Annual Report 2015

Prepared by the Department of Social Services
For the Missouri General Assembly

October 14, 2015

Acknowledgement

This report contains research and analysis completed by Mercer Government Human Services Consulting, part of Mercer Health & Benefits LLC*.*

Table of Contents

Introduction and Scope of the Evaluation 4

Data Sources and Approach 7

Study Question 1: Has CHIP improved the health of Missouri children and families? What are the overall effects of the CHIP program? 8

- 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? 16

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 percent of the federal poverty level (FPL) have any negative effect on these numbers? 18

Appendix I: Hospitalization and Emergency Room Utilization Rates by Payer/Program 22

Appendix II: Wrap-Around Service Codes and Titles 26

Appendix III: Wrap-Around Service Codes and Titles 27

Introduction and Scope of the Evaluation

The Missouri Department of Social Services is submitting this annual report to the General Assembly on Missouri's program for health care for uninsured children — the Children's Health Insurance Program (CHIP) — 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 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, MO HealthNet for Kids.

The Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA) reauthorized CHIP through federal fiscal year (FFY) 2013; however, the Patient Protection and Affordable Care Act (ACA), which was enacted in 2010, continued the appropriated funding to CHIP through FFY 2015. In addition to continuing the funding, the ACA provided a 23% increase in the CHIP match rates for states, with a cap of 100% for FFYs 2016 through 2019. The ACA maintenance of effort requirements for the CHIP program require states to maintain income eligibility thresholds and not impose any procedures, methodologies, or other requirements that make it more difficult for people to apply for or renew their CHIP eligibility. In 2015, the Medicare Access and CHIP Reauthorization Act (MACRA) reauthorized CHIP for two more years, until 2017.

In 2014, Missouri began the implementation of the Modified Adjusted Gross Income (MAGI) methodology for Medicaid and CHIP eligibility required by ACA. This conversion entails ending traditional income disregards in favor of a simplified income counting methodology rooted in gross income and closely aligned with federal tax code. MAGI further applies a global 5% disregard to the adjusted gross income, if necessary to safeguard eligibility determinations that could inadvertently be affected by the MAGI simplification. Income thresholds were converted to MAGI equivalents, and Medicaid income thresholds for children were adjusted to the MAGI equivalent of 133% of the Federal Poverty Level (FPL). The converted thresholds are 148% of FPL for children ages 1-18, and 196% of FPL for children aged 0-1.

The ACA included a provision making kids ages 6-18, in families with incomes between 100% of the FPL and the MAGI equivalent of 133% of the FPL a mandatory group under the Medicaid program. Before that requirement, Missouri covered these kids under CHIP. This change resulted in many children who would have been in the CHIP non-premium category switching to Medicaid under the new, MAGI income thresholds. CMS has approved continuing to use CHIP funding to cover those kids who would have been CHIP under pre-MAGI eligibility determinations. We are therefore including them in this report, although they are in a Medicaid eligibility category, and referring to them as "Medicaid/CHIP non-premium".

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

Program Age Group	0-110% FPL	111-148% FPL	149-150%FPL	151-196% FPL	197-300% FPL
Children 0-1	Medicaid (Non-Premium)	Medicaid (Non-Premium)	Medicaid (Non-Premium)	Medicaid (Non-Premium)	CHIP (Premium)
Children 1- 5	Medicaid (Non-Premium)	Medicaid (Non-Premium)	CHIP (Non-Premium)	CHIP (Premium)	CHIP (Premium)
Children 6-18	Medicaid (Non-Premium)	Medicaid/CHIP (Non-Premium)	CHIP (Non-Premium)	CHIP (Premium)	CHIP (Premium)

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

Beginning in September 2005, copays were eliminated in lieu of graduated premiums for all families with incomes greater than 150% FPL, with the exception that infants under 1 are not subject to premiums unless their family income exceeds 196% FPL. Premiums are based on income and effective July 1, 2015 ranged from $14 per month for a family size of one with income more than 150% FPL to $305 per month for a family size of six. Premium rates are adjusted annually, in July of each year, and exist in three different bands: (i) 151-185% FPL, (ii) 186-225%, and (iii) 226-300% FPL. In no case shall the family be charged more than 5 percent of the family's gross income, and the premium invoicing system is designed to not invoice a monthly premium in excess of 5 percent of the family's gross annual income divided by twelve (12).[2]

Missouri has a 30-day grace period for non-payment of premiums, but for families with income over 225% FPL, there is a lockout period of ninety (90) days after disenrollment due to non-payment of premiums after the grace period. For these families to re-enroll, repayment of outstanding premiums is required even after the ninety (90) day lockout period has been concluded.

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.
- Improve the health of Missouri's medically uninsured children through the use of preventive care.

This report focuses on three questions, which are outlined in the original legislative mandate to evaluate the CHIP program, and are as follows:

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

This will include:

- The number of children participating in the program in each income category.
- The effect of the program on the number of children covered by private insurers.
- The effect of the program on medical facilities, particularly emergency rooms (ERs).
- The overall effect of the program on the health care of Missouri residents.
- The overall cost of the program 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 percent FPL have any negative effect on these numbers?

Terminology

Throughout this report, we use the following terminology:

- MO HealthNet or Medicaid refers to the Title XIX State Plan Medicaid population.

[2] For the full premium chart, see Appendix III.

- CHIP refers to the targeted low-income expansion program for children.

Data Sources and Approach

This report uses previously aggregated, readily available data from the State of Missouri and the following sources:

- Health Status Indicator Rates — Department of Health and Senior Services (DHSS), Community Health Information Management and Epidemiology (CHIME), calendar year (CY) 2013.
- U.S. Census Data, 2000-2013.
- Claims data from CY 2014.
- Eligibility data from CY 2014 and FY 2015.
- Monthly Management Report, Table 13 — Department of Social Services (DSS), Fiscal Year 2015.
- Journal articles and health publications produced by the Federal Government and national health policy researchers (credited in the footnotes).

The most recent data available from these sources was used in compiling this year's report. To facilitate the comparison of longitudinal data across this year's report and previous years' reports, the same data sources have been used where possible.

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 FY 2015, CHIP program enrollment ranged from under 66,000 to more than 74,000 participants (See table below):[3]

CHIP Participants by Eligibility Category					
Month	Year	Medicaid/CHIP (non-Premium)	CHIP (non-premium)	CHIP (premium)	Total
July	2014	11150	36574	23989	71713
August	2014	14453	34975	23793	73221
September	2014	16597	33006	23933	73536
October	2014	18396	31515	24073	73984
November	2014	20191	29976	24012	74179
December	2014	21908	28108	24320	74336
January	2015	23429	24231	23821	71481
February	2015	24528	21216	24027	69771
March	2015	25783	18434	24759	68976
April	2015	27125	15912	24507	67544
May	2015	27957	14289	24736	66982
June	2015	28801	12477	24657	65935

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

Over the last five years, the Missouri rate of children's private insurance (including employer sponsored insurance (ESI) and self-pay insurance) has remained fairly stable, and has decreased slightly in the past year on trend with the rest of the country. Of note is that as demonstrated in the charts found on page 19 of this report, Missouri's uninsured population was higher than the national average in 2011, after being below the national average for previous years[4]; however, 2013 data finds that Missouri children's uninsured rate (6.0%) has dropped well below the national rate of 8.0%. Missouri's rate of public insurance coverage for children (Medicaid and CHIP) remains below the national averages, and increased by only 3% in 2013. This means that it is highly unlikely that crowd-out is occurring, as there has not been a major growth in public insurance coverage, even with the recession and the watermark effect of Marketplace enrollment. This question is explored in greater detail in study question 3 later in the report.

