State of Missouri
Department of
Social Services
Division of Medical
Services

E V A L U A T I O N

O F T H E

M I S S O U R I

S E C T I O N 1 1 1 5

W A I V E R

Review Period: September 1, 2004 – August 31, 2005

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TABLE OF CONTENTS

INTRODUCTION AND SCOPE OF THE EVALUATION

This report constitutes the seventh evaluation of the Missouri Medicaid Section 1115 Healthcare Demonstration Waiver program (1115 Waiver) and covers the period from September 1, 2004 through August 31, 2005. The 1115 Waiver, known as Managed Care Plus (MC+), expanded Medicaid 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. Implemented on September 1, 1998[1], the original goals of the 1115 Waiver were to:

- reduce the number of people in Missouri without health insurance coverage;
- increase the number of children, youth, and families in Missouri who have medical insurance coverage;
- improve the health of Missouri's medically uninsured population, and
- demonstrate that not providing (non-emergency medical transportation) NEMT and requiring cost sharing will not negatively impact access to medical coverage or an individual's health.

Over the last several years, changes made to the 1115 Waiver have left coverage only to children and uninsured women losing their Medicaid eligibility 60 days after the birth of their child. Cost sharing for children has increased over the years with premium responsibility being applied to more families. Coverage to uninsured women losing their Medicaid eligibility 60 days after the birth of their child was reduced from two years to one year. Coverage to the adult populations (adults leaving welfare for work, uninsured custodial parents, uninsured non-custodial parents) has been eliminated over the years. Adults leaving welfare for work was the last group to be eliminated; their coverage terminated the beginning of State Fiscal Year 2006.

This evaluation is being completed in accordance with the requirements of Missouri Senate Bill 632 and the Centers for Medicare & Medicaid Services (CMS). This report covers the evaluation period September 1, 2004 through August 31, 2005, and addresses the following questions:

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

- **RESEARCH QUESTION 1:** Has the 1115 Waiver expansion provided health insurance coverage to children and families who were previously uninsured?

- **RESEARCH QUESTION 2:** Has the 1115 Waiver expansion improved the health of Missouri children and families?

- **RESEARCH QUESTION 3:** What is the impact of the 1115 Waiver on providing a comprehensive array of community based wraparound services for Seriously Emotionally Disturbed Children (SED) and children affected by substance abuse?

- **RESEARCH QUESTION 4:** What is the effect of the 1115 Waiver on the number of children covered by private insurers? Does the 1115 Waiver expansion to cover children with a gross family income above 185% FPL have any negative effect on these numbers?

This report also examines the "Health Care for the Indigent of St. Louis" amendment (The "St. Louis Amendment") to the 1115 waiver. The St. Louis Amendment authorizes the use of a limited portion of Disproportionate Share Hospital expenditures to be used for two purposes: (1) to transition Connect Care, a public-private hospital in St. Louis, from an inpatient facility to an outpatient facility; and (2) to enable the St. Louis region to transition its "safety net" system of care for the medically indigent to a viable, self-sustaining model. The related research question is:

- **RESEARCH QUESTION 5:** Has the 1115 Waiver Amendment improved the health of the indigent of St. Louis City?

During this evaluation we found that the 1115 Waiver:

Increased Rates of Insured Missourians. The average rate of uninsured is lower during the six-year period following the waiver's implementation than it was during the six-year period preceding its implementation. Moreover, since the implementation of the 1115 Waiver rates of uninsured persons in Missouri have been lower than national rates for both children and adults. However, this year's

evaluation shows that the rate of uninsured children and adults is increasing in Missouri.

Improved Health of Missourians. Proxy indicators such as utilization of preventive and wellness services suggest that children enrolled in the 1115 Waiver are receiving these services, and at higher rates than Other Medicaid children are. Moreover, for children in the 1115 Waiver avoidable hospitalization rates have declined steadily since 2000.

Provided Wraparound Services to Children and Youth with Serious Emotional Disturbance (SED). Utilization data show that SED children are receiving wraparound services, particularly case management and family assistance services. Discussions with providers suggest that there are not access problems for case management but that there are provider shortages in other service areas, particularly respite, which impacts the availability of those services.

Had a Minimal Crowd-Out Effect. In this evaluation as well as in earlier evaluations, based on national studies and analysis of data, there was no conclusive evidence of crowd-out found.

Supported Access to Services by the Indigent in St. Louis. St. Louis ConnectCare has completed its transition to an outpatient system of care. ConnectCare utilization statistics demonstrate the access to services by the Indigent.

DATA SOURCES AND APPROACH

Our evaluation relies on the use of previously aggregated, readily available data supplied by the State of Missouri and obtained from other sources. A description of the major data sources and their uses is provided below.

Dataset/Report Name	Description
Current Population Survey/Annual Demographic Supplement – US Bureau of the Census	The Current Population Survey (CPS) is a monthly survey conducted by the Bureau of the Census for the Bureau of Labor Statistics. In March, a more comprehensive survey is conducted, which is referred to as the Annual Demographic Supplement (ADS). The CPS ADS provides national and statewide estimates of rates of insurance by type of coverage. Data from the CPS ADS was used to respond to Research Questions 1 and 4.
Health Status Indicator Rates – Missouri Department of Health and Senior Services, Community Health Information Management and Epidemiology (CHIME)	The Missouri Department of Health and Senior Services, CHIME unit provided data on several health status indicators for children, including avoidable hospitalizations, emergency department visits, asthma emergency department visits, and asthma hospitalizations. This data was used for the purpose of responding to Research Question 2.
St. Louis ConnectCare Utilization data	St. Louis ConnectCare provided utilization data by payer to assist with the evaluation of Research Question 5.
Monthly Management Report – Department of Social Services	The monthly management report provides point-in-time enrollment by month. This report was used to examine enrollment activity by eligibility group and region for the purpose of responding to Research Question 1.
Multiple Data Requests –	These are detailed in Appendix I. The data associated

Dataset/Report Name	Description
Division of Medical Services, Department of Social Services and the Department of Mental Health	with these requests was used in our response to Research Questions 2 and 3.

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

RESEARCH QUESTION 1: HAS THE MC+ EXPANSION PROVIDED HEALTH INSURANCE COVERAGE TO CHILDREN AND FAMILIES WHO WERE PREVIOUSLY UNINSURED?

Recent statistics show increases in the overall rates of uninsured in Missouri—from 12.8 percent to 14.4 percent, in the nation as a whole—from 17.6 percent to 17.8 percent, and in twenty-six other states between 2003 and 2004. On a positive note, Missouri's rate is lower than the national rate and, when broken down by state, is the 14th lowest. It is of concern, however, that the rate of increase is much greater in Missouri than the rate of increase nationally, 12.5 percent compared to 1.1 percent.[2]

Since 1999, the year the 1115 Waiver was fully implemented, Missouri's rate of uninsured has nearly doubled from 7.7 percent to 14.4 percent. By comparison the national rate has increased from 16.4 percent to 17.8 percent. While the increase in Missouri is troubling, particularly when compared to the slower rate of increase at the national level, it is notable that the average rate of uninsured during the six-year period since the 1115 Waiver's implementation—11.7 percent—is lower than during the six-year period prior to the 1115 Waiver's implementation (1993-1998) when the average rate of uninsured was 14.5 percent.[3] This lower average uninsured rate is a laudable achievement for Missouri, particularly in light of policy changes that reduced the original coverage levels available under the waiver and the start of an economic downturn in 2001.

National studies suggest that the increasing rate of uninsured individuals over the past several years is primarily a result of declining rates of people covered by employer-sponsored insurance (ESI).[4] At the national level, the percent of people with ESI has declined from 63.6 percent in 1999-2000 to 59.8 percent in 2003-2004, a 3.8 percentage point drop during this period. All but three states experienced a decline in ESI coverage

[2] U.S. Census Bureau, Current Population Survey/Annual Social and Economic Supplement, Historical Health Insurance Tables, Table HI-6. Health Insurance Coverage by State – People under 65: 1987 to 2004. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt6.html;

[3] U.S Census Bureau, Table HI-6.

[4] Holahan J, & Cook, A. (November 2005). "Changes in Health Insurance Coverage during the Economic Downturn: 2000-2004." *Health Affairs – Web Exclusive*. Available at: www.healthaffairs.org; Gould, E. (October 2005). *Prognosis worsens for workers' health care: Fourth consecutive year of decline in employer-provided health insurance*. Economic Policy Institute: EPI Issue Brief #167. Available at: http://www.epinet.org/briefingpapers/167/bp167.pdf

rates. Unfortunately, the data suggest that the problem of declining ESI coverage is particularly acute in Missouri. While Missouri's overall rate of ESI is in the middle of the range (the highest ESI rate was in New Hampshire—72.7 percent and the lowest was in New Mexico—49.6 percent), the rate of decline in Missouri was among the highest—in excess of 6.0 percentage points.[5]

These national level researchers (Holohan, Cook and Gould) have attributed the declining rate of ESI to factors such as:

- A loss of jobs: between 2000 and 2003 there was a decline of 2.6 million jobs, largely a result of an economic recession, followed by a period of very slow economic growth. Although there was a gain of 1.5 million jobs between 2003 and 2004 the gain does not offset the previous losses.[6] These job losses have resulted in an increase in the rate of uninsured; and
- A loss of jobs with benefits: since 2000, the percentage of firms offering ESI has dropped from 69 percent to 60 percent.[7] 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 employer-sponsored insurance to industries less likely to provide insurance (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), and (3) shifts from full-time to part-time work (only 28 percent of firms that offer ESI offer it to part-time workers).[8]

These factors certainly appear to be occurring in Missouri as well. Between 2000 and 2005 the unemployment rate in Missouri increased and, as with the rate of uninsured, Missouri is experiencing greater increases than the nation as a whole: Missouri's unemployment rate increased from 3.3 percent to 5.1 percent while the national rate

[5] Gould.
[6] Holahan and Cook.
[7] The Kaiser Family Foundation and Health Research and Educational Trust (HRET). (2005). Employer Health Benefits 2005 Annual Survey.
[8] Gould; Holahan and Cook; Kaiser Family Foundation and HRET.

increased from 4.0 percent to 5.1 percent.[9] There has also been a shift in the types of jobs during this time period. For example, in 2000, 402,000 people were working in jobs classified as manufacturing and in 2005 only 309,800 were.[10]

Other national studies have suggested that as the cost of ESI increases fewer employees elect to "take-up" or purchase it. And the cost of ESI has increased, particularly relative to increases in workers' earnings. As a percent of total premiums paid, the proportion for which the employee is responsible has remained relatively constant at 16 percent for single coverage and 26 percent for family coverage. However, in terms of dollar amounts which the employee must pay there have been large increases: from an average of $27 per month in 2000 to $51 per month in 2005 for single coverage and from $129 to $226 for family coverage.[11] These increases in costs are occurring concurrent with declines in median income and increases in the poverty rate both nationally and in Missouri. This suggests that ESI, when offered, is becoming less affordable for many people, particularly those with lower incomes.

Uninsured Children

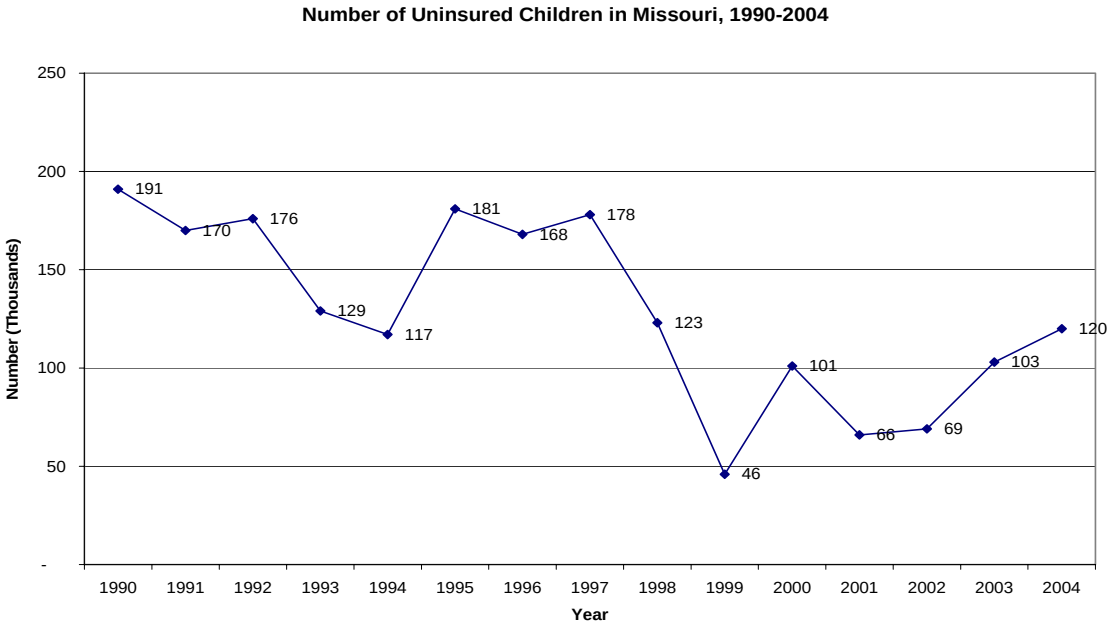
The recent increase in the overall rates of uninsured people in Missouri is, in part, driven by an increase in the number and rate of uninsured children—8.5 percent in 2004, up from 7.3 percent in 2003 (figures 1 and 2). Despite this increase, Missouri's rate is still about one-third less than the national average of 11.2 percent. In fact, had Missouri's rate been equal to the national average, there would have been an additional 38,000 uninsured children in the state. However, on a less positive note, the national rate of uninsured children is decreasing (despite the loss of ESI) and is at an all-time low while Missouri's rate is increasing. Moreover, if the rate of increase this year—16 percent—continues in 2006 the rate of uninsured children will be higher in Missouri than in the nation as a whole.

[9] U.S. Department of Labor. (April 10, 2006). *Unemployment Rates for States*. Available at http://www.bls.gov/lau

[10] U.S. Department of Labor. (April 21, 2006). *Regional and State Employment and Unemployment: March 2006*; U.S. Department of Labor. (April 21, 2000). *Regional and State Employment and Unemployment: March 2000*. Available at: http://www.bls.gov/lau

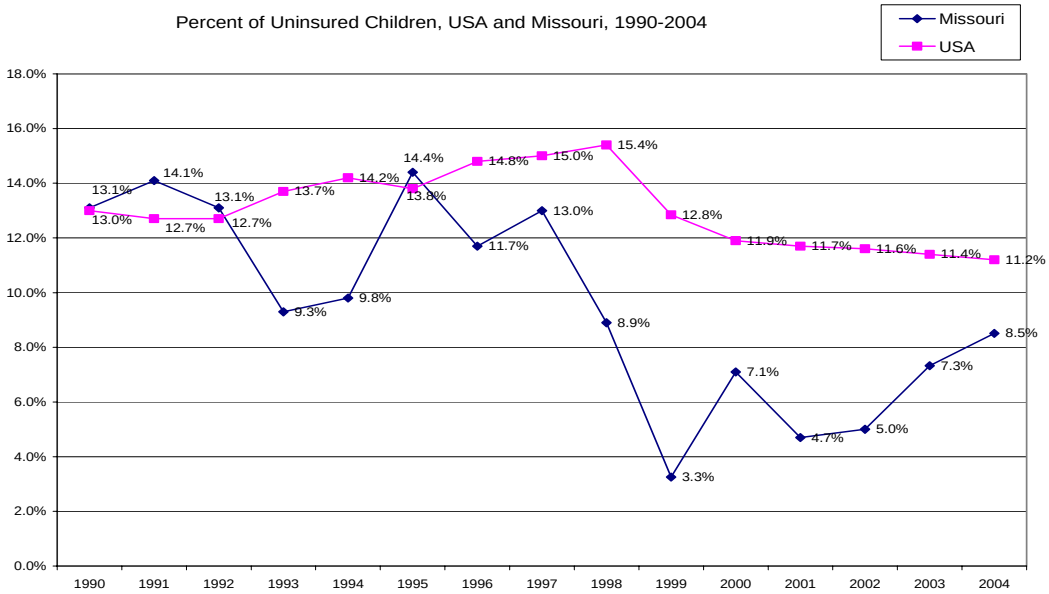
[11] Kaiser Family Foundation and HRET.

Figure 1



Source: U.S. Census Bureau, Historical Health Insurance Tables, Table HI-5. Health Insurance Coverage by State -- Children Under 18: 1990 to 2004. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt5.html.

Figure 2



Source: U.S. Census Bureau, Historical Health Insurance Tables, Table HI-5. Health Insurance Coverage by State -- Children Under 18: 1990 to 2004. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt5.html.

Despite the increases in the rate of children without health insurance, analysis of the six-year 1115 Waiver period indicates that the state has made great strides in reducing the number of uninsured children. Specifically, the average rate during the six years prior to full implementation of the 1115 Waiver (1993-1998) is nearly twice as high—11.2 percent—as the average rate during the six year period since implementation of the 1115 Waiver (1999-2004)—6.3 percent.[12] This lower average rate is in part a result of the 1115 Waiver, which has clearly provided insurance coverage to children who were either previously uninsured or had lost other coverage and would be uninsured in the absence of the 1115 Waiver. Stakeholders interviewed for a previous evaluation (September 1, 2002 – August 31, 2003) generally recognize the state's success in expanding health insurance to children as one of the greatest achievements of the 1115 Waiver.

