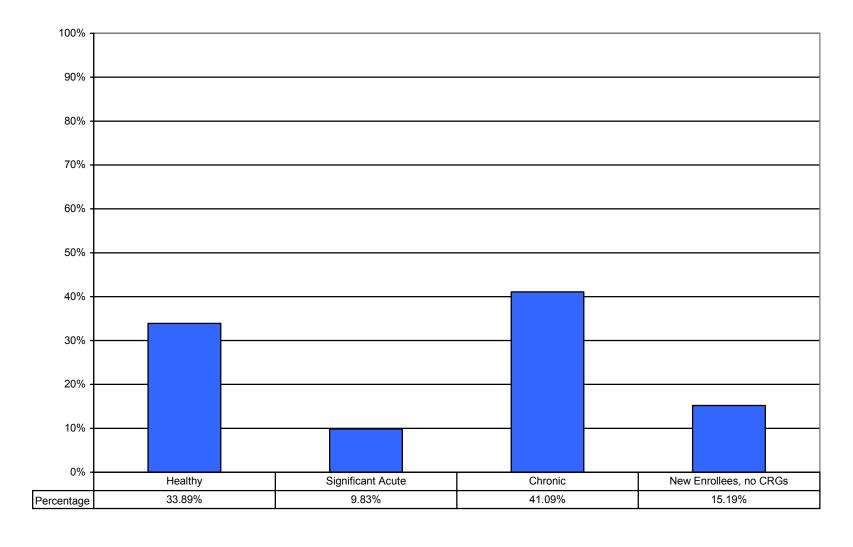
January 1, 2003 to December 31, 2003



#### CHART 2-3B. PERCENT OF EXPENDITURES FOR HEALTHY, SIGNIFICANT ACUTE AND CHRONIC CONDITIONS

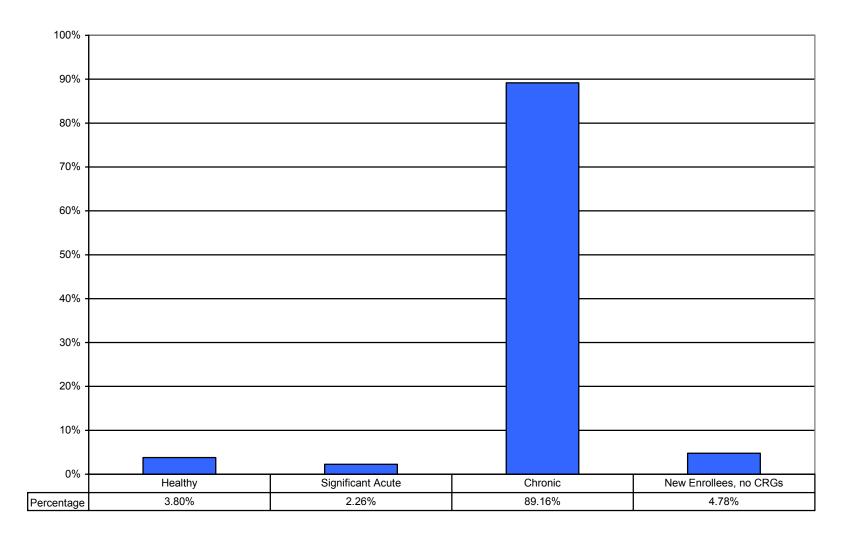
#### **MEDICAID PCCM**

July 1, 2002 to June 30, 2003



# CHART 2-3C. PERCENT OF EXPENDITURES FOR HEALTHY, SIGNIFICANT ACUTE AND CHRONIC CONDITIONS

**CMSN**July 1, 2002 to June 30, 2003



#### **Use of Services**

#### AVERAGE COST OF PRESCRIPTIONS PER MEMBER PER MONTH

**Significance**: General information is provided about pharmacy expenditures due to the national concern about the rising costs of prescription medications, particularly within Medicaid Programs.

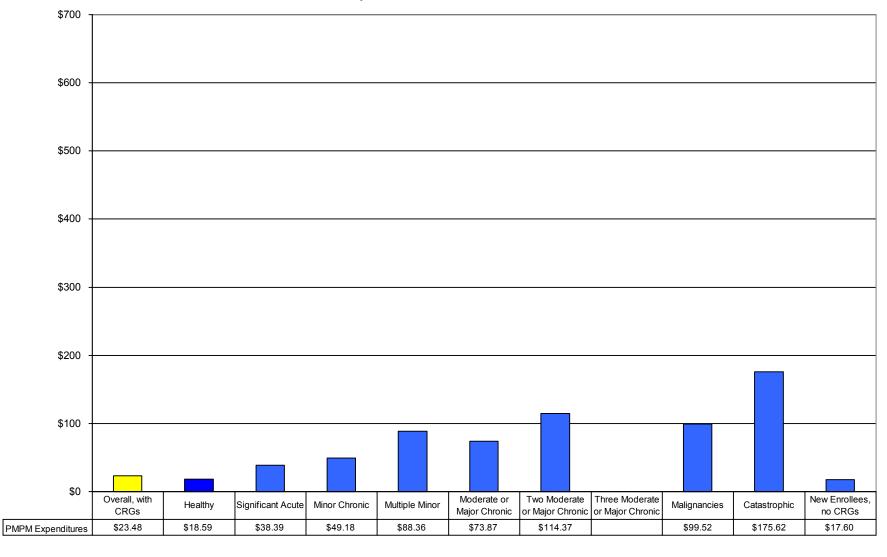
**Findings**: Pharmacy expenditures are about \$23 PMPM for Healthy Kids, \$13 for Medicaid PCCM, and \$167 for CMSN (see Charts 2-4 A, B, and C). Enrollees with catastrophic conditions have the highest PMPM pharmacy expenditures for Healthy Kids (\$176). Among Medicaid enrollees, the highest PMPM pharmacy expenditures occur for enrollees with moderate or major chronic conditions affecting three or more body systems (\$686). Similarly, the highest PMPM pharmacy expenditures for CMSN are for enrollees with chronic triplets (\$659). Drug expenditures are higher in all CRG categories for CMSN than for Medicaid PCCM or Healthy Kids (Charts 2-5 A, B. and C). For example, the PMPM expenditures for prescriptions were \$375 for CMSN enrollees with major chronic conditions, but \$294 for Medicaid PCCM and \$118 for Healthy Kids enrollees.

**Implications and Recommendations:** PMPM pharmacy expenditures increase with worsening health status in both programs. Pharmacy expenditures are highest for enrollees with major chronic conditions in CMSN, which is likely related to the severity distribution of CMSN enrollees within each CRG category.

### CHART 2-4A. AVERAGE COST OF PRESCRIPTIONS PER MEMBER PER MONTH BY CRG CATEGORY

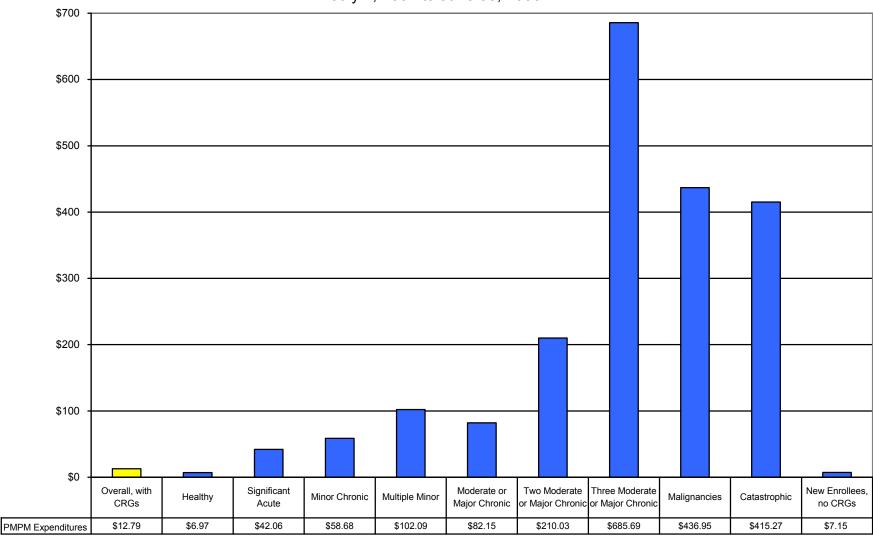
#### HEALTHY KIDS

January 1, 2003 to December 31, 2003



### CHART 2-4B. AVERAGE COST OF PRESCRIPTIONS PER MEMBER PER MONTH BY CRG CATEGORY





### CHART 2-4C. AVERAGE COST OF PRESCRIPTIONS PER MEMBER PER MONTH BY CRG CATEGORY

**CMSN** 

July 1, 2002 to June 30, 2003 \$700 \$600 \$500 \$400 \$300 \$200 \$100 \$0 Overall, with Significant Moderate or Two Moderate Three Moderate New Enrollees, Multiple Minor Healthy Minor Chronic Malignancies Catastrophic CRGs Major Chronic or Major Chronic or Major Chronic no CRGs Acute \$167.01 \$57.87 \$90.73 \$98.93 \$147.10 \$147.86 \$319.16 \$659.30 \$479.25 \$430.05 \$71.50 PMPM Expenditures

