Annual Report 2011

Prepared by the Department of Social Services

for the Missouri General Assembly

September 30, 2011

Acknowledgement

This report contains research and analysis completed by Alicia Smith & Associates, LLC.

Table of Contents

Introduction and Scope of the Evaluation

This annual report on Missouri's program for heath care for uninsured children/State Children's Health Insurance Program (CHIP) is being submitted to the General Assembly as required by Section 208.650 of the Revised Statutes of Missouri. The CHIP program operated as part of a Medicaid Section 1115 Healthcare Demonstration Waiver program (1115 Waiver) between September 1, 1998 and September 30, 2007. The 1115 Waiver originally expanded eligibility to uninsured children, adults leaving welfare for work, uninsured custodial parents, uninsured non-custodial parents and uninsured women losing their Medicaid eligibility 60 days after the birth of their child. [1] Effective September 2007, Missouri's CHIP program began operating as a combination Medicaid/CHIP program.

The Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA) reauthorized the Children's Health Insurance Program until FY2013. The Patient Protection and Affordable Care Act (PPACA) enacted in 2010, appropriated funding to CHIP through FY 2015 and provided for states a 23% point increase in the CHIP match rates, with a cap of 100%, for fiscal years 2016 through 2019. In addition, PPACA maintenance of effort requirements for the CHIP program requires states to maintain income eligibility thresholds and not impose any procedures, methodologies or other requirements that make it more difficult for people to apply or renew their CHIP eligibility.

Missouri provides presumptive eligibility for children in families with income of up to 150% of the federal poverty level (FPL) until an eligibility decision is made. The table below lists the income eligibility thresholds for CHIP.

[1]SCHIP 1: Children under age 1	Children in families with gross incomes of more than 185% but less than 300% FPL
[1]SCHIP 1: Children ages 1 through 5	Children in families with incomes of more than 151% but less than 300% FPL
[2]SCHIP 2: Children ages 1 through 5	Children in families with incomes more than 133% but less than 151% FPL
[1]SCHIP 1: Children ages 6 through 18	Children in families with incomes of more than 151% but less than 300% FPL
[2]SCHIP 2: Children ages 6 through 18	Children in families with incomes of more than 100% but less than 151% FPL

[1] Separate SCHIP Program
[2] Medicaid Expansion Program

Beginning September 2005, co-pays were eliminated in lieu of graduated premiums for all families with incomes greater than 150% of FPL. Premiums are based on income and in FY 2011 ranged from $13 for a family size of 1 to $277 for a family size of 6 per month. Premium rates are adjusted annually. In no case shall the family be charged more than 5% of the family's gross income. The premium invoicing system is designed to not invoice a monthly premium in excess of 5% of the family's gross annual income divided by twelve (12).

[1] Service delivery to children began September 1, 1998. Service delivery for adults began February 1, 1999.

Missouri has a grace period for non-payment of premiums of 30 days, but for families with income over 225% FPL, there is a lock-out period of 6 months after disenrollment due to non-payment of premiums. For these families, repayment of outstanding premiums is also required.

The CHIP program has the following strategic goals:

- Reduce the number of children in Missouri without health insurance coverage;
- Increase access to health care;
- Increase the number of children in Missouri who have access to a regular source of healthcare coverage; and
- Improve the health of Missouri's medically uninsured children through the use of preventive care.

This report focuses on four questions which are outlined in the statute and are as follows:

Study Question 1: **Has CHIP improved the health of Missouri's children and families?**

What are the overall effects of the CHIP program? Specifically, what is:

- The number of children participating in each income category?
- The effect on the number of children covered by private insurers?
- The effect on medical facilities, particularly emergency rooms?
- The overall effect on the health care of Missouri residents?
- The overall cost to the state of Missouri?
- The methodology used to determine availability for the purpose of enrollment, as established by rule?

Study Question 2: What is the impact of CHIP on providing a comprehensive array of community-based wrap-around services for seriously emotionally disturbed children and children affected by substance abuse?

Study Question 3: What is the effect of CHIP on the number of children covered by private insurers? Did the expansion of health care coverage to children whose gross family income is above 185% of the federal poverty level (FPL) have any negative effect on these numbers?

Terminology

Throughout this report, we use the following terminology:

- MO HealthNet or Medicaid refers to program for the Title XIX state plan Medicaid population.
- CHIP refers to the targeted low-income expansion program for children.

Data Sources and Approach

This report relied on the use of previously aggregated, readily available data from the state of Missouri and obtained from other sources. Major data sources used in previous years' report are also used this year in order to facilitate the comparison of longitudinal data across the reports. Major data sources are as follows:

- Health Status Indicator Rates – Department of Health and Senior Services (DHSS), Community Health Information Management and Epidemiology (CHIME);
- Missouri Information for Community Assessment (MICA) – DHSS;
- Monthly Management Report – Department of Social Services (DSS);
- Multiple Data Requests – MO HealthNet Division (MHD), DSS and Department of Mental Health (DMH); and,
- U.S. Census Data

In addition to the aforementioned data sources journal articles and health publications produced by the federal government and national health policy researchers were utilized and are credited in the footnotes.

Study Question 1

Has CHIP improved the health of Missouri's children and families?

1. What is the number of children participating in the program in each income category?

For the most recent twelve-month period, July 2010 through June 2011, CHIP program enrollment ranged from 68,000 to more than 71,000 participants (See table below):

CHIP Participants by Premium and Non-Premium Categories

	Up to 150% FPL (Non-Premium)	Above 150% to 300% (premium)	Total
Jul-2010	45,682	23,744	69,426
Aug-2010	44,946	23,627	68,573
Sep-2010	45,604	23,714	69,318
Oct-2010	46,218	23,649	69,867
Nov-2010	46,600	24,204	70,804
Dec-2010	46,725	24,407	71,132
Jan-2011	46,635	24,591	71,226
Feb-2011	46,323	24,554	70,877
Mar-2011	46,007	24,543	70,550
Apr-2011	45,891	24,583	70,474
May-2011	44,726	24,317	69,043
Jun-2011	44,667	24,285	68,952

Source: Department of Social Services, Monthly Management Reports

(Numbers are counts of unique enrollees at the beginning of the month)

