ANNUAL REPORT 2010

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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 (SCHIP) is being submitted to the General Assembly as required by Section 208.650 of the Revised Statutes of Missouri. The SCHIP 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 SCHIP program began operating as a combination SCHIP program. Missouri provides presumptive eligibility for children in families with income of 150% of the federal poverty level (FPL) or below until an eligibility decision is made. Uninsured children age birth through age 18 with family income below 150% of FPL are covered under the MO HealthNet expansion. Uninsured children under age 1 with family income more than 185% but less than 300% of FPL and uninsured children age 1 through age 18 with family income between 151% and 300% of FPL are covered under a Separate Child Health Program. Beginning September 2005, co-pays were eliminated in lieu of graduated premiums for all families with incomes greater than 150% of FPL**. On February 4, 2009, President Obama signed into law H.R. 2, the Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA) Under CHIPRA, the term CHIP means the State Children's Health Insurance Program.** The CHIP program has the following goals:

- Reduce the number of people in Missouri without health insurance coverage;
- Increase the number of Missouri children, youth and families who have medical insurance coverage; and
- Improve the health of Missouri's medically uninsured population.

Per the statute, this report focuses on three questions:

Study Question 1: What is the impact of the CHIP program on providing a comprehensive array of community based wraparound services for Seriously Emotionally Disturbed Children (SED) and children affected by substance abuse?

Study Question 2: 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 3: Does the CHIP program have any negative impact on the number of children covered by private insurance because of expanding health care coverage to children with a gross family income above 185% of the federal poverty level (FPL)?

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.

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

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 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); and
- Multiple Data Requests – MO HealthNet Division (MHD), DSS and Department of Mental Health (DMH).

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

Study Question 1: *What is the impact of the CHIP program 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, 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 DMH and MHD for the evaluation period were compiled and analyzed.

- 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.

- The results from this year's report are not directly comparable with those reported last year because this evaluation is for a 12-month period rather than the 15-month period of last year's report, which was used to move to a calendar year reporting period (the reporting period had followed the waiver years). Last year, we did not want to exclude from the analysis the final three months of 2007 because data from these months were not included in the evaluation from last year. This year's report is the first to include one calendar year's data, and moving forward, the analysis will be conducted for each calendar year so subsequent reports will be directly comparable.

Methodology for Data Analyses

DSS and DMH data on CHIP program eligibility, MCO enrollment and wraparound service utilization beginning January 1, 2009, and ending December 31, 2009, were used in this analysis. There were 1,260 children in the CHIP program population who received wraparound services during the study period. For this analysis, the group was further divided into 630 strictly fee-for-service (FFS) participants, 575 strictly managed care organization (MCO) participants and 55 participants who received services through both FFS and MCO. The proportion of participants in the mixed MCO/FFS group is much smaller for this period than for last year's reporting period because the MCO expansion was completed during calendar year 2008.

Table 1 on page 4 shows that the total units of all wraparound services per child for the MCO population was slightly greater than for the exclusively FFS population; the mixed MCO/FFS population had the greatest average number of units of services per child. The chart on page 4 shows how the mix of services differed among the populations. For example, case management services accounted for 88.5% of the services utilized by the FFS population, while amounting to 79.3% of services provided to the MCO population, and 76.6% of services utilized by the mixed group. Conversely, respite services amount to just 5.9% of the FFS group, 13.2% of the MCO group and 20.9% of the mixed group.[2]