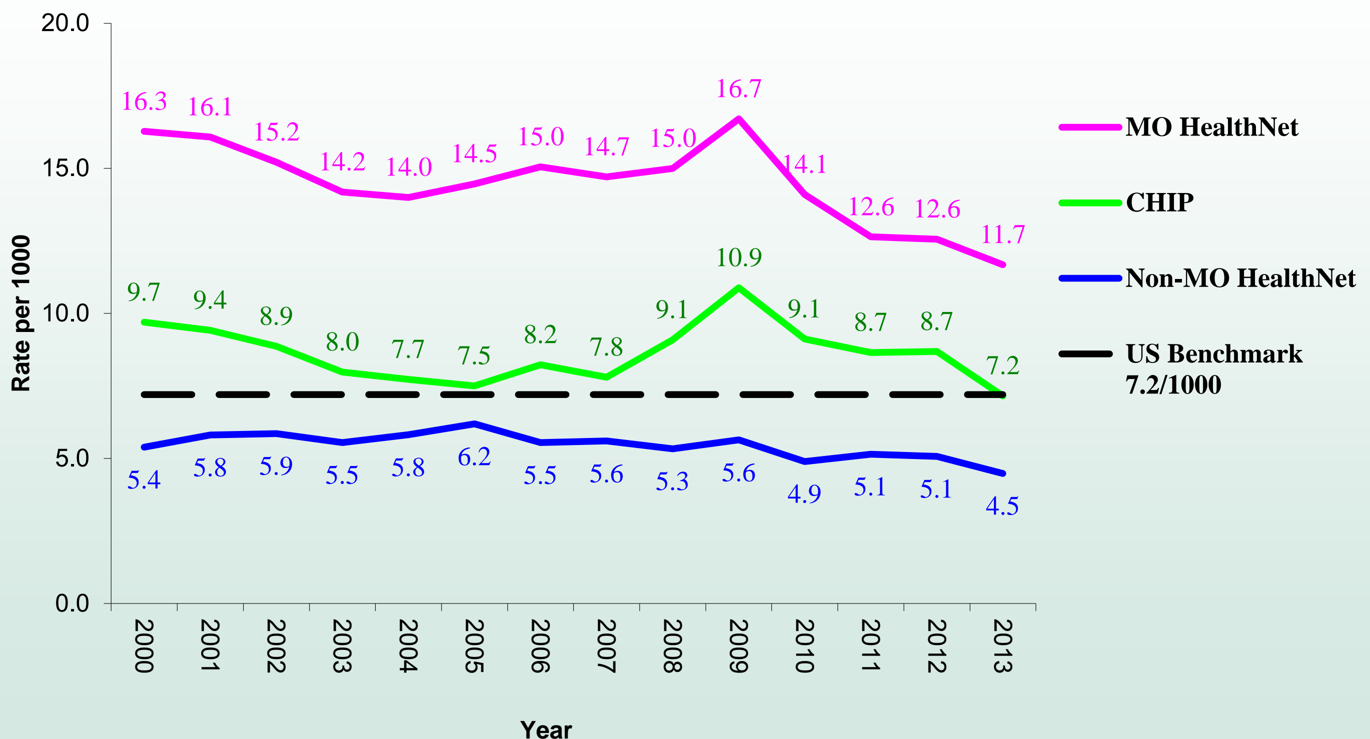
[3] Note: Enrollment numbers are unique members in each income category. Because of the MAGI conversion, the enrollment counts for the Medicaid/CHIP (non-premium) category were extracted from eligibility and enrollment data. The CHIP (non-premium) and CHIP premium enrollment were provided by the Monthly Management Report, Table 13, for fiscal year 2015.

[4] See Study Question 3 for data and further details.

3. What is the effect of the CHIP program on medical facilities, particularly emergency rooms?[5]

Preventable Hospitalizations

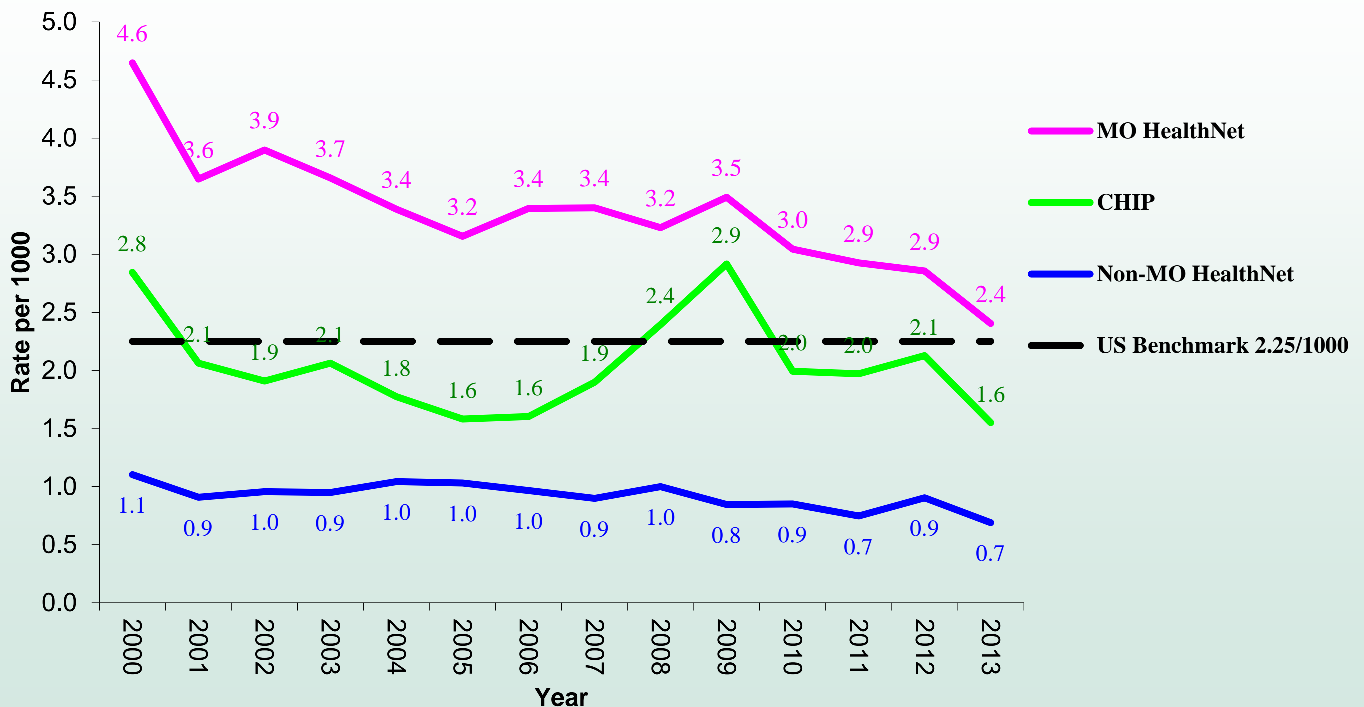
- From 2000 to 2013, preventable hospitalizations for the CHIP population decreased by 26.2%. During this time, preventable hospitalizations for the MO HealthNet (Medicaid children) population decreased by almost 28.2%, while the preventable hospitalizations for the non-MO HealthNet group decreased by 16.7%.
- In 2013, the CHIP group's rate of preventable hospitalizations per 1,000 children was equal to the national benchmark of 7.2 per 1,000.