2. What is the effect of the CHIP program on the number of children covered by private insurers?

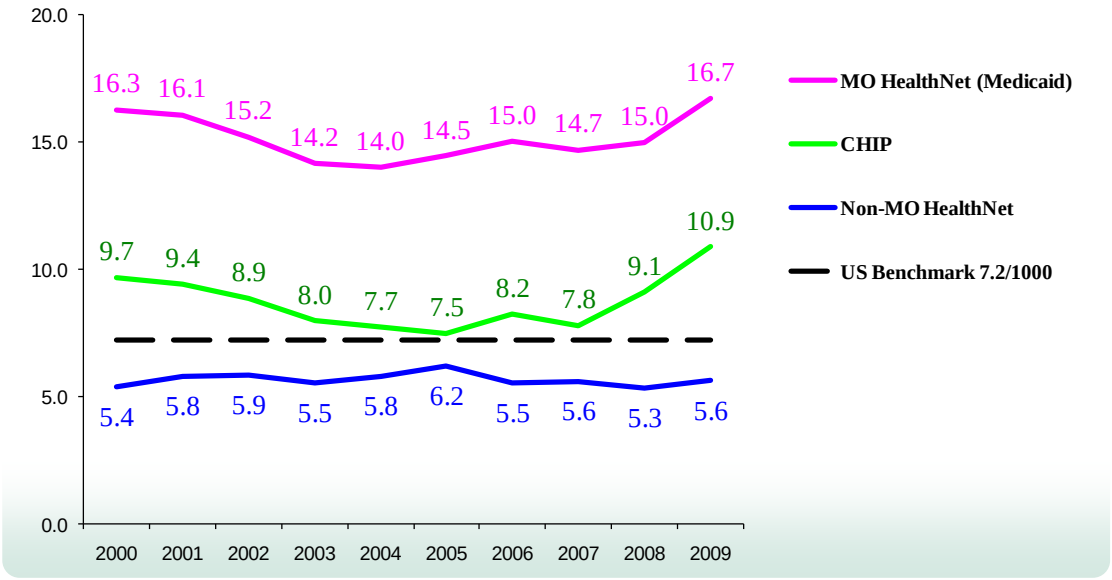
In Missouri in the last 5 years, it appears that the increases in Medicaid-covered kids and uninsured kids more than offset the decreases in ESI and private insurance but, if crowd-out is occurring, it is at the lower income level of Medicaid, not in the CHIP program, and that children receiving coverage through CHIP would likely be uninsured without it. This question is explored in greater detail in study question 4 later in this report.

3. What is the effect of the CHIP program on medical facilities, particularly emergency rooms?[2]

Preventable Hospitalizations

- Since 2000, preventable hospitalizations for the CHIP population have increased by slightly more than 12%. During this time, preventable hospitalizations for the MO HealthNet (Medicaid children) population increased by less than 3% while the preventable hospitalizations for the non-MO HealthNet group increased by almost 5%.
- In 2009, the CHIP group rate of 10.9 preventable hospitalizations per 1,000 children was 51% higher than the national benchmark of 7.2 per 1,000.

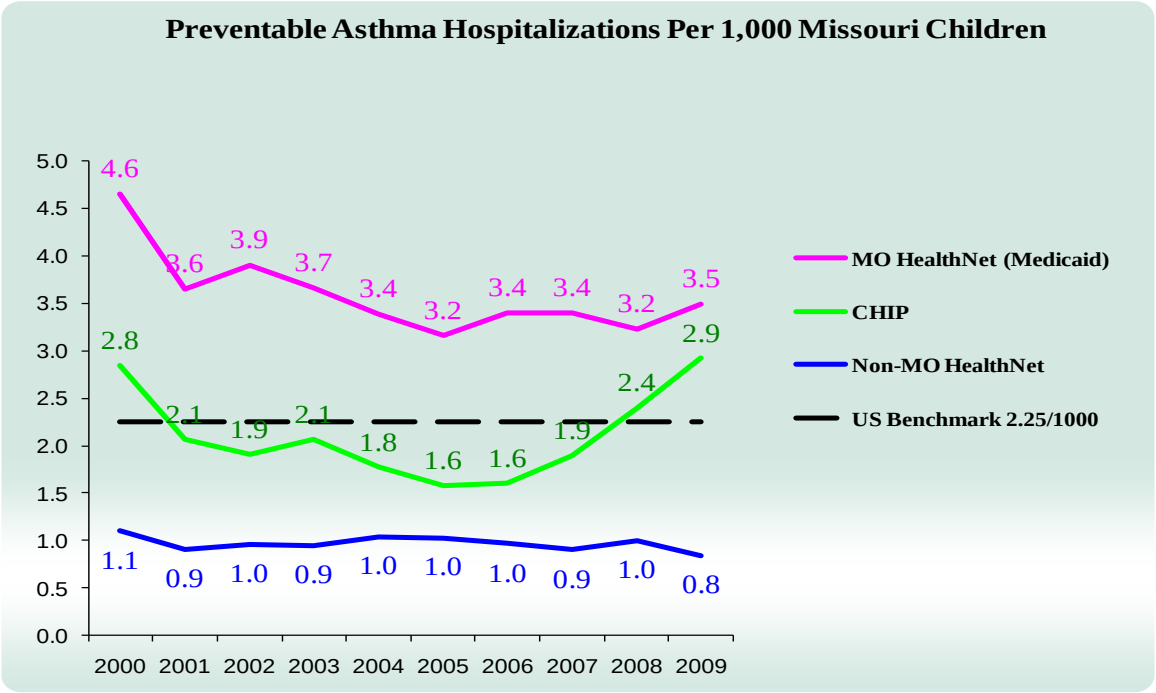
Preventable Hospitalizations Per 1,000 Missouri Children
(All Diagnoses)



Preventable Asthma Hospitalizations

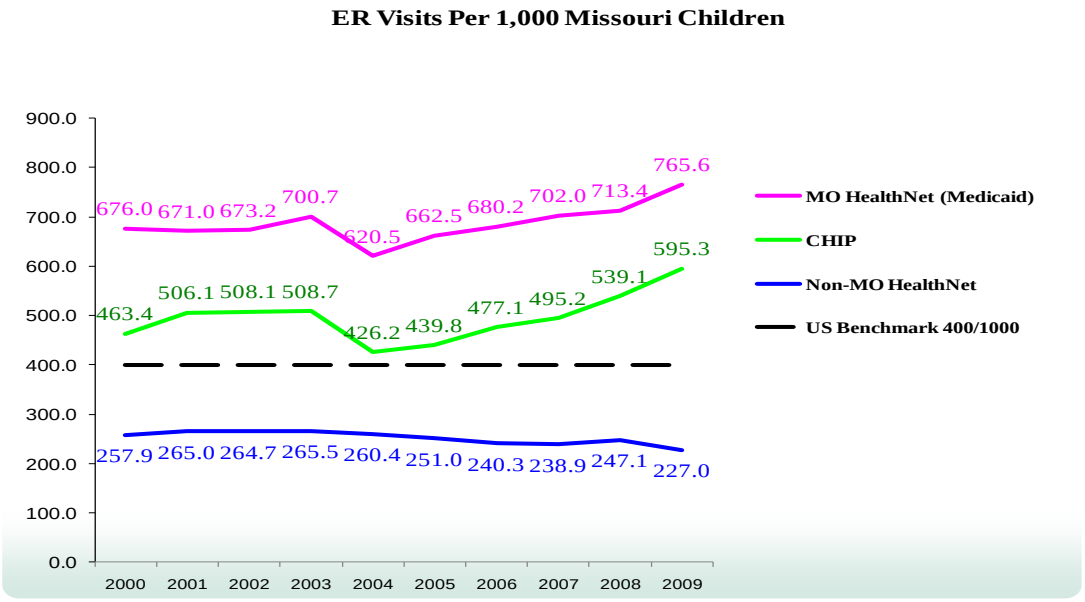
- Since 2000, preventable hospitalizations due to asthma for the CHIP population have increased by 2.5%. During this time, preventable hospitalizations due to asthma for the MO HealthNet (Medicaid children) population decreased by almost 25% while the preventable hospitalizations for the non-MO HealthNet group decreased by just over 23%.
- In 2009, the CHIP group rate of 2.9 per 1,000 was 29% higher than the national benchmark of 2.25 per 1,000 children.

[2]Indicator values for 2008 were retroactively adjusted slightly due to updated enrollment data obtained after the last report, so they do not match the figures from last year's reported 2008 data. This applies to all four indicator charts.