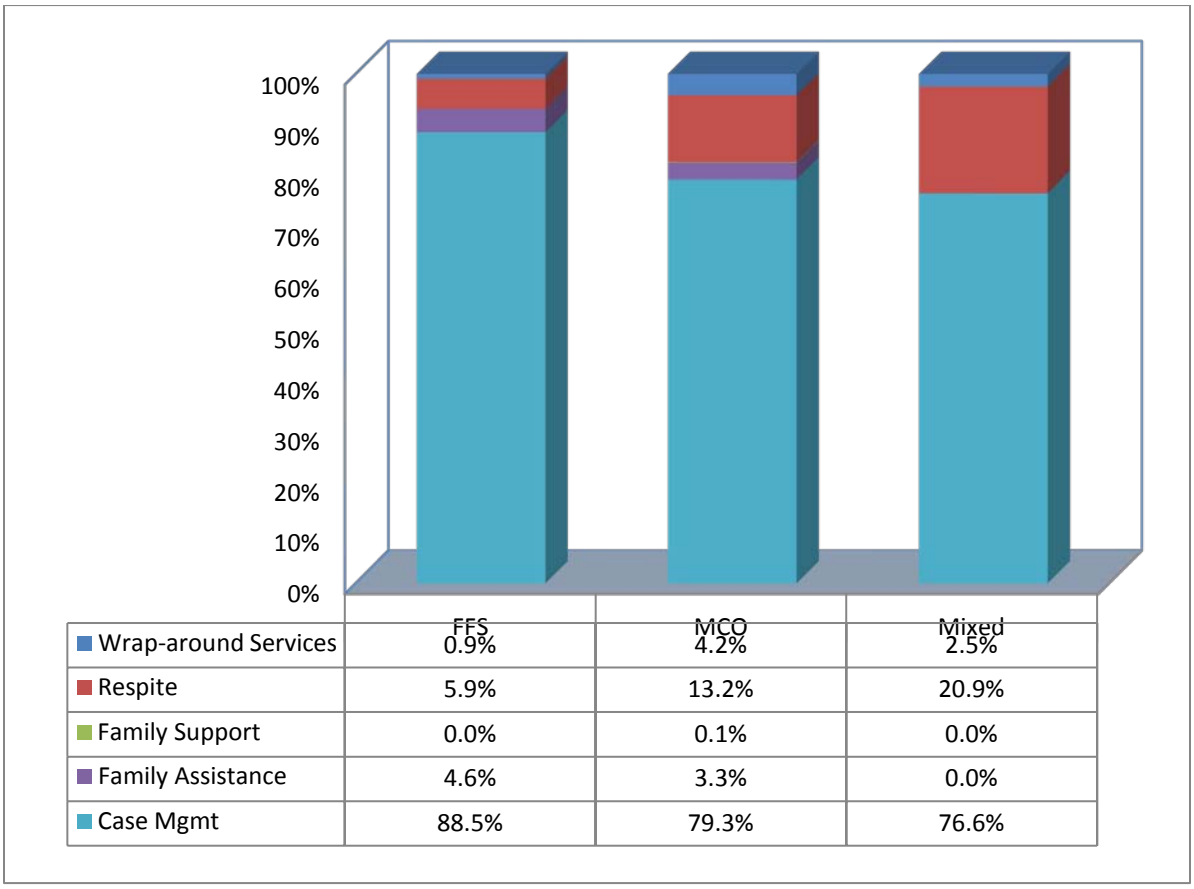
[2] There was a slight change in data inclusions from last year: last year's report included respite code 44021, and this year's does not, as directed by Joel Zemmer of the Department of Mental Health.

Table 1:
CHIP Children's Wraparound Service Utilization by Service

	Family Assistance	Family Support	Other Case Management	Respite	Targeted Case Management	Wrap-around Services	Grand Total
Quantity of Services							
FFS	408	0	6,100	522	1,715	83	8,828
MCO	310	10	3,863	1,240	3608	395	9,426
Mixed	0	0	467	246	434	29	1,176
Services per Child							
FFS	0.6	0.0	9.7	0.8	2.7	0.1	14.0
MCO	0.5	0.0	6.7	2.2	6.3	0.7	16.4
Mixed	0.0	0.0	8.5	4.5	7.9	0.5	21.4

Source: Department of Social Services and Department of Mental Health

Chart 1:
Share of Services by FFS, MCO, and Mixed FFS/MCO Participants



Note: Case Management includes targeted case management and other case management. Respite includes independent and youth respite care. Bars represent 100 percent of service count for each category. Percentages may not add to 100 due to rounding.

These statistics alone are not conclusive evidence of a disparity, particularly without an analysis of the populations' differences, what non-wraparound mental health and substance abuse services the individuals are receiving, and whether there are differences unrelated to the service delivery model. For example, some services may be more easily obtained in an urban area where managed care exists (as demonstrated by the mixed group's utilization) than a rural area (where there is no managed care).

These data demonstrate that CHIP children with SED are receiving certain wraparound services, particularly case management and family assistance services. However, it appears that, regardless of service delivery system, relatively few families are accessing family support or wraparound services.

Study Question 2: What are the overall effects of CHIP program?

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

For the most recent twelve-month period, July 2009 through June 2010, CHIP program enrollment ranged from just under 64,000 participants to more than 69,000 participants (*See table, right*).

SCHIP Participants by Premium and Non-Premium

	Up to 150% FPL (non-premium)	Above 150% to 300% FPL (premium)	Total
Jul – 2009	41,827	21,951	63,778
Aug – 2009	42,121	22,273	64,394
Sep – 2009	42,882	22,665	65,547
Oct – 2009	43,605	23,051	66,656
Nov – 2009	44,194	23,480	67,674
Dec – 2009	44,677	22,627	67,304
Jan – 2010	45,022	22,691	67,713
Feb – 2010	44,948	22,989	67,937
Mar – 2010	45,238	23,241	68,479
Apr – 2010	45,406	23,358	68,764
May – 2010	45,780	23,745	69,525
Jun – 2010	45,904	23,892	69,796

Source: Department of Social Services, Monthly Management Reports (numbers are counts of unique enrollees during the month)

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

Among those children who do have insurance, there has been redistribution over the past nine or so years by type of coverage both in Missouri and in the nation as a whole. As discussed in previous evaluations, over that period there has been an overall decline in employer sponsored insurance (ESI). However, in the last reported year (2008), this trend did not occur for children in Missouri: while the national rate of ESI for children under 18 dropped from 59.5% in 2007 to 58.9% in 2008, the Missouri rate rose from 57.9% in 2007 to 64.0% in 2008. This increase argues against any negative effect of the Missouri CHIP program on private insurance rates for children. Notably, the overall rate of ESI for the entire Missouri population mirrored the national figures, dropping from 60.5% in 2007 to 59.1% in 2008.