CHART 2-5A. AVERAGE COST OF PRESCRIPTIONS PER MEMBER PER MONTH BY COLLAPSED CRG CATEGORY



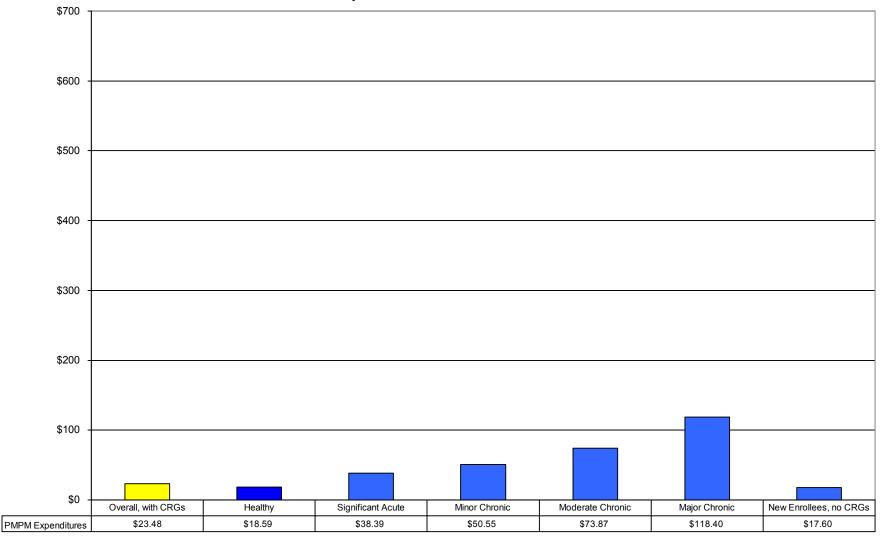


CHART 2-5B. AVERAGE COST OF PRESCRIPTIONS PER MEMBER PER MONTH BY COLLAPSED CRG CATEGORY

### **MEDICAID PCCM**

July 1, 2002 to June 30, 2003

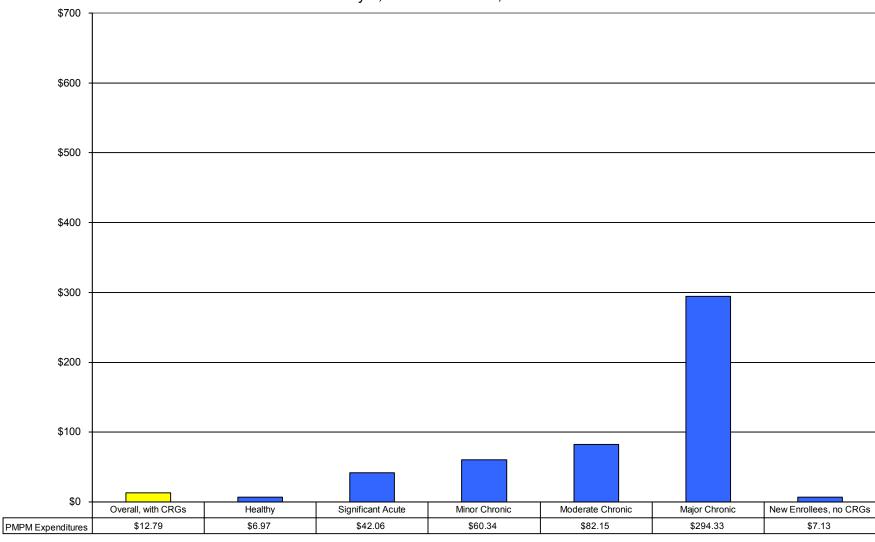
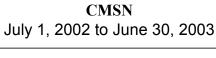
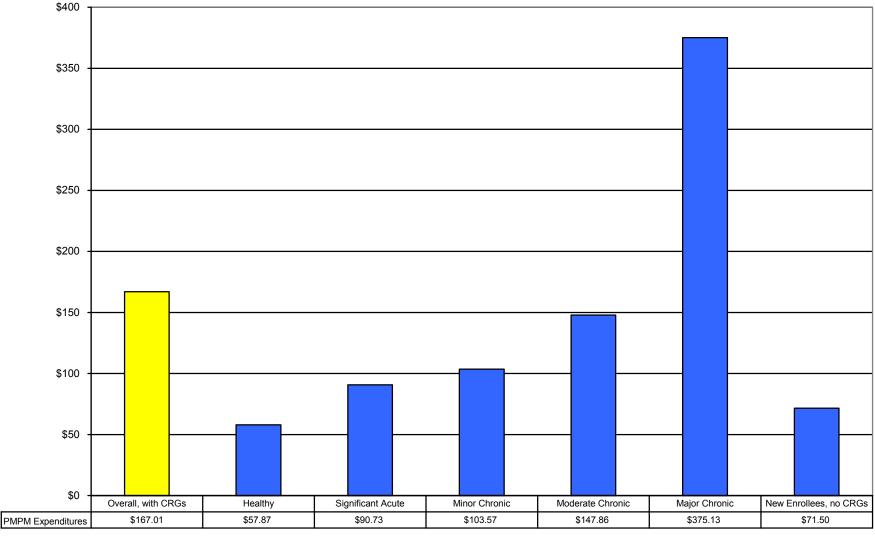


CHART 2-5C. AVERAGE COST OF PRESCRIPTIONS PER MEMBER PER MONTH BY COLLAPSED CRG CATEGORY





#### **Use of Services**

# HEDIS WELL-CHILD VISITS IN THE 3RD, 4TH, 5TH, AND 6TH YEARS OF LIFE HEDIS ADOLESCENT WELL CARE VISITS

**Significance**: Access to preventive care visits is a fundamental component of pediatric health care for all children including those with special health care needs. Preventive care visits that meet the American Academy of Pediatrics (AAP) periodicity schedule are associated with a decrease in avoidable inpatient admissions for infants, across various racial and ethnic groups, income levels, and health status. Preventive care visits are also critically important given the marked increase in the incidence of learning difficulties, accidents, and violence among children – a cluster of conditions that are called the "new morbidities" of childhood. These visits provide an opportunity for anticipatory guidance to parents about issues such as home safety, seat belt and care seat use, and normal developmental changes. Such interventions have been shown to increase parents' awareness of important developmental milestones and to reduce injury. Moreover, preventive care visits may be especially important for low-income children who are more likely than their more affluent counterparts to have these "new morbidities." In addition, preventive care visits are a critical time to provide immunizations and to screen for anemia and lead poisoning.

**Findings**: Among three, four, five, and six year olds, 46% of Healthy Kids enrollees had well-child visits compared to an average of 59% of enrollees in CMSN and 23% of enrollees in Medicaid PCCM. A higher percentage of children with significant acute and chronic conditions in all three programs had a well-child visit when compared to enrollees classified as healthy. About 36% of adolescents in CMSN had a preventive care visit, whereas 33% of adolescents in Healthy Kids and 13% of adolescents in Medicaid PCCM had a preventive care visit.

**Implications and Recommendations**: The provision of preventive care services is supposed to be one of the hallmarks of good managed care. None of the programs are performing better than the HEDIS average for both well-child and adolescent well-care. There is room for improvement in preventive care visits for Healthy Kids, Medicaid PCCM, and CMSN in Florida. Barriers to preventive visits should be identified and addressed by all KidCare programs.

²⁰ Hakim RB, Bye BV. Effectiveness of compliance with pediatric preventive care guidelines among Medicaid beneficiaries. Pediatrics. 2001;108:90-97.

²¹ Busey S, Schum TR, Meurer JR. Parental perceptions of well-child care visits in an inner-city clinic. Archives of Pediatric and Adolescent Medicine. 2002; 156:62-66.