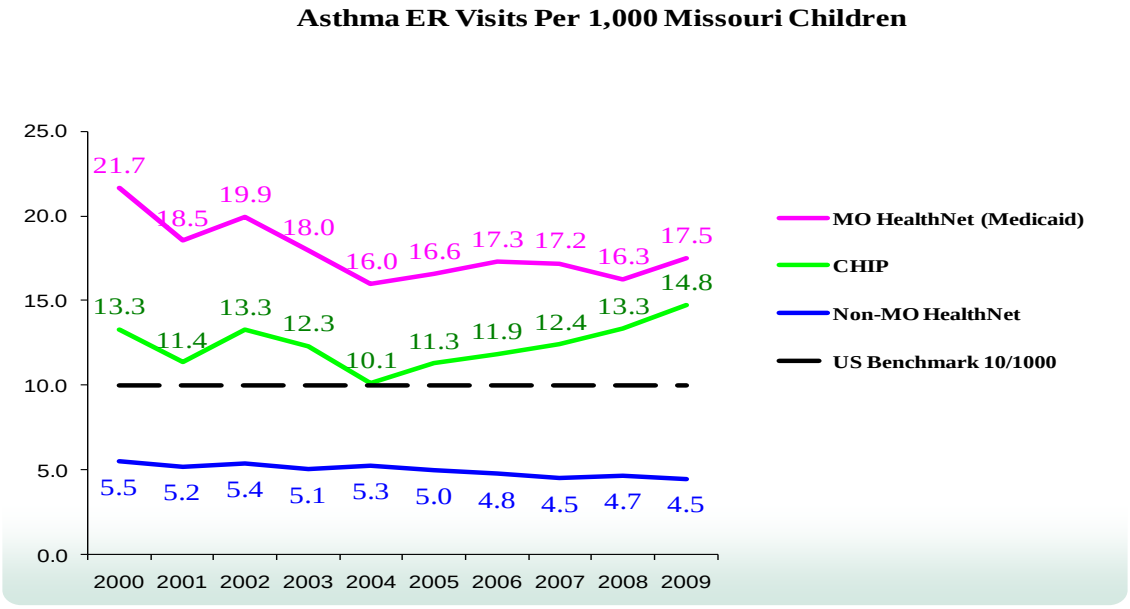
Emergency Room (ER) Visits

- Since 2000, ER visits for the CHIP population have increased by 28.5%. During this time, ER visits for the MO HealthNet (Medicaid) population increased by slightly over 13% while the ER visits for the non-MO HealthNet group decreased by 12%.
- In 2009, the CHIP group rate of 595.3 ER visits per 1,000 children was 49% higher than the national benchmark of 400 per 1,000 children.



Asthma ER Visits

- Since 2000, ER visits due to asthma for the CHIP population have increased by just under 11%. During this time, ER visits due to asthma for the MO HealthNet (Medicaid) population decreased by just over 19% while the ER visits for the non-MO HealthNet group decreased by just under 19%.
- In 2009, the CHIP group rate of 14.8 was 48% higher than the national benchmark of 10 per 1,000 children.



The data shows a multi-year increase in all four indicators for the CHIP population, and the increase is similar across all regions. A detailed analysis needed to understand this change in performance is outside the scope of this report and would require further study.

A summary of the indicators is presented in the following table. Detailed data broken down by region and by year is included as Appendix I.

Summary of 2009 Indicators for Missouri Children under 19 per 1,000 children

	CHIP	MO HealthNet (Medicaid)	Non-MO HealthNet (non-Medicaid)	National Benchmark
Preventable hospitalizations	10.9	16.7	5.6	7.2
Preventable asthma hospitalizations	2.9	3.5	0.8	2.25
ER visits	595.3	765.6	227.0	400
ER asthma visits	14.8	17.5	4.5	10

Data sources:Department of Health and Senior Services; Benchmark: Kozak, Hall and Owings (preventable hospitalizations); Healthy People 2000 (preventable asthma hospitalizations); CDC's Health, United States, 2005 (ER visits); CDC, NCHS Health E-Stats (ER Asthma Visits)

4. What is the overall effect of the CHIP program on the health care of Missouri residents?

There have been a limited number of studies analyzing the impact of health care coverage on children's lives but those conducted show a positive impact on children when compared to uninsured children. One of the most comprehensive studies illustrating how health care coverage impacts a child's life as compared to children without coverage was done almost ten years ago, The Kaiser Commission's Report, "Children's Health – Why Insurance Matters." Below are a few examples from this report:[3]

- Insured children are six times more likely to receive medical care.
- Insured children are four times more likely to receive preventive dental care.
- Insured children are three times more likely to receive prescriptions.
- Insured children with special health needs are three times more likely to get needed care.
- Insured children are nine times less likely to be hospitalized for a preventable problem.

The Baker Institute of Policy Report, published in June 2009, looked at the available research on the economic and health impacts of uninsured children in the United States. Their review of the research literature concluded that "immediate improvements in the health of children, as well as long-term returns of greater health and productivity in adulthood" would result from providing health care coverage to all children in the United States.4

In a more recent study published in 2010, researchers at Johns Hopkins Children's Center analyzed data from more than 23 million children's hospitalizations from 1988 to 2005 across 37 states. This study found that uninsured children are 60 percent more likely to die when hospitalized for all causes as compared with insured children (including Medicaid/CHIP and private insurance). The authors found that when you compare death rates by underlying disease, uninsured children have an increased rate of death independent of their medical condition, which increases their risk of dying by 60 percent as compared to those insured. The researchers concluded that at least 1,000 hospitalized children die each year due to being uninsured.

Another study published in 2005 looked specifically at the impact of Colorado's State Children's Health Insurance Program on health outcomes in children. Newly enrolled families in the state's CHIP program were interviewed within two months of their enrollment and then one year later. Families reported a significant increase in access to all types of health care, a perceived decrease in unmet health needs and no increased usage of emergency department services or hospitalizations.5

The Missouri CHIP population represents approximately 4.8% of the state's total population of children and about 1.15% of the entire state population. In 2009, 9.7% of Missouri's children were uninsured, which was tied for the 20th lowest rate in the country. Without the CHIP program, approximately 70,000 currently enrolled children would most likely be uninsured, raising the state's percentage of uninsured children to 14.5% and lowering the state's rank to 46th in the nation in uninsured rate.

[3] Kaiser Commission: Children's Health – Why Health Insurance Matters, May 2002.

[4] Baker Institute Policy Report: The Economic Impact of Uninsured Children on America, June 2009

[5] Pediatrics. 2005; 115(20: 364-71. Kempe A, Beaty BL, et al, Department of Pediatrics, University of Colorado Health Sciences Center

5. What is the overall cost of the CHIP program to Missouri?

The CHIP program is funded with state (general revenue), federal, and other agency dollars[6]. In 2011, the federal share of the CHIP program expenditures was 74.3% plus ARRA FMAP. [7] Actual expenditures for FY 2011 are provided below.

CHIP Expenditures	
	FY 2011 Actual
State	$23,277,111
Federal	$116,118,899
Other	$15,737,135
Total	$155,133,145

6. What is the methodology used to determine availability for the purpose of enrollment?

13 CSR 70-4.080, State Children's Health Insurance Program, is the rule that establishes the methodology to determine availability for enrollment.