[5] For this question, hospital data from CY 2013 was used, which was the most recent set of data available from DSS.

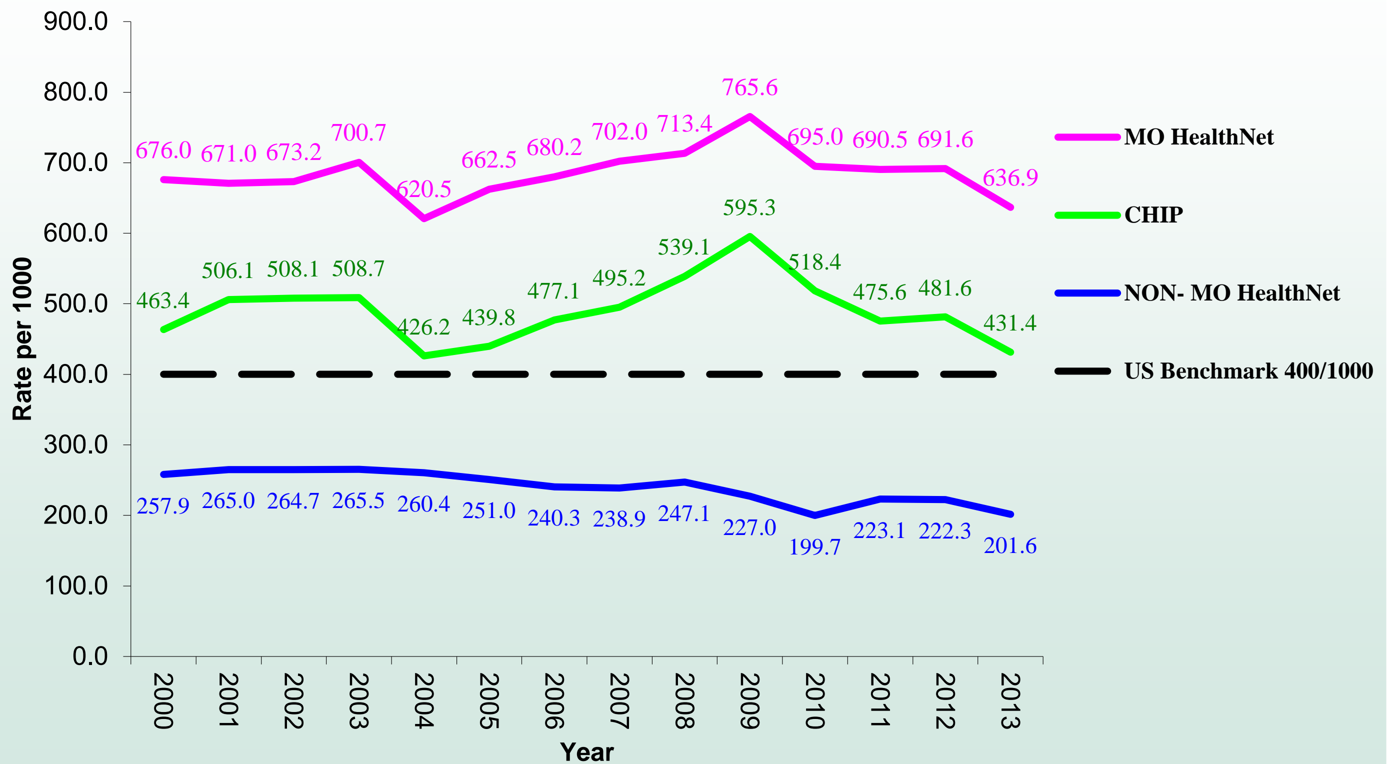
Preventable Asthma Hospitalizations

- From 2000 to 2013, preventable hospitalizations due to asthma for the CHIP population decreased by 45.5%. During this time, preventable hospitalizations due to asthma for the MO HealthNet (Medicaid children) population decreased by 48.3%, while the preventable asthma hospitalizations for the non-MO HealthNet group decreased by 37.4%.
- In 2013, the CHIP group's rate of 1.6 preventable asthma hospitalizations per 1,000 children was 28% lower than the national benchmark rate of 2.25 preventable asthma hospitalizations.



ER Visits

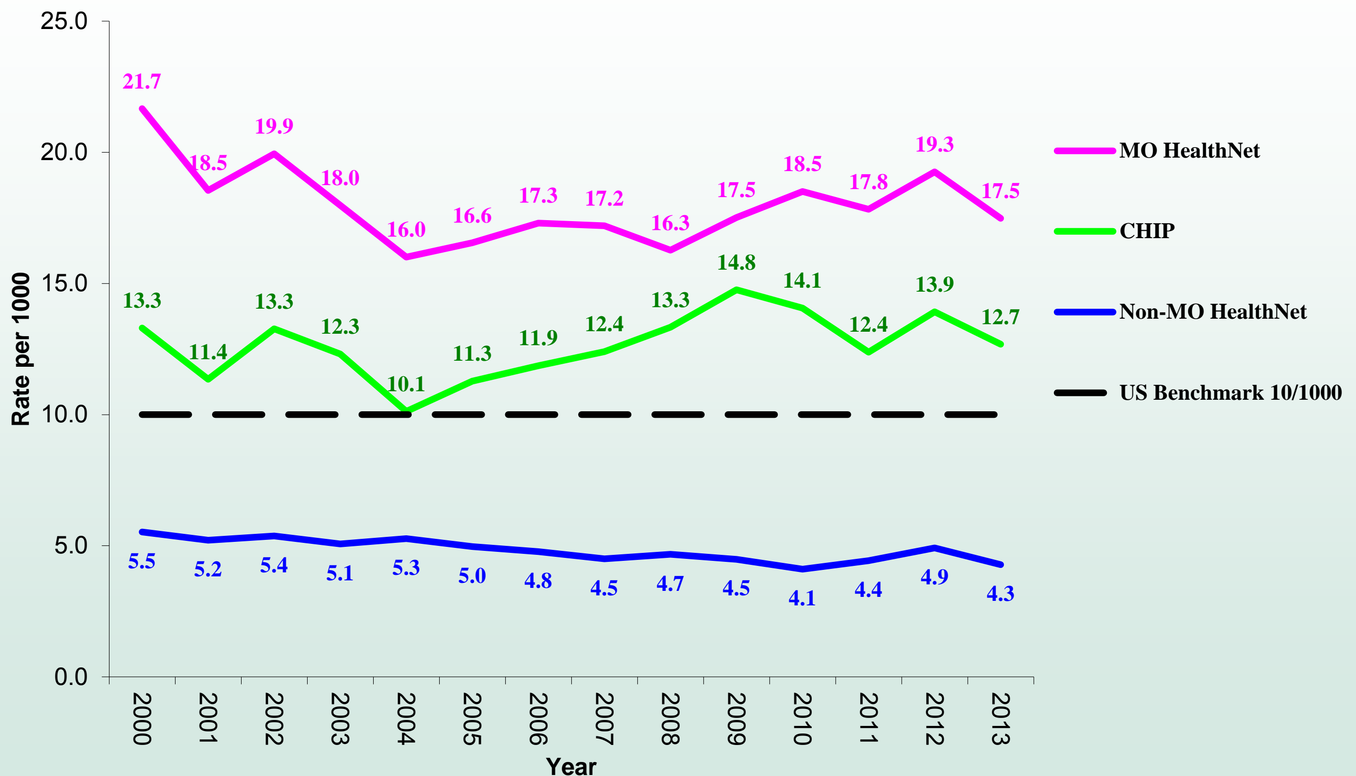
- From 2000 to 2013, ER visits for the CHIP population decreased by 6.9%. During this time, ER visits for the MO HealthNet (Medicaid children) population decreased by 5.8%, while the ER visits for the non-MO HealthNet group decreased by 21.8%.
- In 2013, the CHIP group's rate of 431.4 ER visits per 1,000 children was over 7% higher than the national benchmark rate of 400 ER visits. Although these results remain higher than the national benchmark, they represent significant reductions in both the CHIP and MO HealthNet rates per thousand which increased in 2013.