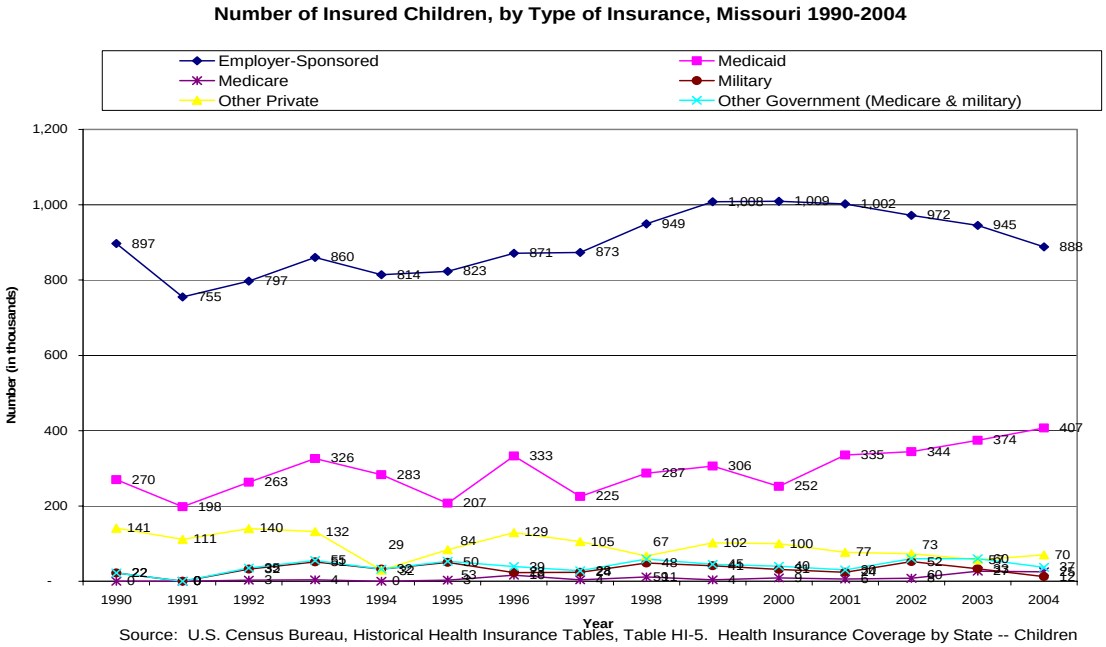
Insured Children - Types of Coverage

Among those children who do have insurance, there has been a re-distribution by type of coverage both in Missouri and in the nation as a whole. As discussed previously, there has been a decline in ESI coverage. This phenomena certainly holds true for Missouri children where, between 2003 and 2004, the number of children in Missouri with ESI declined by 6.0 percent (in terms of rate, in 2003, 72.5 percent of children had ESI and in 2004 this number had fallen to 68.8 percent). Longer-term analysis reveals a similar trend: since 2000 there has been a decline in both the number and the percent of children in Missouri who have ESI. During this same period, the number and percent of children in Missouri who have Medicaid coverage has also increased, which mimics the national trend (figure 3).

These data suggest that, because the increase in Medicaid coverage occurred as the number of children covered with ESI and other private insurance decreased, Medicaid continues to expand health coverage to children who were either previously uninsured or would be due to loss of employer-sponsored coverage.

[12] U.S. Census Bureau, Current Population Survey/Annual Social and Economic Supplement, Historical Health Insurance Tables, Table HI-5. Health Insurance Coverage by State – Children Under 18: 1987 to 2004. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt6.html

Figure 3



Source: U.S. Census Bureau, Historical Health Insurance Tables, Table HI-5. Health Insurance Coverage by State -- Children Under 18: 1990 to 2004. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt5.html.

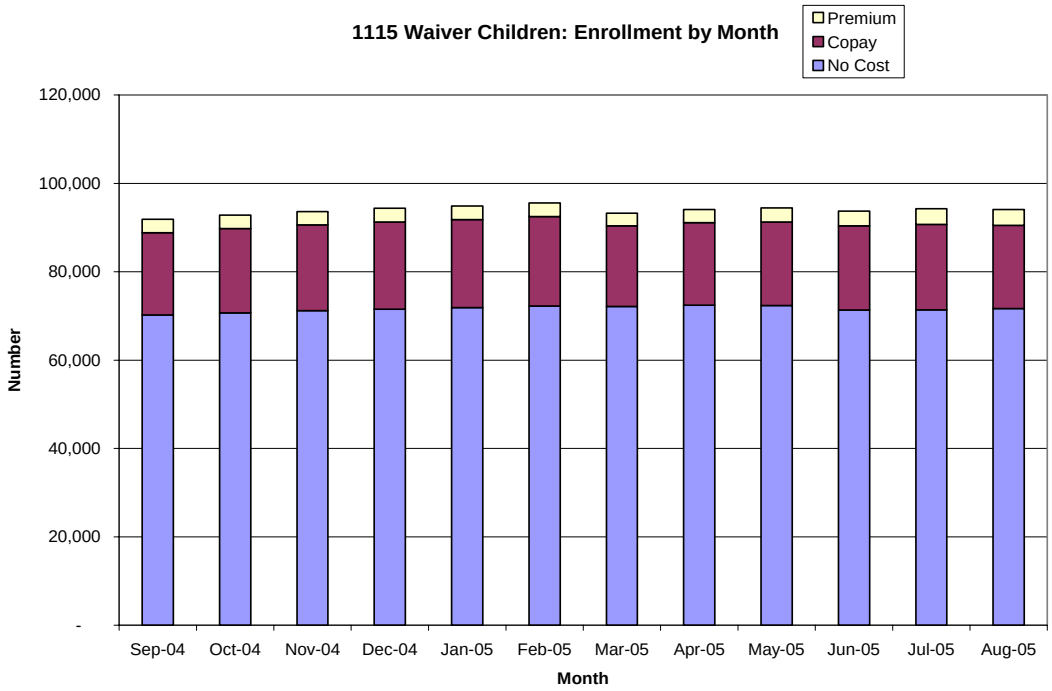
Insured Children – Enrollment in the 1115 Waiver[13]

Part of the increase in Medicaid enrollment in Missouri is due to continued increases in the number of children enrolled in the 1115 Waiver. During this evaluation period (September 2004 to August 2005) the number of Missouri children in the 1115 Waiver increased from 91,911 to 94,088—an increase of 2.4 percent (see figure 4). These numbers and the annual enrollment increases are particularly impressive in light of the fact that the state of Missouri originally estimated that about 91,300 uninsured Missouri children would be eligible under the 1115 Waiver, and expected 75 percent of these children, or about 68,500, to enroll. In November 2000, after 26 months of operation, enrollment of children reached 69,967, surpassing the original target. Moreover, in February 2005, enrollment reached its peak of 95,532, higher than the original estimate

[13] It is important to note that these numbers differ from those reported in figures 1, 2 and 3 and discussed above. This is because they are from different sources and are collected by different means. The numbers reported in figure 3 are from the Current Population Survey which is conducted once per year by the U.S. Census Bureau, while those reported here are monthly enrollment numbers reported by the state. In a May 2003 paper entitled "How Many People Lack Health Insurance and For How Long?" the Congressional Budget Office found that the number of people who report that they have Medicaid coverage in population surveys is smaller than the number indicated by the program's administrative data—one estimate was that survey undercount is between 12 and 15 percent. The Medicaid enrollment numbers in figure 3 should not be compared to those in figure 4.

of the number of children eligible for the 1115 Waiver.[14] However, the rate of increase has slowed, from about 16 percent between August 2000 and August 2001, to 4 percent between September 2001 and August 2002 and 4.7 between September 2002 and August 2003, to about 2.5 percent per year over the past two years.

Figure 4



Source: Missouri Department of Social Services, Family Support Division, Division of Medical Services. Monthly Management Reports for September 2004 – August 2005.

As with previous evaluation periods, these enrollment increases have not occurred evenly across the 1115 Waiver populations. During this evaluation period, there was a 2.0 percent increase in the number of enrolled children whose families had no co-pay and no premium responsibilities under the terms of the 1115 Waiver (expansion families with income at or below 185 percent of the FPL), a 1.5 percent increase among the number of enrolled children whose families had co-pay but no premium responsibilities (families with incomes at or between 186 percent and 225 percent of the FPL) and a 14.7 percent increase among children from families with co-pay and premium

[14] Missouri Department of Social Services, Family Support Division, Division of Medical Services. *Monthly Management Reports for September 2004 – August 2005*. Available at: http://www.dss.mo.gov/re/fsmsmr.htm.

responsibilities (226 percent to 300 percent of the FPL).[15] Thus, the greatest increase was among the higher income families. In fact, the number of children enrolled in the premium group is higher than it has been since 2001. Previous conversations with the state suggest that they have been more vigilant about conducting annual re-determinations of eligibility and, as a result, some children have moved from no cost eligibility categories into those with premium and co-pay responsibilities. It is also possible that this group has been most affected by a loss of ESI and/or an increase in the cost-sharing responsibilities placed upon the employee to the point where it is now more cost-effective (monthly family premiums range between $12 and $257 in the 1115 Waiver).

By comparison, last year's evaluation (September 2003 through August 2004) found that the greatest increases occurred among children whose families have co-pay but no premium responsibilities (families with incomes at or between 186 percent and 225 percent of the FPL)—a 6.0 percent increase. [16] The September 2002 through August 2003 evaluation found the largest enrollment increase among families with no co-pay and no premium responsibilities and a decrease in the number of enrolled children whose families have co-pay and premium responsibilities. Previous evaluations also reported decreases in enrollment for the higher-income populations.[17]

When analyzed by family support regions, enrollment of the 1115 Waiver populations in 2004 increased in all but one region (there was a decrease in the Northwest Region) with the greatest increase—4.5 percent—in enrollment taking place in the Kansas City Region. [18]

Uninsured (Non-Elderly) Adults

Both nationally and in Missouri the percent of non-elderly adults without health insurance are increasing (figures 5 and 6). Specifically, between 2003 and 2004, the rate in Missouri increased by 12.0 percent in one year: from 15.0 percent in 2003 to 16.8 percent in 2004. It is worth noting that between 2002 and 2003 the uninsured rate for

[15] *Monthly Management Reports for September 2004 – August 2005*

[16] Alicia Smith & Associates, LLC, *Evaluation of the Medicaid Section 1115 Waiver (Review Period September 1, 2003-August 31, 2004),* for the Missouri Department of Social Services, Division of Medical Services.
evaluation

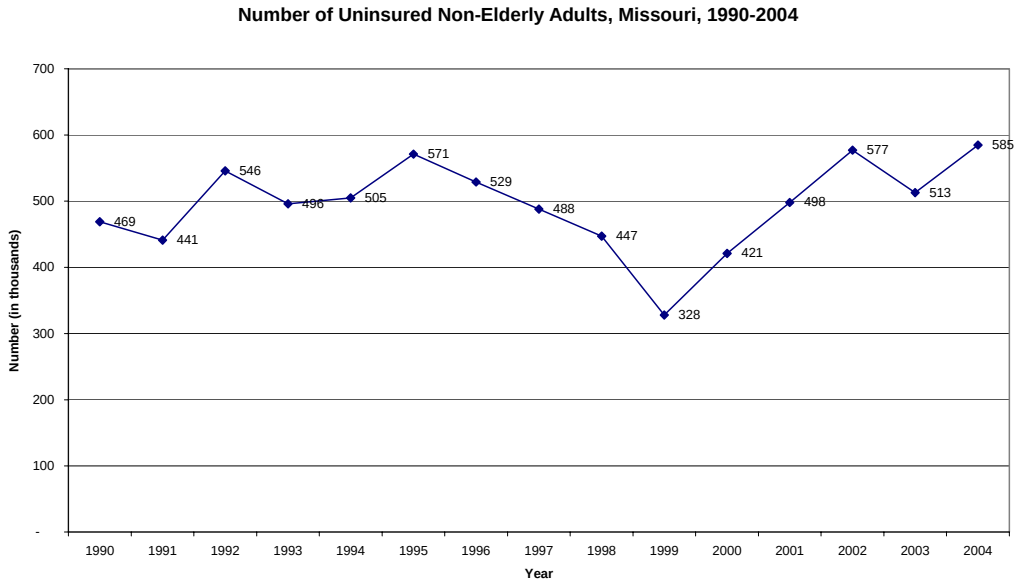
[17] AS & A evaluation.

[18] *Monthly Management Reports for September 2004 – August 2005*

non-elderly adults in Missouri actually declined meaning that some of the recent increase may be a correction, however, the rate is still up slightly from the 2002 rate of 16.3 percent and is up by 78 percent since 1999. As with the rate for children, the actual rate of uninsured non-elderly adults in Missouri is lower than the national rate and, when broken down by state, is the 15th lowest; but the rate of increase in Missouri is greater than the national rate of increase.[19] Again, as with the rate for children, if the rates of increase in both Missouri and in the nation as a whole continue at the rate they did this year, the rate of uninsured adults in Missouri will be higher than the rate in the nation as a whole in two years.

As discussed previously, much of the increase can be attributed to loss of ESI. This loss of ESI among children was mitigated, in part, by the 1115 Waiver and other public programs. However, budgetary changes implemented to the 1115 Waiver in 2002 have made the program less available to many adults than was originally envisioned.

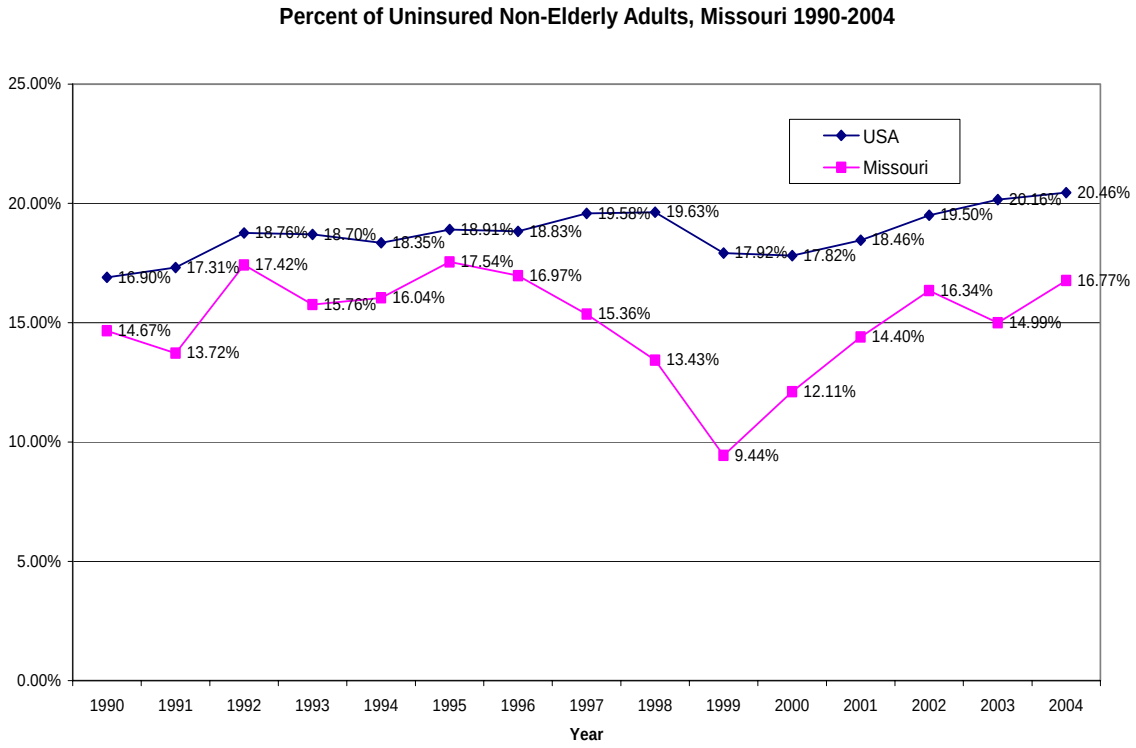
Figure 5



Sources: U.S. Census Bureau, Historical Health Insurance Tables, Table HI-5. Health Insurance Coverage by State -- Children Under 18: 1987 to 2004. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt5.html; U.S. Census Bureau, Historical Health Insurance Tables, Table HI-6. Health Insurance Coverage by State -- Adults Under 65: 1987 to 2004. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt6.html.

[19] U.S. Census Bureau, Table HI-5 & Table HI-6.

Figure 6



Sources: U.S. Census Bureau, Historical Health Insurance Tables, Table HI-5. Health Insurance Coverage by State -- Children Under 18: 1987 to 2004. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt5.html; U.S. Census Bureau, Historical Health Insurance Tables, Table HI-6. Health Insurance Coverage by State -- Adults Under 65: 1987 to 2004. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt6.html.

Insured (Non-Elderly) Adults - Types of Coverage

The number of non-elderly adults in Missouri with ESI dropped by 93,000 people between 2003 and 2004 (see figure 7). This continues a trend begun in 1999 when the number of adults with ESI peaked at more than 2 million. In addition, between 2003 and 2004 the number of adults with other private coverage also decreased. This is not surprising given that a low percentage of non-elderly adults purchase individual and other private coverage.[20]

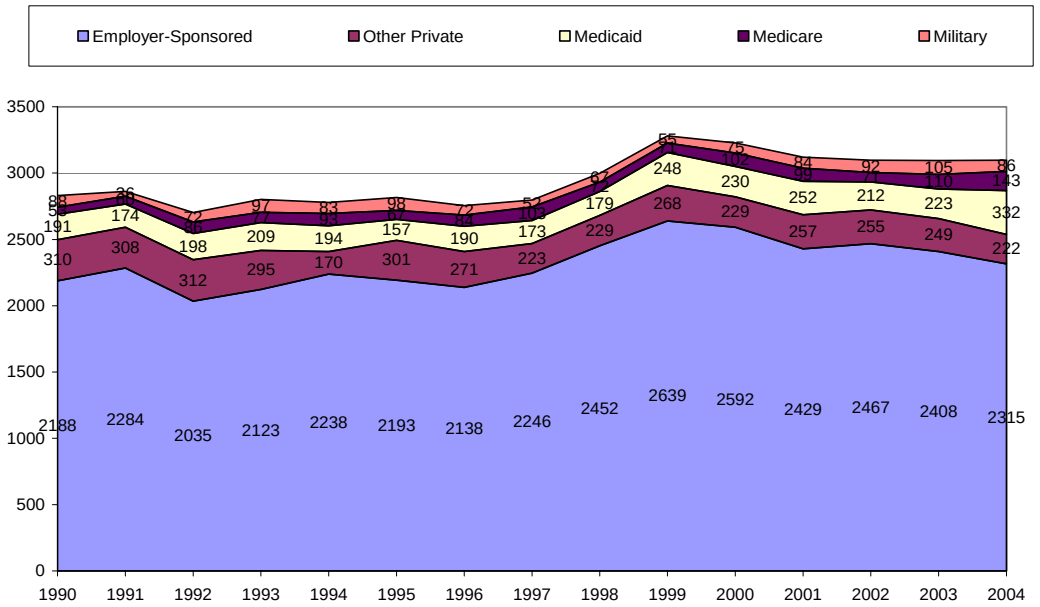
Concurrent with the declines in private coverage, more adults in Missouri are enrolled in Medicaid and Medicare. In fact, the number of non-elderly adults in Missouri with Medicaid increased by 109,000 people to an all-time high of 332,000 people. Similarly, more adults in Missouri have Medicare—143,000 individuals—than in any other year

[20] Buntin, M.B., Marquis, M.S. & Yegian J.M. (November/December 2004). The Role of the Individual Health Insurance Market and Prospects for Change. *Health Affairs* 23(6): 79-90.

since 1990.[21] This suggests that, at least in 2004, many of the non-elderly adults in Missouri who lost ESI gained government coverage. However, because public coverage is less available to adults than it is to children, the increases in public coverage that occurred did not offset the decline in employer-sponsored coverage.