Eligibility provisions for families with gross income of more than 150% of FPL:

- Children must not have health insurance for the six months prior to the application.
- If health insurance was dropped within the six months prior to application, prospective participants must wait six months after coverage was dropped to be eligible. The waiting period does not apply to children who lose coverage due to an involuntary loss of employment by their parents, a new position for a parent with a new employer that does not offer coverage, expiration of COBRA coverage, or lapses of coverage due to lifetime maximums or pre-existing conditions.
- Parents/guardians of uninsured children must certify the child does not have access to affordable health care insurance.

In addition to these provisions, the following rules apply to premium payments:

- Children in families with gross incomes of more than 150% but less than 225% of FPL are eligible for coverage once a premium has been received. Eligibility for the program may begin at the beginning of the month; however, coverage cannot begin until the premium has been received.
- Children in families with gross incomes of more than 225% and up to 300% of FPL are eligible 30 calendar days after the receipt of the application or when the premium is received, whichever is

[6] Other sources of funding include the Federal Reimbursement Allowance Fund, Health Initiative Fund, Managed Care Reimbursement Allowance Fund, Pharmacy Rebates Fund, Premium Fund, and Life Science Research Trust Fund. $907,611 was appropriate for the CHIP program in the FY 11 budget for the Pharmacy Reimbursement Allowance Fund, but it was put in reserve and not expended. Funding paid from the Supplemental Pool is not included.

[7] FMAP for Missouri CHIP varied for each quarter due to the addition of ARRA FMAP.

later. The thirty (30) day waiting period is waived for a child with special health needs8, but the premium must still be received.

- The 6 month waiting period and thirty calendar day delay are not applicable to a child already participating in the program when a parent's income changes.
- Total aggregate premiums cannot exceed 5% of the family's gross income for a 12-month period.
- Premiums must be paid prior to delivery of service.

How are premiums set?	
Income Category	**Monthly Premium Calculation**
(1) More than 150% and up to and including 185% FPL	Amount is equal to 4% of monthly income between 150% and 185% of FPL for the family size.
(2) More than 185% and up to and including 225% FPL	Amount is equal to 8% of the monthly income between 185% and 225%of the FPL for the family size plus premium calculated in category 1.
(3) More than 225% and up to 300% FPL	Amount is equal 14% of the monthly income between 225% and 300% of FPL for the family size plus the premium calculated in categories 1 and 2.

.

[8] "Special health care needs" are defined as a condition which left untreated would result in the death or serious physical injury of a child, and who does not have access to affordable employer-subsidized health care insurance and must meet other qualifications for eligibility.

Study Question 2

What is the impact of CHIP on providing a comprehensive array of community-based wrap-around services for seriously emotionally disturbed children and children affected by substance abuse?

Wraparound services are a class of treatment and support services provided to a seriously emotionally disturbed (SED) child and/or the child's family with the intent of facilitating the child's functioning and transition towards a better mental health state. Wraparound services include family support services, case management, respite care, family assistance, targeted case management, transportation support, social and recreational support, basic needs support and clinical/medical support.

Important parameters to be considered are:

- Comparisons of utilization of wraparound services across service delivery systems are focused on evaluating whether managed care organization (MCO) enrollment impacts how and/or what wraparound services are provided. Eligibility and service utilization data from the Department of Mental Health (DMH) and the MO HealthNet Division (MHD) for the evaluation period were compiled and analyzed.
- 4 year trends in utilization were examined to explore the rate of utilization during the economic recession.
- DMH and MHD have developed joint protocols and guidelines for the provision of wraparound services. DMH provides the funding for the services (either full funding or the state's match). DMH also coordinates and oversees the delivery of these services.

Methodology for Data Analysis

DSS and DMH data on CHIP program eligibility, MCO enrollment and wraparound service utilization beginning January 1, 2010, and ending December 31, 2010, were used in this analysis. There were 1,112 children in the CHIP program population, which represents 1.6% of the total CHIP population, who received wraparound services during the study period. For this analysis, the group was further divided into 546 fee-for-service (FFS) participants and 566 managed care organization (MCO) participants.

The average child receiving FFS wraparound services received a greater number of services on average than a child receiving MCO wraparound services, according to the Chart A below. Chart B on the following page shows how the mix of services differed among the populations. For example, 83.7% of the wraparound services received by the FFS population consisted of Case Management, while that represented only 62.8% of the wraparound services received by the MCO population.

The charts on the following page show utilization rates of wraparound services by type over 4 fiscal years, from 2007 to 2010.

