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

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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 program, a Medicaid Section 1115 Healthcare Demonstration Waiver program (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 eligibility 60 days after the birth of their child. Implemented on September 1, 1998,[1] the 1115 Waiver had 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.

Over the years, changes made to the 1115 Waiver have focused coverage on children and uninsured women losing their eligibility 60 days after the birth of their child. Cost sharing has also changed. Early on, depending on the income level of a family a combination of co-pays and premiums or co-pays only were charged. Beginning September 2005, co-pays were eliminated in lieu of graduated premiums for all families with incomes greater than 150% of FPL.

Per the statute, this report focuses on three questions:

Study Question 1: What is the impact of the 1115 Waiver 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 1115 Waiver? 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 1115 Waiver 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)?

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

Throughout this report, we use the following terminology:

MO HealthNet or ***Medicaid*** refers to the Title XIX state plan Medicaid population.

1115 Waiver or (***SCHIP***) refers to targeted low-income children covered by the 1115 Waiver program.

Data Sources and Approach

Evaluation 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 1115 Waiver 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 an 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 for several reasons. First, this evaluation is for 12 months rather than the 18-month period of last year's report. Second, DMH requested a slight alteration to the definition of *wraparound* service. Third, while the structure of this analysis is similar to last year, the calculation of several of the denominators was modified. Specifically, the number of enrollee months was calculated in a different fashion to correct for data entry errors that were uncovered in the eligibility file. Therefore, it may be of limited value to make direct comparisons between the data reported.

Methodology for Data Analyses

DSS and DMH data on 1115 Waiver eligibility, MCO enrollment and wraparound service utilization beginning September 1, 2005, and ending August 31, 2006, were used in this analysis. There were 1,322 children in the 1115 Waiver population who received wraparound services during the study period. The group was further divided into 792 fee for service (FFS) participants and 530 managed care organization (MCO) participants. Of the 530 MCO participants, 279 who received services through both FFS and MCO were excluded. The table (page 4) shows utilization of wraparound services in total for the FFS population was 1.4 times greater than the MCO population. The pie charts (page 4) show the mix of services was also different between the two populations. Case management services accounted for 86% of the services utilized by the FFS population, while amounting to just 56% of the MCO population. Conversely, family assistance services amount to 25% of the MCO group and just 8% of the FFS group.

Wraparound Service Utilization of 1115 Waiver Children by Service

MCO

Service Type	Quantity	Percent	Util. Rate (Avg. Svcs./Child)
Case Management (Targeted)	944	24%	3.8
Case Management (Other)	1,294	32%	5.2
Family Assistance	1,017	25%	4.1
Family Support	136	3%	0.5
Respite	510	13%	2.0
Wraparound services	118	3%	0.5
Total	**4,019**	**100%**	**16.1**

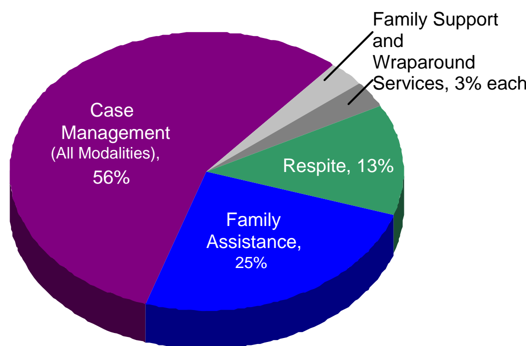
FFS

Service Type	Quantity	Percent	Util. Rate (Avg. Svcs./Child)
Case Management (Targeted)	5,943	33%	7.5
Case Management (Other)	9,734	53%	12.3
Family Assistance	1,485	8%	1.9
Family Support	12	0%	0.0
Respite	955	5%	1.2
Wraparound services	129	1%	0.2
Total	**18,258**	**100%**	**23.1**

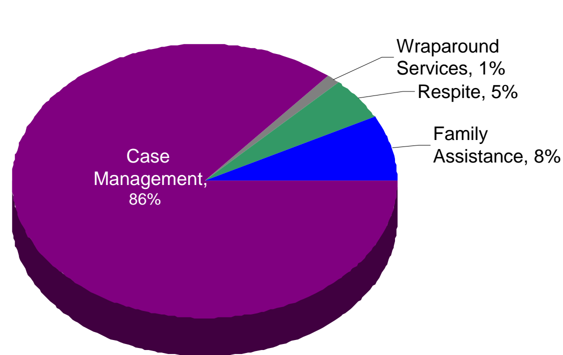
1.4 times the utilization rate for MCO

Source: Department of Social Services and Department of Mental Health

Service Usage Among MCO Participants



Service Usage by FFS Participants



Note: Case Management, in the above graphs, includes targeted case management. Respite includes independent and youth respite care.