Despite the Missouri gains in ESI rates for children in 2008, the discussion in last year's report about the overall decline over the decade is still applicable and attributable to the same reasons:

- **Continued high unemployment rates** – in June 2007 the national unemployment rate was 4.5%; in June 2008 it was 5.5%; in June 2009 it was 9.5%, and it remained 9.5% in June of 2010. Missouri's pattern is very similar with an increase from 5.0% in June 2007 to 5.8% in June 2008 to 9.3% in June 2009, and in June 2010 it remained at 9.1%. [3]

- **A decrease in the percentage of jobs with benefits – 69% in 2000 to 60% in 2009.**[4] Declines in ESI coverage rates are often tied to:

  (1) Shifts in employment from large to small firms.

  (2) Shifts from industries more likely to provide ESI to industries less likely to provide ESI (high-coverage industries include mining, manufacturing, utilities, finance/insurance/real estate, education and public administration; low-coverage industries include agriculture, construction, transportation, wholesale/retail, trade, information/communication, professional health and social services and art/entertainment). Certainly in Missouri these changes have been occurring. For example, between January 2000 and June 2008, people working in jobs classified as

[3] US Department of Labor, Bureau of Labor Statistics. *Regional and State Employment and Unemployment: June 2010*. US Department of Labor, Bureau of Labor Statistics. *Regional and State Employment and Unemployment: June 2009*. US Department of Labor, Bureau of Labor Statistics. *Regional and State Employment and Unemployment: June 2008*. US Department of Labor, *Bureau of Labor Statistics. Regional and State Employment and Unemployment: June 2007*. Available on-line http://www.bls.gov/LAU/

[4] The Kaiser Family Foundation and Health Research and Educational Trust (HRET), "Employer Health Benefits 2009 Annual Survey," (2009), http://ehbs.kff.org/

manufacturing declined 29%. During that same time, the percent of people working in construction jobs increased 13%. Between 2008 and 2009, both industries lost jobs although the decline was more precipitous for manufacturing (a 37% decrease) than for construction jobs (an 8.3% decrease). From 2009 to 2010, manufacturing leveled out with a slight (0.5%) decrease, while construction jobs decreased by 13.9%.[5]

(3) Shifts from full-time to part-time work.

- **Increases in the cost of ESI to employers**. The cost of ESI has increased, particularly relative to increases in workers' earnings. As a percent of total premiums paid, the employee portion has remained relatively constant at 17% for single coverage and 27% for family coverage. However, in terms of dollar amounts the employee must pay, there have been large increases; between 2000 and 2009 premiums for single and family coverage more than doubled—an increase of more than 100 %—from $28 to $65 per month for single coverage and from $135 to $293 for family coverage.[6] During this same time real median income has decreased from $52,500 in 2000 to $50,303 in 2008 (2000 dollars are adjusted and reported in 2008 dollars). Notably, the decline in real income between 2007 ($52,163 in 2008 dollars) and 2008—3.6%—is the largest one-year decline since 1967.[7] This suggests that ESI, when offered, is becoming less affordable for many people, particularly those with lower incomes.

Study Question 3 (*see page 13*) provides additional information on the impact of the CHIP program on the number of children covered by private insurance.

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

It is well documented that uninsured individuals are more likely to be hospitalized for preventable conditions and use emergency rooms (ERs) to receive needed care.[8] Therefore, if the preventable hospitalizations and ER utilization rates for the CHIP program population are similar to other insured populations and for MO HealthNet participants, we could infer that the program is having a positive effect on medical facilities and ERs (e.g., they have fewer avoidable admissions and there are fewer children using the ER when a visit to a physician might be more appropriate).

To answer this question the following indicators were examined:

- Frequency of preventable hospitalizations (hospitalizations are considered to be avoidable when the associated primary diagnosis is for a preventable or manageable illness); and
- ER visits.[9]

Utilization of these services was compared across three populations:

- Children eligible for medical assistance through the CHIP program;[10]
- Children otherwise eligible for medical assistance (MO HealthNet [Medicaid] children);[11] and

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[5]US Department of Labor, Bureau of Labor Statistics. *Regional and State Employment and Unemployment: June 2010*, US Department of Labor, Bureau of Labor Statistics. *Regional and State Employment and Unemployment: June 2009*. US Department of Labor, Bureau of Labor Statistics. *Regional and State Employment and Unemployment: June 2008*. US Department of Labor, *Bureau of Labor Statistics. Regional and State Employment and Unemployment: June 2007*. US Department of Labor, Bureau of Labor Statistics. *Regional and State Employment and Unemployment: June 2000*. Available on-line http://www.bls.gov/LAU/

[6]The Kaiser Family Foundation and Health Research and Educational Trust (HRET), "Employer Health Benefits 2009 Annual Survey," (2009), http://ehbs.kff.org/

[7] Shierholz, Heidi (September 10, 2009): *"New 2008 Poverty, Income Data Reveal Only Tip of the Recession Iceberg."* Washington, DC: Economic Policy Institute. Available at: http://www.epi.org

[8] Kaiser Commission on Medicaid and the Uninsured, "The Uninsured and Their Access to Health Care." October 2007.