CHART A

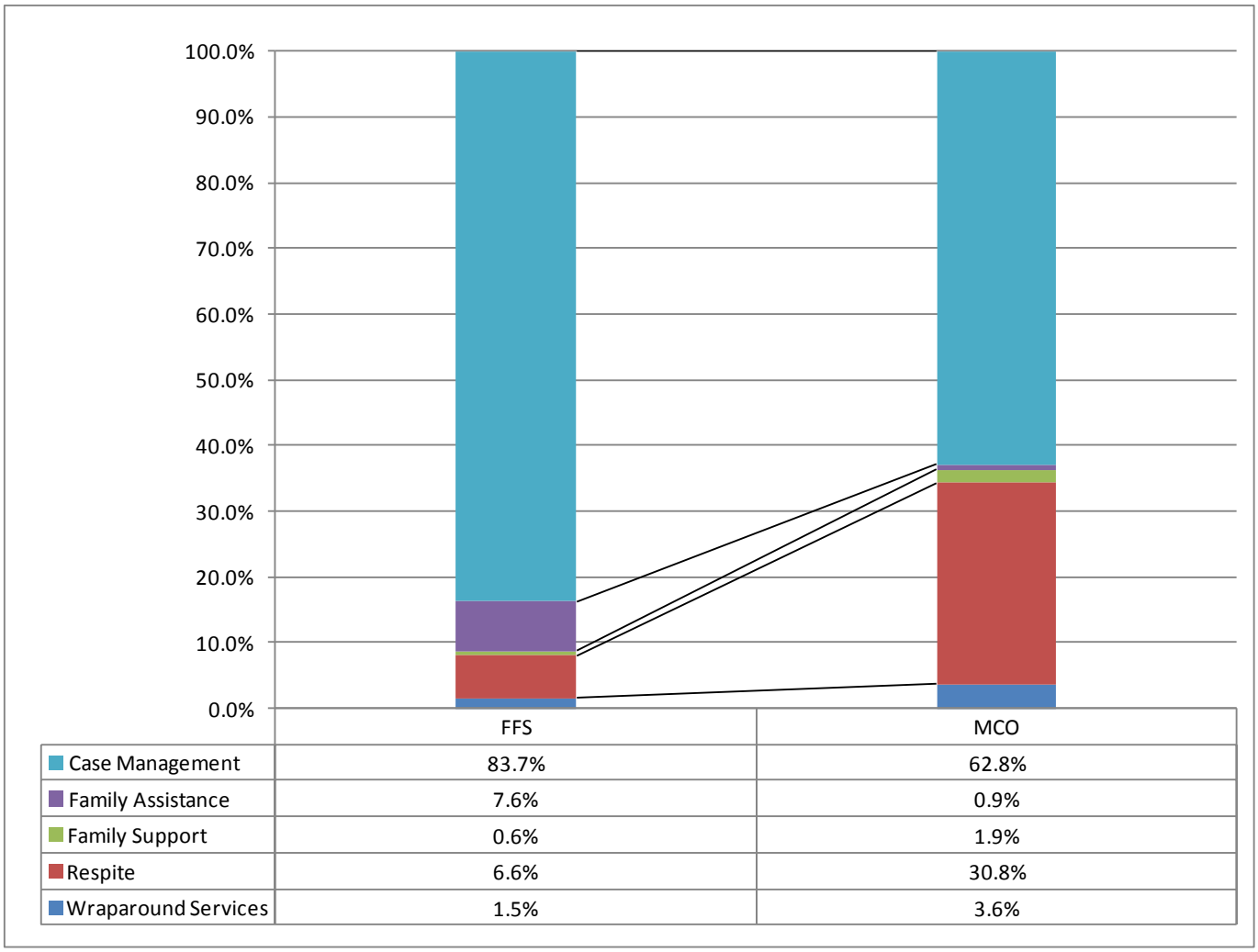
Quantity of Services

	Family Assistance	Family Support	Other Case Management	Respite	Targeted Case Management	Wraparound Services	Grand Total
Quantity of Services							
FFS	585	46	5106	504	1316	117	7674
MCO	55	119	2503	1929	1437	228	6271
Services Per Child							
FFS	1.1	0.1	9.4	0.9	2.4	0.2	14.1
MCO	0.1	0.2	4.4	3.4	2.5	0.4	11.1

Source: Department of Social Services and Department of Mental Health

Chart B

Mix of Services by FFS and MCO



	FFS	MCO
Case Management	83.7%	62.8%
Family Assistance	7.6%	0.9%
Family Support	0.6%	1.9%
Respite	6.6%	30.8%
Wraparound Services	1.5%	3.6%

These statistics cannot be used on their own to determine the quality of wraparound services received by each population. There may be differences in each population that account for the different types of services. For example, one explanation for the large disparity in the usage of respite services could be

that they may be more easily obtained in an urban area, where managed care exists, than in a rural area where children can only receive FFS care.

Study Question 3

What is the effect of CHIP on the number of children covered by private insurers?

The shift from private health insurance coverage to public coverage, known as crowd-out, is relatively difficult to measure. Crowd-out is difficult to identify because not all substitution of public for private coverage constitutes crowd-out. A crowd-out situation arises only if the actions taken—people substituting public for private coverage, or employers changing their insurance offerings—would not have occurred in the absence of the public program. If people would otherwise have become uninsured, enrolling in a public program does not constitute crowd-out.[9]

Generally, crowd-out refers to the substitution of publicly funded coverage for existing private coverage. Individuals may choose to forgo coverage available from their employer or in the individual market because publicly funded coverage is more affordable or more comprehensive. Alternatively, employers may choose to drop coverage for their workers once public coverage becomes available.

Different ways of defining crowd-out yield different results. Researchers define crowd-out in multiple ways, reflecting both their own perspectives and the idiosyncrasies of their data. These differences contribute to confusion when estimates are compared. All crowd-out estimates are expressed as ratios, but both the numerators and denominators of these ratios may measure different concepts.

The most common definition compares the reduction in the share of the population with private coverage to the increase in the share of the population with public coverage due to the expansion. Researchers using this definition attempt to estimate the changes due solely to the expanded eligibility over the period of years included in the study.

A June 2010 report by the Center on Budget and Policy Priorities (CBPP) noted that several research studies have examined whether Medicaid crowds out private health insurance coverage, focusing primarily on state expansions in the 1990s of children's Medicaid eligibility to income levels similar to those that will apply to adults under health reform. The most common estimates suggest that if a Medicaid coverage expansion increases enrollment by 100 children, some 80 to 90 of them will have been uninsured, while the rest will have shifted from employer-based insurance. (The estimated size of the crowd-out effect varies from study to study because of methodological differences; some studies find no statistically significant evidence of crowd-out, while others find some crowd-out).[10]

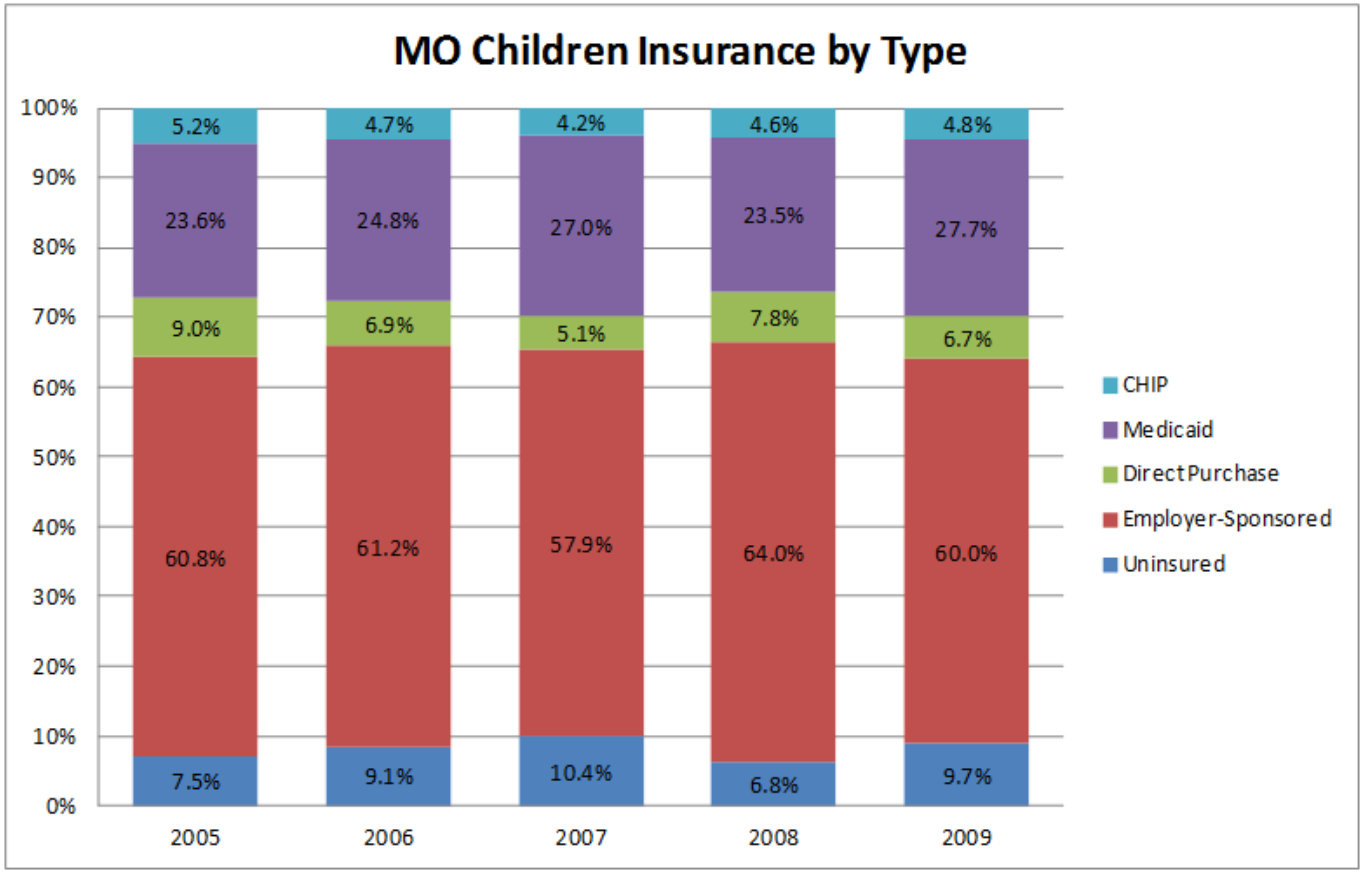
Throughout the first decade of the 21st century, there has been a redistribution of insurance coverage by type both in Missouri and in the nation as a whole. Over this period there has been an overall decline in

[9] Davidson, G., L. A. Blewett, & K. T. Call (June 2004). *Public Program crowd-out of private coverage: What are the issues?* The Robert Wood Johnson Foundation: Research Synthesis Report No. 5.