Figure 7

Number of Insured Non-Elderly Adults, by Type of Insurance, Missouri 1990-2004



Source: U.S. Census Bureau, Historical Health Insurance Tables, Table HI-5. Health Insurance Coverage by State -- Children Under 18: 1987 to 2004 and Table HI-6. Health Insurance Coverage Status and Type of Coverage by State -- People Under 65: 1987 to 2004.

Summary and Conclusions

In terms of both numbers and rate, it is clear that the 1115 Waiver is providing coverage to children who would otherwise be uninsured. Since its inception, the enrollment numbers have increased each year. The rate of increase has slowed over the last several years but this is not surprising as new programs often experience initial enrollment surges with much slower growth in the later years.

Moving forward, Missouri may continue to experience increases in the rates of uninsured children, not because children are not enrolling in the 1115 Waiver, but because of reductions in the numbers of children with ESI. Certainly Medicaid and the 1115 Waiver

[21] U.S. Census Bureau, Table HI-5 & Table HI-6.

will provide coverage to some of these children but not all of them will be eligible for the program and not all of those who are eligible will be enrolled.

Similarly, there are more adults in Missouri who do not have health insurance in 2004 than there were in 2003. And, as with children, the increase is driven by loss of ESI coverage. While public programs have filled some gaps created by the loss of ESI, many groups of uninsured non-elderly adults are not eligible for relief and, in fact, recent program changes have actually restricted eligibility for adults even further. Thus, in the future the state may experience even greater increases in the number of adults without health insurance.

The good news is that the rates of uninsured in Missouri—both for adults and children—are lower than the national rates and that the average rates for both groups are lower for the six-year period following implementation of the 1115 Waiver than they are for the six-year period preceding its implementation. This suggests that the 1115 Waiver has expanded coverage to those who were previously uninsured or would have become uninsured. However, as mentioned previously, it is of concern that (1) the rate of uninsured adults is increasing faster than the rate nationally, and that (2) the rate of uninsured children is increasing while the national rate for children is decreasing. These two trends are likely related to the greater loss of ESI in the state as compared to the nation as a whole. Moving forward, as mentioned previously, if the state does not reverse the trend for children and slow the rate of growth of uninsured adults the rates in Missouri will exceed the national rates for the first time since 1995 for children and 1990 for adults.

RESEARCH QUESTION 2: HAS THE 1115 WAIVER IMPROVED THE HEALTH OF MISSOURI'S CHILDREN AND FAMILIES?

In order to evaluate the impact of the 1115 Waiver on the health of its beneficiaries we examined the following indicators:

- ☑ **Avoidable hospitalizations** (hospitalizations are considered to be avoidable when the associated primary diagnosis is for a preventable or manageable illness) **and emergency room (ER) visits;**[22]
- ☑ **Utilization of preventive and wellness services**; and
- ☑ **Frequency of medical and non-medical grievances** filed by or on behalf of the 1115 Waiver population. Since one of the desirable outcomes associated with the 1115 Waiver is an improvement in health status, improved health status should be reflected in a decreased frequency of grievances or in a desirable change in the mix of grievances.

The data used to compute these indicators were compiled and provided to us by the Department of Social Services (DSS) and the Department of Health and Senior Services (DHSS). When brought together these indicators provide significant insight into the health of the 1115 Waiver population that is being studied.

Avoidable Hospitalizations and Emergency Room Use

Our analysis of avoidable hospitalizations and utilization of ERs covers calendar years 1999 through 2004, the period following the implementation of the 1115 Waiver for which complete, validated information was available. Information was collected for three distinct populations:

1. Children eligible for medical assistance under the 1115 Waiver (1115 Waiver Children);
2. Children otherwise eligible for medical assistance (Other Medicaid Children); and
3. Children not eligible for any medical assistance (Non-Medicaid Children); this group consists primarily of individuals with commercial, i.e. private health insurance.

[22] 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.

As in previous evaluations our goal is to ascertain the effect of the 1115 Waiver on children by comparing the experience of 1115 Waiver children to that of Other Medicaid and Non-Medicaid children during a common time period. Additionally, our analysis considered statewide statistics as well as potential disparities across the four 1115 Waiver regions (the three managed care regions and the fee-for-service region).

Avoidable hospitalizations – all applicable diagnoses

The American Academy of Pediatrics points to the rate of hospitalizations for ambulatory sensitive conditions (asthma, diabetes, gastroenteritis, etc.) as a recommended indicator for evaluating the impact of SCHIP programs - high rates of avoidable hospitalizations may indicate lack of access to or insufficient utilization of primary care services. Consistent with this premise, for calendar years 1999 through 2004, we examined the following indicators related to the use of these services:

- Rates of avoidable hospitalizations/all applicable diagnoses; and,
- Rates of avoidable hospitalizations/*asthma* primary diagnosis.

The avoidable hospitalization rates for children in the study populations are shown in Figure 8. Overall, avoidable hospitalization rates continued on their downward trend during 2004 – down about 5 percent between 2003 and 2004. This decrease was on top of the 1 percent decrease between 2002 and 2003.

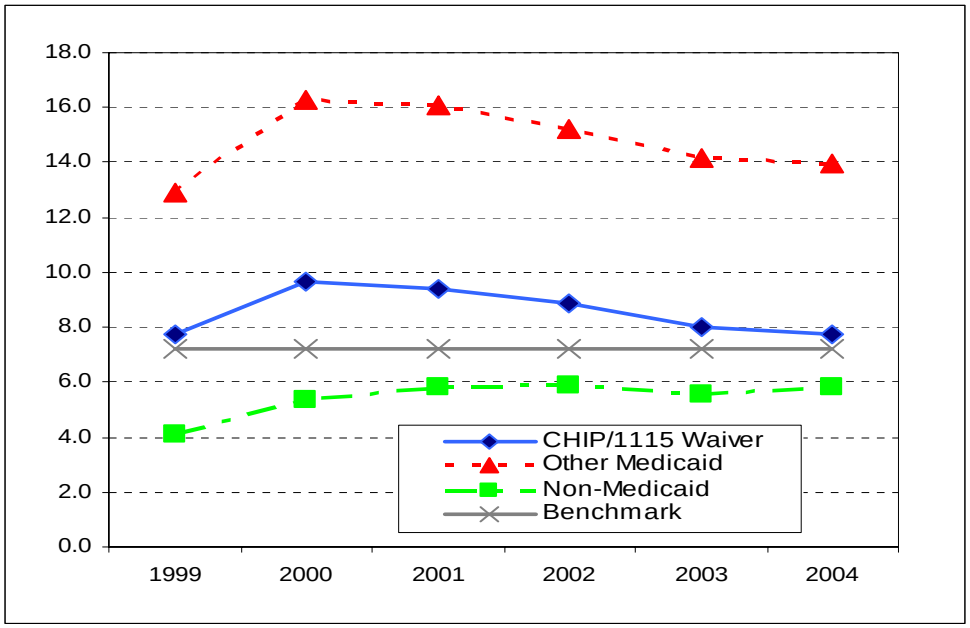
- The most dramatic decrease was experienced by the 1115 Waiver and the Other Medicaid populations, a positive development. The avoidable hospitalization rate in the Other Medicaid population decreased by 1.3 percent between 2003 and 2004, while the 1115 Waiver rate decreased by more than 3 percent.
- The 1115 Waiver rate continues to be considerably lower – **44** percent lower – than the Other Medicaid rate. This is true of every year of the study.
- While the 1115 Waiver rate in 2004 was higher than the Non-Medicaid rate, the gap between the use rates of these two populations has been steadily decreasing and it decreased noticeably between 2003 and 2004. In 1999, the 1115 Waiver rate was almost twice as high as the Non-Medicaid rate; in 2004 this differential is only 25 percent. Moreover, the Non-Medicaid rate actually ticked up by almost 5 percent from 2003 to 2004 (the four-year average of this rate, which may be a more reliable measure of trends in this statistic, increased 4 percent), whereas the 1115 Waiver rate has been decreasing steadily since 2001.

- The 1115 Waiver rate continues to approach the benchmark rate (7.2 per 1,000) computed using data from the National Hospital Discharge Survey.[23] Moreover, the 20 percent decrease in the 1115 Waiver rate over the last four years of the study exceeded the decrease that the national rate experienced over eighteen years.

Figure 8: Avoidable hospitalizations per 1,000 children, Missouri age <19.

Data Source: Missouri Department of Health and Senior Services.

Benchmark data: Kozak, Hall and Owings study referenced in the report (ref. Footnote #24).



Avoidable hospitalizations – asthma primary diagnosis

The asthma avoidable hospitalization rates for children in the study populations are shown in Figure 9.

- The hospitalization rates for children in both the 1115 Waiver and Other Medicaid populations experienced significant decreases between 2003 and 2004, the 1115 Waiver rate decreasing by 14 percent.
- While the decrease in the Other Medicaid rate between 2003 and 2004 – 22 percent – was even greater than the decrease in the 1115 Waiver rate, for the sixth consecutive year the 1115 Waiver rate remains considerably lower than the Other Medicaid rate. Over the six years for which statistics are available the average difference between these rates is about 46 percent.

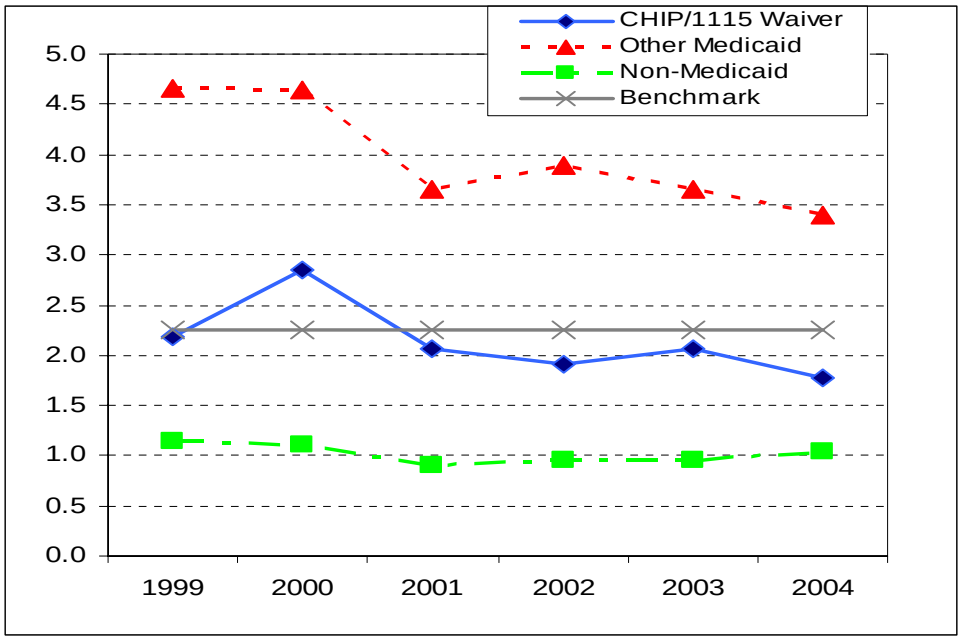
[23] "Trends in Avoidable Hospitalizations, 1980-1998"; Kozak, Hall and Owings; Health Affairs; Mar./Apr. 2001; p. 225-232.

- The gap between the hospitalization rate for the 1115 Waiver population and the Non-Medicaid group continues to close. Since 2000 the gap has closed by almost two-thirds, from almost 1.75 hospitalizations per 1,000 children in 2000 to about 0.7 hospitalizations per 1,000 children in 2004.
- For the last four years of the study the 1115 Waiver rate has remained below the Healthy People 2000 target rate of 2.25 asthma hospitalizations per 1,000 children.[24] This is noteworthy since many of the children in the 1115 Waiver program meet one or more of the following criteria shown to substantially increase the likelihood of an avoidable hospitalization: prior diagnosis of asthma, adolescent age, family with working poor income, and previously uninsured.[25]

Figure 9: Avoidable hospitalizations per 1,000 children, asthma primary diagnosis, Missouri, age <19.

Data Source: Missouri Department of Health and Senior Services.

Benchmark data: Healthy People 2000 publication referenced in the report (ref. Footnote #25).



[24] Healthy People 2000 report: http://www.cdc.gov/nchs/data/hp2000/hp2k01-acc.pdf

[25] "Keeping children out of hospitals: parents' and physicians' perspectives on how pediatric hospitalizations for ambulatory care-sensitive conditions can be avoided". Pediatrics; 11/1/2003; Sun, Donglin.

ER visits – all diagnoses

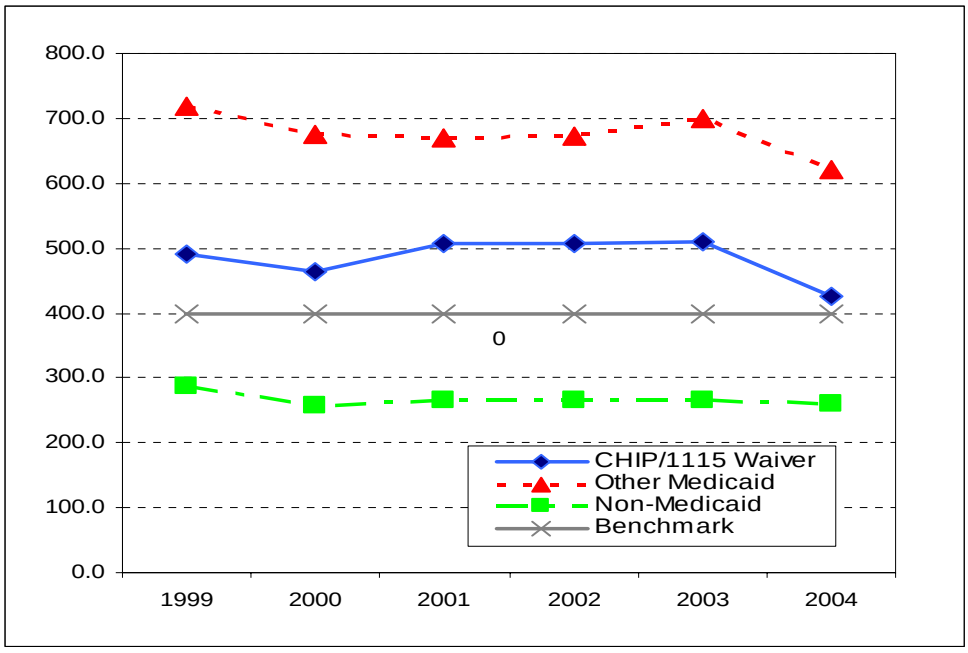
In the aggregate, the trends for emergency room utilization (ref. Figure 10) are very encouraging and consistent with those observed in the avoidable hospitalizations data.

- After remaining relatively unchanged for three years, the ER utilization rate for children in the 1115 Waiver population decreased in 2004 to 426 visits per 1,000 children, the lowest rate in six years. The utilization rate for children in the Other Medicaid population also experienced a significant decrease from 2003 to 2004.
- The 1115 Waiver utilization rate continues to be lower than the Other Medicaid rate; the average difference between the two rates has increased to over 30 percent.
- The gap between the 1115 Waiver rate and the Non-Medicaid rate is the smallest in six years; the Non-Medicaid utilization rate has not experienced a significant decrease since 2000.
- The 1115 Waiver rate is now as close as it has been over the last six years to the 2003 national rate of 400 visits per 1,000 children (derived from CDC statistics).[26]

Figure 10: ER visits per 1,000 children, Missouri, age <19.

Data Source: Missouri Department of Health and Senior Services.

Benchmark data: Health, United States 2005 publication referenced in the report (ref. Footnote #27).



[26] Health, United States, 2005 – Table 88. http://www.cdc.gov

- Whereas in past years the ER utilization rate in the fee-for-service 1115 Waiver region was driving up the gap between the overall 1115 Waiver rate and the benchmark rate, in 2004 the utilization rates in all four service areas – the three managed care regions and the fee-for-service region, decreased substantially with the fee-for-service region experiencing the greatest decrease (23 percent). Still, it should be noted that the ER utilization rate in the managed care waiver regions was below the benchmark as recently as 2000, and has only returned to those levels in the Western region.

ER visits - asthma

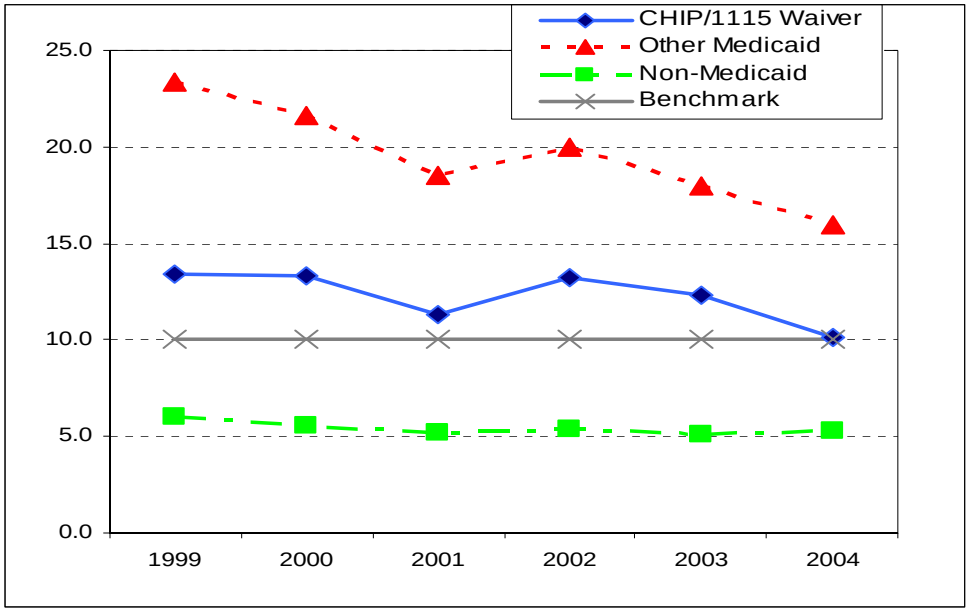
Between 2003 and 2004 the ER-asthma utilization rates across all three study populations remained constant or experienced a noticeable decrease (ref. Figure 11). The 1115 Waiver rate experienced the greatest decrease – 18 percent, to about 10 visits per 1,000 children.

- The ER-asthma utilization rate for the 1115 Waiver population was 36 percent lower than the rate for the Other Medicaid population.
- The 1115 Waiver ER-asthma utilization rate was equal to the 2002 national rate (10.0 per 1,000 children) published by the CDC.[27]

Figure 11: ER visits per 1,000 children, asthma primary diagnosis, age <19

Data Source: Missouri Department of Health and Senior Services.