CHART 2-6A. HEDIS WELL-CHILD VISITS IN THE 3RD, 4TH, 5TH, AND 6TH YEARS OF LIFE BY COLLAPSED CRG CATEGORY

HEALTHY KIDS
January 1, 2003 to December 31, 2003

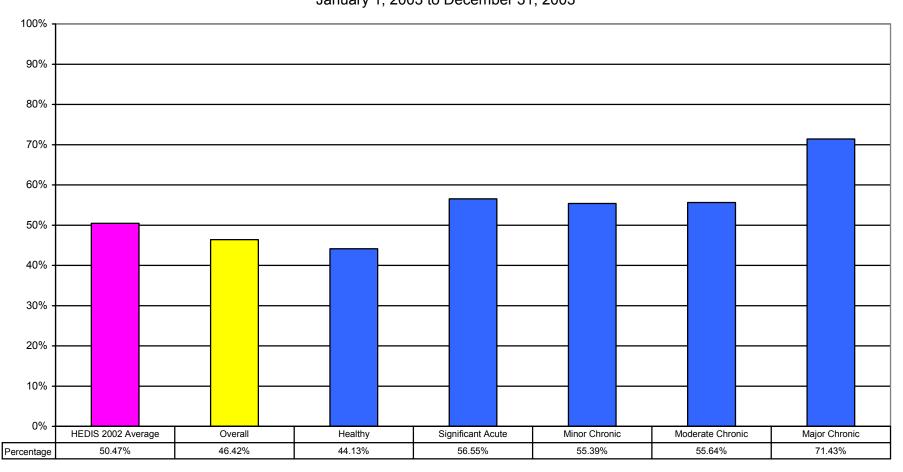
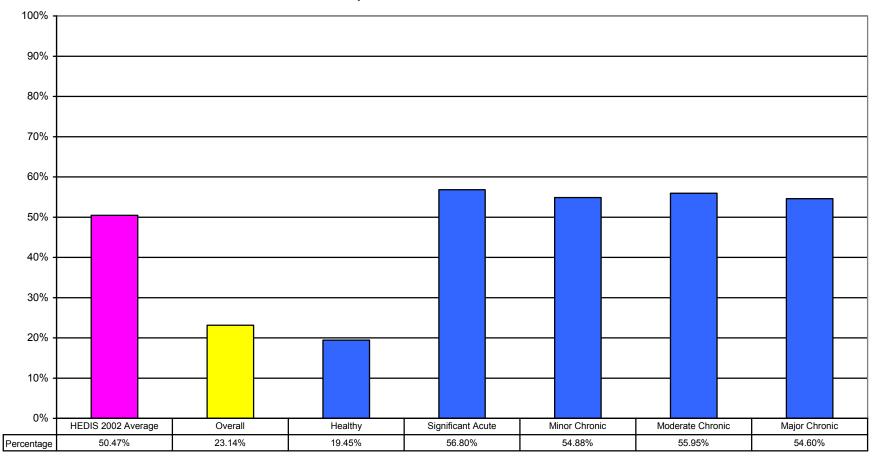


CHART 2-6B. HEDIS WELL-CHILD VISITS IN THE 3RD, 4TH, 5TH, AND 6TH YEARS OF LIFE BY COLLAPSED CRG CATEGORY

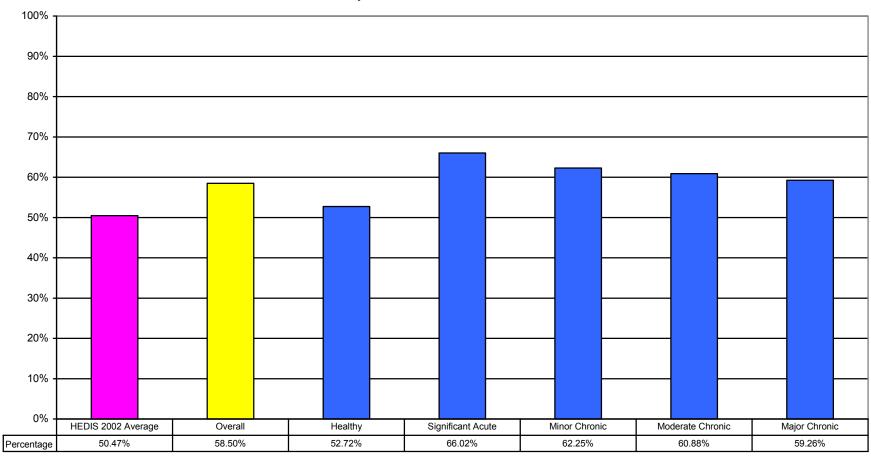
#### MEDICAID PCCM

July 1, 2002 to June 30, 2003



# CHART 2-6C. HEDIS WELL-CHILD VISITS IN THE 3RD, 4TH, 5TH, AND 6TH YEARS OF LIFE BY COLLAPSED CRG CATEGORY

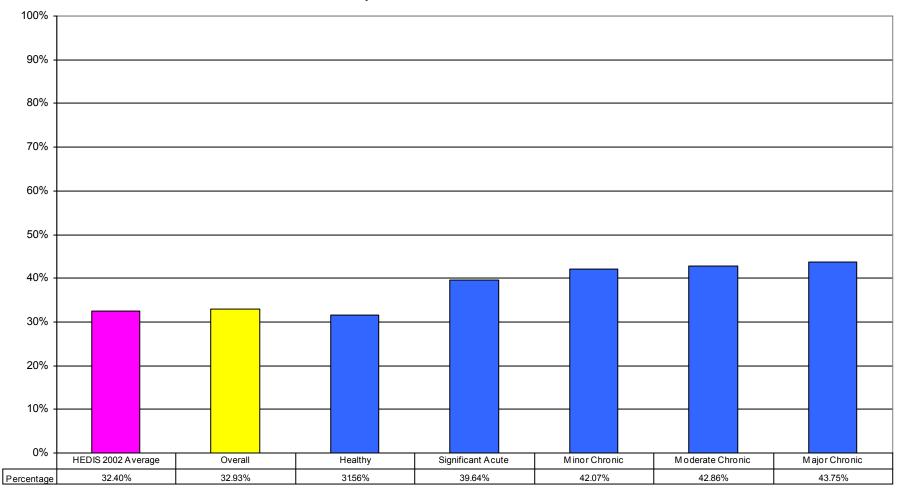
**CMSN**July 1, 2002 to June 30, 2003



# CHART 2-7A. HEDIS ADOLESCENT WELL CARE VISITS BY COLLAPSED CRG CATEGORY

#### **HEALTHY KIDS**

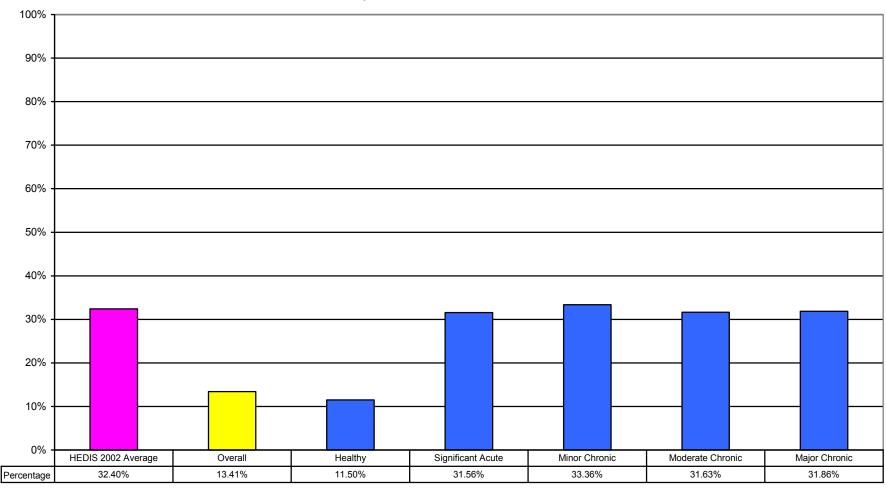
January 1, 2003 to December 31, 2003



### CHART 2-7B. HEDIS ADOLESCENT WELL CARE VISITS BY COLLAPSED CRG CATEGORY

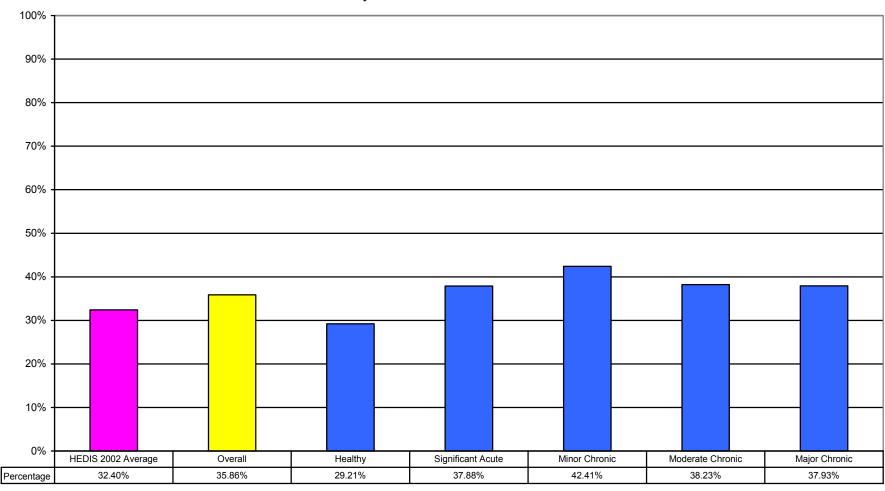
#### **MEDICAID PCCM**

July 1, 2002 to June 30, 2003



### CHART 2-7C. HEDIS ADOLESCENT WELL CARE VISITS BY COLLAPSED CRG CATEGORY

**CMSN**July 1, 2002 to June 30, 2003



### **SECTION 3.**

# EFFECTIVENESS AND ACCESS/AVAILABILITY OF CARE MEASURES

#### Introduction

According to the IOM, effective care means "providing services based on scientific knowledge to all who could benefit and refraining from providing services to those who are not likely to benefit (avoiding under use and overuse, respectively)." The HEDIS measure that assesses the use of appropriate medications for people with persistent asthma was selected. Asthma is a common chronic disease that affects an estimated 14 million adults and children. Morbidity and mortality from asthma is largely preventable and health care costs associated with the disease can be reduced if medication guidelines are followed by practitioners and patients. The National Heart Blood and Lung Institute (NHBLI) recommends five classes of long-term control medication for asthma and their use among enrollees can be assessed using the HEDIS measure "Use of Appropriate Medications for People with Asthma."