[9] From "Missouri Monthly Vital Statistics", 29(4), 1995, State Center for Health Statistics, Missouri Dept. of Health. The diagnoses associated with avoidable hospitalizations in this study are: Angina; Asthma; Bacterial Pneumonia; Cellulites; Chronic Obstructive Pulmonary Disease; Congenital Syphilis; Congestive Heart Failure; Dehydration; Dental Conditions; Diabetes; Epilepsy; Failure to Thrive; Gastroenteritis; Hypertension; Hypoglycemia; Kidney or Urinary Infection; Nutritional Deficiencies; Pelvic Inflammatory Disease; Severe Ear, Nose or Throat infection; Tuberculosis.

[10] The SCHIP program group includes children with eligibility codes 71, 72, 73, 74, and 75.

[11] The Medicaid group includes children with eligibility codes 06 to 70, 87, and 88. Note that this cohort includes children in foster care, the juvenile courts, group homes, and in the care of the Division of Youth Services. It also includes a relatively small number who are blind or have been determined to be disabled.

- Children not eligible for any publicly funded medical assistance (Non-MO HealthNet children); which consists primarily of individuals with commercial, i.e., private health insurance.

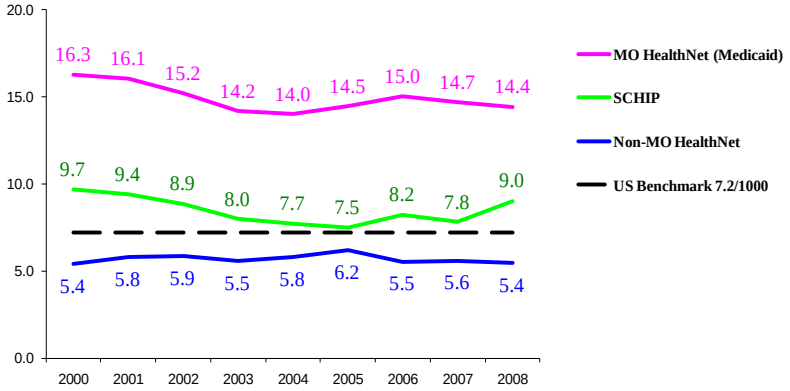
The American Academy of Pediatrics recommends the rate of hospitalizations for ambulatory-sensitive conditions (asthma, diabetes, gastroenteritis, etc.) as an indicator for evaluating the impact of CHIP programs. High rates of preventable hospitalizations may indicate lack of access to or insufficient utilization of primary care services. Consistent with this premise, for calendar years 2000 through 2008, we examined rates of preventable hospitalizations, preventable hospitalizations due to asthma, ER visits and ER asthma visits. All rates are measured as the incidence per 1,000 population. DSS and DHSS data were used to compute these indicators.

Preventable Hospitalizations

- Since 2000, preventable hospitalizations for the CHIP population have decreased by 7.2%. During this time preventable hospitalizations for the MO HealthNet (Medicaid) population decreased over 11% while they remained constant for the non-MO HealthNet group.[12]

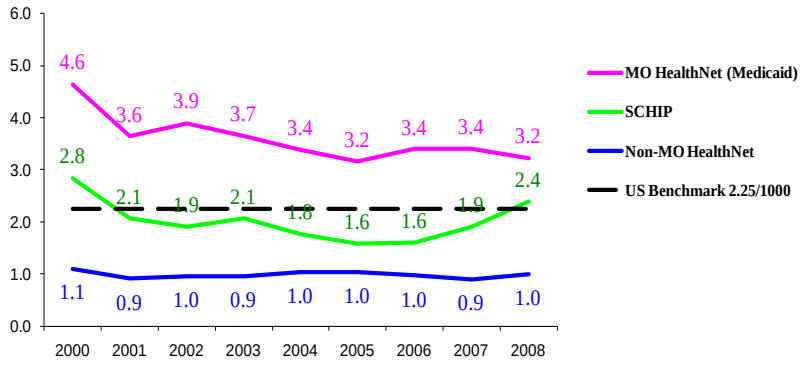
- In 2008, the CHIP group rate of 9.0 was 25% higher than the national benchmark of 7.2.