Benchmark data: Asthma Prevalence, Health Care Use and Mortality, 2002 publication referenced in the report (ref. Footnote #28).



[27] Asthma Prevalence, Health Care Use and Mortality, 2002; fact sheet by the National Center for Health Statistics; last updated February 08, 2005. http://www.cdc.gov/nchs/products/pubs/pubd/hestats/asthma/asthma.htm

- On average the utilization rate in the more rural regions of the state (Central and fee-for-service) has been lower than the aforementioned benchmark in every year of the study. The Eastern and Western regions are more heavily urban, and as suggested by several studies the prevalence of asthma and related illnesses should be expected to be higher in these regions.[28] That notwithstanding, in what could be seen as a very positive development, the 2004 utilization rates in those two regions experienced year-to-year decreases of 24 percent and were the lowest in six years.

Regional variations – 1115 Waiver population

The health indicators for each population were also compared across 1115 Waiver managed care regions and the parts of the state that have remained fee-for-service. In addition to the regional variations described earlier it is noteworthy that across all three study populations the fee-for-service region continues to have the highest rates of avoidable hospitalizations and ER utilization. As noted in previous evaluations this phenomenon could be a function of several factors, including the fee-for-service region being predominantly rural (access to primary care services may be less than adequate in this area) and containing some of the poorest sections of the state – southeastern Missouri, and the area south of Kansas City – a factor which is expected to correlate strongly with health status.

Utilization of Preventive and Wellness Services

We examined the degree to which the 1115 Waiver population was able to access and receive the following preventive and wellness services:

- Well baby physician/clinic services;
- Well child physician/clinic services; and
- Child and adolescent preventive immunizations.

The services examined in this part of the analysis are consistent with the definition of early preventive, screening, diagnostic and treatment (EPSDT) services contained in the Omnibus

[28] (a) Prevalence of asthma in urban and rural children in Tamil Nadu; Chakravarthy S., Singh R.B. and Swaminathan S., Venkatesan P; National Library of Medicine; Sep-Oct 2002.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12502136&dopt=Abstract
(b) "Childhood asthma and urban geography'; Nagourney E.; New York Times; Sept. 29, 2000.
http://library.uchc.edu/bhn/cite/nyt/3245asthma.html
(c) Disproportionate Air Pollution Burden and Asthma in Urban Communities; Clark S. and Shat J.; published by the Harvard School of Public Health. http://www.med.harvard.edu/chge/textbook/papers/Clark.pdf

Budget and Reconciliation Act of 1989 (OBRA 89) and in rules and regulations managed by CMS including those pertaining to EPSDT reporting.[29]

Methodology and Objectives

To conduct our analysis we requested data from the Division of Medical Services (DMS) of the Department of Social Services on the monthly utilization of preventive and wellness services by 1115 Waiver children and Other Medicaid children spanning the period of January 2004 and May 2005. This time period extends for 17 months because we were aiming to establish a history of utilization that would support analysis and inferences based on such analysis that could be deemed *statistically significant*. In keeping with Federal guidelines, a service was deemed "preventive" and/or "wellness" when the provider assigned one of a set of procedure codes and a preventive diagnosis code to the encounter.[30]

The goal of this analysis was to compare utilization of preventive and wellness services between 1115 Waiver children and Other Medicaid children. We assume that the *minimum desirable outcome* is that the 1115 Waiver population are able to access these services at a rate comparable to that of the Other Medicaid children.

Observations

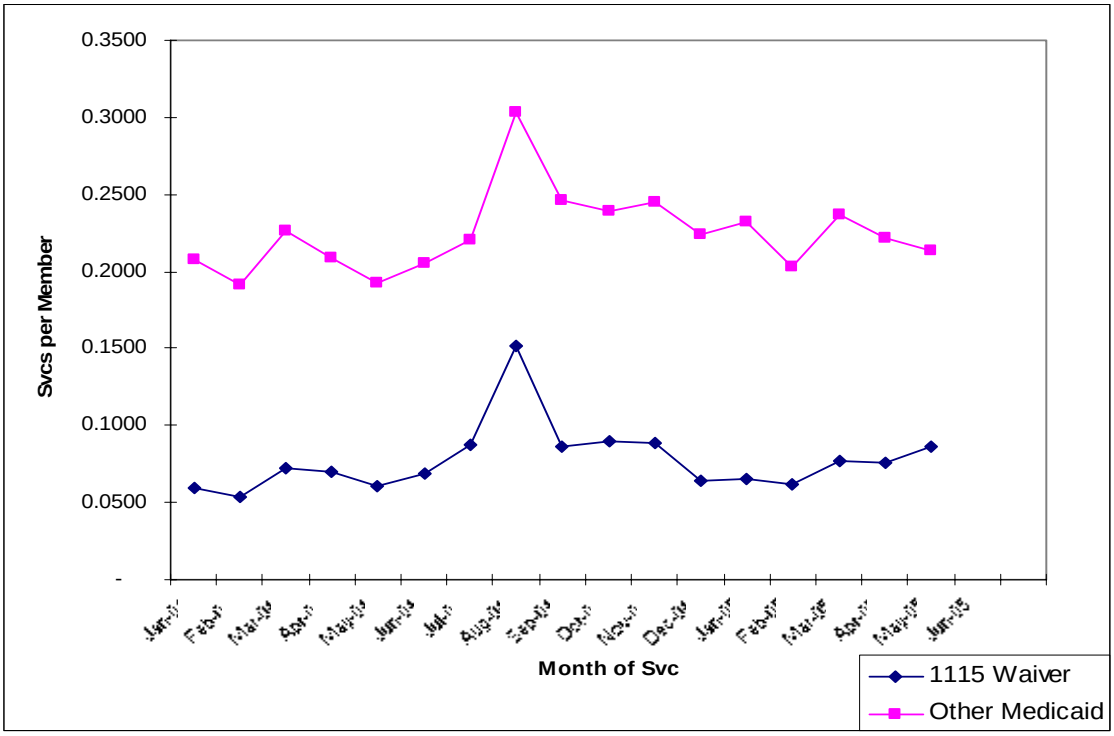
The utilization by month of these services by the 1115 Waiver and Other Medicaid populations is illustrated in Figure 12 (next page). The predictable seasonal variations – for instance, the drop in activity during the summer vacation months, followed by spikes right before the start of a school year – are observable.

[29] http://www.cms.hhs.gov/medicaid/epsdt/default.asp

[30] Preventive diagnosis codes in-scope included: V20-V20.2, V70.0 and V70.3-V70.9. Procedure codes in-scope included: 99381-99385, 99391-99395, 99431-99432, 99201-99205, 99211-99215, 90476-90748.

Figure 12: Preventive and wellness services per enrollee (average), children in 1115 Waiver and Other Medicaid populations, January 2004 – May 2005.

Data Source: Missouri Department of Social Services, Division of Medical Services

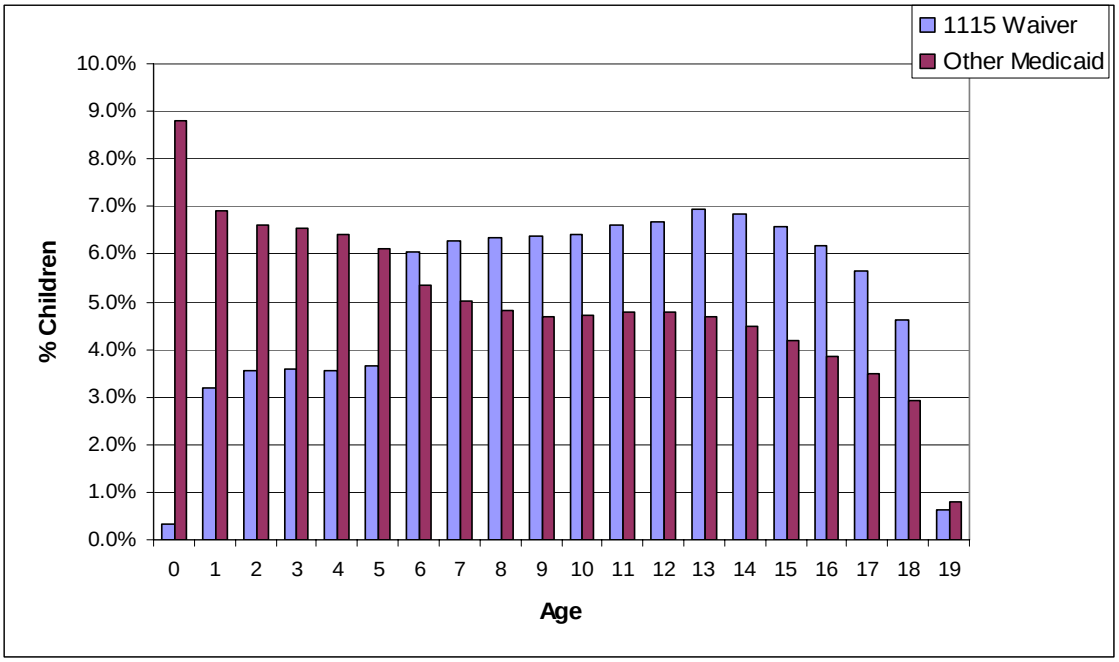


At first glance it appears there is a great disparity between the utilization of services by the two populations, with utilization by the 1115 Waiver population lagging that of the Other Medicaid population. However, this disparity is explained by the significant difference in the mix of children by age in each population (ref. Figure 13, next page):

- The weighted average age of children in the 1115 Waiver population (10.3 years) is about 2 ½ years older than that of the Other Medicaid population (7.8 years).
- More than 30 percent of 1115 Waiver children are age 14 and older, compared to less than 20 percent of Other Medicaid children.
- Almost 16 percent of Other Medicaid children are ages 0 or 1, compared to only 3.5 percent of 1115 Waiver children. This statistic in particular goes a long way towards explaining the aforementioned disparity.

Figure 13: Differences in age distribution, children in 1115 Waiver and Other Medicaid populations, January 2004 – May 2005.

Data Source: Missouri Department of Social Services, Division of Medical Services



Adjusting for age in the analysis yields a much clearer picture of service utilization across the two populations (ref. Figures 14a and 14b, next page). Across all age groups, the utilization of preventive and wellness services by the 1115 Waiver population was greater than that of the Other Medicaid population. The difference was more pronounced in older-age children:

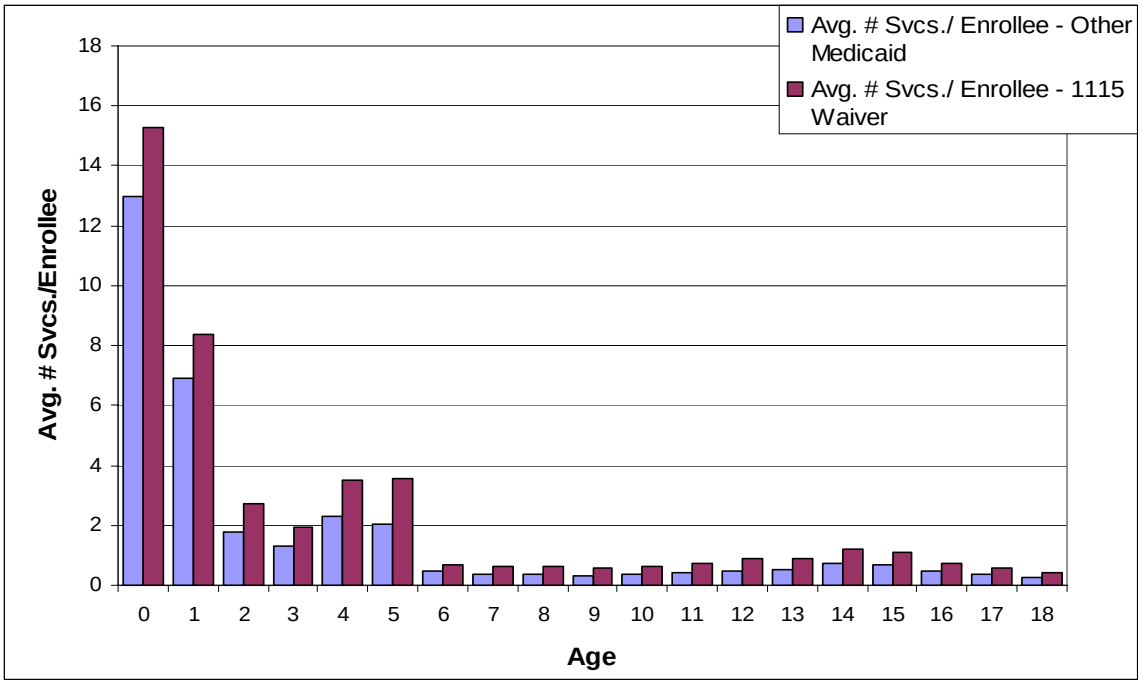
- The difference for ages 0 and 1, where immunizations (a fairly well prescribed set of services) are the most common preventive and wellness service rendered, was only about 20 percent.
- The difference for ages 2 and older was much greater, averaging close to 65 percent.

These findings are consistent with findings related to avoidable hospitalizations and ER visits: the statistics suggest that 1115 Waiver children benefit from having better access to key preventive and wellness services, which would be expected to impact the need for ER visits and certain hospitalizations.

Figures 14a and 14b: Comparison of utilization of preventive and wellness services by age, children in 1115 Waiver and Other Medicaid populations, Jan. 2004 – May 2005. Table and chart.

Data Source: Missouri Department of Social Services, Division of Medical Services

Other Medicaid				1115 Waiver				
Age	Service Units	Avg. # Enrollees/ Study Period	Avg. # Svcs./ Enrollee - Other Medicaid	Age	Service Units	Avg. # Enrollees/ Study Period	Avg. # Svcs./ Enrollee - 1115 Waiver	***Diff., 1115 Waiver - to - Other Medicaid***
0	548,070	42,306	12.95	0	4,633	303	15.28	*17.9%*
1	229,020	33,168	6.90	1	24,682	2,943	8.39	*21.5%*
2	57,509	31,863	1.80	2	9,020	3,299	2.73	*51.5%*
3	40,426	31,413	1.29	3	6,388	3,312	1.93	*49.9%*
4	71,219	30,832	2.31	4	11,577	3,300	3.51	*51.9%*
5	60,531	29,406	2.06	5	12,074	3,392	3.56	*72.9%*
6	12,434	25,786	0.48	6	3,847	5,591	0.69	*42.7%*
7	8,742	24,060	0.36	7	3,577	5,824	0.61	*69.0%*
8	8,418	23,228	0.36	8	3,716	5,875	0.63	*74.5%*
9	7,213	22,600	0.32	9	3,414	5,893	0.58	*81.5%*
10	8,148	22,689	0.36	10	3,743	5,925	0.63	*75.9%*
11	9,485	23,016	0.41	11	4,449	6,123	0.73	*76.3%*
12	10,944	22,992	0.48	12	5,413	6,192	0.87	*83.7%*
13	11,684	22,597	0.52	13	5,828	6,420	0.91	*75.6%*
14	15,606	21,593	0.72	14	7,678	6,346	1.21	*67.4%*
15	14,106	20,184	0.70	15	6,591	6,082	1.08	*55.1%*
16	8,968	18,612	0.48	16	4,122	5,711	0.72	*49.8%*
17	5,988	16,783	0.36	17	3,082	5,236	0.59	*65.0%*
18	3,799	14,021	0.27	18	1,760	4,286	0.41	*51.6%*



Member Grievances

The Division of Medical Services (DMS) of the Department of Social Services provided us with data related to grievances filed by all 1115 Waiver enrollees (including children and adults) against their plan or the health care providers with whom they interacted. DMS classified the grievances as follows:

- Quality of Care - this grievance would be expected to correlate most strongly with health status; includes grievances such as "provider treatment not helping", "not getting better", "lack of provider concern" and "concerned about and/or disagrees with diagnosis";
- Timeliness of Appointments;
- Denial of Services;
- Other Medical - "unable to reach provider," "(member) wants new provider";
- Transportation Grievances;
- Interpreter Grievances;
- Denial of Claims;
- Office Staff Behavior - relates to providers or their staff; or
- Other Non-Medical - "member (inappropriately) charged at time service is rendered," "receiving bills from PCPs, collection agencies, etc." and "place of service not clean."

For this year's report the grievances were compiled for the following periods:

- Period A: January 2002 to September 2002
- Period B: January 2003 to September 2003
- Period C: January 2004 to September 2004
- Period D: October 2004 to August 2005

We then computed the average number of grievances per month for each Period. Finally, we converted these averages to per-member per-month statistics by factoring the average number of 1115 Waiver enrollees per month during each Period. This enables an "apples-to-apples" comparison across periods. These statistics are shown in Figure 15, next page. In what is most likely a positive development, the average number of grievances per member decreased by 27 percent between Periods C and D, and was lower than in the first report period (Period A).

Figure 15: Comparison of 1115 Waiver Member Grievances across Reporting Periods

Data Source: Missouri Department of Social Services, Division of Medical Services

		X Grievances during Period	*Y* Avg. Grievances per Month	*Z* Avg.# Members during Period	*Y/(Z/1,000)* Grievances/ 1,000 Members/Year
Period A	1/02-9/02	104	11.6	76,636	1.81
Period B	1/03-9/03	77	8.6	84,020	1.22
Period C	1/04-9/04	129	14.3	90,691	1.90
Period D	10/04-8/05	132	12.0	103,408	1.39

Other observations related to member grievances include:

- Forty percent of all grievances filed were against Healthcare USA, which has about 40 percent of all 1115 Waiver HMO enrollees; in Period C, approximately 60 percent of all grievances were filed against Healthcare USA.
- Grievances as a percentage of all grievances filed were greater than the proportion of enrollees for the following HMOs: Family Health Partners, First Guard and Missouri Care. Refer to Figure 16 for more details.
- About four out of every ten grievances filed were associated with service denials. None of the other grievance types makes up as much as 10 percent of all grievances.

Figure 16: 1115 Waiver Member Grievances by Managed Care Organization, Sep. '04-Jun. '05

Data Source: Missouri Department of Social Services, Division of Medical Services

Managed Care Organization (MCO):	Avg. Enrollees by Month (9/04-6/05)	% Total	# of Complaints (9/04-6/05)	% Total
Blue Advantage Plus	4,642	8.7%	5	4.3%
Community Care Plus	4,803	9.0%	8	6.9%
Family Heath Partners	7,158	13.5%	23	19.8%
Firstguard	5,198	9.8%	14	12.1%
HealthCare USA	20,796	39.2%	46	39.7%
Mercy	5,640	10.6%	8	6.9%
Missouri Care	4,850	9.1%	12	10.3%
TOTAL (FOR AVG. ENROLLMENT)	**53,086**		**116**	

Summary and Conclusion

There are several noteworthy and potentially positive developments in this evaluation of health status indicators. The analyzed metrics demonstrate that the 1115 Waiver children are able to access preventive and wellness services (and at a higher rate than the Other Medicaid population). This may be having a positive impact on ER visits and avoidable hospitalizations, both of which experienced noticeable reductions on a per member basis. Additionally, the frequency of grievances also declined, which would suggest greater satisfaction with the quality of services received and with the associated outcomes.