Access to care refers to the ability to obtain needed medical care and can be measured in a variety of ways.²⁴ Three different access measures are used in the CHIP quality assessment. The first two measures address the use of inpatient and emergency room facilities for ambulatory care sensitive conditions (ACSCs), which IOM specifically recommends as an access to care indicator.²⁵ ACSCs refer to those conditions that are not expected to result in inpatient or ER use if there is good access to care in the outpatient setting. ACSCs include:

- 1. Immunization preventable conditions such as pertussis, rheumatic fever, tetanus, polio, and hemophilus meningitis,
- 2. Chronic conditions such as asthma, diabetes with ketoacidosis or hyperosmolar coma, diabetes with specified manifestations, diabetes without specified complications, grand mal seizures, and hypoglycemia, and
- 3. Acute conditions such as cellulitis, dehydration, gastroenteritis, pneumonia, and kidney/urinary tract infections, ear, nose, and throat infections, ruptured appendix, and untyped conditions such as failure to thrive, congenital syphilis, and nutritional deficiency.

²² Pieoro LT, Potoski M, Talbert JC, Doherty DE. Asthma prevalence, cost, and adherence with expert guidelines on the utilization of health care services and costs in a state Medicaid population. *Health Services Research*. 2001;36(2): 357-371.

²³ National Commission on Quality Assurance. *HEDIS 2003: Technical Specifications*. Washington, DC: 2002.

²⁴ Miller RH and Luft HS. HMO plan performance update: An analysis of the literature, 1997-2001. *Health Affairs*. 2002;21(4):63-

²⁵ Gaskin DJ, Hoffman C. Racial and ethnic differences in preventable hospitalizations across 10 states. *Medical Care Research and Review*. 2000;57(1):85-107.

The third indicator is a HEDIS measure that addresses children's access to primary care practitioners. Low-income families, especially those with young children tend to use primary care at much lower rates than higher income groups. Linkages with primary care providers can have a positive effect on both the quality and costs of care. Therefore assessing the degree to which children in CHIP have access to their primary care practitioners is an important quality of care indicator.

The following charts are included in this section:

- CHART 3-1A. HEDIS USE OF APPROPRIATE MEDICATIONS FOR PEOPLE WITH ASTHMA BY COLLAPSED CRG CATEGORY: HEALTHY KIDS
- CHART 3-1B. HEDIS USE OF APPROPRIATE MEDICATIONS FOR PEOPLE WITH ASTHMA BY COLLAPSED CRG CATEGORY: MEDICAID PCCM
- CHART 3-1C. HEDIS USE OF APPROPRIATE MEDICATIONS FOR PEOPLE WITH ASTHMA BY COLLAPSED CRG CATEGORY: CMSN
- CHART 3-2A. PERCENT OF HOSPITALIZATIONS WITH A PRIMARY DIAGNOSIS OF AN AMBULATORY CARE SENSITIVE CONDITION BY COLLAPSED CRG CATEGORY: HEALTHY KIDS
- CHART 3-2B. PERCENT OF HOSPITALIZATIONS WITH A PRIMARY DIAGNOSIS OF AN AMBULATORY CARE SENSITIVE CONDITION BY COLLAPSED CRG CATEGORY: MEDICAID PCCM
- CHART 3-2C. PERCENT OF HOSPITALIZATIONS WITH A PRIMARY DIAGNOSIS OF AN AMBULATORY CARE SENSITIVE CONDITION BY COLLAPSED CRG CATEGORY: CMSN
- CHART 3-3A. PERCENT OF ER USE WITH A PRIMARY DIAGNOSIS OF AN AMBULATORY CARE SENSITIVE CONDITION BY COLLAPSED CRG CATEGORY: HEALTHY KIDS
- CHART 3-3B. PERCENT OF ER USE WITH A PRIMARY DIAGNOSIS OF AN AMBULATORY CARE SENSITIVE CONDITION BY COLLAPSED CRG CATEGORY: MEDICAID PCCM
- CHART 3-3C. PERCENT OF ER USE WITH A PRIMARY DIAGNOSIS OF AN AMBULATORY CARE SENSITIVE CONDITION BY COLLAPSED CRG CATEGORY: CMSN
- CHART 3-4A. HEDIS CHILDREN'S ACCESS TO PRIMARY CARE PRACTITIONERS BY COLLAPSED CRG CATEGORY: HEALTHY KIDS
- CHART 3-4B. HEDIS CHILDREN'S ACCESS TO PRIMARY CARE PRACTITIONERS BY COLLAPSED CRG CATEGORY: MEDICAID PCCM
- CHART 3-4C. HEDIS CHILDREN'S ACCESS TO PRIMARY CARE PRACTITIONERS BY COLLAPSED CRG CATEGORY: CMSN

²⁶ Kotagal UR, Schoettker PJ, Atherton HD, et al. Relationship between early primary care and emergency department use in early infancy by the Medicaid population. *Arch Pediatr Adolesc Med.* 2002;156:710-716.

#### **Effectiveness of Care**

### HEDIS USE OF APPROPRIATE MEDICATIONS FOR PEOPLE WITH ASTHMA

**Significance**: Nearly 9.2 million children have a diagnosis of asthma and the annual health care costs for adults and children with the disease are more than \$12 billion.²⁷ Asthma is characterized by airway inflammation which, if untreated, may lead to permanent airway damage. Current asthma care guidelines recommend inhaled anti-inflammatory medications—such as corticosteroids and cromolyn—as first-line treatment.

Little information is available about the experiences of children with asthma in SCHIP; however, pediatric Medicaid patients with asthma tend to have higher rates of emergency room (ER) use and inpatient stays and a lower likelihood of having a prescription filled for controller medications when compared to children in Commercial health plans. In another recent national study examining the appropriate use of controller medication for 13,352 children ages three to fifteen years with asthma, only 39% of them had filled prescriptions for recommended controller medications. Appropriate medication management for those with asthma has been associated with reduced symptoms, reduced inpatient and ER use, and improved quality of life.

Children were included in this measure based on the HEDIS criteria. The health status of these children were then classified using the CRGs.

**Findings**: Over half of Healthy Kids enrollees (59% of youngsters and 53% of adolescents) received medications as recommended by the NHBLI compared to over two-thirds in Medicaid (71% of youngsters and 66% of adolescents) and about three-quarters of CMSN enrollees (78% of youngsters and 72% of adolescents). All three programs exceeded the HEDIS average except for adolescents in Healthy Kids. Some children classified as "healthy" met the HEDIS definition for inclusion in the measure and were compliant with the outcomes for this measure. Those children with asthma classified as healthy were identified for inclusion in this measure based on their medication use and not based on their diagnosis.

²⁷ Rosenwasser LJ. Incorporating Omalizumab into asthma treatment guidelines: Consensus panel recommendations. *Pharmacy and Therapeutics*. 2003; 28(6):400-410.

²⁸ Finkelstein JA, Barton MB, Donahue JG, et al. Comparing asthma care for Medicaid and non-Medicaid children in a health maintenance organization. Arch Pediatr Adolesc Med. 2000;154:563-568.

²⁹ Donahue JG, Fuhlbrigge AL, Finkelstein JA, et al. Asthma pharmacotherapy and utilization by children in 3 managed care organizations. *Journal of Allergy and Clinical Immunology*. 2000; 106:1108-1114.

Implications and Recommendations: Several studies have demonstrated that both SCHIP and Medicaid face the challenges of delivering adequate asthma care to low-income families with young children³⁰. Reaching out to families more aggressively so that their children receive appropriate medications can be a significant factor in reducing morbidity and mortality from this common childhood disease. Additional information should be gathered to identify factors contributing to the low compliance with recommended asthma medications. For example, the pharmacy claims data used for this measure only contains information about prescriptions that the family filled. It does not contain information about whether the physician ordered the medication. Medical record reviews should be conducted to examine whether physicians are ordering the recommended asthma medications. Strategies directed toward the families and the physicians can be formulated once factors contributing to the low compliance rates are more fully identified.