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



Preventable Asthma Hospitalization

Preventable Asthma Hospitalizations Per 1,000 Missouri Children



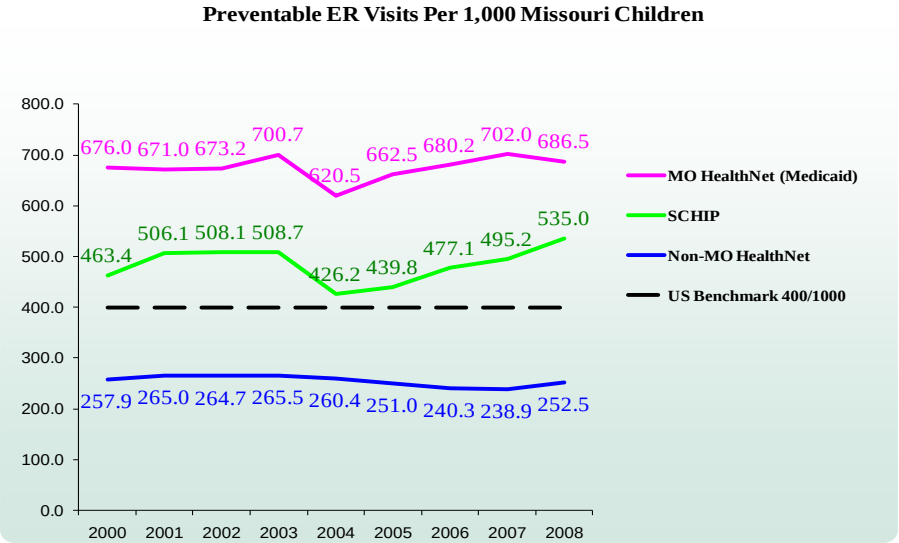
- Since 2000, preventable hospitalizations due to asthma for the CHIP population have decreased by slightly more than 14%. During this time preventable hospitalizations due to asthma for the MO HealthNet (Medicaid) population decreased by 30% and by 10% for the non-MO HealthNet population.

- In 2008, the CHIP population rate of 2.4 was 6.7% higher than the national benchmark rate of 2.25.

[12] Data in the figures may not compute to the summary percentages in the text due to rounding.

ER Visits

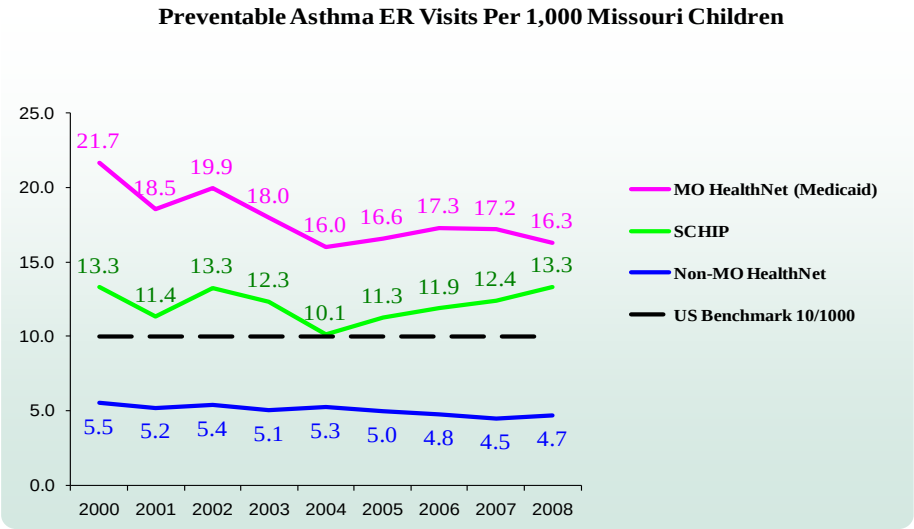
- Since 2000, ER visits for the CHIP population have increased by 15.4%. During this time, ER visits for the MO HealthNet (Medicaid) population also increased--by 1.5% while ER visits for the non-MO HealthNet population decreased by more than 2%.



- In 2008, the CHIP population ER visit rate of 535 was within 34% of the national benchmark rate of 400.

Asthma ER Visits

- Since 2000, ER visits due to asthma have returned to 13.3 for the CHIP population. ER visits decreased by more than 24% for the MO HealthNet (Medicaid) population and by 14.5% for the non-MO HealthNet population.



- In 2008, the CHIP population rate of 13.3 was within 33% of the national benchmark of 10.

The data show a recent increase in all four indicators for the CHIP population, in contrast to the other populations compared. While this reflects an undesirable trend, causes cannot be attributed without further study and conclusions without such study would be premature. A more detailed examination of the encounter data for ER visits and hospitalizations may be warranted.

A summary of the indicators discussed is presented in the following table. Detailed data are included as Appendix I.

Summary of 2008 Indicators for Missouri Children under 19

	CHIP	MO HealthNet (Medicaid)	Non – MO HealthNet (non-Medicaid)	Benchmark
Preventable hospitalizations	9.0	14.4	5.4	7.2
Preventable asthma hospitalizations	2.4	3.2	1.0	2.25
ER visits	535.0	686.5	252.5	400.0
ER asthma visits	13.3	16.3	4.7	10.0

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?

The CHIP population is about 1% of the entire state population. The ability of this population to affect health care outcomes of Missourians as a whole would be difficult to discern. What we do know is that in 2008 6.8% of Missouri's children were uninsured, which ranked the state 19th in the nation.[13] Without the CHIP program approximately 65,000 additional children would most likely be uninsured, raising the state's percentage of uninsured children to 11.4% and lowering our rank to 42nd.

It is important for children to have health insurance. Below are just a few examples of what it means to a child to have health insurance coverage when compared to children without health insurance:[14]

- Insured children are six times more likely to have a usual site of care.
- Insured children are twice as likely to see a physician during the year.
- 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 are more than twice as likely to receive treatment for recurring ear infections.
- 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.