Asthma ER Visits

- From 2000 to 2013, asthma ER visits for the CHIP population decreased by 4.7%. During this time, asthma ER visits for the MO HealthNet (Medicaid children) population decreased by 19.3%, while the asthma ER visits for the non-MO HealthNet group decreased by 22.6%.
- In 2013, the CHIP group rate of 12.7 asthma ER visits per 1,000 children was 27% higher than the national benchmark rate of 10 Asthma ER visits per 1,000 children.

Asthma ER Visits Per 1,000 Missouri Children



The data shows improvement in all four indicators for the CHIP population when comparing 2012 to 2013. Rates of preventable hospitalizations, general and asthma-related, are equal to or below national benchmarks and equal to or below their best rates since 2000.

Rates of ER visits, both general and asthma-related, decreased between study years 2012 and 2013. However, both measures are still above national benchmarks. Children with Medicaid and CHIP are more likely to seek care through the ER than both uninsured children and children with private coverage. In a controlled study conducted in 2008, 28% of Medicaid and CHIP children visited the ER at least once, as compared to 18% of children with private coverage and 15% of uninsured children. Medicaid and CHIP children were also more likely to have had multiple visits to the ER. Barriers to access to primary care and more specifically the opportunity to obtain primary care after business hours remain key determinants in this trend for CHIP and Medicaid children[6].

[6] The Impact of the Children's Health Insurance Program (CHIP): What Does the Research Tell Us? The Kaiser Family Foundation, July 2014

A summary of the indicators from 2013 is presented in the following table. Detailed data by region and by year is included as Appendix I to this report. In 2016, MO HealthNet will implement an asthma education and in-home environmental assessment program for youth with uncontrolled asthma. For example, this program is anticipated to reduce ED utilization among the targeted population.

Summary of 2013 Indicators for Missouri Children Under 19 Per 1,000 Children

	CHIP	MO HealthNet (Medicaid)	Non-MO HealthNet (Non-Medicaid)	National Benchmark
Preventable Hospitalizations	**7.2**	**11.7**	**4.5**	**7.2**
Preventable Asthma Hospitalizations	**1.6**	**2.4**	**0.7**	**2.3**
ER Visits	**431.4**	**636.9**	**201.6**	**400.0**
Asthma ER Visits	**12.7**	**17.5**	**4.3**	**10.0**

Data Sources: DHSS; Benchmark: Kazak, 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?

Studies analyzing the impact of health care coverage on children's health show that children who have insurance have better health outcomes than uninsured children. Though the studies are not specific to the State of Missouri, they show the benefits of being enrolled in the CHIP program.

A 2014 report of compiled research published by the Kaiser Family Foundation found a large and consistent body of evidence that demonstrates that following enrollment in Medicaid or CHIP, children are more likely to have a usual source of care, visits to physicians and dentists, and use of preventive care. In addition, these children are less likely to have unmet health care needs for physician services, prescription drugs, dental and specialty, as well as hospital care. In nine of ten studies cited in the Congressionally-mandated evaluation of CHIP, rates of unmet need were reduced by 50% or more as compared to before CHIP. Evidence from some states further indicates that increased access was accompanied by reduced emergency department use.[7]

A 2012 report published by the Urban Institute for the Medicaid and CHIP Payment and Access Commission (MACPAC)[8] found that for almost every measure of access to health care nationwide, children in CHIP had substantially better access to care than uninsured children and almost equal access to children with ESI. Compared to uninsured children, children on CHIP were more likely to have a usual source of care, had greater access to specialists, and were less likely to have unmet needs due to costs or experience delays in receiving care. The experience of children in CHIP was similar to that of children in ESI, once adjusted for demographics, with similarly high rates of a usual source of care in addition to being less likely to have delayed medical care due to costs.

As reported by MACPAC in their March 2014 report[9], the factors that affect health care have become more complex, in particular for families who may qualify at times for marketplace coverage. While eligible, there could be barriers to the cost of marketplace premiums or, more often, the need to "churn" between programs as various points of the family

[7] *ibid*.
[8] Urban Institute, National Findings on Access to Health Care and Service Use for Children Enrolled in Medicaid or CHIP, Kenney and Coyer, March 2012.
[9] Medicaid and CHIP Payment and Access Commission (MACPAC) Report to the Congress on Medicaid and CHIP, March 2014.

financial cycle are experienced. These social determinants, along with economic recovery instability, have the potential to affect not just enrollment numbers, but the health and wellness of beneficiaries.

5. What is the overall cost of the CHIP program to Missouri?[10]

The CHIP program is funded through federal and State appropriations (both through general State revenue and other State agency dollars).[11] The federal/State share data is not yet available for expenditures paid for the Medicaid/CHIP non-Premium group; the total for that population is included in the table below.