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³⁰ Halterman JS, Aligne CA, Auinger P, et al. Inadequate therapy for asthma among children in the United States. *Pediatrics*. 2000;105(1):272-276.

# CHART 3-1A. HEDIS USE OF APPROPRIATE MEDICATIONS FOR CHILDREN AND ADOLESCENTS WITH ASTHMA BY COLLAPSED CRG CATEGORY N=897 for 5-9 year olds and N=1774 for 10-17 year olds

#### HEALTHY KIDS

January 1, 2003 to December 31, 2003

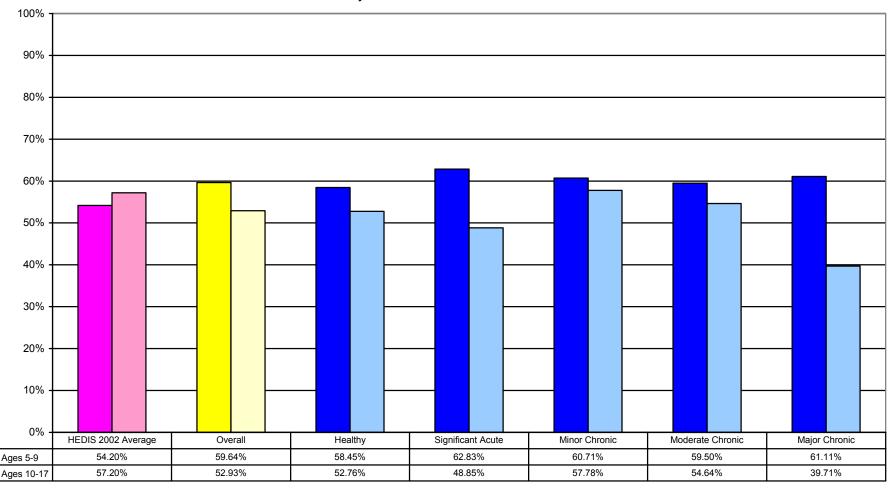
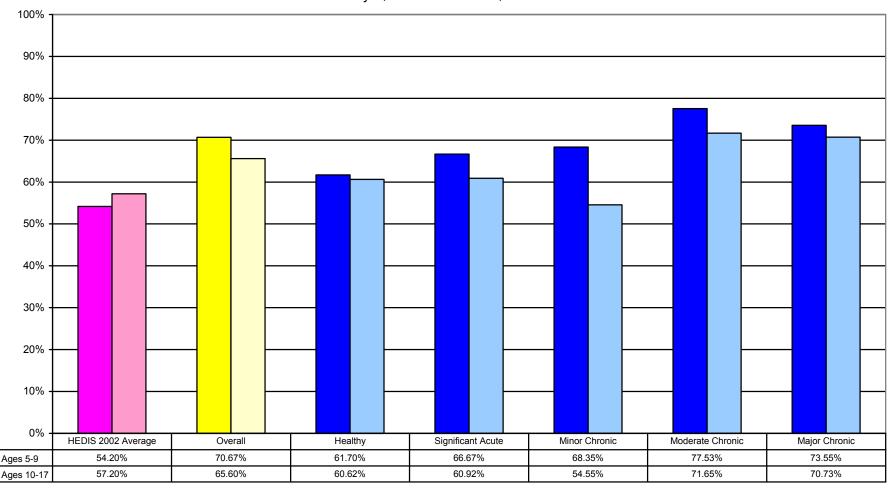


CHART 3-1B. HEDIS USE OF APPROPRIATE MEDICATIONS FOR CHILDREN AND ADOLESCENTS WITH ASTHMA BY COLLAPSED CRG CATEGORY N=1599 for 5-9 year olds and N=965 for 10-17 year olds

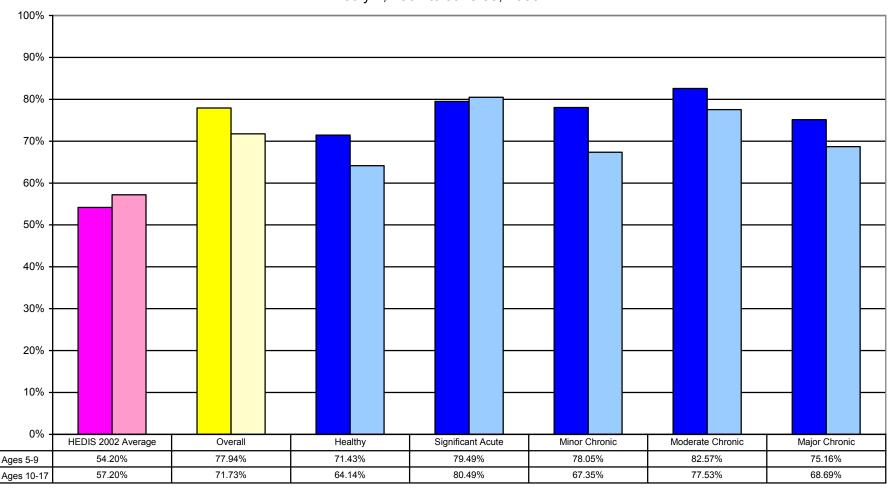
#### **MEDICAID PCCM**

July 1, 2002 to June 30, 2003



# CHART 3-1C. HEDIS USE OF APPROPRIATE MEDICATIONS FOR CHILDREN AND ADOLESCENTS WITH ASTHMA BY COLLAPSED CRG CATEGORY N=1342 for 5-9 year olds and N=1355 for 10-17 year olds

**CMSN**July 1, 2002 to June 30, 2003



#### **Access to Care**

# PERCENT OF HOSPITALIZATIONS WITH PRIMARY DIAGNOSIS OF AN AMBULATORY CARE SENSITIVE CONDITION AND

# PERCENT OF ER USE WITH PRIMARY DIAGNOSIS OF AN AMBULATORY CARE SENSITIVE CONDITION

**Significance:** As previously described, ACSCs are those conditions that should not result in an inpatient stay or an ER visit, if there is good access to care in the outpatient setting. Preventable hospitalizations and ER visits are costly and do not reflect good quality of or access to care for enrollees. Prior research has demonstrated that large states like Florida (notably New York and California) are at risk for having high rates of preventable hospitalizations, particularly among their Hispanic and Black non-Hispanic populations. One study examining hospital discharge abstracts in 10 states found that 18% of all discharges were for ACSCs. However, the greatest risk for preventable hospitalizations due to these conditions was found among Hispanic children, working age Black non-Hispanic adults, and Hispanic elderly patients. In addition to racial and ethnic variations in the incidence of preventable hospitalizations, low-income persons in general and those on Medicaid also are at increased risk for such events. Persons who have preventable hospitalizations are also more likely to be seen in the ER for such conditions and to use the ER for their routine care. In one study, in a small state, 20% of all ER uses among Medicaid recipients were for ACSCs. The incidence of inpatient and ER use for ACSCs is considered a strong marker of access to care. The information about the incidence of inpatient and ER use for ACSCs among minorities is provided as background information only. Information about race and ethnicity has only recently been collected for Title XXI enrollees and more time needs to elapse before there is sufficient data to report this measure by race and ethnicity for Healthy Kids enrollees.

**Findings:** Overall, 25% of Healthy Kids enrollees with an inpatient stay were admitted for an ACSC and 22% of ER visits by Healthy Kids enrollees were for ACSCs (see Charts 3-2 and 3-3). The Medicaid PCCM data show that 23% of inpatient stays were for an ACSC and 27% of ER visits were for ACSCs. Only 18% inpatient stays for CMSN enrollees were for an ACSC, but about 26% of ER visits by CMSN enrollees were for ACSCs. Hospitalization and ER use in all three programs for ACSCs varies little by health status categories. Although slightly larger shares of children with moderate chronic condition use inpatient and ER services for ACSCs, there is not a significant pattern of variation in use by CRG.

³¹ Gaskin DJ, Hoffman C. Racial and ethnic differences in preventable hospitalizations across 10 states. *Medical Care Research and Review*. 2000;57(1):85-107.

³²Oster A, Bindman AB. Emergency department visits for ambulatory care sensitive conditions: Insights into preventable hospitalizations. *Medical Care*. 2003;41(2):198-207.

³³ Croke A. Reducing ED Over-Utilization. Rhode Island, Neighborhood Health Plan, 2003.

**Implications and Recommendations:** The findings for the KidCare programs are similar to those found nationally among low income populations. The CMSN, serving the most severely ill CSHCN had the lowest percentage of enrollees with inpatient stays for ACSCs of any of the KidCare Program components considered in this report. Moreover, in the Healthy Kids and PCCM Programs, the percentages of children with inpatient stays or ER visits for ACSCs did not increase with worsening health status. Thus, while improvements are needed in all of the program components to minimize potentially avoidable hospital stays and ER visits, the most vulnerable children – CSHCN – are not using these services for ACSCs more than healthy children.