[13] U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements, Table HIO-5. Health Insurance Coverage Status and Type of Coverage by State and Age for All People: 2008, available at: http://www.census.gov/hhes/www/cpstables/032009/health/h05_000.htm.
[14] Kaiser Commission – Children's Health – Why Health Insurance Matters, May 2002.

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

The CHIP program is funded with state (general revenue), federal and other dollars.[15] Actual expenditures for FY 2010 are provided below.

CHIP Expenditures

	FY 2010 Actual
State (General Revenue)	$21,876,116
Federal	$112,872,746
Other	$15,257,539
Total	$150,006,401

6. What is the methodology used to determine availability for the purpose of enrollment, as established by rule?

13 CSR 70-4.080, State Children's Health Insurance Program, sections (2), (3), (5), (6) and (11) 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. Children with special health care needs who do not have access to affordable employer-subsidized health care insurance are exempt from the six month penalty for loss of insurance coverage without good cause and the 30-day waiting period for children in families with income of more than 225% of FPL, as long as the child meets all other qualifications for eligibility.
- 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 later. The thirty (30) day waiting period is waived for special needs children, but the premium must still be received.
- 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.

[15] Pharmacy Rebates Fund, Federal Reimbursement Allowance Fund, Pharmacy Reimbursement Allowance Fund, Health Initiatives Fund, Premium Fund and Medicaid Managed Care Organization Reimbursement Allowance Fund were available in FY 2010.

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 to14% of the monthly income between 225% and 300% of FPL for the family size plus the premium calculated in categories 1 and 2.

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Study Question 3: Does the CHIP program have any negative impact on the number of children covered by private insurance as a result of expanding health care coverage to children with a gross family income above 185% of the federal poverty level (FPL)?

This question is directed at the issue of crowd out, defined as a shift from private health insurance coverage to public coverage. This generally occurs in one of three ways:

- An individual drops private coverage for public coverage; or
- An enrollee with public coverage refuses an offer of private coverage (does not *take-up* the coverage); or
- Employers take actions they would not have taken in the absence of public coverage which have the effect of forcing or encouraging their employees to drop private coverage and shift to public coverage (for example, they increase premium contributions or no longer offer coverage at all).[16]

Crowd out does not occur when people, who would otherwise have become uninsured, enroll in a public program.[17]

Measuring Crowd Out

The existence and extent of crowd out could be determined by analyzing the mix of private and public coverage before and after a public program expansion. If all else is equal, a decrease in enrollment in private insurance occurring in the same timeframe as an increase in public coverage is evidence of crowd out. As discussed in Study Question 2, Part 2, private coverage of children in Missouri actually rose slightly in the last year.

The overall trend still indicates that private coverage has dropped over the 9 year period studied, but there are factors that would explain this outside of the public expansion. Over the last several years there has been a shift from jobs that traditionally offered health coverage (i.e., manufacturing) to jobs not offering coverage (i.e., construction) and decreases in the percentage of firms offering employer-sponsored insurance (ESI) and increases in the cost of ESI. In addition, the unemployment rate has remained at a very high 9.3% in June 2010.

For crowd out to occur employers must take actions to steer employees away from ESI coverage and towards public coverage. This is difficult to determine because employers are experiencing annual increases in their costs related to providing health insurance and might increase employee contributions and/or stop providing coverage regardless of the existence of expanded public programs.

Employees contribute to crowd out by choosing not to take up the ESI coverage because enrolling in a publicly funded program will save them money. Again, determining what motivates people to act in certain ways is not easy. For example, employees may not take up dependent coverage because of increasing premiums and the existence of an expanded public program does not necessarily play into their decision.

Because of the inherent challenges in quantifying crowd out, the importance of the issue to policymakers, and ongoing health reform activities much research has been done in this area. Still there is no consensus on the prevalence of crowd out. For example:

- A 2004 synthesis, compiled by the Robert Wood Johnson Foundation, summarized the findings of 25 different models developed to measure the effects of crowd out. The crowd out estimates from these models ranged from no evidence of crowd out to upwards of 75% (not all of the findings were statistically significant).[18] The huge range in these estimates is due to differences in

[16] 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.
[17] Davidson, Blewett & Call (June 2004).
[18] Davidson, Blewett & Call (June 2004).

the data (for example, the way it is collected); different assumptions in developing the model (for example, assumptions about how changes in the economy would affect private coverage); differences in the programs which have been studied (e.g., state differences or differences in income thresholds) and the inherent challenges in ascertaining the motivations of both employers and employees.

- In 2007, the Congressional Budget Office (CBO) estimated that among children there would be a reduction in private coverage of between a quarter and half of the increase in public coverage. Or, stated another way, for every 100 children who enroll in CHIP programs, there is a reduction of between 25 and 50 children who have private coverage.[19] It is worth noting, however, that in its estimates CBO defines crowd out to include all children who are uninsured when they enroll but whose families would—in the absence of CHIP or Medicaid—have purchased private coverage for their children in the future; CBO has not counted just those children who had private insurance that was dropped for public program coverage.[20]

- Finally, and most recently, the United States Government Accountability Office (GAO) examined the Centers for Medicare & Medicaid Services' (CMS) and states' efforts to minimize crowd-out to determine whether this is an area of concern.[21] They concluded in their February 2009 report to Congress that the data being collected is of limited use in assessing the extent to which crowd-out is a concern. In other words, there is not enough information to conclude that crowd-out is occurring at all and there certainly is not enough evidence to conclude that it is occurring at a rate high enough to warrant concern on the part of state and federal policy makers. As part of their report GAO did recommend that CMS act to "ensure that states (1) collect and report consistent information on the extent to which CHIP applicants have private insurance available to them and (2) take appropriate steps to determine whether available private health insurance is affordable for SCHIP applicants."