CHIP FY 2015 Expenditures			
State Funds	CHIP	Medicaid/CHIP prior to ACA	**Grand Total**
General Revenue	$30,589,450		
Other Funds	$14,468,318		
Federal Funds	$103,215,830		
Total	**$148,273,598**	**$37,583,106**	**$185,856,704**

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 Missouri rule that establishes the methodology to determine availability for enrollment.[12]

The eligibility provisions for families with gross income of more than 150% FPL are:

- Parents/guardians of uninsured children must certify the child does not have access to affordable ESI or other affordable available coverage.
- Infants under 1 year with gross incomes of less than 196% FPL are exempt from premiums.
- Children in families with gross incomes of more than 150% FPL but up to 225% 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 226% FPL and up to 300% FPL are eligible 30 calendar days after the receipt of the application or when the premium is received, whichever is later.
    - Any child identified as having special health care needs — defined as a condition that, left untreated, would result in the death or serious physical injury of a child — who does not have access to affordable ESI will be exempt from the 30-day waiting period in order to be eligible for services, as long as the child meets all other qualifications for eligibility. Special health care needs are established based on a written statement from the child's treating physician.

[10] For this question, financial data from FY 2015 was used.

[11] Other sources of state funding include the Pharmacy Rebate Fund, FRA Fund, Health Initiative Fund, Life Sciences Research Fund, the Premium Fund, etc.

[12] This regulation can be found online at http://s1.sos.mo.gov/cmsimages/adrules/csr/current/13csr/13c70-4.pdf. Missouri is in the process of changing the methodology to determine eligibility to meet CMS requirements, but this implementation is not yet complete.

- The 30 calendar day delay are not applicable to children 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.
- Premiums will be updated annually and take effect on July 1 of each calendar year.

How are premiums set		
Income Category (0-1 yrs)	**Income Category (1-18 yrs)**	**Monthly Premium Calculation**
N/A	**(1) More than 150% and up to and including 185% FPL**	Premium = 4% of monthly income for the family size.
(2) More than 196% and up to and including 225% FPL	**(2) More than 185% and up to and including 225% FPL**	Premium = 8% of the monthly income for the family size plus the premium calculated in category 1.
(3) More than 225% and up to 300% FPL	**(3) More than 225% and up to 300% FPL**	Premium = 14% of the monthly income for the family size plus the premiums calculated in categories 1 and 2.

Study Question 2[13]
What is the impact of CHIP on providing a comprehensive array of community-based wraparound services for seriously emotionally disturbed (SED) children and children affected by substance abuse?

Wraparound services are a class of treatment and support services provided to a 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, targeted case management, community support services, transportation support, social and recreational support, basic needs support, and clinical/medical support.

The Department of Mental Health (DMH) and MO HealthNet 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

Comparisons of utilization of wraparound services across service delivery systems (i.e., fee-for-service (FFS) versus managed care) are focused on evaluating whether MCO enrollment impacts which wraparound services are provided and in what manner they are provided. DSS and DMH data on CHIP program eligibility, MCO enrollment, and wraparound service utilization beginning January 1, 2014 and ending December 31, 2014, were used in this analysis.

There were 749 unique children in the CHIP program population who received wraparound services during the study period. For this analysis, the group was further divided into 334 FFS participants and 443 MCO participants; 28 of these received services through both delivery methods at different times during the year and are counted in both categories.

The MCOs are not required by contract to provide wraparound services. However, the MCOs do provide these wraparound services when it is cost effective as a diversion from more intensive levels of care. The average child receiving FFS wraparound services received more services than the average child receiving MCO wraparound services, as illustrated in Chart A on the next page, but both overall received significantly less wraparound services in CY 2014 than in CY 2013. Chart B, on the following page, shows how the mix of services differed between the FFS and MCO populations. For example, 72.4% of the wraparound services provided to the FFS population consisted of community support services, while these services represented 64% of the wraparound services provided to the MCO population.

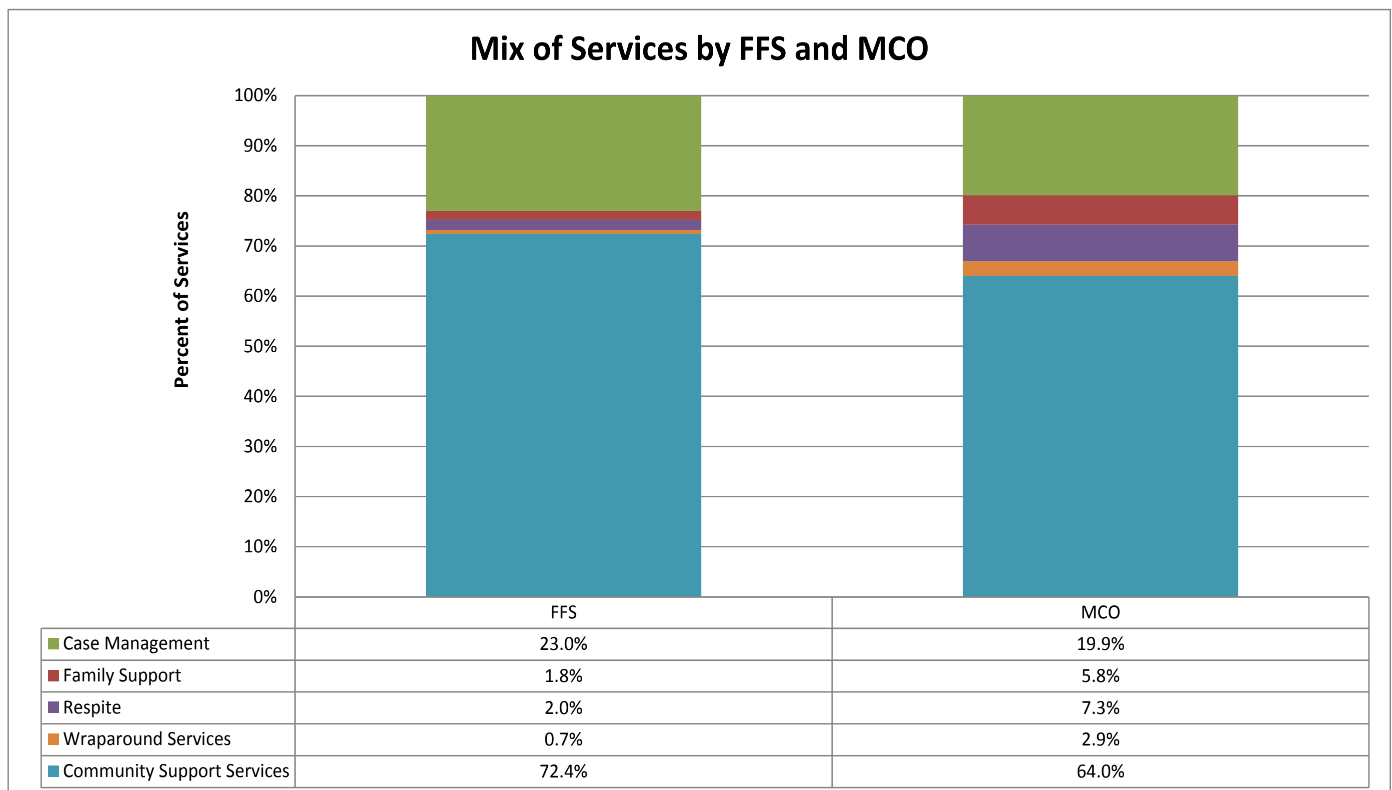
The following charts show utilization rates of wraparound services by type in CY 2014.