Many factors play a role in the occurrence of potentially avoidable inpatient and ER uses. In addition to poverty and other socioeconomic factors, the supply of primary care physicians plays a large role in ER use rates, including potentially avoidable visits.³⁴ Studies of the early Medicaid expansions in the 1990s indicate that ER use declined among those providers who had office hours in the evenings and on weekends. 35 Thus the programs should 1) review the adequacy of their primary care networks and 2) consider factors that may be limiting access to care for their enrollees such as restricted office hours and language and cultural barriers.

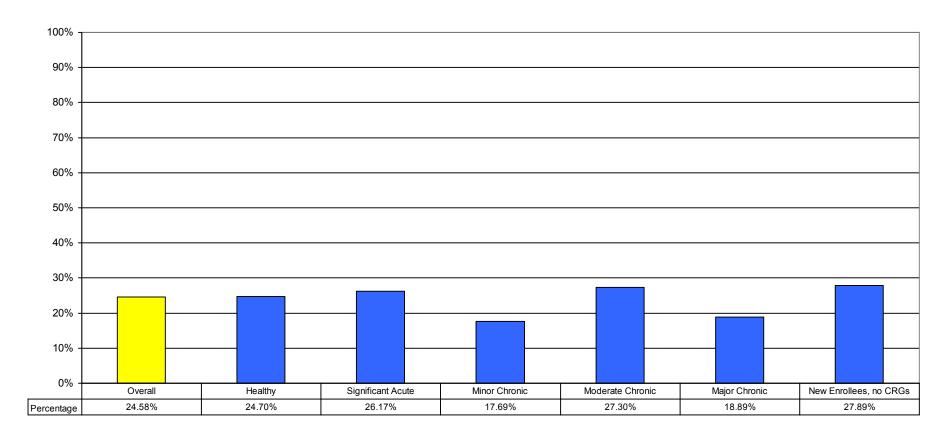
³⁴ Halfon N, Newacheck PW, Wood D. Routine emergency room use for sick care by children in the United States. *Peditatrics*. 1996;98:28-34.

³⁵ Alessandrini EA, Shaw KN, Bilker WB, et al. Effects of Medicaid managed care on health care use: Infant emergency department and ambulatory services. Pediatrics. 2001;108(1):103-110.

# CHART 3-2A. PERCENT OF HOSPITALIZATIONS WITH PRIMARY DIAGNOSIS OF AN AMBULATORY CARE SENSITIVE CONDITION BY COLLAPSED CRG CATEGORY

#### **HEALTHY KIDS**

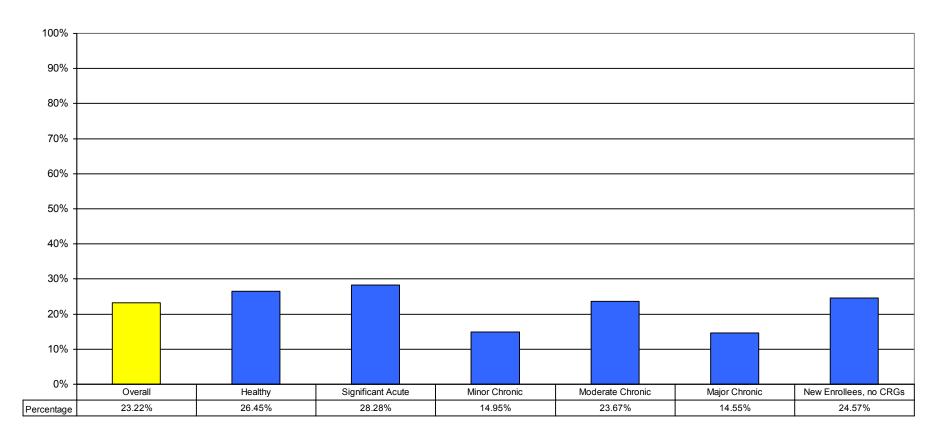
January 1, 2003 to December 31, 2003



# CHART 3-2B. PERCENT OF HOSPITALIZATIONS WITH PRIMARY DIAGNOSIS OF AN AMBULATORY CARE SENSITIVE CONDITION BY COLLAPSED CRG CATEGORY

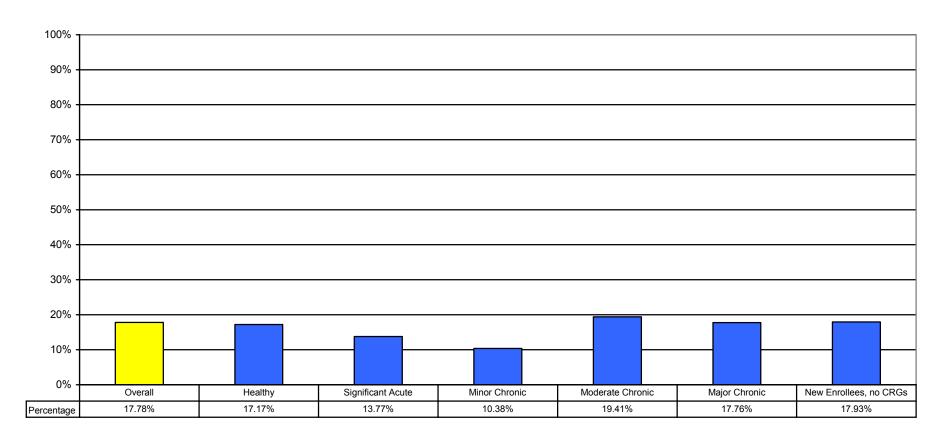
#### **MEDICAID PCCM**

July 1, 2002 to June 30, 2003



# CHART 3-2C. PERCENT OF HOSPITALIZATIONS WITH PRIMARY DIAGNOSIS OF AN AMBULATORY CARE SENSITIVE CONDITION BY COLLAPSED CRG CATEGORY