State Level Reports on Crowd Out

In addition to the general research on crowd out, CMS evaluations of crowd out in 16 states have found that:

- 8 states reported no evidence of crowd out;

- 5 states reported crowd out rates of less than five percent; and

- 3 states reported crowd out rates between 10 and 20 percent.[22]

The Congressionally mandated CHIP Evaluation of experiences in ten states determined that although 28 percent of new entrants had ESI in the six months prior to enrollment:

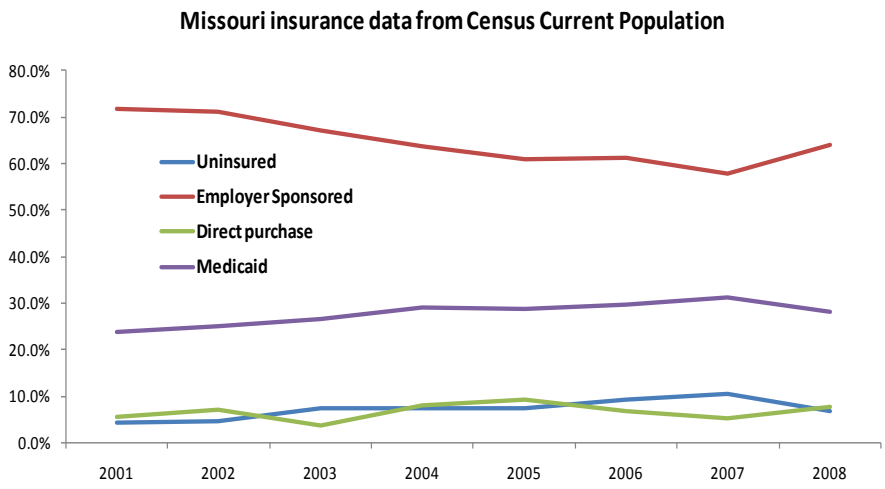
- 14 percent involuntarily lost coverage

- 8 percent found the employer coverage unaffordable; and

- Only 6 percent voluntarily dropped their ESI.[23]

[19] Congress of the United States, Congressional Budget Office, "The State Children's Health Insurance Program," May 2007.
[20] Ku, L. (September 27, 2007). "Crowd-Out is Not the Same as Voluntarily Dropping Private Health Insurance for Public Program Coverage," Center on Budget and Policy Priorities.
[21] United States Government Accountability Office, "Report to the Chairman, Committee on Finance, U.S. Senate: State Children's Health Insurance Program; CMS Should Improve Efforts to Assess whether SCHIP Is Substituting for Private Insurance." February 2009.
[22] Dubay, Lisa. (August 29, 2007). "Crowd-Out Under SCHIP: Looking Back and Moving Forward." Power Point Presentation Available at: http://www.allhealth.org/briefing_detail.asp?bi=112
[23] Ibid.

In Missouri, previous CMS-required evaluations on the CHIP program have concluded that, though there were potential indicators – the increase in CHIP program enrollment numbers concurrent with decreases in the current population survey reported private enrollment numbers – there was not enough evidence to support a conclusion that crowd out was occurring. That is, most likely, the changes in enrollment were due to economic conditions such as a reduction in the number of jobs that provide health insurance and increased cost shifting of health insurance premiums by employers to employees.[24]



The most recent Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC) published by the U.S. Census Bureau show that in Missouri the percentage of children with private insurance actually went up in 2008, while the country as a whole continued to lose ground.[25]

Summary and Conclusions

Given the inconclusive nature of all research done in the area of crowd out and the paucity of available and useful data (as indicated in the GAO report) it is impossible to state with certainty that crowd out is occurring, and the increase in ESI for children in Missouri in 2008 further supports the premise that it is not. It is important to note that the General Assembly's action to extend premium and affordability requirements to a greater portion of the Missouri's CHIP population has provided strong mechanisms to address crowd out.