[13] For this question, claims and enrollment data from CY 2014 was used.

CHART A
Quantity of Services (Units)

Wraparound Services	Family Support	Other Case Management	Respite	Targeted Case Management	Wraparound Services	Community Support Services	Grand Total
Quantity of Services FFS	114	1330	130	144	48	4636	6,402
Quantity of Services: MCO	425	1317	536	138	212	4682	7,310
Services per Child: FFS	0.3	4.0	0.4	0.4	0.1	13.9	19.2
Services per Child: MCO	1.0	3.0	1.2	0.3	0.5	10.6	16.5

CHART B



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, the FFS population is predominantly rural and the MCO population is predominantly urban. As found in previous years' studies, both delivery systems are providing similar numbers of community support services and have shifted away from targeted case management. However, fewer services were provided overall in 2014 than in 2013, and this should be monitored to determine whether the decrease is reflective of a trend.

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 and will become more complex as the marketplace is added to the analysis. 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 or terminating 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.[14]

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 employees once public coverage becomes available for them.

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. 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 congressional report on CHIP by Mathematica Policy Research from December 2011[15] concludes that crowd out in the CHIP program nationwide is less than expected:

> *"While studies differ in their methods and data sources, existing evidence indicates that some level of crowd out is unavoidable but the magnitude of substitution is lower than many expected and in general concerns about CHIP substituting for private coverage have lessened over time…Estimates of substitution rates from population-based studies range from none to as much as 60 percent of the increase in public coverage from CHIP coming from reductions in private coverage (Dubay and Kenney 2009; Gruber and Simon 2008; Lee et al. 2008; Bansak and Raphael 2007; Davidoff et al. 2005; Hudson et al. 2005; LoSasso and Buchmueller 2004; Cunningham et al. 2002). More recent studies using longitudinal data sources and improved methods for handling cases with both public and private coverage…estimate substitution rates ranging from 7 to 30 percent."*

Since 2000, there has been a redistribution of insurance coverage by type in both Missouri and the nation as a whole. Over this period there has been an overall decline in ESI, and that trend continues in 2013. In Missouri from 2009 to 2013, ESI rates for children have fluctuated; the 2013 rate (53%) is notably lower than the 2009 rate (59.1%). Likewise, the trends in the national rate for children in ESI also significantly dropped from 55.8% in 2009 to 49% in 2013. As ESI shows a consistent downward trend, direct purchase of insurance for children in Missouri has remained stagnant from 5.9% in 2011 to 6% in 2013. During this time period, the combined U.S. census data for Medicaid and CHIP in Missouri shows a slight increase in Medicaid/CHIP coverage, from 32.5% in 2009 to 33% in 2013. However, the national figure has risen more significantly from 33.8% in 2009 to 37% in 2013. Finally, the rate of uninsured children in the State of Missouri experienced a substantial improvement as it decreased to 6% in 2013 from 10.7% in 2012.

---

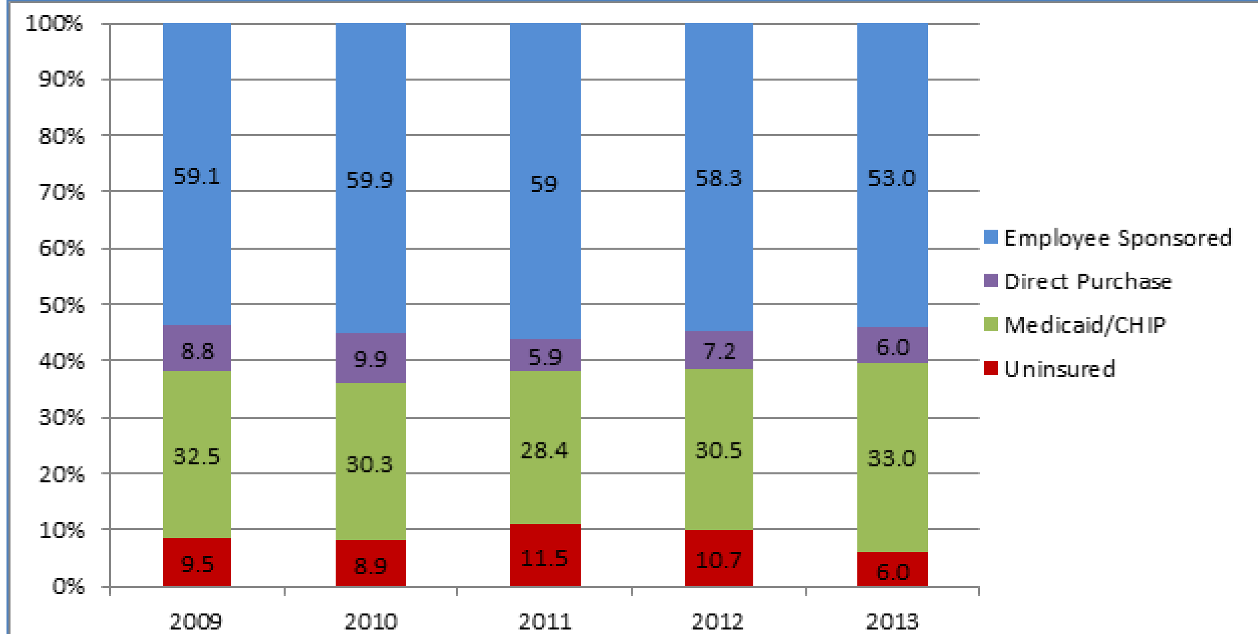
[14] Davidson, G., L. A. Blewett, & K. T. Call (June 2004). *Public Program crowd-out of private coverage: What are the issues?* The Robert Wood Johnson Foundation: Research Synthesis Report No. 5.

[15] Mathematica Policy Research (December 2011). *Children's Health Insurance Program: An Evaluation (1997-2010).*