<u>RESEARCH QUESTION 3:</u> WHAT IS THE IMPACT OF THE 1115 WAIVER ON PROVIDING A COMPREHENSIVE ARRAY OF COMMUNITY BASED WRAPAROUND SERVICES FOR SERIOUSLY EMOTIONALLY DISTURBED CHILDREN (SED) AND CHILDREN AFFECTED BY SUBSTANCE ABUSE?

Wraparound services are a class of treatment and support services provided to a seriously emotionally disturbed (SED) child and/or the child's family with the intent of facilitating the child's functioning and transition towards a better mental health state. The services that may be provided under this definition and are included in this analysis are:

- **Family support services** that help to develop a support system for parents of SED children, services include programs to develop problem solving skills, providing emotional support and assisting in linking services and parent-to-parent guidance;
- **Case management** which entails the arrangement and coordination of treatment and rehabilitation needs and the coordination of services and support activities;
- **Respite care** services which may be provided on a time limited basis either in or out of the home to support the family in maintaining a child at home;
- **Family assistance** which are services provided in a variety of settings; activities provided may include home living and community skills, transportation, working with the adult members on parenting skills, communication and socialization, and arranging for appropriate services and resources available in the community;
- **Targeted case management (TCM)** which includes the arrangement, coordination and participation in the assessment; coordination of the service plan implementation (including linking children and families to services and arranging the supports necessary to access resources and facilitating communication between service providers); monitoring the services delivery plan; and documenting all aspects of intensive targeted case management.
- **"Wrap-around services;"** according to the state's definition this service may include the following:
    - *Respite* for emergency or planned in-home or out-home respite;
    - *Transportation support* to enable the child and his/her family to access needed services and support;

- *Social and recreational support* services that enable the child and his/her family to participate in activities that s/he would otherwise not be able to be involved in due to distance and/or cost;
- *Basic needs support* services provided on a temporary and/or emergency basis;
- *Clinical/medical support* services, not including traditional outpatient services, that help meet non-behavioral health treatment needs as well as facilitate meeting the child's overall treatment goals; and
- *Other specialized support* services such as crisis management, legal support, basic schooling and vocational training that cannot be met through other means.

DMH and DMS 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 services – and related codes – that Missouri classifies as wraparound services are listed in Appendix II.

In the last evaluation cycle our analysis focused on documenting the degree to which 1115 Waiver children were receiving mental health services and the degree to which children receiving mental health services were also receiving wraparound services. In this evaluation we focus on comparing utilization of wraparound services across service delivery systems and, in particular, determining whether HMO enrollment impacts how and/or what wraparound services are provided. To that end we compiled and analyzed eligibility and service utilization data from DMH and DMS for an 18-month period. We also conducted interviews with parents of children who received these services, as well as service providers, to gain added perspective on the accessibility and value of these services.

Methodology

We requested and received from DSS and DMH Waiver eligibility, HMO enrollment and wraparound service utilization data, for the period beginning January 1, 2004 and ending June 30, 2005 – the "study period". Preliminary analysis of these data revealed that close to 1,800 children - hereafter referred to as **Subset 1** - in the 1115 Waiver received

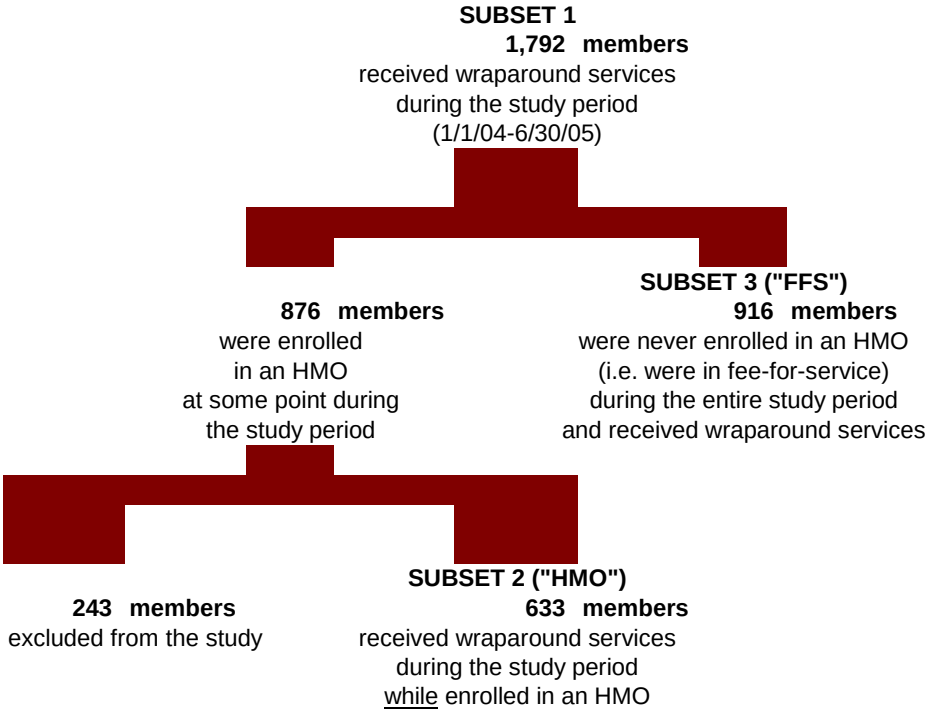
wraparound services during the study period. To set up the comparison between the two service delivery systems we culled from Subset 1 two smaller subsets (Figure 17 illustrates this breakout):

Subset 2 ("HMO") – children who were enrolled in an HMO during the study period AND at the time they received wraparound services

Subset 3 ("FFS") - children who were in fee-for-service throughout the entire study period (i.e. children with no HMO enrollment "spans" in their eligibility files) and received wraparound services

The 243 children who received wraparound services but were in both fee-for-service and managed care during the study period were excluded from the analysis.

Figure 17: Breakout of 1115 Waiver children that received wraparound services during the Research Question 3 study period.



Analysis/Statistics by Subset – Subset 2 ("HMO")

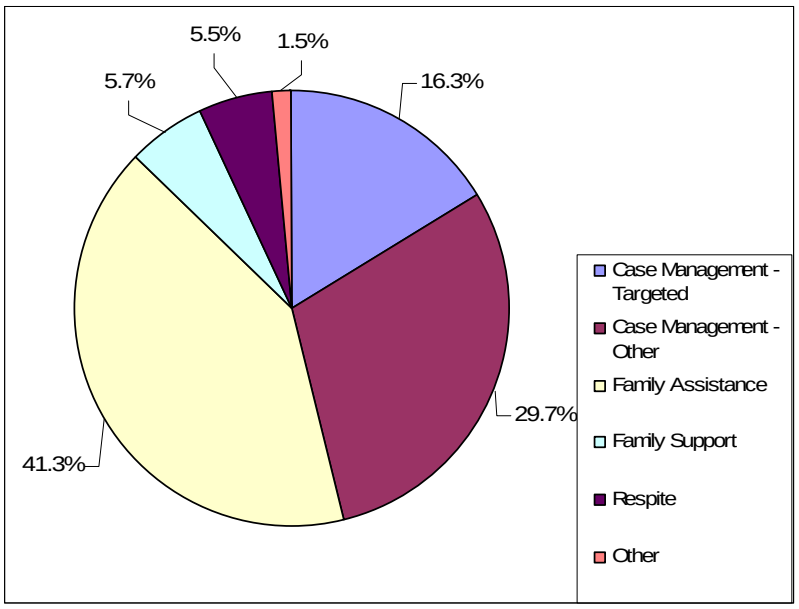
Children who were enrolled in an HMO during the study period AND at the time they received wraparound services. Note: The use rate is the average number of services per child in that subset (in this case per child in an HMO).

Figures 18a and 18b

Use and mix of services (18-month study period) – table and chart

Data Source: Missouri Department of Social Services, Missouri Department of Mental Health

Code	Description	Qty of Svcs	*% of Total*	*Use Rate (Avg. Svcs./Child)*
49004H	CHILD/ADOLES FAMILY ASSIST	5,467	*41.3%*	*8.64*
20004H	CASE MNGMT-LIC QMHP IND	2,676	*20.2%*	*4.23*
20000H	CASE MNGMT-BACHELOR IND	897	*6.8%*	*1.42*
Y3127J	TARGET C M SED/MHP IND	887	*6.7%*	*1.40*
02500H	FAMILY SUPPORT	750	*5.7%*	*1.18*
440001	RESPITE CARE - IND. -	733	*5.5%*	*1.16*
Y3128J	TARGET C M SED/CM IND	617	*4.7%*	*0.97*
Y3127K	TARGET CASE MGMT (TCM) YTH	597	*4.5%*	*0.94*
20001H	CASE MNGMT-PARAPROFESS IND	260	*2.0%*	*0.41*
39601W	WRAP-AROUND SRVCS-YOUTH IND	197	*1.5%*	*0.31*
Y3128K	TARGET CASE MGMT (TCM) YTH	48	*0.4%*	*0.08*
20003H	CASE MNGMT-PHYSICIAN IND	47	*0.4%*	*0.07*
20005H	CASE MNGMT-LIC PSYCH IND	25	*0.2%*	*0.04*
20008H	CASE MGMT-CHILD PSYCHITRST	19	*0.1%*	*0.03*
20006H	CASE MNGMT-AD PR NURSE IND	3	*0.0%*	*0.00*
TOTALS		**13,223**		



- Average # of service units per child: 20.9
- Average months of continuous enrollment in an HMO during the study period: 13.7
- Average # of service units per child per month of continuous enrollment: 1.53

Analysis/Statistics by Subset – Subset 3 ("FFS")

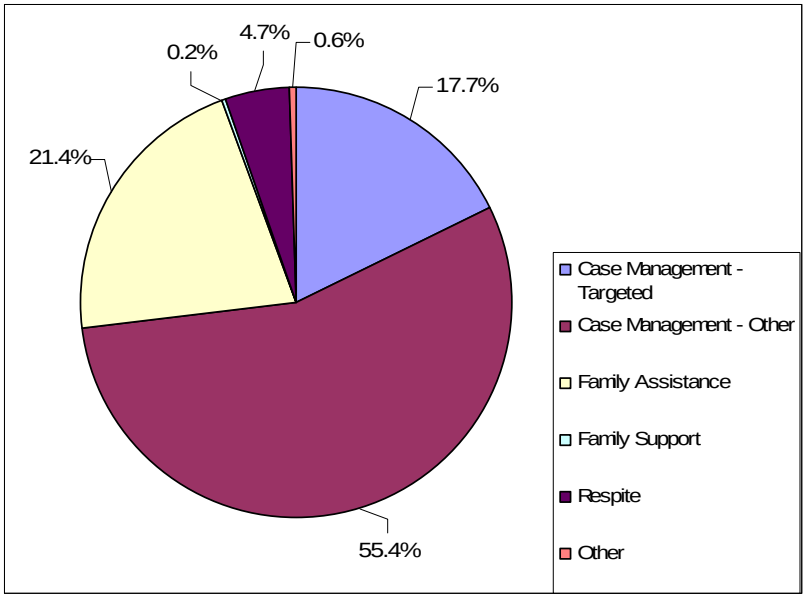
Children who were in fee-for-service throughout the entire study period (i.e. children with no HMO enrollment "spans" in their eligibility files) and received wraparound services. Note: The use rate is the average number of services per child in that subset (in this case per child in FFS).

Figures 19a and 19b

Use and mix of services (18-month study period) – table and chart

Data Source: Missouri Department of Social Services, Missouri Department of Mental Health

Code	Description	Qty of Svcs	*% of Total*	*Use Rate (Avg. Svcs./Child)*
20000H	CASE MNGMT-BACHELOR IND	11,435	*39.6%*	*12.48*
49004H	CHILD/ADOLES FAMILY ASSIST	6,184	*21.4%*	*6.75*
20004H	CASE MNGMT-LIC QMHP IND	3,676	*12.7%*	*4.01*
Y3128J	TARGET C M SED/CM IND	3,499	*12.1%*	*3.82*
440001	RESPITE CARE - IND. -	1,342	*4.7%*	*1.47*
Y3128K	TARGET CASE MGMT (TCM) YTH	763	*2.6%*	*0.83*
20008H	CASE MGMT-CHILD PSYCHITRST	578	*2.0%*	*0.63*
Y3127J	TARGET C M SED/MHP IND	482	*1.7%*	*0.53*
Y3127K	TARGET CASE MGMT (TCM) YTH	348	*1.2%*	*0.38*
39601W	WRAP-AROUND SRVCS-YOUTH IND	179	*0.6%*	*0.20*
20003H	CASE MNGMT-PHYSICIAN IND	156	*0.5%*	*0.17*
20001H	CASE MNGMT-PARAPROFESS IND	119	*0.4%*	*0.13*
02500H	FAMILY SUPPORT	51	*0.2%*	*0.06*
44006W	RESPITE CARE ONE-TIME-ONLY PRESC	15	*0.1%*	*0.02*
20006H	CASE MNGMT-AD PR NURSE IND	9	*0.03%*	*0.01*
20005H	CASE MNGMT-LIC PSYCH IND	3	*0.0%*	*0.00*
39603W	WRAP-AROUND SRVCS ADULT AS	1	*0.003%*	*0.00*
TOTALS		**28,840**		



- Average # of service units per child: 31.5
- Average months of continuous eligibility during the study period: 9.9
- Average # of service units per child per month of continuous eligibility: 3.17

Summary comparative statistics can be found in Figures 20a through 20c, below.

Figure 20a

High-level comparison of wraparound service utilization across service delivery systems, 1115 Waiver children, Jan. '04-Jun. '05

Data Source: Missouri Department of Social Services, Missouri Department of Mental Health

SUMMARY STATISTICS, SUBSET 2 ("HMO")

Totals:	Span Days	Services
	261,848	13,223
Unique # benes:	633	
Averages:		
Svcs./span day	0.0505	
Span days/child	413.7	
Span months/child		*13.7*
Svcs./child	20.9	
Svcs./child/span month		*1.53*
Relative use % (Subset 2 to Subset 3):		*48%*

SUMMARY STATISTICS, SUBSET 3 ("FFS")

Totals:	Span Days	Services
	274,605	28,840
Unique # benes:	916	
Averages:		
Svcs./span day	0.1050	
Span days/child	299.8	
Span months/child		*9.9*
Svcs./child	31.5	
Svcs./child/span month		*3.17*

Figure 20b

Comparison of wraparound service utilization across service delivery systems by service type, 1115 Waiver children, Jan. '04-Jun. '05 - table

Data Source: Missouri Department of Social Services, Missouri Department of Mental Health

Subset 2 = "HMO" subset; Subset 3 = "FFS" subset.

SUBSET 2

Service Type	% All Svcs.	SUBSET 2 - Use Rate (Avg. Svcs. Per Child)
Case Management - Targeted	16.3%	3.4
Case Management - Other	29.7%	6.2
Family Assistance	41.3%	8.6
Family Support	5.7%	1.2
Respite	5.5%	1.2
Other	1.5%	0.3

SUBSET 3

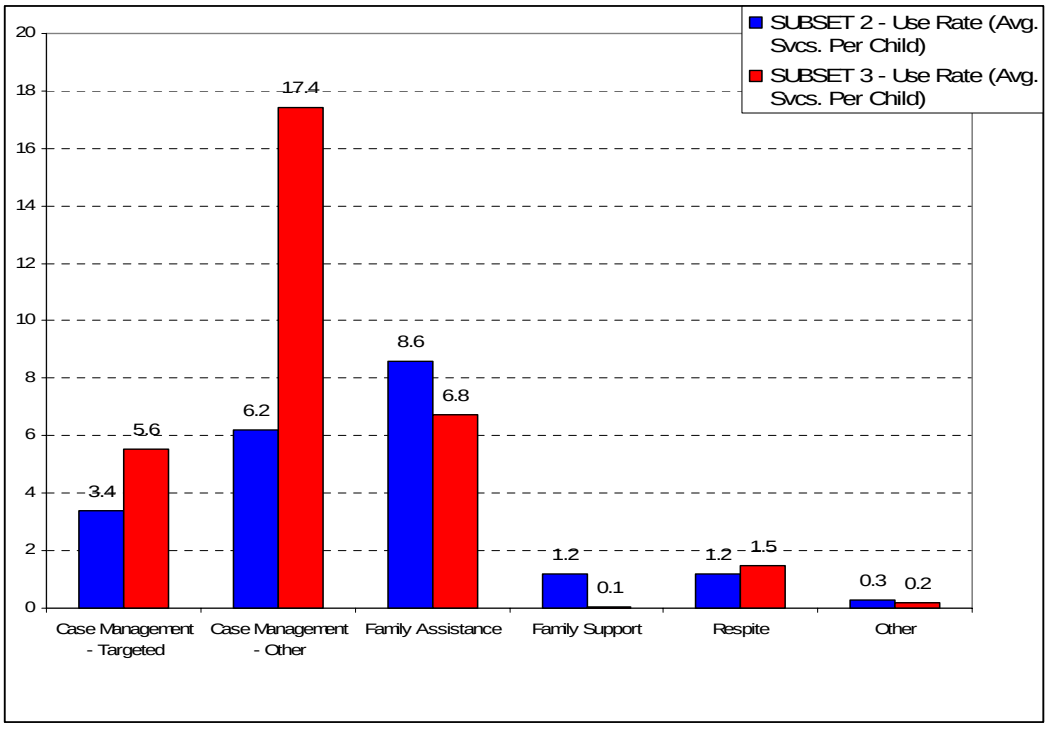
Service Type	% All Svcs.	SUBSET 3 - Use Rate (Avg. Svcs. Per Child)
Case Management - Targeted	17.7%	5.6
Case Management - Other	55.4%	17.4
Family Assistance	21.4%	6.8
Family Support	0.2%	0.1
Respite	4.7%	1.5
Other	0.6%	0.2

Figure 20c

Comparison of wraparound service utilization across service delivery systems by service type, 1115 Waiver children, Jan. '04-Jun. '05 - chart

Data Source: MO Department of Social Services, MO Department of Mental Health

Subset 2 = "HMO" subset; Subset 3 = "FFS" subset.