These statistics alone are not conclusive evidence of an actual disparity, particularly without an analysis of the populations' similarities, 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) than a rural area (where there is no managed care).

These data demonstrate that 1115 Waiver children with SED are receiving certain wraparound services, particularly case management and family assistance services. However, it appears that relatively few families are accessing respite or other wraparound services. This is consistent with findings in prior years.

Study Question 2: What are the overall effects of the 1115 waiver expansion?

MO HealthNet for Kids (SCHIP) Participants by Premium and Non-Premium

	Up to 150% FPL (non-premium)	Above 150% to 300% FPL (premium)	Total
Dec-2006	44,733	21,050	65,783
Jan-2007	44,953	21,104	66,057
Feb-2007	44,919	21,026	65,945
Mar-2007	45,302	20,851	66,153
Apr-2007	42,492	19,554	62,046
May-2007	42,429	19,124	61,553
Jun-2007	42,625	18,507	61,132
Jul-2007	42,093	17,772	59,865
Aug-2007	41,014	17,756	58,770
Sep-2007	40,546	18,324	58,870
Oct-2007	40,197	18,232	58,429
Nov-2007	41,419	17,869	59,284

Source: Department of Social Services, Monthly Management Reports

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

   For December 2006-November 2007, the most recent year for which data is available, 1115 Waiver enrollment ranged from 66,153 in May 2007 to 58,429 in October 2007 (*See table, right*).

2. ***What is the effect of the 1115 Waiver expansion program on the number of children covered by private insurers?***

   Among those children who do have insurance, there has been redistribution over the past seven to eight years by type of coverage both in Missouri and in the nation as a whole. As discussed in previous evaluations, there has been an overall decline in employer sponsored insurance (ESI). However, it is not evident that the 1115 Waiver has caused these reductions. Notably, the rate of ESI is dropping nationwide. Researchers and policy analysts attribute these declines to several factors:

- ***A shift from jobs with benefits – 69% in 2000 to 60% in 2007.***[2] 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 are occurring. For example, between January 2000 and August 2007, people working in jobs classified as manufacturing declined 19.6%. During that same time, the percent of people working in construction jobs increased 8.3%.[3]

  (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 16% for single coverage and 28% for family coverage. However, in terms of dollar amounts the employee must pay, there have been large increases. Between 1999 and 2007 premiums for single and family coverage increased by more than 110%.[2] Nationally, during this same time, median income increased less than 20%.[4] This suggests that ESI, when offered, is becoming less affordable for many people, particularly those with lower incomes.

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[2] The Kaiser Family Foundation and Health Research and Educational Trust (HRET), "Employer Health Benefits 2007 Annual Survey," (2007), http://www.kff.org/insurance/7672/upload/EHBS-2007-Full-Report-PDF.pdf.
[3] US Department of Labor, Bureau of Labor Statistics, State and Area Employment, Hours and Earnings for Missouri, http://data.bls.gov/cgi-bin/surveymost?sm+29
[4] U.S. Census Bureau, Median Household Income by State: 1984 to 2006, www.census.gov/hhes/www/income/histinc/h08.html

Study Question 3 (*see page 11*) provides additional information on the impact of the 1115 Waiver on the number of children covered by private insurance.

3. What is the effect of the 1115 Waiver expansion 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.[5] Therefore, if the preventable hospitalizations and ER utilization rates for the 1115 Waiver 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.[6]

Utilization of these services was compared across three populations:

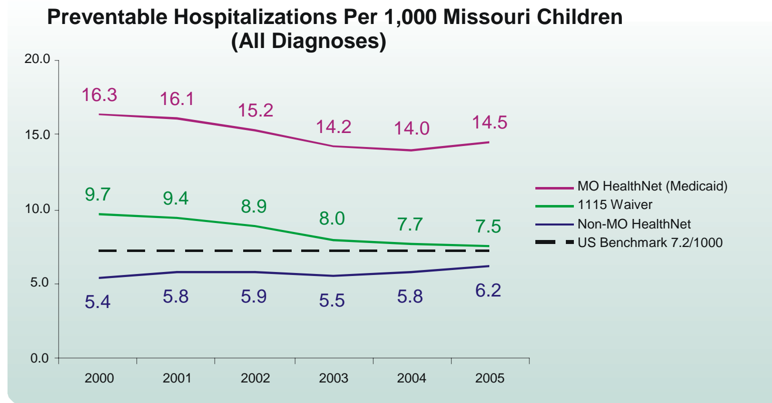
- Children eligible for medical assistance under 1115 Waiver;[7]
- Children otherwise eligible for medical assistance (MO HealthNet [Medicaid] children);[8] and,
- Children not eligible for any publicly funded medical assistance (Non-MO HealthNet children); which consists primarily of individuals with commercial, i.e., private health insurance.