[24] Alicia Smith & Associates, LLC. (2005). "Evaluation of the Missouri Section 1115 Waiver."
[25] U.S. Census Bureau, 2009 Annual Social and Economic (ASEC) Supplement

Appendix I

APPENDIX I:
Hospitalization and ER Utilization Rates by Payer/Program (2000-2008)
Review period: January 1, 2009 - December 31, 2009
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 SCHIP	5.2	1.8	3.9	1.7	**2.8**
Benchmark = 2.25/1,000 pop.	2001 SCHIP	3.0	1.8	2.3	1.3	**2.1**
Healthy People 2000	2002 SCHIP	2.5	1.8	2.9	1.2	**1.9**
Ref. footnote in report.	2003 SCHIP	2.9	1.3	2.7	1.6	**2.1**
	2004 SCHIP	2.9	1.2	1.6	1.2	**1.8**
	2005 SCHIP	2.6	0.8	1.6	1.0	**1.6**
	2006 SCHIP	2.3	1.0	2.3	0.9	**1.6**
	2007 SCHIP	3.5	0.7	1.9	0.8	**1.9**
	2008 SCHIP	4.5	1.4	2.1	1.2	**2.4**
	Change from 2000 to 2008	**-13.2%**	**-19.2%**	**-46.3%**	**-26.5%**	**-15.8%**
	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**
	Change from 2000 to 2008	**7.4%**	**-18.4%**	**-35.5%**	**-21.5%**	**-9.3%**
	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	5.4	2.0	2.7	1.9	3.2
	Change from 2000 to 2008	**-29.4%**	**-42.0%**	**-39.5%**	**-28.9%**	**-30.5%**
Asthma ER visits age <19	2000 SCHIP	24.7	9.0	19.5	7.1	**13.3**
Benchmark = 10/1,000 pop.	2001 SCHIP	17.7	5.1	13.5	7.8	**11.4**
CDC NCHS Health E-Stats	2002 SCHIP	19.5	11.5	17.4	8.2	**13.3**
Ref. footnote in report.	2003 SCHIP	18.4	6.6	17.5	8.3	**12.3**
	2004 SCHIP	15.7	5.6	12.0	6.5	**10.1**
	2005 SCHIP	18.5	6.8	11.8	7.1	**11.3**
	2006 SCHIP	19.9	8.1	13.7	6.3	**11.9**
	2007 SCHIP	20.8	5.4	16.0	6.2	**12.4**
	2008 SCHIP	22.5	7.5	18.1	5.4	**13.3**
	Change from 2000 to 2008	**-9.3%**	**-16.7%**	**-7.1%**	**-23.7%**	**0.2%**
	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**
	Change from 2000 to 2008	**-18.0%**	**-10.2%**	**-24.8%**	**-5.5%**	**-15.5%**
	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
	Change from 2000 to 2008	**-25.5%**	**-28.3%**	**-34.1%**	**-25.0%**	**-24.9%**

APPENDIX I (continued):
Hospitalization and ER Utilization Rates by Payer/Program (2000-2008)
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 SCHIP	367.6	393.4	388.4	546.3	**463.4**
	2001 SCHIP	490.1	497.3	471.6	531.9	**506.1**
	2002 SCHIP	525.9	496.8	467.8	517.9	**508.1**
	2003 SCHIP	511.0	521.9	465.8	590.0	**508.7**
	2004 SCHIP	403.2	467.2	381.3	453.2	**426.2**
	2005 SCHIP	436.3	467.8	390.7	459.8	**439.8**
	2006 SCHIP	478.9	528.9	421.4	490.7	**477.1**
	2007 SCHIP	517.3	516.3	467.8	487.5	**495.2**
	2008 SCHIP	558.8	546.4	532.6	512.5	535.0
	Change from 2000 to 2008	**52.0%**	**38.9%**	**37.1%**	**-6.2%**	**15.5%**
	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	233.3	227.6	246.5	308.3	**252.5**
	Change from 2000 to 2008	**-11.0%**	**4.2%**	**-8.7%**	**20.1%**	**-2.1%**
	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	688.3	732.7	685.5	666.9	**686.5**
Preventable hospitalizations age <19	**Change from 2000 to 2008**	**-3.5%**	**7.5%**	**7.6%**	**1.5%**	**1.6%**
Benchmark = 7.2/1,000 pop.						
Kozak, Hall and Owings.	2000 SCHIP	10.5	8.0	9.5	9.8	**9.7**
Ref. footnote in report.	2001 SCHIP	9.9	8.8	6.7	10.5	**9.4**
	2002 SCHIP	6.8	9.2	8.9	10.0	**8.9**
	2003 SCHIP	6.7	6.6	8.2	9.9	**8.0**
	2004 SCHIP	7.0	7.0	6.9	8.8	**7.7**
	2005 SCHIP	7.5	6.4	6.2	8.4	**7.5**
	2006 SCHIP	8.2	8.1	6.3	9.2	**8.2**
	2007 SCHIP	8.7	6.3	7.7	7.7	**7.8**
	2008 SCHIP	11.0	8.6	7.2	8.6	9.0
	Change from 2000 to 2008	**4.7%**	**7.4%**	**-23.8%**	**-11.4%**	**-6.9%**
	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	6.1	5.8	4.1	5.4	**5.4**
	Change from 2000 to 2008	**10.5%**	**17.3%**	**-16.1%**	**-4.8%**	**1.2%**
	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	15.8	13.6	10.2	16.2	**14.4**
	Change from 2000 to 2008	**-11.3%**	**-9.5%**	**-24.4%**	**-2.4%**	**-11.3%**

APPENDIX II:

DMH-DSS Wrap-Around Service Codes and Titles

Review period: January 1, 2009 - December 31, 2009

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