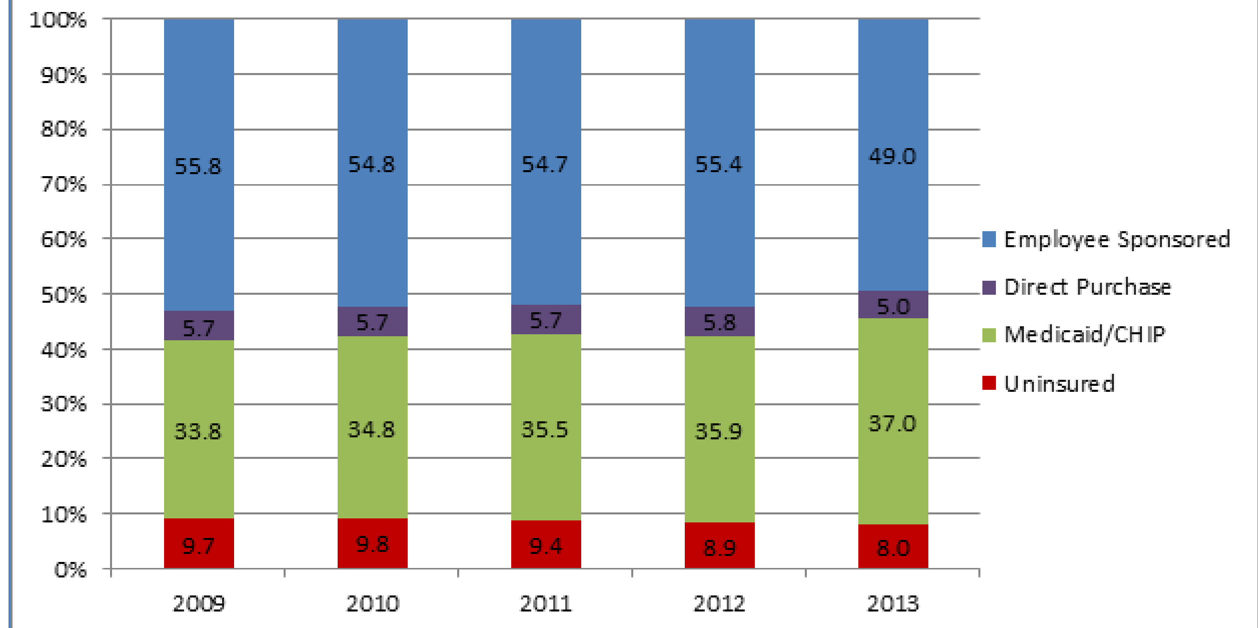
This data suggests that the expansion of the CHIP program has had little to no impact on the number of children covered by private insurance, and in fact, Missouri is outpacing the rest of the nation in maintaining private health insurance rates, both in overall percentage and in trend in the last five years. The next two charts illustrate these five year trends. We anticipate that there may be changes in future years that may be attributed to implementation of the ACA; however, these data are not available at this early date.

Missouri Children Compared to U.S. Children 2009-2013[16]

Type of Insurance among Children in Missouri



Type of Insurance among Children Nationally



[16] Data is based on the Census Bureau's March 2014 Current Population Survey (CPS: Annual Social and Economic Supplements) which combines the Medicaid and CHIP programs. Columns do not add up to 100% in this data source, as people can be in more than one category. 2013 is the most recent year's data available for this measure. Children are aged 0-18.

Much of the research on crowd-out in children's coverage historically 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, which could be complicated by marketplace options in some states. Using a broad definition of crowd-out, the Congressional Budget Office concludes that between 25% and 50% of children enrolled in CHIP — which covers children with incomes too high to qualify for Medicaid — previously had private health insurance.[17]

A recent Center for Medicare and Medicaid Services (CMS) report by the Ohio State University College of Public Health[18] suggests the opposite: that the higher the state's eligibility threshold, the lower the crowd-out around the eligibility threshold. The report estimated threshold crowd-out levels for all 50 states and found no evidence of threshold crowd-out in Missouri, or in any of the other 18 states with an eligibility threshold of 300% FPL. The data also suggests much lower crowd-out overall than previous studies, with an overall State range of 0% to 12%. Overall crowd-out in Missouri was found to be 2.35 percent. The report concludes:

> *"The relatively small crowd-out at all income levels suggests that the discourse on children's health insurance programs should shift away from crowd-out towards the merits of public programs. Arguments for and against public children's health insurance programs should be based on benefits of publicly insuring children who otherwise would be uninsured, not on whether previously insured children drop private insurance and move to the public's payrolls."*

The comparison of Missouri's population by insurance type and status to the national trends over the last five years (above) is a strong indicator that the policies in Missouri designed to minimize crowd-out, like the requirement for six prior months of no coverage before enrolling in CHIP, have been successful. This should be carefully monitored, as the State elected to eliminate the six-month waiting period in September of 2014, to see if indications of crowd-out appear in future reports.

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

[18] Medicare and Medicaid Research Review (2013, Volume 3, Number 3). *State Variability in Children's Medicaid/CHIP Crowd-Out Estimates.*

APPENDIX I

Hospitalization and ER Utilization Rates by Payer/Program (2000-2013)
Review period: January 1, 2013 — December 31, 2013
Data source: Missouri Department of Health and Senior Services (DHSS)

Asthma hospitalizations age < 19
Benchmark = 2.25/1,000 pop.
Healthy People 2000

Rates per 1000 pop.

Cal. Year	Population	*Eastern*	*Central*	*Western*	*Other*	**State**
2000	CHIP	5.2	1.8	3.9	1.7	**2.8**
2001	CHIP	3.0	1.8	2.3	1.3	**2.1**
2002	CHIP	2.5	1.8	2.9	1.2	**1.9**
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**
2010	CHIP	3.6	1.0	1.6	1.2	**2.0**
2011	CHIP	4.0	0.5	1.6	1.0	**2.0**
2012	CHIP	4.0	0.7	2.0	1.2	**2.1**
2013	CHIP	2.1	0.5	2.4	0.9	**1.6**
Change from 2000 to 2013		**-59.4%**	**-70.1%**	**-37.7%**	**-44.5%**	**-45.5%**
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**
2010	Non-MO HealthNet	1.2	0.5	0.6	0.6	**0.9**
2011	Non-MO HealthNet	1.1	0.4	0.6	0.5	**0.7**
2012	Non-MO HealthNet	1.2	0.4	0.9	0.6	**0.9**
2013	Non-MO HealthNet	0.9	0.6	0.7	0.4	**0.7**
Change from 2000 to 2013		**-32.4%**	**-35.3%**	**-33.1%**	**-57.2%**	**-37.4%**
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**
2010	MO HealthNet	4.8	2.0	2.6	2.0	**3.0**
2011	MO HealthNet	4.9	1.9	2.3	1.8	**2.9**
2012	MO HealthNet	4.4	1.9	2.6	1.8	**2.9**
2013	MO HealthNet	3.1	1.7	2.7	1.7	**2.4**
Change from 2000 to 2013		**-59.0%**	**-50.9%**	**-39.8%**	**-34.9%**	**-48.3%**

Asthma ER visits age < 19
Benchmark = 10/1,000 pop.
Healthy People 2000

Rates per 1000 pop.

Cal. Year	Population	*Eastern*	*Central*	*Western*	*Other*	**State**
2000	CHIP	24.7	9.0	19.5	7.1	**13.3**
2001	CHIP	17.7	5.1	13.5	7.8	**11.4**
2002	CHIP	19.5	11.5	17.4	8.2	**13.3**
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**
2010	CHIP	23.5	6.8	16.0	7.5	**14.1**
2011	CHIP	21.1	6.3	13.4	6.5	**12.4**
2012	CHIP	23.8	6.6	16.0	7.1	**13.9**
2013	CHIP	23.2	6.0	13.5	5.8	**12.7**
Change from 2000 to 2013		**-6.4%**	**-33.3%**	**-30.7%**	**-18.1%**	**-4.7%**
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**
2010	Non-MO HealthNet	5.6	2.3	4.1	2.6	**4.1**
2011	Non-MO HealthNet	5.8	2.6	4.8	2.8	**4.4**
2012	Non-MO HealthNet	6.5	2.3	5.8	2.9	**4.9**
2013	Non-MO HealthNet	6.0	2.4	4.6	2.1	**4.3**
Change from 2000 to 2013		**-20.5%**	**-19.4%**	**-24.5%**	**-34.9%**	**-22.6%**
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**
2010	MO HealthNet	30.0	10.2	21.0	8.6	**18.5**
2011	MO HealthNet	29.0	9.4	19.0	8.9	**17.8**
2012	MO HealthNet	30.7	10.2	22.2	9.0	**19.3**
2013	MO HealthNet	28.9	9.2	19.4	7.3	**17.5**
Change from 2000 to 2013		**-20.0%**	**-30.0%**	**-25.9%**	**-27.2%**	**-19.3%**

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

Rates per 1000 pop.