DSS and DHSS data were used to compute these indicators.

[5] Kaiser Commission on Medicaid and the Uninsured, "*The Uninsured and Their Access to Health Care*." October 2007.
[6] 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.
[7] The 1115 Waiver group includes children with eligibility codes 71, 72, 73, 74, and 75.
[8] 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

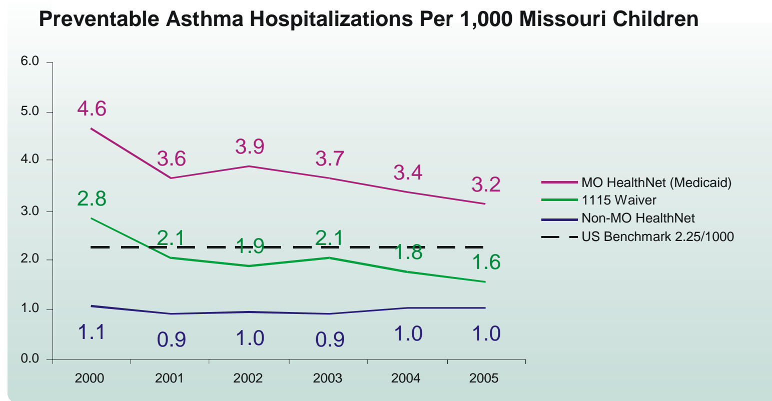
The American Academy of Pediatrics recommends the rate of hospitalizations for ambulatory-sensitive conditions (asthma, diabetes, gastroenteritis, etc.) as an indicator for evaluating the impact of SCHIP programs. High rates of preventable hospitalizations may indicate lack of access to or insufficient utilization of primary care services. Consistent with this premise, for calendar years 2000 through 2005, we examined preventable hospitalizations, preventable hospitalizations due to asthma, ER visits and ER asthma visits.

Preventable Hospitalizations



- Since 2000, preventable hospitalizations for the 1115 Waiver population have decreased by nearly 23%. During this time, MO HealthNet [Medicaid] decreased by 11% while non-MO HealthNet increased by nearly 15%.
- By 2005, the 1115 Waiver group is approximately within 4% of the national benchmark.

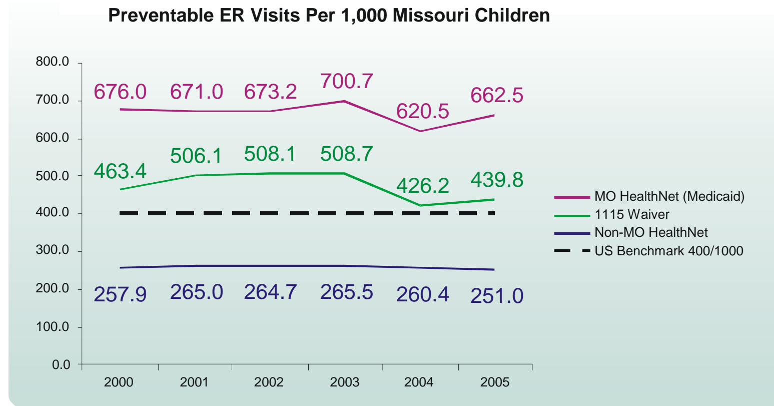
Preventable Asthma Hospitalizations



- Since 2000, the 1115 Waiver population has decreased preventable hospitalizations due to asthma by more than 42%. During that time MO HealthNet (Medicaid) decreased by 30% and non-MO HealthNet decreased by 9%.
- By 2005, the 1115 Waiver population was nearly 30% below the national benchmark.

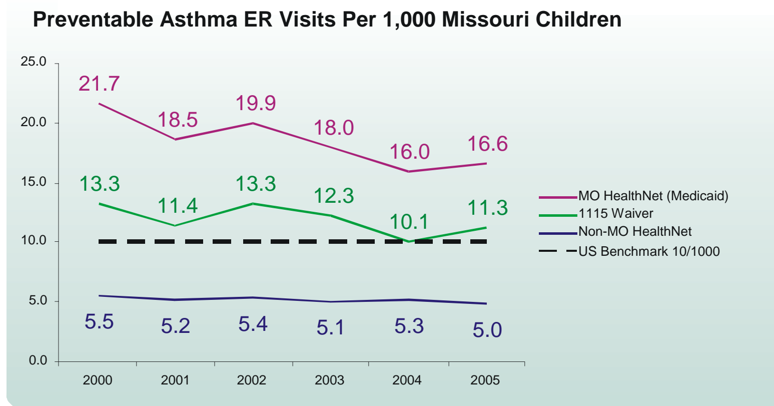
ER Visits

- Since 2000, the 1115 Waiver population has decreased ER visits by more than 5%, MO HealthNet [Medicaid] decreased by 2% and non-MO HealthNet decreased by nearly 3%.
- By 2005, the 1115 Waiver population was within 10% of the national benchmark.