Observations

Despite the limitations associated with the data used in last year's evaluation, we were able to ascertain that 1115 Waiver children in fee-for-service were more likely to utilize wraparound services than HMO enrollees. The more concrete statistics in this year's evaluation would tend to support that hypothesis. According to the data that was analyzed for this evaluation, the use rate of wraparound services by 1115 Waiver children enrolled in an HMO is slightly less than half the use rate of 1115 Waiver children in fee-for-service.

These statistics alone are not conclusive evidence of an actual disparity, particularly without an analysis of whether these are similar populations or not, what non-wraparound mental health and substance abuse services the individuals are receiving, and whether there are differences not related to the service delivery model, for example, whether some services are more easily obtained in an urban area (where managed care exists) than a rural area (where there is no managed care).

There are, however, interesting differences in the mix of services across service delivery systems that may warrant further study:

- While *case management* services are the most utilized wraparound service in both subsets, these make just under half of all Subset 2/HMO services but almost three quarters of all Subset 3/FFS services. In particular there is a large difference in utilization of case management services other than TCM.
- *Family assistance* makes up more than 40 percent of all wraparound services used by Subset 2/HMO recipients but only one fifth of the services used by Subset 3/FFS recipients.
- *Family support* services make up almost 6 percent of wraparound services used by Subset 2/HMO recipients but they are virtually not used (0.2 percent of all services) by Subset 3/FFS recipients.

Interviews

In order to better inform the responses to this research question we conducted a series of short telephone interviews with parents of SED children and providers of wraparound services. For provider interviews we spoke with staff at the administrative agents of DMH's Division of Comprehensive Psychiatric Services. We spoke with three parents

and twelve staff members (most often the children's services director or clinical director) representing fourteen administrative agents in thirteen of the service areas.[31] Of the service areas represented, ten were in service areas that had some managed care.

We asked the providers several questions designed to determine:

- How accessible these services are;
- Whether some services are more available than others;
- Whether these services are useful to the children and families; and
- Whether there is a difference in obtaining the services for children in fee-for-service Medicaid as compared to those in managed care.

All but one of the providers indicated that the services, when provided, are extremely helpful to both the children and families. Several providers said that many of these services would be beneficial to other children and families who are functionally worse off than many of the children who do receive services but because these children have not been diagnosed as SED they do not qualify for them. One provider, however, indicated that wrap-around services are over-rated and have limited application. He expressed concern that many children need a broader array of services but that wrap-around services are provided first because they are cheaper. Only when these services "fail," are the more intensive services, which purportedly were needed all along, actually provided.

Regarding specific services, nearly all providers indicated that case management services are accessible and available, as is suggested by the utilization data. One provider however, located in the southwest corner of the state, did say that there are not enough case managers in their area and they have lists of children awaiting case management services.

All of the providers stated that respite services can be very helpful for the family and that the services play an important role in keeping children in the home. Unfortunately, nearly all providers said it is difficult to schedule because of a shortage of respite providers. One provider said there are enough respite providers but there are not

[31] Some of the individuals with whom we spoke worked for organizations that were the administrative agent for more than 1 service area

enough “culturally appropriate” respite providers. Another provider did say that providing respite is difficult but they have been working hard at building relationships with treatment family homes and this has helped. Several providers opined that higher reimbursement rates would likely help with the respite provider shortage.

Providers also said that family support services, in particular peer support (parent-to-parent guidance) can be extremely helpful to parents and that, in many instances, parents are more likely to confide in other parents than in case managers. As with above, providers believe there is a shortage of peer support services because there is a provider shortage (for this service the providers are other parents and these parents are frequently overwhelmed with their own crises and challenges parenting SED children).

Several providers offered that family assistance services and other services designed to help the children with socialization and the development of other life skills can also be very helpful.

Finally, providers did mention they use the wraparound funds to provide transportation services and other one-time services such as paying utility bills or providing other support that helps families remain in their homes. Their ability to provide this type of assistance is limited by the amount of money DMH has appropriated. Two providers said specifically that it had been easier in the past to provide these services and that they are now fighting to keep what they have.

The parents with whom we spoke reiterated much of what the providers shared, albeit from the perspective of a parent. For example, all three parents stressed how invaluable family support—in particular peer support—can be and lamented its unavailability. One parent indicated that parents are not even informed of this service and surmised it is because “clinical providers don’t value family support.” It is noteworthy that several providers did specifically state that this is one service they know is very helpful and would like to see more of. The parents did have extensive experience with case management services which correlates with the data finding of high utilization of case management services. However, two parents stressed the importance of who the case manager is and the relationship developed with that individual. One woman said her daughter had a wonderful case manager last year but has been reassigned to a new

case manager and the relationship is not nearly as good. Of these parents, one had a child in fee-for-service Medicaid and the other had a child in managed care (one parent provided a broader perspective and did not provide specific details about the services her child had received).

In seeking to answer whether there is a difference in the accessibility of services based on the delivery model, none of the providers were able to provide insight into why the utilization patterns differ between fee-for-service and managed care.

Summary and Conclusion

For this year's evaluation we were able, for the first time, to develop an analysis of service utilization across service delivery systems—an analysis which revealed that there is a difference between the rates at which certain services are used depending upon the service delivery system. In particular, the case management use rates (services per child) are much higher for children in fee-for service than for those in managed care. Children in managed care, however, have higher use rates for family assistance and family support services.

Our discussions with providers and parents mirrored the utilization trends. That is, the individuals with whom we spoke (with one exception) suggested that case management is available but that the other services are more difficult to obtain. Unfortunately, these individuals were unable to provide insight into why there are different utilization rates across service delivery systems.

In next year's evaluation we would like to explore the differences between utilization of these services by delivery system with the ultimate goal of identifying the root causes of these differences. To that end it would be very beneficial to obtain and analyze demographic and clinical assessment data for the same group of children that received wraparound services during this evaluation's study period (January 2004 – June 2005).

RESEARCH QUESTION 4: WHAT IS THE EFFECT OF THE 1115 WAIVER ON THE NUMBER OF CHILDREN COVERED BY PRIVATE INSURERS? DOES THE 1115 WAIVER EXPANSION TO COVER CHILDREN WITH A GROSS FAMILY INCOME ABOVE 185 PERCENT FPL HAVE ANY NEGATIVE EFFECT ON THESE NUMBERS?

In answering whether the 1115 Waiver has an effect on the number of children receiving private coverage—most frequently through their parents' employer-sponsored coverage—we are seeking to answer whether there has been any "crowd-out." Crowd-out, defined as a shift from private health insurance coverage to public coverage, generally occurs in one of three ways:

1. an individual drops private coverage for public coverage;
2. an enrollee with public coverage refuses an offer of private coverage (does not "take-up" the coverage); or
3. employers take actions—which 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).[32]

Crowd-out does not occur when people, who would otherwise have become uninsured, enroll in a public program.[33]

Measuring Crowd-out

At a basic level, one could determine the existence and extent of crowd-out by analyzing the mix of private and public coverage before a public program expansion and compare it to the mix after the program expansion was implemented. The theory is that, all else being equal, a decrease in enrollment in private insurance occurring in the same timeframe as an increase in public coverage is evidence of crowd-out. That is, of their own volition, enrollees in private insurance have decided to avoid costs and switch to publicly-funded medical assistance for which they are eligible or employers have acted to discourage their employees from taking-up their offers of coverage or have opted not to provide health insurance.

[32] 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.
[33] Davidson, Blewett & Call (June 2004).

Applying this assessment method is complicated, however, by the fact that all other things are not equal. As discussed in Research Question 1, over the last several years, there has been a loss of jobs, decreases in the percentage of firms offering employer-sponsored insurance (ESI), and increases in the cost of ESI. Moreover, in analyzing whether crowd-out has occurred it is necessary to determine whether employers are taking actions—which they would not have taken in the absence of the public coverage—because they hope to steer the employees away from employer-sponsored 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 thus, might increase employee contributions and/or stop providing coverage regardless of the existence of expanded public programs.

On the employee side, effectively measuring crowd-out means knowing that employees have chosen not to take up the employer-sponsored coverage because they have determined they can save money by enrolling in a publicly-funded program. Again, determining what motivates people to act in certain ways is not easy. For example, employees may not take-up dependent coverage because premiums have risen by 10 percent; the existence of an expanded public program does not necessarily play into their decision.

The crowd-out issue is of concern for several reasons. One argument is that, given the limited funding of expansion programs, allowing individuals who are already insured or have access to ESI to enroll in a public program reduces the number of children who do not have access to ESI who can be enrolled.[34] Some have gone so far as to say that expanding Medicaid "causes private coverage to decline, and can even increase the number of people counted as uninsured."[35] Conversely, others argue that crowd-out may not be a bad thing; that is low income individuals, in particular families, who elect to enroll in public programs in lieu of taking up ESI or other private coverage do so because it gives them financial relief, better coverage or both.[36]

Because of the inherent challenges in quantifying crowd-out, and the importance of the issue to policy makers, much research has been done in this area. Despite all of this research, there is no consensus on how prevalent crowd-out is. A 2004 synthesis paper compiled by

[34] Hegner, R. A. (October, 1998). "The State Children's Health Insurance Program: How Much Latitude Do the States Really Have?" Washington, DC: National Health Policy Forum, Issue Brief No. 725.
[35] Cannon, M. F. (September 19, 2005). "Medicaid is Behind the Decline in Private Health Coverage." The Union Leader.
[36] Hegner (October 1998).

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 any crowd-out to upwards of 75 percent (not all of the findings were statistically significant).[37] 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 differences in income thresholds), and the inherent challenges in ascertaining the motivations of both employers and employees. In sum, there is no consensus on the magnitude of crowd-out and, as evidenced by the models that showed no crowd-out effects, if it occurs at all.

Previous Evaluations of the 1115 Waiver

Previous evaluations of the 1115 Waiver have concluded that, though there were potential indicators—the increase in Medicaid enrollment concurrent with decreases in private enrollment—there was not enough evidence to support a conclusion that crowd-out was occurring. That is, most likely, the increase in Medicaid enrollment and the decrease in private insurance enrollment were due to economic conditions such as increases in unemployment, a reduction in the number of jobs that provide health insurance, and increased cost shifting of health insurance premiums by employers to employees.[38]

During last year's evaluation we also spoke with 18 employers who provided us with general information about their companies and anecdotal information about their health insurance plans. In addition, two representatives of Chambers of Commerce spoke with us about what they hear from their members regarding health insurance offerings and take-up rates among employees. Specifically, we asked these individuals:

- 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 Medicaid program and were going to enroll their children in it.

[37] Davidson, Blewett & Call (June 2004).
[38] Alicia Smith & Associates, LLC. (2005). *Evaluation of the Missouri Section 1115 Waiver. Review Period: September 1, 2003 – August 31, 2004.*

None of these employers 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 with whom we spoke said there had not been 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 Medicaid (including the 1115 Waiver program), seven employers and one Chamber of Commerce representative said, "yes." Of those employers who indicated this occurred, they said it was relatively 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.

While these anecdotes suggested there might have been some crowd-out—that is employees declined ESI because they planned to enroll, or had enrolled, their children into the 1115 Waiver—there were other factors playing into these decisions. For example, one or two 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 turn-over rates (100 percent) many employees never become eligible for ESI. There is no crowd-out in this scenario because the employees didn't 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.

Analysis of the Waiver Period September 2004 through August 2005

As with previous years, during this evaluation period the number of children with private insurance declined while the number of children with Medicaid increased. However, this does not necessarily mean that crowd-out is occurring because, as was discussed in Research Question 1, the unemployment rate is increasing and there has been a shift in the types of jobs—from those that provide health insurance to those that are less likely to do so. These other economic changes have likely contributed to changes in the number of children with both private and public health insurance.

Since the publication of the Robert Wood Johnson Foundation 2004 synthesis paper discussed above, several other researchers have examined the issue of crowd-out at the national level. Researchers Thomas Buchmueller, Philip Cooper, Kosali Simon and Jessica Vistnes, in examining whether the SCHIP expansions have effected employers' health insurance decisions, found no evidence that employers dropped health insurance altogether or dropped coverage for the dependents of employees.[39] The research did, however, suggest that employers whose workers were likely to have eligible children did raise family employee contributions relative to those for single coverage. The researchers also found lower-take-up rates for ESI, suggesting that employees might opt for public coverage.

Julie Hudson, Thomas Seldon and Jessica Banthin developed several different models to investigate the impact of SCHIP on insurance coverage for children and found that across all models SCHIP had a "significant impact in decreasing uninsurance and increasing public insurance for children targeted by SCHIP and those eligible for Medicaid."[40] However, with respect to the effect on private insurance, some models showed significant decreases in private insurance (suggesting crowd-out) while others resulted in no significant effect. The researchers concluded that because the estimates of crowd-out lacked robustness and precision, policy-makers should exercise caution in developing programs and policies based on crowd-out research. That is, it was impossible for the researchers to quantify the extent to which crowd-out occurs, if, in fact, it occurs at all.

Finally, Lara D. Shore-Sheppard uses March Current Population Survey data to re-create the analysis conducted by David Cutler and Jonathan Gruber in their 1996 paper—considered the seminal paper of this issue—and found no statistically significant evidence of crowd-out.[41]

In sum, these researchers confirm the findings of the Robert Wood Johnson synthesis paper, and despite the importance of the issue and the extensive research that has been conducted, the debate about the extent to which crowd-out occurs will continue. This additional research

[39] Buchmueller, T., Cooper, P., Simon, K. & Vistnes, J. (Fall 2005). "The Effect of SCHIP Expansions on Health Insurance Decisions by Employers." *Inquiry* 42: 218-231.
[40] Hudson, J.L., Seldon, T. M. & Banthin, J.S. (Fall 2005). "The Impact of SCHIP on Insurance Coverage of Children." *Inquiry* 42: 232-254.
[41] Shore-Sheppard, L.D. (January 2005). "Stemming the Tide? The Effect of Expanding Medicaid Eligibility on Health Insurance." National Bureau of Economic Research, Working Paper 11091.

supports our assertion that it is impossible to conclude that crowd-out is occurring, and it is certainly impossible to quantify the extent to which it might be happening.

Specifically referring to the second part of the question of whether the 1115 Waiver expansion to cover children with a gross family income above 185 percent FPL has a negative effect on these numbers, for the reasons give above, it is not possible to definitively conclude that the expansion has driven down the numbers of children with private health insurance. Answering this question is further complicated by the fact that we do not know the family incomes of children who have lost private health coverage. While we do know there have been enrollment increases in the two eligibility categories covering children above 185 percent of FPL over the past year, with the largest percentage increase occurring among children from families whose income is between 226 and 300 percent of FPL, we do not know that it is children in these income groups that are losing private health insurance. These children may have been uninsured prior to enrolling in the 1115 Waiver or, as conversations with state employees suggested during last year's evaluation, were in the no premium groups originally (the state has been more closely monitoring income levels to ensure that children are placed in the appropriate eligibility category).

Summary and Conclusion

In summary, as with previous years, there are potential indicators—the increase in Medicaid enrollment concurrent with a decrease in private insurance enrollment—but there is not enough evidence to support a conclusion that crowd-out is occurring. Nor is it possible to determine its magnitude, if in fact, it is occurring. The increase in Medicaid enrollment and the decrease in private insurance enrollment are likely due to the changing economic environment, including rising unemployment, loss of jobs that provide health insurance, and increased cost shifting to employees. In the absence of the 1115 Waiver it is likely that many children who lost ESI would have joined the ranks of the uninsured.

Although there is no evidence to suggest the State is not closely monitoring whether potential enrollees have access to private coverage, close examination of its enrollment practices might reveal the need to be more thorough in determining whether potential enrollees have access to private coverage; more comprehensive information-collecting

at enrollment could discourage people from opting-out of ESI in order to enroll their children in the 1115 Waiver.

RESEARCH QUESTION 5: HAS THE 1115 WAIVER AMENDMENT IMPROVED THE HEALTH OF THE INDIGENT OF ST. LOUIS CITY?

In this evaluation cycle, our response to this research question focuses on recent developments associated with ConnectCare's impact on providing services to the medically indigent. The analysis uses activity data provided by ConnectCare and broader metrics of ER utilization produced by the Department of Health and Senior Services.

Background: About the St. Louis Waiver Amendment and ConnectCare

The **St. Louis Waiver Amendment** authorized a demonstration to transition St. Louis ConnectCare (ConnectCare) to an outpatient system of care and, ultimately, to facilitate the creation in the St. Louis region of a long-term viable "safety net" system of care for the medically indigent. To that end a portion of Disproportionate Share Hospital (DSH) funds was made available under the demonstration. Additionally, the following key benchmarks were tied to the demonstration's authorization:

1. The ongoing reporting of ConnectCare activity and costs;
2. The formation of Planning Work Groups to review regional health care issues;
3. The compilation and analysis of area data for use in strategic health planning and policy development; and
4. The preparation of a strategic plan and an implementation plan for delivery of health care services to the medically indigent population in the St. Louis area.

ConnectCare has completed its transition to a fully outpatient system of care and operates the "largest community health center in the city of St. Louis."[42] ConnectCare is also part of the St. Louis Integrated Health Network (IHN), which among others includes Saint Louis University, Washington University and the Saint Louis County Department of Health. The stated goal of the IHN is to "ensure access to health care for uninsured and underinsured children and adults" through increased integration and coordination of a health care safety net. [43] The IHN is funded by its members and by a grant from the Federal government's Integrated Services Development Initiative through the Health Resources and Services Administration (HRSA). The IHN has also received grants from other institutions, such as the Episcopal-Presbyterian Charitable Health and Medical

[42] http://stlconnectcareorg/about.html
[43] http://www.stlouisihn.org/m_aboutus.php

Trust, to provide targeted services such as patient health literacy programs and education for minority and immigrant patients.

ConnectCare developments

As of the last evaluation, ConnectCare was comprised of five primary care clinics (PCCs), an urgent care center (UCC) and a stand-alone dialysis center. As of late 2005, ownership, operation and management of the PCCs were transitioned to two health care entities in the region; these entities are Federally Qualified Health Centers (FQHCs) and as such they are entitled to special funding considerations by the Federal government:

- The *Lillian Courtney* and *Max Starkloff* PCCs are now owned, operated and managed by Grace Hill Health Centers.
- The *Florence Hill* and *Homer G. Phillips* PCCs are now owned, operated and managed by Myrtle Hilliard Davis.

Grace Hill and Myrtle Hilliard Davis are also members of the IHN.

According to a letter dated September 16, 2005 and signed by Glendia Hatton, President and CEO of ConnectCare, this "new healthcare delivery system" will allow ConnectCare to focus on specialty services and the Urgent Care Center. Over $7 million in local contributions was set aside to provide for necessary capital improvements to the PCCs.[44] This ownership change has been couched as a direct result of "four years of planning through the St. Louis Regional Health Commission (RHC) which conducted a study that recommended affiliations between FQHCs and non-FQHCs."[45]

As part of this ownership transfer it was agreed that 60 percent of the DSH funding that previously under the Waiver would have gone to ConnectCare will continue to go to ConnectCare. The remainder of this funding will be divided between the two FQHCs based on the proportionate share of the primary care case load that they assumed.