Cal. Year	Population	Eastern	Central	Western	Other	State
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**
2010	CHIP	576.1	459.2	485.0	513.6	**518.4**
2011	CHIP	501.9	465.0	432.0	484.7	**475.6**
2012	CHIP	535.6	456.0	447.5	467.8	**481.6**
2013	CHIP	486.0	421.6	400.9	406.7	**431.4**
Change from 2000 to 2013		**32.2%**	**7.2%**	**3.2%**	**-25.6%**	**-6.9%**
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**
2010	Non-MO HealthNet	196.4	182.0	189.0	226.0	**199.7**
2011	Non-MO HealthNet	214.0	196.9	226.0	250.3	**223.1**
2012	Non-MO HealthNet	222.9	192.9	230.1	230.1	**222.3**
2013	Non-MO HealthNet	205.1	190.5	204.9	198.7	**201.6**
Change from 2000 to 2013		**-21.7%**	**-12.9%**	**-24.1%**	**-22.6%**	**-21.8%**
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**
2010	MO HealthNet	740.8	654.7	666.6	684.8	**695.0**
2011	MO HealthNet	703.9	659.0	632.5	730.8	**690.5**
2012	MO HealthNet	747.8	658.6	659.2	670.1	**691.6**
2013	MO HealthNet	703.3	625.7	601.5	595.8	**636.9**
Change from 2000 to 2013		**-1.4%**	**-8.2%**	**-5.6%**	**-9.3%**	**-5.8%**

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

Rates per 1000 pop.

Cal. Year	Population	*Eastern*	*Central*	*Western*	*Other*	**State**
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**
2010	CHIP	10.7	7.1	8.4	9.0	**9.1**
2011	CHIP	11.1	8.0	6.2	8.3	**8.7**
2012	CHIP	10.9	6.6	5.6	9.6	**8.7**
2013	CHIP	7.7	4.9	7.8	7.3	**7.2**
Change from 2000 to 2013		**-26.7%**	**-38.5%**	**-18.2%**	**-25.6%**	**-26.2%**
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**
2010	Non-MO HealthNet	5.8	5.1	3.7	4.4	**4.9**
2011	Non-MO HealthNet	5.8	4.9	4.2	5.1	**5.1**
2012	Non-MO HealthNet	5.6	4.3	3.9	5.6	**5.1**
2013	Non-MO HealthNet	4.7	4.5	3.9	4.6	**4.5**
Change from 2000 to 2013		**-15.0%**	**-8.6%**	**-19.2%**	**-19.0%**	**-16.7%**
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**
2010	MO HealthNet	15.2	12.4	11.0	15.7	**14.1**
2011	MO HealthNet	14.6	11.6	9.3	13.4	**12.6**
2012	MO HealthNet	13.3	11.7	9.0	14.7	**12.6**
2013	MO HealthNet	11.1	10.8	9.8	14.0	**11.7**
Change from 2000 to 2013		**-37.5%**	**-27.8%**	**-27.3%**	**-15.5%**	**-28.2%**

APPENDIX II

DMH-DSS Wraparound Service Codes and Titles
Review period: January 1, 2014 — December 31, 2014

Wraparound Services (for children with SED and those affected by Substance Abuse)	
Procedure Code	**Description**
02500H	FAMILY SUPPORT
20000H	CASE MNGMT-BACHELOR IND
20001H	CASE MNGMT-PARAPROFESS IND
20003H	CASE MNGMT-PHYSICIAN IND
20004H	CASE MNGMT-LIC QMHP IND
20005H	CASE MNGMT-LIC PSYCH IND
20006H	CASE MNGMT-AD PR NURSE IND
20007H	CASE MNGMT-SIGN LANG L.QMHP
39601W	WRAP-AROUND SRVCS-YOUTH IND
39603W	WRAP-AROUND SRVCS ADULT AS
440001	RESPITE CARE - IND
49004H	CHILD/ADOLES FAMILY ASSIST
H0036K	COMMUNITY SUPPORT
T1016A	CASE MANAGEMENT EACH 15 MINS
Y3127K	TARGET CASE MGMT (TCM) YTH
Y3128K	TARGET CASE MGMT (TCM) YTH

APPENDIX III

Premium Chart, July, 2015

MO HealthNet for Kids - CHIP Premium Chart Effective July 1, 2015			
Family Size	**Percent of FPL**	**Monthly Income**	**Premium Amount**
1	>150	$1472.01 to $1815.00	$14
1	>185	$1815.01 to $2207.00	$45
1	>225	$2207.01 to $2943.00	$110
2	>150	$1992.01 to $2456.00	$19
2	>185	$2456.01 to $2987.00	$61
2	>225	$2987.01 to$ 3983.00	$149
3	>150	$2512.01 to $3098.00	$23
3	>185	$3098.01 to $3767.00	$77
3	>225	$3767.01 to $5023.00	$188
4	>150	$3032.01 to $3739.00	$28
4	>185	$3739.01 to $4547.00	$93
4	>225	$4547.01 to $6063.00	$227
5	>150	$3552.01 to $4380.00	$33
5	>185	$4380.01 to $5327.00	$109
5	>225	$5327.01 to $7103.00	$266
6	>150	$4072.01 to $5022.00	$38
6	>185	$5022.01 to $6107.00	$125
6	>225	$6107.01 to $8143.00	$305
7	>150	$4592.01 to $5663.00	$43
7	>185	$5663.01 to $6887.00	$141
7	>225	$6887.01 to $9183.00	$344
8	>150	$5112.01 to $6304.00	$48
8	>185	$6304.01 to $7667.00	$157
8	>225	$7667.01 to $10223.00	$383
9	>150	$5632.01 to $6946.00	$53
9	>185	$6946.01 to $8447.00	$173
9	>225	$8447.01 to $11263.00	$422
10	>150	$6152.01 to $7587.00	$57
10	>185	$7587.01 to $9227.00	$188
10	>225	$9227.01 to $12303.00	$461
11	>150	$6672.01 to $8228.00	$62
11	>185	$8228.01 to $10007.00	$204
11	>225	$10007.01 to $13343.00	$500
12	>150	$7192.01 to $8870.00	$67
12	>185	$8870.01 to $10787.00	$220
12	>225	$10787.01 to $14383.00	$539
Premium information for family sizes of 13+ is available upon request.			