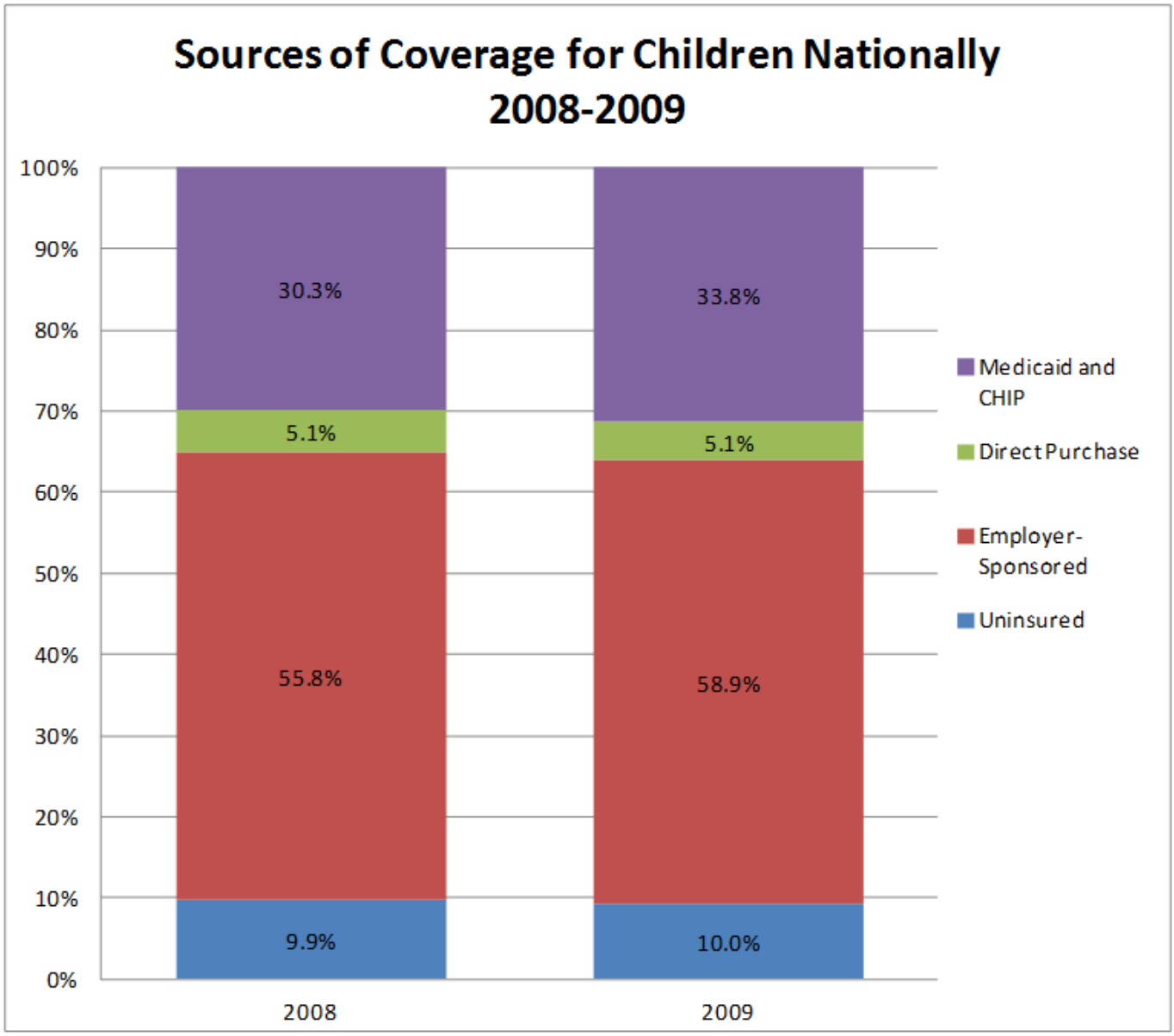
[10] Broaddus, Matthew & Angeles, January (June 2010). *Medicaid Expansion in Health Reform Not Likely to "Crowd Out" Private Insurance.* The Center on Budget and Policy Priorities: Moving forward with Health Reform.

employer sponsored coverage (ESI). In Missouri from 2005 to 2009, ESI rates have fluctuated; the 2009 rate (60%) was only slightly lower than the 2005 rate (60.8%), while the national rate for kids dropped from 60.9% to 55.8% over the same period. Lower rates of kids receiving coverage through direct purchase (9% in 2005 to 6.7% in 2009) are seen, with corresponding increases in Medicaid covered (23.6%) and uninsured kids (7.5% to 9.7%; the CHIP program has actually dropped during the period, from 5.2% to 4.9%. This data suggests that the expansion of the CHIP program has no negative impact on the number of children covered by private insurance.

Missouri Children Compared to U.S. Children[11]



[11] Data on children nationwide is from the U.S. Census data which combines the Medicaid and CHIP programs.



The CBPP report also posits that the marked reduction in the number of uninsured low-income children after CHIP was created in 1997 and states began easing barriers that were impeding the entry of eligible low income children into Medicaid provides clear evidence that Medicaid and CHIP expansions primarily benefited uninsured children.

In addition, Centers for Disease Control and Prevention data show that the percentage of children with incomes below 200 percent of the poverty line who are uninsured fell by more than one-third between 1997 and 2005, from 22.6 percent to 13.9 percent. Census Bureau data show that the percentage of low-income children who are uninsured declined from 24.6 percent in 1997 to 18.7 percent in 2005.(CDC and the Census Bureau differ in how they define and measure insurance coverage and conduct their surveys, so they produce somewhat different results.) The Agency for Healthcare Research and Quality also found a marked reduction in uninsured children over the past decade, as non-Hispanic white children's rates of being uninsured fell from 12.6 percent to 7.9 percent, while non-Hispanic black

and Hispanic children's rates fell from 17.6 percent to 11.3 percent and 28.1 percent to 19.7 percent, respectively[12]

The modest crowd-out that did occur was overwhelmingly due to an individual or family involuntarily losing its private coverage or finding private coverage to be unaffordable. For example, 93 percent of those who previously had private coverage and enrolled in CHIP did so either due to the loss of private coverage (such as an employer no longer offering health coverage) or because the private coverage had become unaffordable, according to a rigorous ten-state analysis conducted as part of the congressionally mandated CHIP evaluation.

Much of the research on crowd-out in children's coverage finds that it is a significant factor only when states expand coverage further up the income scale, since children in moderate income families are more likely to have access to affordable employer-based coverage than their lower-income counterparts. Using a broad definition of crowd-out, CBO concludes that between 25 percent and 50 percent of children enrolled in CHIP — which covers children with incomes too high to qualify for Medicaid — previously had private health insurance.[13]

In Missouri in the last 5 years, it appears that the increases in Medicaid-covered kids and uninsured kids more than offset the decreases in ESI and private insurance, but that if crowd-out is occurring it is at the lower income level of Medicaid, not in the CHIP program, and that children receiving coverage through CHIP would likely be uninsured without it.