In addition to these changes ConnectCare has taken on new services targeted at the underserved populations in St. Louis City and County:

- Sexually transmitted disease (STD) and tuberculosis (TB) testing services; and

[44] http://bond.senate.gov/press_section/record.cfm?id=246873
[45] Web site of Senator Kip Bond of Missouri: http://bond.senate.gov

- "MetroAIDS" HIV/AIDS testing and counseling services.

Analysis: ConnectCare service utilization statistics

Note #1: service utilization statistics provided in previous evaluations may differ from those provided in this evaluation. Methods of recognizing and reporting service activity (encounters, procedures, etc.), a reduction in the number of locum tenens physicians and the outsourcing of lab and dialysis services are driving these differences.

Note #2: The data set available for this year's evaluation was more limited than in previous years (specifically, we were not able to obtain detailed utilization data by specialty).

Note #3: ConnectCare staff confirmed that calendar year 2005 utilization statistics are substantially lower than in 2004 primarily because of the transition of the PCCs to the two FQHCs; this impacts the ability to conduct trend analysis as well as its overall value.

In this evaluation we used 2004 service utilization activity to determine if last year's assessment of ConnectCare's potential impact was on target. In last year's evaluation we asserted that ConnectCare has had an impact on extending needed health care services to Medicaid and uninsured populations in the St. Louis region. The statistics analyzed for this year's evaluation support this assertion. Overall, the four PCCs and the UCC continue to experience significant volume – over 165,000 visits in 2004 alone (ref. Figure 21, next page). Moreover, the vast majority of ConnectCare patients continue to be Medicaid/SCHIP beneficiaries and the uninsured. These two populations make up over 78 percent of ConnectCare patients (ref. Figure 22, next page) and over 85 percent of UCC patients.

Figure 21: ConnectCare encounters by facility and payer, 2004.

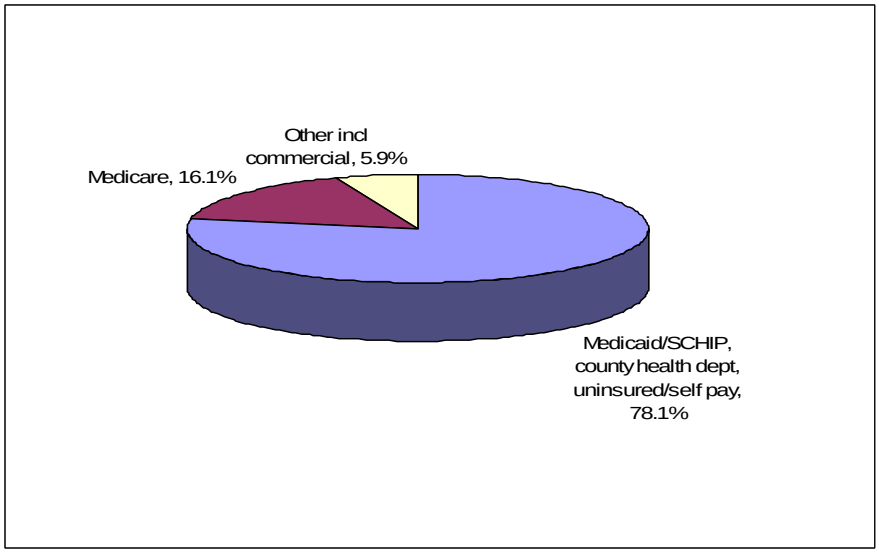
Data Source: ConnectCare. Encounters are reported as defined by ConnectCare.

Facility: / Encounters by payer type:	Florence Hill	Homer Phillips	Lillian Courtney	Max Starkloff	Urgent Care	TOTALS	% of Total
MEDICAID MANAGED CARE	7,248	6,385	10,445	12,779	4,805	**41,662**	*25.1%*
INDIGENT	2,440	6,871	8,303	11,699	8,578	**37,891**	*22.9%*
SELF PAY	1,554	3,274	3,212	6,209	14,528	**28,777**	*17.4%*
MEDICARE	2,568	7,945	6,413	5,791	3,898	**26,615**	*16.1%*
MEDICAID	2,574	4,535	3,892	4,430	3,570	**19,001**	*11.5%*
DENTAL PLANS	6	5	3,497	2,968	16	**6,492**	*3.9%*
HOMELESS	31	96	219	117	1,359	**1,822**	*1.1%*
COMMERCIAL (OTHER THAN BLUE CROSS BLUE SHIELD)	136	185	140	233	1,009	**1,703**	*1.0%*
BLUE CROSS BLUE SHIELD	75	43	62	53	349	**582**	*0.4%*
LOCALS PLANS	34	86	41	84	104	**349**	*0.2%*
ATTORNEY INFORMATION	19	9	20	28	160	**236**	*0.1%*
CHILDREN HEALTH INSR PLAN	31	3	21	67	55	**177**	*0.1%*
OTHER NON COM INSR PAYORS	5	14	26	1	111	**157**	*0.1%*
COUNTY DEPT OF HEALTH	-	3	1	8	120	**132**	*0.1%*
ALL OTHER	6	15	39	78	68	**206**	*0.1%*
TOTALS	**16,727**	**29,469**	**36,331**	**44,545**	**38,730**	**165,802**	

Figure 22

ConnectCare payer mix (based on encounters as defined by ConnectCare), 2004.

Data Source: ConnectCare



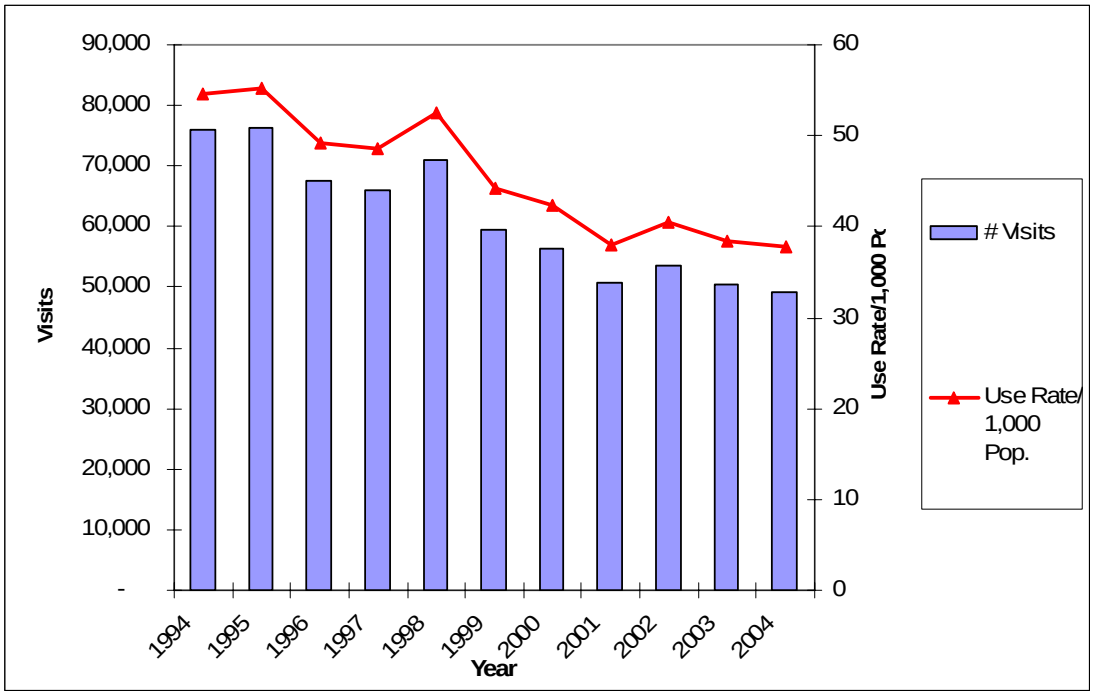
Analysis: ER utilization statistics

After reaching 76,000 visits in 1995 and 71,000 visits in 1998, ER utilization by the medically indigent (the "self-pay/no charge" population, as defined by the Missouri Department of Health and Senior Services) in St. Louis city and St. Louis county has experienced a steady decrease since 1998 including decreases of 3,000 visits from 2002 to 2003, and 1,000 visits from 2003 to 2004. Furthermore, the ER use rate for this population decreased by 6 percent from 2002 to 2004. Refer to Figure 23 for a graphical depiction of these phenomena.

These phenomena, especially the more recent developments, are particularly significant in light of economic conditions nationwide and in the St. Louis area that have tended to adversely impact the working poor and the indigent.

Figure 23: Emergency room utilization by the "self pay/no charge" population in St. Louis city and St. Louis County, 1994-2004.

Data Source: Missouri Department of Health and Senior Services



Summary and Conclusion

The "self-sustaining safety net" envisioned when the St. Louis Waiver Amendment was created continues to evolve, with the creation of the IHN and the changes in the structure of ConnectCare. Furthermore, when coupled with the ER utilization trends the ConnectCare utilization statistics suggest a continuing trend towards more appropriate utilization of certain services by the indigent in St. Louis. The statistics do not suggest that access barriers are an issue, although additional study would be required to assert this conclusively.

It may take several years for all of these developments to have a definitive impact on safety net care coordination, access to services and funding adequacy. Additionally, the analysis of more comprehensive utilization data will need to be completed in order to quantify the impact of these changes. Finally, the data available to us to date do not support an assessment of how the health status of the targeted population is being impacted by these changes; a study of this matter is highly recommended.

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EVALUATION OF THE MISSOURI SECTION 1115 WAIVER ***Review period: September 1, 2004-August 31, 2005***

Table 1: Health Insurance Coverage, Children Age < 18

Data source: U.S. Census Bureau

Under 18 years	All Types of Coverage						Government-Based						Uninsured			
	Private or Govt.		Private		Employment - Based		Medicaid		Medicare		Military		Not Covered		% Uninsured	
Year	MO	USA	MO	USA	MO	USA	MO	USA	MO	USA	MO	USA	MO	USA	MO	USA
1990	1,267	56,786	1,038	46,436	897	39,981	270	12,094	-	88	22	2,408	191	8,504	13.1%	13.0%
1991	1,035	57,794	866	46,114	755	39,683	198	13,514	-	52	-	2,425	170	8,379	14.1%	12.7%
1992	1,170	60,005	937	47,183	797	40,382	263	15,109	3	97	32	2,378	176	8,716	13.1%	12.7%
1993	1,251	60,192	992	47,017	860	39,745	326	16,693	4	48	51	2,307	129	9,574	9.3%	13.7%
1994	1,087	60,505	843	46,266	814	42,966	283	16,132	-	228	32	2,708	117	10,003	9.8%	14.2%
1995	1,077	61,353	907	47,021	823	43,822	207	16,524	3	348	50	2,336	181	9,795	14.4%	13.8%
1996	1,264	60,670	1,000	47,219	871	44,054	333	15,502	16	484	23	2,291	168	10,554	11.7%	14.8%
1997	1,187	60,939	978	47,968	873	44,869	225	14,683	4	395	24	2,163	178	10,743	13.0%	15.0%
1998	1,263	60,949	1,016	48,627	949	45,593	287	14,274	11	325	48	2,240	123	11,073	8.9%	15.4%
1999 [1]	1,366	62,996	1,110	50,300	1,008	46,834	306	14,697	4	364	41	2,076	46	9,285	3.3%	12.8%
2000 [2]	1,324	63,697	1,109	50,499	1,009	47,431	252	15,090	9	518	31	2,563	101	8,617	7.1%	11.9%
2001	1,337	64,118	1,079	49,647	1,002	46,439	335	16,502	6	423	24	2,381	66	8,509	4.7%	11.7%
2002	1,304	64,781	1,045	49,473	972	46,182	344	17,526	8	524	52	2,148	69	8,531	5.0%	11.6%
2003	1,303	65,207	1,002	48,475	945	45,004	374	19,392	27	483	33	2,021	103	8,373	7.3%	11.4%
2004	1,291	65,553	958	48,462	888	44,892	407	19,847	12	500	25	2,045	120	8,269	8.5%	11.2%
% Change from 1998 - 1999	8.16%	3.36%	9.25%	3.44%	6.22%	2.72%	6.62%	2.96%	-63.64%	12.00%	-14.58%	-7.32%	-62.60%	-16.15%	-63.42%	-16.59%
% Change from 1999 - 2000	-3.07%	1.11%	-0.09%	0.40%	0.10%	1.27%	-17.65%	2.67%	125.00%	42.31%	-24.39%	23.46%	119.57%	-7.19%	118.09%	-7.36%
% change from 2000 - 2001	0.98%	0.66%	-2.71%	-1.69%	-0.69%	-2.09%	32.94%	9.36%	-33.33%	-18.34%	-22.58%	-7.10%	-34.65%	-1.25%	-33.80%	-1.68%
% Change from 2001 - 2002	-2.47%	1.03%	-3.15%	-0.35%	-2.99%	-0.55%	2.69%	6.21%	33.33%	23.88%	116.67%	-9.79%	4.55%	0.26%	6.38%	-0.85%
% Change from 2002 - 2003	-0.08%	0.66%	-4.11%	-2.02%	-2.78%	-2.55%	8.72%	10.65%	237.50%	-7.82%	-36.54%	-5.91%	49.28%	-1.85%	46.51%	-1.72%
% Change from 2003 - 2004	-0.92%	0.53%	-4.39%	-0.03%	-6.03%	-0.25%	8.82%	2.35%	-55.56%	3.52%	-24.24%	1.19%	16.50%	-1.24%	16.09%	-1.75%
% Change from 1999 - 2002	-4.54%	2.83%	-5.86%	-1.64%	-3.57%	-1.39%	12.42%	19.25%	100.00%	43.96%	26.83%	3.47%	50.00%	-8.12%	53.59%	-9.70%
% Change from 1999 - 2003	-4.61%	3.51%	-9.73%	-3.63%	-6.25%	-3.91%	22.22%	31.95%	575.00%	32.69%	-19.51%	-2.65%	123.91%	-9.82%	125.03%	-11.25%
% Change from 1999 - 2004	-5.49%	4.06%	-13.69%	-3.65%	-11.90%	-4.15%	33.01%	35.04%	200.00%	37.36%	-39.02%	-1.49%	160.87%	-10.94%	161.24%	-12.81%

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1/ Implementation of Census 2000 based population controls.

2/ Sample expanded by 28,000 households.

EVALUATION OF THE MISSOURI SECTION 1115 WAIVER ***Review period: September 1, 2004-August 31, 2005***

Table 2: Health Insurance Coverage, Non-Elderly Adults

Data source: U.S. Census Bureau

	All Types of Coverage						Government-Based						Uninsured			
	Private or Govt.		Private		Employment - Based		Medicaid		Medicare		Military		Not Covered		% Uninsured	
Year	MO	USA	MO	USA	MO	USA	MO	USA	MO	USA	MO	USA	MO	USA	MO	USA
1990	2,729	127,565	2,498	115,133	2,188	100,232	191	9,585	53	3,377	88	6,363	469	25,939	14.67%	16.90%
1991	2,773	127,908	2,592	114,546	2,284	100,280	174	10,475	60	3,477	36	6,217	441	26,777	13.72%	17.31%
1992	2,590	128,102	2,347	113,639	2,035	98,470	198	11,438	86	3,843	72	5,969	546	29,576	17.42%	18.76%
1993	2,650	129,432	2,418	115,009	2,123	98,626	209	12,347	77	3,659	97	6,045	496	29,775	15.76%	18.70%
1994	2,643	130,904	2,408	116,793	2,238	105,598	194	12,638	93	3,496	83	6,907	505	29,425	16.04%	18.35%
1995	2,684	131,021	2,494	117,106	2,193	106,494	157	12,533	67	3,786	98	5,888	571	30,486	17.54%	18.91%
1996	2,588	132,866	2,409	118,952	2,138	108,219	190	12,733	84	4,126	72	5,423	529	30,825	16.97%	18.83%
1997	2,690	132,958	2,469	119,877	2,246	109,259	173	11,372	103	4,325	52	5,240	488	32,372	15.36%	19.58%
1998	2,884	134,477	2,681	122,063	2,452	111,833	179	10,619	72	4,476	67	5,321	447	32,850	13.43%	19.63%
1999 [1]	3,147	140,470	2,907	127,744	2,639	116,683	248	10,852	71	4,554	55	5,315	328	30,675	9.44%	17.92%
2000 [2]	3,055	142,702	2,821	129,860	2,592	119,138	230	11,105	102	4,933	75	5,126	421	30,935	12.11%	17.82%
2001	2,960	143,259	2,686	129,461	2,429	118,467	252	11,828	99	5,162	84	5,015	498	32,426	14.40%	18.46%
2002	2,955	143,603	2,722	128,814	2,467	117,531	212	12,437	71	5,294	92	5,656	577	34,785	16.34%	19.50%
2003	2,909	143,740	2,657	128,235	2,408	116,813	223	13,065	110	5,716	105	5,752	513	36,302	14.99%	20.16%
2004	2,904	144,866	2,537	128,465	2,315	116,777	332	14,370	143	5,792	86	6,125	585	37,255	16.77%	20.46%
% Change from 1998 - 1999	9.1%	4.5%	8.4%	4.7%	7.6%	4.3%	38.5%	2.2%	-1.4%	1.7%	-17.9%	-0.1%	-26.6%	-6.6%	-29.7%	-8.7%
% Change from 1999 - 2000	-2.9%	1.6%	-3.0%	1.7%	-1.8%	2.1%	-7.3%	2.3%	43.7%	8.3%	36.4%	-3.6%	28.4%	0.8%	28.2%	-0.6%
% Change from 2000 - 2001	-3.1%	0.4%	-4.8%	-0.3%	-6.3%	-0.6%	9.6%	6.5%	-2.9%	4.6%	12.0%	-2.2%	18.3%	4.8%	18.9%	3.6%
% Change from 2001 - 2002	-0.2%	0.2%	1.3%	-0.5%	1.6%	-0.8%	-15.9%	5.1%	-28.3%	2.6%	9.5%	12.8%	15.9%	7.3%	13.5%	5.6%
% Change from 2002 - 2003	-1.6%	0.1%	-2.4%	-0.4%	-2.4%	-0.6%	5.2%	5.0%	54.9%	8.0%	14.1%	1.7%	-11.1%	4.4%	-8.3%	3.4%
% Change from 2003 - 2004	-0.2%	0.8%	-4.5%	0.2%	-3.9%	0.0%	48.9%	10.0%	30.0%	1.3%	-18.1%	6.5%	14.0%	2.6%	11.8%	1.5%
% Change from 1999 - 2002	-6.1%	2.2%	-6.4%	0.8%	-6.5%	0.7%	-14.5%	14.6%	0.0%	16.2%	67.3%	6.4%	75.9%	13.4%	73.1%	8.8%
% Change from 1999 - 2003	-7.6%	2.3%	-8.6%	0.4%	-8.8%	0.1%	-10.1%	20.4%	54.9%	25.5%	90.9%	8.2%	56.4%	18.3%	58.8%	12.5%
% Change from 1999 - 2004	-7.7%	3.1%	-12.7%	0.6%	-12.3%	0.1%	33.9%	32.4%	101.4%	27.2%	56.4%	15.2%	78.4%	21.5%	77.6%	14.1%
% Change from 2000 - 2004	-4.9%	1.5%	-10.1%	-1.1%	-10.7%	-2.0%	44.3%	29.4%	40.2%	17.4%	14.7%	19.5%	39.0%	20.4%	38.5%	14.8%

U.S. Census Bureau, Historical Health Insurance Tables, Table HI-5. Health Insurance Coverage by State -- Children Under 18: 1990 to 2004
http://www.census.gov/hhes/hlthins/historic/hihistt5.html
U.S. Census Bureau, Historical Health Insurance Tables, Table HI-6. Health Insurance Coverage Status and Type of Coverage by State -- People Under 65: 1987 to 2004
http://www.census.gov/hhes/hlthins/historic/hihistt6.html
1/ Implementation of Census 2000 based population controls.
2/ Sample expanded by 28,000 households.