ER Asthma Visits

- Since 2005, the 1115 Waiver population decreased ER visits due to asthma by more than 15%, MO HealthNet [Medicaid] decreased by more than 23% and non-MO HealthNet decreased by 9%
- By 2005, the 1115 Waiver group was within 13% of the national benchmark.



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

Summary of 2005 Indicators for Missouri Children under 19

	1115 Waiver	MO HealthNet (Medicaid)	Non-MO HealthNet (non-Medicaid)	Benchmark
Preventable hospitalizations	7.5	14.5	6.2	7.2
Preventable asthma hospitalizations	1.6	3.2	1.0	2.25
ER visits	439.8	662.5	251.0	400.0
ER asthma visits	11.3	16.6	5.0	10.0

Data sources: Department of Health and Senior Services; Benchmarks: 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 1115 Waiver expansion program on the health care of Missouri residents?

The 1115 Waiver 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 8.7% of Missouri's children are uninsured, which ranks us 23rd in the nation. Without the 1115 Waiver over 59,000 additional children would most likely be uninsured, raising the state's percentage of uninsured to 12.7% and lowering our rank to 39th.

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:[9]

- 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.

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

The 1115 Waiver program is funded with state (general revenue), federal and other dollars.[10] Actual expenditures for 2007 are provided below.

1115 Waiver Expenditures

	FY 2007 Actual
State (General Revenue)	$23,027,183
Federal	$81,265,600
Other	$6,327,172
Total	$110,619,955

[9] Kaiser Commission – Children's Health – Why Health Insurance Matters, May 2002
[10] 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 2007.

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 greater than 150% of FPL:

- Children must not have health insurance for the 6 months prior to the application.
- If health insurance was dropped within the 6 months prior to application, prospective participants must wait 6 months after coverage was dropped to be eligible.
- 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 greater than 150% up to and including 225% of FPL are eligible once a premium has been received.
- Children in families with gross incomes greater than 225% and up to 300% of FPL are eligible 30 calendar days after the receipt of the application if the premium has been received.
- Premiums must be paid prior to delivery of service.

How are premiums set?		
Income Category	**Monthly Premium Calculation**	**Maximum Premium Allowed**
(1) Above 150% up to and including 185% FPL	Sets a flat amount (depending on family size) based on the difference between 185% and 150% times 4%	1% of family's gross income
(2) Above 185% and up to and including 225% FPL	Sets a flat amount (depending on family size) based on the difference between 225% and 185% times 8% plus premium calculated in category 1	3% of family's gross income
(3) Above 225% up to 300% FPL	Premium equals the statewide average of a child/children premium required by the Missouri Consolidated Health Care Plan not to exceed 5% of family gross income	5% of family's gross income

Study Question 3: Does the 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).[11]

Crowd out does not occur when people, who would otherwise have become uninsured, enroll in a public program.[12]

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.

However, not all things are equal. As discussed in Study Question 2, Part 2, 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. 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, and the importance of the issue to policymakers, much research has been done in this area. Still there is no consensus on the prevalence of crowd out. 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).[13] The huge range in these estimates is due to differences in 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

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[11] 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.
[12] Davidson, Blewett & Call (June 2004).
[13]PT Davidson, Blewett & Call (June 2004).

differences in income thresholds) and the inherent challenges in ascertaining the motivations of both employers and employees. In summary, there is no consensus on the magnitude of crowd out.

Previous Reports on the 1115 Waiver

Previous reports have concluded that, though there were potential indicators – the increase in 1115 Waiver 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.[14]

From September 1, 2003, through August 31, 2004, interviewers spoke with 18 employers who provided general information about their companies and anecdotal information about their health insurance plans. In addition, two representatives of Chambers of Commerce were consulted about what they hear from their members regarding health insurance offerings and take up rates among employees.[15] Specifically, these individuals were asked:

- Whether they consider the existence of public coverage, in particular expanded public programs, in deciding whether to offer ESI and in developing their offerings;
- How many employees take up individual and dependent coverage; and,
- If they were aware of any employees who opted out of dependent coverage because they were aware of the MO HealthNet [Medicaid] program and were going to enroll their children in it.