[12] Jessica Vistnes and Jeffrey Rhoads, "Changes in Children's Health Insurance Status, 1996-2005: Estimates for the U.S. Civilian Noninstitutionalized Population Under Age 18," Medical Expenditure Panel Survey Statistical Brief #141, Agency for Healthcare Research and Quality, September 2006. This report examined changes in insurance for children at all income levels, not just low-income children.

[13] Congressional Budget Office, "The State Children's Health Insurance Program," May 2007.

APPENDIX I:
Hospitalization and ER Utilization Rates by Payer/Program (2000- 2009)

Review period: January 1, 2010 - December 31, 2010
Data source: Missouri Department of Health and Senior Services (DHSS)

		Rate				
	MO HealthNet Region:	*Eastern*	*Central*	*Western*	*Other*	***State***
	Cal. Year:					
Asthma hospitalizations age <19	2000 CHIP	5.2	1.8	3.9	1.7	**2.8**
Benchmark = 2.25/1,000 pop.	2001 CHIP	3.0	1.8	2.3	1.3	**2.1**
Healthy People 2000	2002 CHIP	2.5	1.8	2.9	1.2	**1.9**
Ref. footnote in report.	2003 CHIP	2.9	1.3	2.7	1.6	**2.1**
	2004 CHIP	2.9	1.2	1.6	1.2	**1.8**
	2005 CHIP	2.6	0.8	1.6	1.0	**1.6**
	2006 CHIP	2.3	1.0	2.3	0.9	**1.6**
	2007 CHIP	3.5	0.7	1.9	0.8	**1.9**
	2008 CHIP	4.6	1.4	2.1	1.2	**2.4**
	2009 CHIP	4.8	1.8	3.2	1.6	**2.9**
	Change from 2000 to 2009	**-7.4%**	**-0.7%**	**-17.6%**	**-6.1%**	**2.5%**
	2000 Non-MO HealthNet	1.3	0.9	1.1	0.9	**1.1**
	2001 Non-MO HealthNet	1.1	0.7	1.0	0.7	**0.9**
	2002 Non-MO HealthNet	1.2	0.8	0.8	0.8	**1.0**
	2003 Non-MO HealthNet	1.1	0.8	1.0	0.7	**0.9**
	2004 Non-MO HealthNet	1.3	1.1	0.8	0.8	**1.0**
	2005 Non-MO HealthNet	1.3	0.6	1.0	0.8	**1.0**
	2006 Non-MO HealthNet	1.2	0.8	0.9	0.7	**1.0**
	2007 Non-MO HealthNet	1.2	0.6	0.9	0.7	**0.9**
	2008 Non-MO HealthNet	1.4	0.7	0.7	0.7	**1.0**
	2009 Non-MO HealthNet	1.1	0.7	0.6	0.6	**0.8**
	Change from 2000 to 2009	**-14.4%**	**-16.7%**	**-42.8%**	**-29.7%**	**-23.3%**
	2000 MO HealthNet	7.6	3.4	4.5	2.6	**4.6**
	2001 MO HealthNet	4.9	2.9	3.2	2.9	**3.6**
	2002 MO HealthNet	5.3	3.2	3.6	3.0	**3.9**
	2003 MO HealthNet	5.3	2.7	3.1	2.8	**3.7**
	2004 MO HealthNet	5.0	2.3	2.5	2.7	**3.4**
	2005 MO HealthNet	4.6	2.6	3.0	2.1	**3.2**
	2006 MO HealthNet	5.0	3.1	3.0	2.3	**3.4**
	2007 MO HealthNet	5.0	2.3	2.9	2.5	**3.4**
	2008 MO HealthNet	5.6	2.0	2.7	1.9	**3.2**
	2009 MO HealthNet	5.2	2.4	3.4	2.3	**3.5**
	Change from 2000 to 2009	**-32.3%**	**-30.2%**	**-25.4%**	**-11.1%**	**-24.9%**
Asthma ER visits age <19	2000 CHIP	24.7	9.0	19.5	7.1	**13.3**
Benchmark = 10/1,000 pop.	2001 CHIP	17.7	5.1	13.5	7.8	**11.4**
CDC NCHS Health E-Stats	2002 CHIP	19.5	11.5	17.4	8.2	**13.3**
Ref. footnote in report.	2003 CHIP	18.4	6.6	17.5	8.3	**12.3**
	2004 CHIP	15.7	5.6	12.0	6.5	**10.1**
	2005 CHIP	18.5	6.8	11.8	7.1	**11.3**
	2006 CHIP	19.9	8.1	13.7	6.3	**11.9**
	2007 CHIP	20.8	5.4	16.0	6.2	**12.4**
	2008 CHIP	22.5	7.5	18.1	5.4	**13.3**
	2009 CHIP	24.7	7.5	16.2	8.4	**14.8**
	Change from 2000 to 2009	**-0.2%**	**-16.2%**	**-16.9%**	**18.9%**	**10.9%**
	2000 Non-MO HealthNet	7.6	3.0	6.1	3.3	**5.5**
	2001 Non-MO HealthNet	6.6	3.0	6.0	3.3	**5.2**
	2002 Non-MO HealthNet	6.9	2.9	6.1	3.3	**5.4**
	2003 Non-MO HealthNet	6.6	2.8	5.5	3.2	**5.1**
	2004 Non-MO HealthNet	6.9	3.2	5.1	3.5	**5.3**
	2005 Non-MO HealthNet	6.8	3.1	4.8	2.8	**5.0**
	2006 Non-MO HealthNet	6.2	3.1	4.9	3.1	**4.8**
	2007 Non-MO HealthNet	5.7	2.5	5.0	3.1	**4.5**
	2008 Non-MO HealthNet	6.2	2.7	4.6	3.1	**4.7**
	2009 Non-MO HealthNet	6.0	2.9	4.2	2.9	**4.5**
	Change from 2000 to 2009	**-20.2%**	**-2.5%**	**-31.8%**	**-10.9%**	**-18.8%**
	2000 MO HealthNet	36.2	13.2	26.2	10.0	**21.7**
	2001 MO HealthNet	28.1	10.7	22.8	9.7	**18.5**
	2002 MO HealthNet	31.0	11.9	22.9	10.6	**19.9**
	2003 MO HealthNet	28.0	11.6	20.2	13.4	**18.0**
	2004 MO HealthNet	25.0	9.9	17.6	8.9	**16.0**
	2005 MO HealthNet	26.5	11.1	17.8	8.8	**16.6**
	2006 MO HealthNet	30.1	11.2	17.1	8.2	**17.3**
	2007 MO HealthNet	28.1	11.2	18.7	8.6	**17.2**
	2008 MO HealthNet	26.9	9.5	17.3	7.5	**16.3**
	2009 MO HealthNet	28.8	11.1	18.5	8.1	**17.5**
	Change from 2000 to 2009	**-20.5%**	**-16.2%**	**-29.5%**	**-19.3%**	**-19.2%**

APPENDIX I (continued):
Hospitalization and ER Utilization Rates by Payer/Program (2000- 2009)

Review period: January 1, 2009 - December 31, 2009
Data source: Missouri Department of Health and Senior Services (DHSS)

ER visits age <19
Benchmark = 400/1,000 pop.
Health, United States, 2005. CDC
Ref. footnote in report.