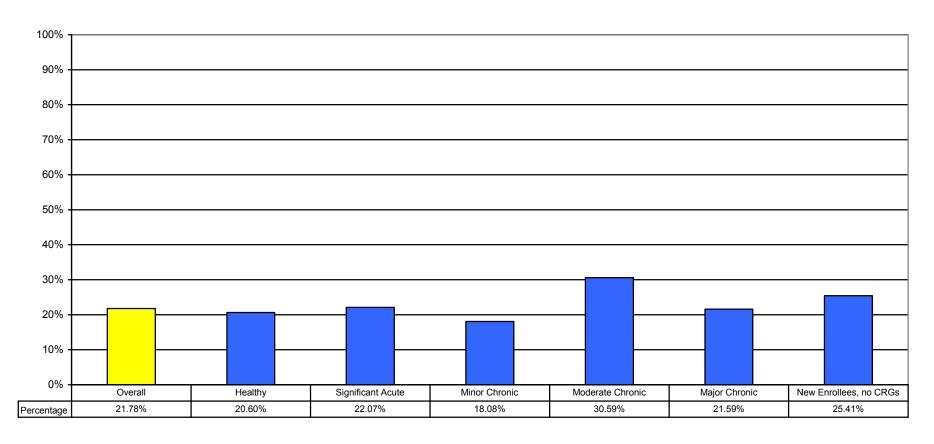
**CMSN**July 1, 2002 to June 30, 2003



# CHART 3-3A. PERCENT OF ER USE WITH A PRIMARY DIAGNOSIS OF AN AMBULATORY CARE SENSITIVE CONDITION

HEALTHY KIDS

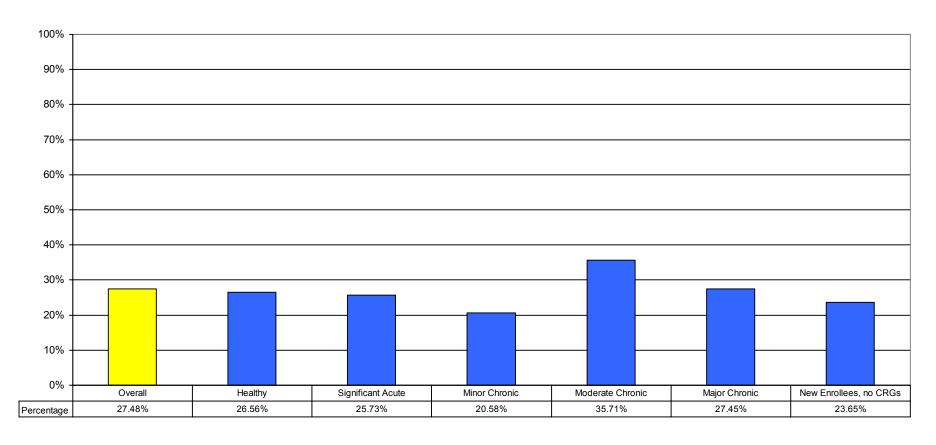
January 1, 2003 to December 31, 2003



# CHART 3-3B. PERCENT OF ER USE WITH A PRIMARY DIAGNOSIS OF AN AMBULATORY CARE SENSITIVE CONDITION

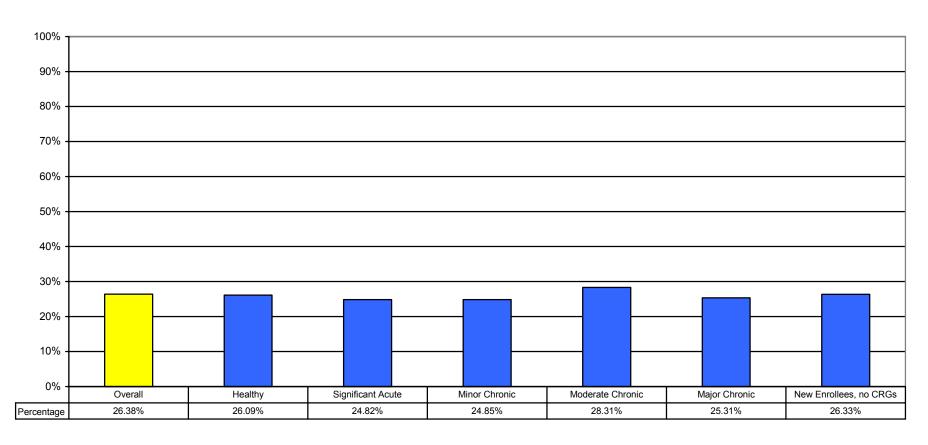
#### MEDICAID PCCM

July 1, 2002 to June 30, 2003



# CHART 3-3C. PERCENT OF ER USE WITH A PRIMARY DIAGNOSIS OF AN AMBULATORY CARE SENSITIVE CONDITION

**CMSN**July 1, 2002 to June 30, 2003



#### **Access to Care**

### HEDIS CHILDREN'S ACCESS TO PRIMARY CARE PRACTITIONERS

**Significance:** Access to primary care practitioners gives children the opportunity to have a medical home. Care within a medical home is associated with increased preventive care visits for children in general and decreased emergency room use for children with asthma.³⁶ The medical home is a fundamental component of children's care and the primary care delivered within that setting is central to efforts to increase access to care, improve pediatric health outcomes, and control health care spending.^{37,38}

**Findings**: The majority of enrollees in Healthy Kids (85%) and in CMSN (94%) have access to primary care practitioners (see Chart 3-4A). Overall, 40% of Medicaid PCCM enrollees (40%) had access to a primary care practitioner (see Chart 3-4B). However, this varied greatly by enrollee health status. For example, only 34% of enrollees classified as healthy in the PCCM Program had access to a primary care practitioner compared to 85% of Healthy Kids and CMSN enrollees (see Chart 3-4C). Enrollees in the PCCM Program with significant acute or chronic conditions had good access to primary care practitioners (84% to 97%, depending on the health status category). In the Healthy Kids and CMSN Programs, 95% or more of the children with significant acute or chronic conditions had primary care practitioner access.

**Implications and Recommendations:** Access to primary care practitioners for children with significant acute and chronic conditions in the for the KidCare Program components examined for this chart book is excellent. However access to primary care practitioners is essential for all children, including those who are healthy. Healthy children in Healthy Kids and CMSN have very good access to primary care practitioners but Medicaid should examine ways to improve access to primary care for its healthy enrollees.

³⁶ Kempe A, Beaty B, Englund BP, et al. Quality of care and use of the medical home in a state-funded capitated primary care plan for low-income children. *Pediatrics*. 2000;105(5):1020-1028.

³⁷ Institute of Medicine. *Primary Care: America's Health in a New Era* National Academy of Sciences, Division of Health Care Services Committee on the Future of Primary Care. Washington, DC.; 1996.

³⁸ Starfield, B. *Primary Care: Balancing Health Needs, Services, and Technology.* New York, NY: Oxford University Press; 1998.

# CHART 3-4A. HEDIS CHILDREN'S ACCESS TO PRIMARY CARE PRACTITIONERS BY COLLAPSED CRG CATEGORY

HEALTHY KIDS
January 1, 2003 to December 31, 2003

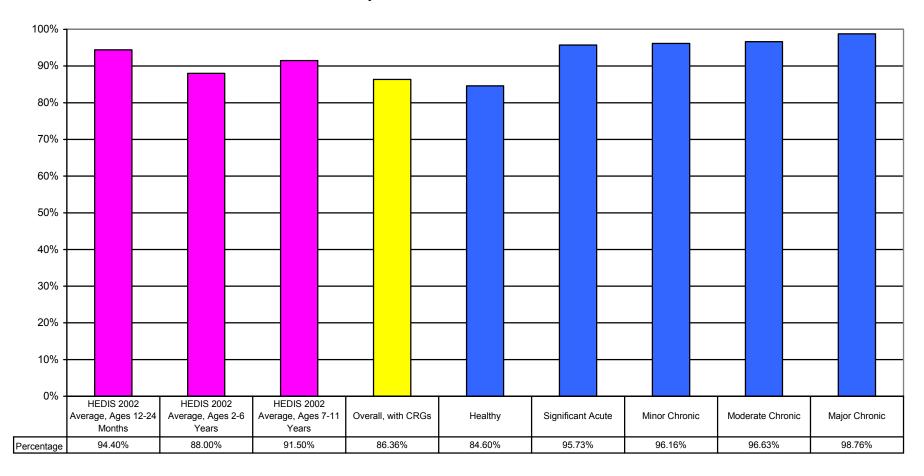
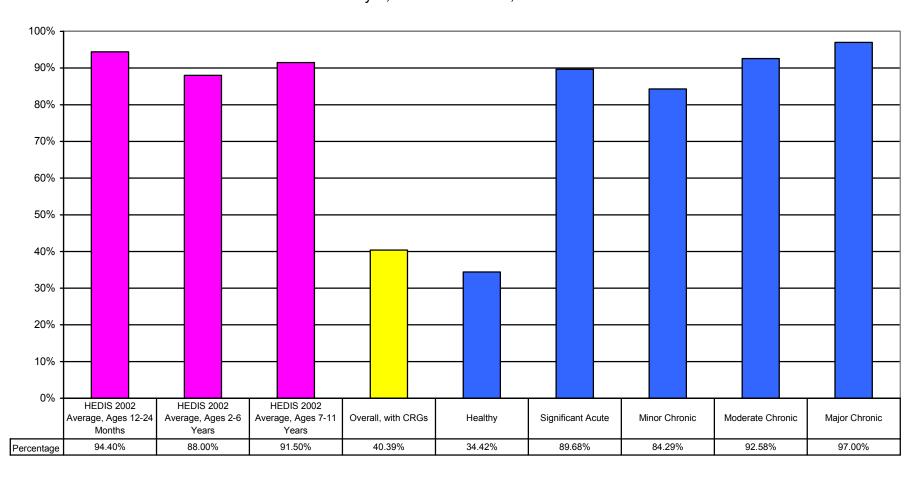


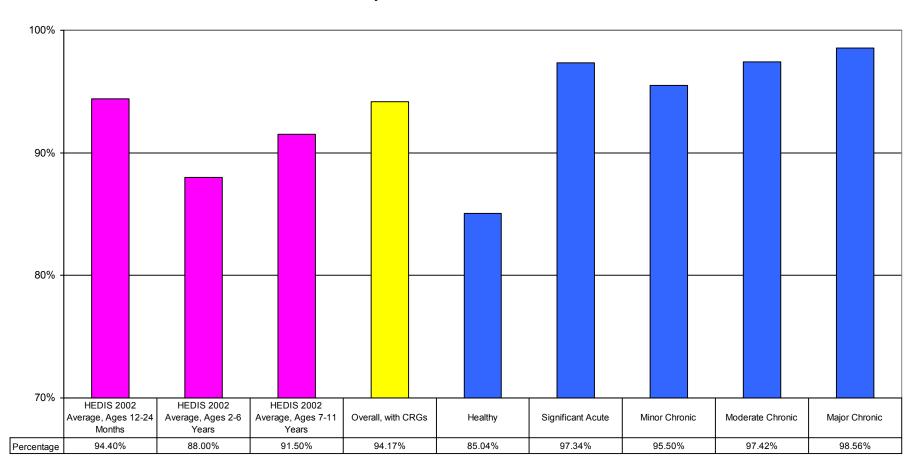
CHART 3-4B. HEDIS CHILDREN'S ACCESS TO PRIMARY CARE PRACTITIONERS BY COLLAPSED CRG CATEGORY

### MEDICAID PCCM July 1, 2002 to June 30, 2003



# CHART 3-4C. HEDIS CHILDREN'S ACCESS TO PRIMARY CARE PRACTITIONERS BY COLLAPSED CRG CATEGORY

**CMSN**July 1, 2002 to June 30, 2003



### **SECTION 4.**

### Families' Satisfaction With Their Children's Medical Homes

#### Introduction

Ensuring that all children have a medical home is one of the Healthy People 2010 national health goals.³⁹ The medical home is a fundamental component of children's care and the primary care delivered within that setting is central to efforts to increase access to care and to improve pediatric health outcomes.^{40,41} According to the American Academy of Pediatrics' (AAP) definition, the medical home is: accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally competent. The medical home should encompass preventive care services, 24 hour per day access to ambulatory and inpatient health care, provision of care over a long period of time to ensure continuity, referrals to subspecialty care, interaction with schools and community services, and maintenance of an accessible but confidential medical record.⁴² The AAP further recommends that physicians who are well-trained in primary pediatric medicine should supervise or provide the medical home.