None indicated they considered the existence of public programs, in particular the existence of the 1115 Waiver, in developing their ESI offerings; rather, the employers cited cost as the primary reason for changing their ESI offerings. Regarding take up rates of ESI and, in particular, take up rates for dependent coverage, many of the employers who were consulted said there were no noticeable changes over the last several years; several others said that none of their employees have children or that their children are covered under a spouse's ESI plan. When asked, specifically, whether they had heard of, or were aware of, employees who did not purchase ESI for their children because they planned to enroll their children in MO HealthNet [Medicaid] (including the 1115 Waiver program), seven employers and one Chamber of Commerce representative said, *yes*. However, the occurrence was uncommon – usually three to five of more than 100 employees per year. Two of these seven employers said that they have had employees return to them after declining coverage because the state had strongly encouraged them to take the ESI and not rely on the 1115 Waiver.[16]

While these anecdotes suggested there might have been some crowd out, there were other factors playing into these decisions. For example, a couple of employers suggested that some of these employees might have declined coverage even in the absence of the 1115 Waiver because they could not afford the premiums. In this scenario, these children would likely have become uninsured. Another employer indicated that due to their 90-day waiting period and high turnover rates (100%) many employees never become eligible for ESI. There is no crowd out in this scenario because the employees did not select the 1115 Waiver program in lieu of ESI, rather, as with above, in the absence of the 1115 Waiver their children would likely be uninsured.

[14] Alicia Smith & Associates, LLC. (2005)
[15] Ibid
[16] Ibid

MoHealthNet for kids

Summary and Conclusions

Given the inconclusive nature of all research done in the area of crowd out, including but not limited to the most recent activities, it is difficult to state with certainty that crowd out is occurring. 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 SCHIP population has provided mechanisms to address crowd out.

Appendix I

Hospitalization and ER Utilization Rates by Payer/Program (2000-2005)
Review period: September 1, 2005-August 31, 2006
Data source: Missouri Department of Health and Senior Services (DHSS)

	Cal. Year / MO HealthNet Region:	Rate: Eastern	Central	Western	Other	State
Asthma hospitalizations age <19						
Benchmark = 2.25/1,000 pop.	2000 1115 Waiver	5.2	1.8	3.9	1.7	**2.8**
Healthy People 2000	2001 1115 Waiver	3.0	1.8	2.3	1.3	**2.1**
Ref. footnote in report.	2002 1115 Waiver	2.5	1.8	2.9	1.2	**1.9**
	2003 1115 Waiver	2.9	1.3	2.7	1.6	**2.1**
	2004 1115 Waiver	2.9	1.2	1.6	1.2	**1.8**
	2005 1115 Waiver	2.6	0.8	1.6	1.0	**1.6**
	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**
	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**
Asthma ER visits age <19						
Benchmark = 10/1,000 pop.	2000 1115 Waiver	24.7	9.0	19.5	7.1	**13.3**
CDC NCHS Health E-Stats	2001 1115 Waiver	17.7	5.1	13.5	7.8	**11.4**
Ref. footnote in report.	2002 1115 Waiver	19.5	11.5	17.4	8.2	**13.3**
	2003 1115 Waiver	18.4	6.6	17.5	8.3	**12.3**
	2004 1115 Waiver	15.7	5.6	12.0	6.5	**10.1**
	2005 1115 Waiver	18.5	6.8	11.8	7.1	**11.3**
	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**
	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**

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

2000	1115 Waiver	367.6	393.4	388.4	546.3	**463.4**
2001	1115 Waiver	490.1	497.3	471.6	531.9	**506.1**
2002	1115 Waiver	525.9	496.8	467.8	517.9	**508.1**
2003	1115 Waiver	511.0	521.9	465.8	590.0	**508.7**
2004	1115 Waiver	403.2	467.2	381.3	453.2	**426.2**
2005	1115 Waiver	436.3	467.8	390.7	459.8	**439.8**
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**
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**

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

2000	1115 Waiver	10.5	8.0	9.5	9.8	**9.7**
2001	1115 Waiver	9.9	8.8	6.7	10.5	**9.4**
2002	1115 Waiver	6.8	9.2	8.9	10.0	**8.9**
2003	1115 Waiver	6.7	6.6	8.2	9.9	**8.0**
2004	1115 Waiver	7.0	7.0	6.9	8.8	**7.7**
2005	1115 Waiver	7.5	6.4	6.2	8.4	**7.5**
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**
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**