		Rate				
	MO HealthNet Region:	*Eastern*	*Central*	*Western*	*Other*	***State***
Cal. Year:						
2000	CHIP	367.6	393.4	388.4	546.3	**463.4**
2001	CHIP	490.1	497.3	471.6	531.9	**506.1**
2002	CHIP	525.9	496.8	467.8	517.9	**508.1**
2003	CHIP	511.0	521.9	465.8	590.0	**508.7**
2004	CHIP	403.2	467.2	381.3	453.2	**426.2**
2005	CHIP	436.3	467.8	390.7	459.8	**439.8**
2006	CHIP	478.9	528.9	421.4	490.7	**477.1**
2007	CHIP	517.3	516.3	467.8	487.5	**495.2**
2008	CHIP	562.8	526.8	539.4	524.6	**539.1**
2009	CHIP	646.7	533.7	576.0	589.6	**595.3**
Change from 2000 to 2009		**75.9%**	**35.7%**	**48.3%**	**7.9%**	**28.5%**
2000	Non-MO HealthNet	262.1	218.6	269.9	256.6	**257.9**
2001	Non-MO HealthNet	256.6	244.9	296.3	259.9	**265.0**
2002	Non-MO HealthNet	263.4	251.4	284.4	255.6	**264.7**
2003	Non-MO HealthNet	265.3	253.1	281.8	256.9	**265.5**
2004	Non-MO HealthNet	244.6	271.4	268.5	274.2	**260.4**
2005	Non-MO HealthNet	243.9	442.7	248.1	258.4	**251.0**
2006	Non-MO HealthNet	231.1	252.4	238.7	251.5	**240.3**
2007	Non-MO HealthNet	232.5	236.2	233.4	253.5	**238.9**
2008	Non-MO HealthNet	227.7	226.3	234.6	309.9	**247.1**
2009	Non-MO HealthNet	216.8	216.6	219.9	258.6	**227.0**
Change from 2000 to 2009		**-17.3%**	**-0.9%**	**-18.5%**	**0.7%**	**-12.0%**
2000	MO HealthNet	713.6	681.7	637.0	656.8	**676.0**
2001	MO HealthNet	642.4	704.4	628.4	709.9	**671.0**
2002	MO HealthNet	674.9	710.0	581.7	708.6	**673.2**
2003	MO HealthNet	691.3	754.9	618.1	737.8	**700.7**
2004	MO HealthNet	596.3	700.9	557.1	654.1	**620.5**
2005	MO HealthNet	602.1	765.1	570.7	688.0	**662.5**
2006	MO HealthNet	696.9	547.5	575.4	697.4	**680.2**
2007	MO HealthNet	709.8	769.4	623.6	719.6	**702.0**
2008	MO HealthNet	717.6	727.6	711.6	703.8	**713.4**
2009	MO HealthNet	794.2	744.9	748.2	756.8	**765.6**
Change from 2000 to 2009		**11.3%**	**9.3%**	**17.4%**	**15.2%**	**13.2%**

Preventable hospitalizations age <19
Benchmark = 7.2/1,000 pop.
Kozak, Hall and Owings.
Ref. footnote in report.

2000	CHIP	10.5	8.0	9.5	9.8	**9.7**
2001	CHIP	9.9	8.8	6.7	10.5	**9.4**
2002	CHIP	6.8	9.2	8.9	10.0	**8.9**
2003	CHIP	6.7	6.6	8.2	9.9	**8.0**
2004	CHIP	7.0	7.0	6.9	8.8	**7.7**
2005	CHIP	7.5	6.4	6.2	8.4	**7.5**
2006	CHIP	8.2	8.1	6.3	9.2	**8.2**
2007	CHIP	8.7	6.3	7.7	7.7	**7.8**
2008	CHIP	11.1	8.3	7.3	8.9	**9.1**
2009	CHIP	13.4	8.0	10.0	10.5	**10.9**
Change from 2000 to 2009		**27.0%**	**0.3%**	**4.9%**	**7.8%**	**12.2%**
2000	Non-MO HealthNet	5.5	4.9	4.9	5.7	**5.4**
2001	Non-MO HealthNet	6.0	5.6	5.0	6.1	**5.8**
2002	Non-MO HealthNet	5.9	6.4	5.1	6.2	**5.9**
2003	Non-MO HealthNet	5.7	6.1	4.7	5.8	**5.5**
2004	Non-MO HealthNet	6.1	6.3	4.7	6.2	**5.8**
2005	Non-MO HealthNet	6.5	7.0	4.9	6.5	**6.2**
2006	Non-MO HealthNet	5.9	5.8	4.5	5.9	**5.5**
2007	Non-MO HealthNet	5.9	5.2	4.6	5.0	**5.6**
2008	Non-MO HealthNet	6.0	5.7	3.9	5.4	**5.3**
2009	Non-MO HealthNet	6.5	5.8	3.9	5.7	**5.6**
Change from 2000 to 2009		**17.9%**	**17.7%**	**-19.4%**	**0.4%**	**4.7%**
2000	MO HealthNet	17.8	15.0	13.5	16.6	**16.3**
2001	MO HealthNet	14.9	15.0	12.1	19.3	**16.1**
2002	MO HealthNet	13.7	14.8	12.0	18.2	**15.2**
2003	MO HealthNet	13.5	13.7	10.4	16.8	**14.2**
2004	MO HealthNet	12.8	12.5	10.6	16.1	**14.0**
2005	MO HealthNet	13.3	14.5	11.3	17.0	**14.5**
2006	MO HealthNet	14.3	14.7	11.3	17.7	**15.0**
2007	MO HealthNet	14.3	13.6	11.1	17.1	**14.7**
2008	MO HealthNet	16.5	13.5	10.6	17.1	**15.0**
2009	MO HealthNet	17.5	15.8	12.6	19.0	**16.7**
Change from 2000 to 2009		**-1.4%**	**5.6%**	**-6.5%**	**14.5%**	**2.7%**

APPENDIX II:

DMH-DSS Wrap-Around Service Codes and Titles

Review period: January 1, 2010 - December 31, 2010

Wrap-Around Services (for children with SED and those affected by Substance Abuse)		
02500H	FAMILY SUPPORT	SED WA
20000H	CASE MNGMT-BACHELOR IND	SED WA
20001H	CASE MNGMT-PARAPROFESS IND	SED WA
20003H	CASE MNGMT-PHYSICIAN IND	SED WA
20004H	CASE MNGMT-LIC QMHP IND	SED WA
20005H	CASE MNGMT-LIC PSYCH IND	SED WA
20006H	CASE MNGMT-AD PR NURSE IND	SED WA
20008H	CASE MGMT-CHILD PSYCHITRST	SED WA
39601W	WRAP-AROUND SRVCS-YOUTH IND	SED WA
39603W	WRAP-AROUND SRVCS ADULT AS	SED WA
440001	RESPITE CARE - IND. -	SED WA
44001H	RESPITE CARE - INDIVIDUAL	SED WA
49004H	CHILD/ADOLES FAMILY ASSIST	SED WA
Y3127K	TARGET CASE MGMT (TCM) YTH	SED WA
Y3128K	TARGET CASE MGMT (TCM) YTH	SED WA

SED WA = SED Wrap-Around Service