While access to a medical home is essential for all children, it is particularly important for those with special health care needs because of the complexity of their care. Examining families' experiences with their children's medical homes, including those with special health care needs, is an important component of any quality of care assessment for children in Medicaid and Title XXI.

The following charts are included in this section:

CHART 4-1A. FAMILIES' SATISFACTION WITH THEIR CHILDREN'S MEDICAL HOMES: CAHPS ALTERNATIVE SCORING

CHART 4-1B. KIDCARE PROGRAM OVERALL: MEDICAL HOME SCORES BY NUMBER OF PARENT-REPORTED

CONDITION CONSEQUENCES

CHART 4-1C. KIDCARE PROGRAM OVERALL: MEDICAL HOME SCORES BY RACE AND ETHNICITY

⁴² American Academy of Pediatrics. Policy Statement: The Medical Home. *Pediatrics* 2002;110 (1):184-186.

³⁹ U.S. Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health*, 2nd ed. Washington, DC: US Government Printing Office: 2002.

⁴⁰ Institute of Medicine. 1996. *Primary Care: America's Health in a New Era* National Academy of Sciences, Division of Health Care Services Committee on the Future of Primary Care. Washington, DC.

⁴¹ Starfield, B. 1998. Primary Care: Balancing Health Needs, Services, and Technology. New York, NY: Oxford University Press.

#### **Medical Home**

### PARENTAL SATISFACTION WITH THEIR CHILDREN'S MEDICAL HOMES

**Significance:** The significance of the medical home was described in the preceding section.

**Findings:** Chart 4-1A contains the results for each of the medical home domains for the KidCare Program components assessed in this chart book. Overall, none of the KidCare Program components provided a medical home for children using the developers' criterion of 75 points or greater for each medical home domain. Eighty-five percent of children or greater, depending on the program had a personal doctor or nurse. Based on the survey responses, improvement is needed in families' access to care. The MediPass Program in counties with and without an HMO option and the MediKids Program achieved an average score of 75 points; whereas the other program components did not.

All of the program components received scores of 75 points or higher for family-centered care, comprehensive care, and culturally competent care. However, the care coordination scores could be improved. The MediKids program had the lowest score at 56 points on average, followed by the Medicaid HMOs at 63 points, and MediPass in counties with and without an HMO option and the Healthy Kids Program, all scoring an average of 64 points. The CMSN Program met or exceeded the 75 points in the area of care coordination for Title XXI and for Medicaid Title XIX enrollees.

Chart 4-1B. contains the results for each of the medical home domains by the number of condition consequences the children have. Children with three condition consequences had the highest scores in five of the six medical home domains compared to the overall scores and compared to children who were healthy or who had fewer condition consequences. The one exception was in the area of accessible care where children with three condition consequences had an average score of 72 points compared to 74 points for the children overall. Children with three condition consequences had a score of 79 points in the care coordination domain compared to 69 points overall. Children with two condition consequences, however, had care coordination scores that were similar to the overall group.

Chart 4-1C contains the results for each of the medical home domains by race and ethnicity. No significant differences were noted in the scores between those of different races/ethnicities (white non-Hispanic, black non-Hispanic, Hispanic, and other) with the exception of cultural sensitivity. Hispanics had an average of 85 points in that domain compared to 94 points for White non-Hispanics and 95 points for Black non-Hispanics. However, all races and ethnicities had a score of 75 points or higher in this domain indicating that culturally sensitive care was "usually to always" provided.

Implications and Recommendations: Overall children in the Florida KidCare Program are receiving care from primary care providers who are addressing the six medical home domains included in the CAHPS. CSHCN, particularly those with the greatest number of condition consequences, have among the highest scores for the domains. However, improvements are needed in access to care for all of the KidCare Program components. Children in the CMSN are "usually to always" receiving care coordination. However, those in Medicaid, MediKids, and Healthy Kids are not. There are CSHCN in these programs (who do not meet the CMSN medical eligibility criteria) as well as children who might need short-term care coordination due to injuries or other significant acute conditions. Strategies need to be developed all children including those not enrolled in CMSN to receive care coordination when it is needed.

CHART 4-1A. FAMILIES' SATISFACTION WITH THEIR CHILDREN'S MEDICAL HOMES: CAHPS ALTERNATIVE SCORING

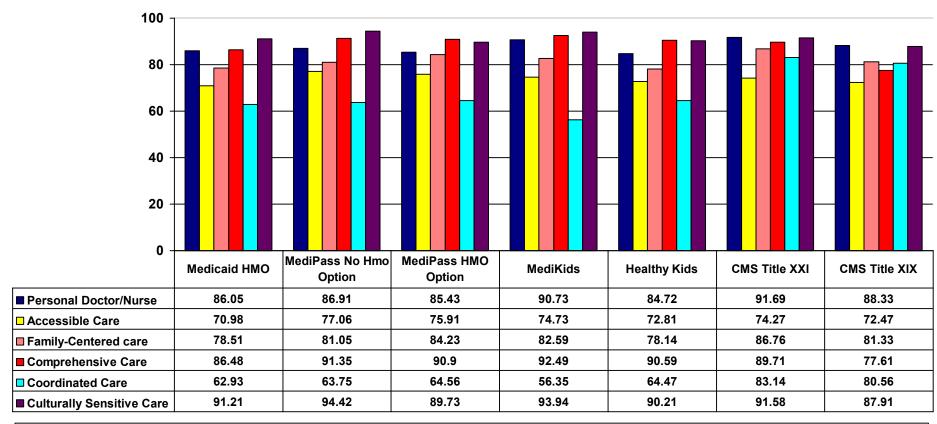
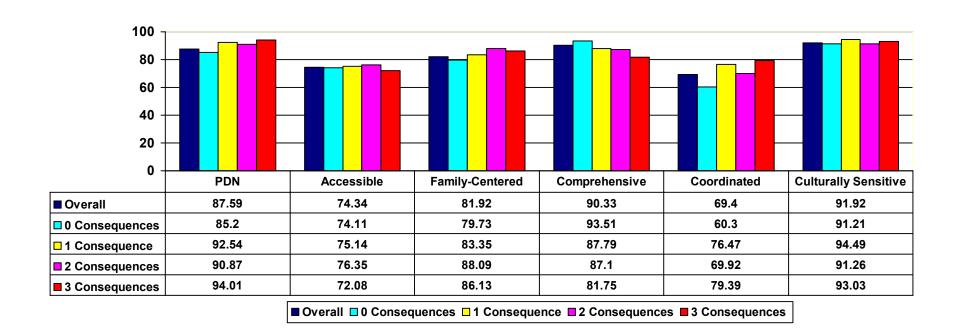
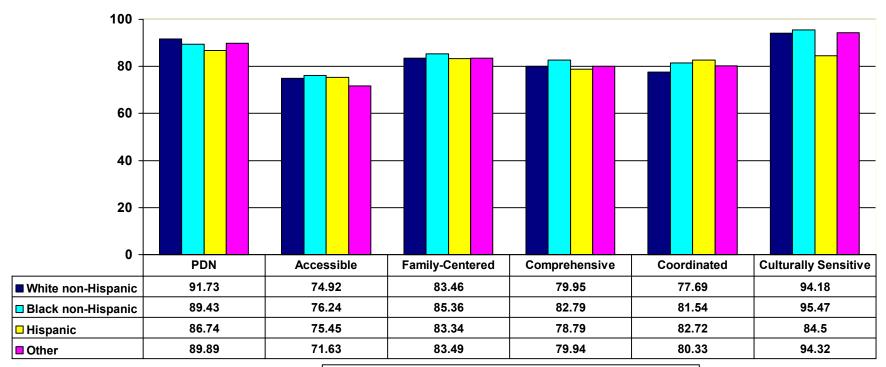


CHART 4-1B. KIDCARE PROGRAM OVERALL: MEDICAL HOME SCORES BY NUMBER OF PARENT-REPORTED CONDITION CONSEQUENCES



### CHART 4-1C. KIDCARE PROGRAM OVERALL: MEDICAL HOME SCORES BY RACE AND ETHNICITY



■ White non-Hispanic ■ Black non-Hispanic ■ Hispanic ■ Other