EVALUATION OF THE MISSOURI SECTION 1115 WAIVER ***Review period: September 1, 2004-August 31, 2005***

Table 3: Health Insurance Coverage, Children and (Non-Elderly) Adults

Data source: U.S. Census Bureau

	All Types of Coverage						Government-Based						Uninsured			
	Private or Govt.		Private		Employment - Based		Medicaid		Medicare		Military		Not Covered		% Uninsured	
	MO	USA	MO	USA	MO	USA	MO	USA	MO	USA	MO	USA	MO	USA	MO	USA
1990	3,996	184,351	3,536	161,569	3,085	140,213	461	21,679	53	3,465	110	8,771	660	34,443	14.2%	15.7%
1991	3,808	185,702	3,458	160,660	3,039	139,963	372	23,989	60	3,529	36	8,642	611	35,156	13.8%	15.9%
1992	3,760	188,107	3,284	160,822	2,832	138,852	461	26,547	89	3,940	104	8,347	722	38,292	16.1%	16.9%
1993	3,901	189,624	3,410	162,026	2,983	138,371	535	29,040	81	3,707	148	8,352	625	39,349	13.8%	17.2%
1994	3,730	191,409	3,251	163,059	3,052	148,564	477	28,770	93	3,724	115	9,615	622	39,428	14.3%	17.1%
1995	3,761	192,374	3,401	164,127	3,016	150,316	364	29,057	70	4,134	148	8,224	752	40,281	16.7%	17.3%
1996	3,852	193,536	3,409	166,171	3,009	152,273	523	28,235	100	4,610	95	7,714	697	41,379	15.3%	17.6%
1997	3,877	193,897	3,447	167,845	3,119	154,128	398	26,055	107	4,720	76	7,403	666	43,115	14.7%	18.2%
1998	4,147	195,426	3,697	170,690	3,401	157,426	466	24,893	83	4,801	115	7,561	570	43,923	12.1%	18.4%
1999 [1]	4,513	203,466	4,017	178,044	3,647	163,517	554	25,549	75	4,918	96	7,391	374	39,960	7.7%	16.4%
2000 [2]	4,379	206,399	3,930	180,359	3,601	166,569	482	26,195	111	5,451	106	7,689	522	39,552	10.7%	16.1%
2001	4,297	207,377	3,765	179,108	3,431	164,906	587	28,330	105	5,585	108	7,396	564	40,935	11.6%	16.5%
2002	4,259	208,384	3,767	178,287	3,439	163,713	556	29,963	79	5,818	144	7,804	646	43,316	13.2%	17.2%
2003	4,212	208,947	3,659	176,710	3,353	161,817	597	32,457	137	6,199	138	7,773	616	44,675	12.8%	17.6%
2004	4,195	210,419	3,495	176,927	3,203	161,669	739	34,217	155	6,292	111	8,170	705	45,524	14.4%	17.8%
% Change from 1998 - 1999 [4]	8.8%	4.1%	8.7%	4.3%	7.2%	3.9%	18.9%	2.6%	-9.6%	2.4%	-16.5%	-2.2%	-34.4%	-9.0%	-36.3%	-10.6%
% Change from 1999 - 2000	-3.0%	1.4%	-2.2%	1.3%	-1.3%	1.9%	-13.0%	2.5%	48.0%	10.8%	10.4%	4.0%	39.6%	-1.0%	39.0%	-1.8%
% Change from 2000 - 2001	-1.9%	0.5%	-4.2%	-0.7%	-4.7%	-1.0%	21.8%	8.2%	-5.4%	2.5%	1.9%	-3.8%	8.0%	3.5%	8.4%	2.4%
% Change from 2001 - 2002	-0.9%	0.5%	0.1%	-0.5%	0.2%	-0.7%	-5.3%	5.8%	-24.8%	4.2%	33.3%	5.5%	14.5%	5.8%	13.8%	4.3%
% Change from 2002 - 2003	-1.1%	0.3%	-2.9%	-0.9%	-2.5%	-1.2%	7.4%	8.3%	73.4%	6.5%	-4.2%	-0.4%	-4.6%	3.1%	-3.0%	2.3%
% Change from 2003 - 2004	-0.4%	0.7%	-4.5%	0.1%	-4.5%	-0.1%	23.8%	5.4%	13.1%	1.5%	-19.6%	5.1%	14.4%	1.9%	12.5%	1.1%
% Change from 1999 - 2002	-5.6%	2.4%	-6.2%	0.1%	-5.7%	0.1%	0.4%	17.3%	5.3%	18.3%	50.0%	5.6%	72.7%	8.4%	71.4%	4.9%
% Change from 1999 - 2003	-6.67%	2.69%	-8.91%	-0.75%	-8.06%	-1.04%	7.76%	27.04%	82.67%	26.05%	43.75%	5.17%	64.71%	11.80%	66.23%	7.32%
% Change from 1999 - 2004	-6.67%	2.69%	-8.91%	-0.75%	-8.06%	-1.04%	7.76%	27.04%	82.67%	26.05%	43.75%	5.17%	64.71%	11.80%	66.23%	7.32%
% Change from 2000 - 2004	-4.20%	1.95%	-11.07%	-1.90%	-11.05%	-2.94%	53.32%	30.62%	39.64%	15.43%	4.72%	6.26%	35.06%	15.10%	34.58%	10.56%

U.S. Census Bureau, Historical Health Insurance Tables, Table HI-6. Health Insurance Coverage Status and Type of Coverage by State -- People Under 65: 1990 to 200
http://www.census.gov/hhes/hlthins/historic/hihistt6.html

1/ Implementation of Census 2000 based population controls.

2/ Sample expanded by 28,000 households.

EVALUATION OF THE MISSOURI SECTION 1115 WAIVER Review period: September 1, 2004-August 31, 2005
Table 4a-1: Waiver Enrollment by Area/Region - Children

Data source: Missouri Department of Social Services, Family Support Division, Division of Medical Services. Monthly Management Reports for September 2004 – August 2005.

	Sep-04	Oct-04	Nov-04	Dec-04	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05
AREA 1-Northwest												
No Cost	6,778	6,902	7,004	7,109	7,082	7,136	7,141	7,178	7,024	6,887	6,862	6,866
Copay	1,995	2,051	2,088	2,077	2,103	2,115	1,880	1,926	1,925	1,858	1,837	1,764
Premium	346	321	316	342	330	292	263	284	353	357	376	361
TOTAL	**9,119**	**9,274**	**9,408**	**9,528**	**9,515**	**9,543**	**9,284**	**9,388**	**9,302**	**9,102**	**9,075**	**8,991**
AREA 2-Northeast												
No Cost	7,779	7,884	7,911	7,883	7,902	7,861	7,856	7,776	7,753	7,583	7,609	7,709
Copay	2,103	2,222	2,308	2,387	2,408	2,434	2,177	2,230	2,231	2,226	2,275	2,222
Premium	321	312	311	341	354	341	310	323	343	378	393	406
TOTAL	**10,203**	**10,418**	**10,530**	**10,611**	**10,664**	**10,636**	**10,343**	**10,329**	**10,327**	**10,187**	**10,277**	**10,337**
AREA 3-Southeast												
No Cost	10,742	10,788	10,894	10,847	10,905	11,034	11,039	11,056	11,016	10,842	10,727	10,817
Copay	2,833	2,905	2,939	2,953	3,008	3,041	2,728	2,799	2,866	2,878	2,914	2,831
Premium	541	519	507	498	498	497	455	449	462	474	508	539
TOTAL	**14,116**	**14,212**	**14,340**	**14,298**	**14,411**	**14,572**	**14,222**	**14,304**	**14,344**	**14,194**	**14,149**	**14,187**
AREA 4-Southwest												
No Cost	16,588	16,678	16,748	16,782	16,904	16,949	16,922	16,954	16,976	16,783	16,784	16,801
Copay	4,380	4,457	4,549	4,596	4,614	4,683	4,240	4,391	4,449	4,444	4,485	4,335
Premium	664	640	634	626	634	605	593	618	658	702	722	728
TOTAL	**21,632**	**21,775**	**21,931**	**22,004**	**22,152**	**22,237**	**21,755**	**21,963**	**22,083**	**21,929**	**21,991**	**21,864**
AREA 5-Kansas City												
No Cost	11,306	11,291	11,349	11,484	11,568	11,686	11,659	11,759	11,782	11,593	11,687	11,649
Copay	3,150	3,259	3,293	3,400	3,412	3,440	3,175	3,226	3,287	3,351	3,390	3,355
Premium	539	540	554	575	567	543	469	524	567	573	610	660
TOTAL	**14,995**	**15,090**	**15,196**	**15,459**	**15,547**	**15,669**	**15,303**	**15,509**	**15,636**	**15,517**	**15,687**	**15,664**
AREA 6-St. Louis reg												
No Cost	17,408	17,150	17,268	17,408	17,499	17,587	17,557	17,691	17,769	17,626	17,707	17,809
Copay	4,112	4,209	4,276	4,331	4,375	4,536	3,999	4,127	4,177	4,305	4,428	4,342
Premium	686	660	686	718	715	752	784	784	818	870	935	894
TOTAL	**22,206**	**22,019**	**22,230**	**22,457**	**22,589**	**22,875**	**22,340**	**22,602**	**22,764**	**22,801**	**23,070**	**23,045**
STATE WIDE												
No Cost	70,241	70,693	71,174	71,513	71,860	72,253	72,174	72,414	72,320	71,314	71,376	71,651
Copay	18,573	19,103	19,453	19,744	19,920	20,249	18,199	18,699	18,935	19,062	19,329	18,849
Premium	3,097	2,992	3,008	3,100	3,098	3,030	2,874	2,982	3,201	3,354	3,544	3,588
TOTAL	**91,911**	**92,788**	**93,635**	**94,357**	**94,878**	**95,532**	**93,247**	**94,095**	**94,456**	**93,730**	**94,249**	**94,088**

EVALUATION OF THE MISSOURI SECTION 1115 WAIVER ***Review period: September 1, 2003-August 31, 2004***

Table 4a-2: Waiver Enrollment by Area/Region - Children

Data source: Missouri Department of Social Services, Family Support Division, Division of Medical Services. Monthly Management Reports for September 2003 – August 2004 Available at: http://www.dss.mo.gov/re/fsmsmr.htm.

	Sep-03	Oct-03	Nov-03	Dec-03	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04	Aug-04
AREA 1-NW												
No Cost	6,891	6,954	6,929	6,957	6,907	6,896	6,939	6,922	6,853	6,756	6,685	6,724
Copay	1,940	1,929	1,989	2,011	2,017	2,016	1,812	1,877	1,871	1,863	1,881	1,926
Premium	279	322	314	344	342	342	303	296	323	334	326	322
TOTAL	**9,110**	**9,205**	**9,232**	**9,312**	**9,266**	**9,254**	**9,054**	**9,095**	**9,047**	**8,953**	**8,892**	**8,972**
AREA 2-NE												
No Cost	7,982	7,968	7,900	8,005	7,935	7,971	7,948	8,013	7,889	7,822	7,693	7,766
Copay	1,997	2,028	2,067	2,100	2,095	2,133	1,896	1,963	2,026	2,013	2,026	2,055
Premium	286	296	294	323	312	284	273	315	345	378	352	326
TOTAL	**10,265**	**10,292**	**10,261**	**10,428**	**10,342**	**10,388**	**10,117**	**10,291**	**10,260**	**10,213**	**10,071**	**10,147**
AREA 3-SE												
No Cost	11,081	11,160	11,157	11,201	11,126	11,210	11,099	11,095	10,850	10,673	10,590	10,599
Copay	2,861	2,860	2,812	2,802	2,815	2,809	2,468	2,636	2,717	2,724	2,755	2,802
Premium	394	398	409	443	432	438	426	485	539	578	556	547
TOTAL	**14,336**	**14,418**	**14,378**	**14,446**	**14,373**	**14,457**	**13,993**	**14,216**	**14,106**	**13,975**	**13,901**	**13,948**
AREA 4-SW												
No Cost	16,238	16,342	16,415	16,452	16,410	16,502	16,396	16,588	16,505	16,261	16,344	16,480
Copay	4,045	4,119	4,208	4,258	4,287	4,360	3,821	3,938	4,039	4,045	4,187	4,305
Premium	481	518	515	545	561	569	532	571	670	696	691	703
TOTAL	**20,764**	**20,979**	**21,138**	**21,255**	**21,258**	**21,431**	**20,749**	**21,097**	**21,214**	**21,002**	**21,222**	**21,488**
AREA 5-KC												
No Cost	11,055	11,133	11,145	11,123	11,003	11,092	11,145	11,348	11,370	11,156	11,121	11,192
Copay	2,773	2,863	2,888	2,940	2,960	3,009	2,679	2,783	2,873	2,951	2,992	3,072
Premium	411	440	438	463	462	448	426	432	499	537	537	534
TOTAL	**14,239**	**14,436**	**14,471**	**14,526**	**14,425**	**14,549**	**14,250**	**14,563**	**14,742**	**14,644**	**14,650**	**14,798**
AREA 6-St. Louis Region												
No Cost	16,159	16,403	16,576	16,739	16,819	16,903	16,715	17,112	17,300	17,180	17,027	17,003
Copay	3,555	3,680	3,753	3,814	3,857	3,888	3,465	3,615	3,802	3,867	3,916	4,022
Premium	438	516	538	589	603	587	551	604	696	725	728	713
TOTAL	**20,152**	**20,599**	**20,867**	**21,142**	**21,279**	**21,378**	**20,731**	**21,331**	**21,798**	**21,772**	**21,671**	**21,738**
STATE WIDE (In Thousands)												
No Cost	69,406	69,960	70,122	70,477	70,200	70,574	70,242	71,078	70,767	69,848	69,460	69,764
Copay	17,171	17,452	17,717	17,925	18,031	18,215	16,141	16,812	17,328	17,463	17,757	18,181
Premium	2,289	2,490	2,508	2,707	2,712	2,668	2,511	2,703	3,072	3,248	3,190	3,145
TOTAL	**88,866**	**89,902**	**90,347**	**91,109**	**90,943**	**91,457**	**88,894**	**90,593**	**91,167**	**90,559**	**90,407**	**91,090**

EVALUATION OF THE MISSOURI SECTION 1115 WAIVER ***Review period: September 1, 2002-August 31, 2003***

Table 4a-3: Waiver Enrollment by Area/Region - Children

Data source: Missouri Department of Social Services Family Support Division, Division of Medical Services. Monthly Management Reports for September 2002 – August 2003.

	Sep-02	Oct-02	Nov-02	Dec-02	Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Jul-03	Aug-03
AREA 1-NW												
No Cost	8,624	8,908	8,844	8,823	9,012	9,102	9,172	9,304	9,248	9,186	9,221	9,359
Copay	2,463	2,487	2,540	2,608	2,659	2,665	2,492	2,531	2,612	2,628	2,660	2,722
Premium	430	426	447	467	426	402	382	414	417	422	414	414
TOTAL	**11,517**	**11,821**	**11,831**	**11,898**	**12,097**	**12,169**	**12,046**	**12,249**	**12,277**	**12,236**	**12,295**	**12,495**
AREA 2-NE												
No Cost	9,341	9,542	9,599	9,661	9,941	10,068	10,142	10,304	10,382	10,493	11,004	10,983
Copay	2,516	2,570	2,615	2,648	2,657	2,710	2,496	2,542	2,554	2,611	2,748	2,791
Premium	401	407	408	406	377	365	333	311	307	312	347	349
TOTAL	**12,258**	**12,519**	**12,622**	**12,715**	**12,975**	**13,143**	**12,971**	**13,157**	**13,243**	**13,416**	**14,099**	**14,123**
AREA 3-SE												
No Cost	8,448	8,641	8,661	8,696	8,808	8,924	8,935	9,004	9,013	9,038	9,146	9,171
Copay	2,383	2,393	2,402	2,423	2,442	2,484	2,318	2,361	2,391	2,400	2,390	2,377
Premium	385	386	407	373	335	328	290	260	264	278	277	300
TOTAL	**11,216**	**11,420**	**11,470**	**11,492**	**11,585**	**11,736**	**11,543**	**11,625**	**11,668**	**11,716**	**11,813**	**11,848**
AREA 4-SW												
No Cost	16,265	16,728	16,801	16,885	17,163	17,348	17,383	17,360	17,371	17,487	17,739	17,953
Copay	4,189	4,289	4,348	4,375	4,472	4,537	4,171	4,221	4,247	4,297	4,336	4,390
Premium	599	607	579	583	524	501	446	464	503	523	542	551
TOTAL	**21,053**	**21,624**	**21,728**	**21,843**	**22,159**	**22,386**	**22,000**	**22,045**	**22,121**	**22,307**	**22,617**	**22,894**
AREA 5-KC												
No Cost	7,535	7,969	8,052	8,241	8,305	8,433	8,395	8,509	8,521	8,565	8,649	8,733
Copay	1,764	1,831	1,858	1,891	1,955	2,000	1,849	1,881	1,951	1,980	2,024	2,033
Premium	287	299	292	305	310	272	249	248	271	286	282	287
TOTAL	**9,586**	**10,099**	**10,202**	**10,437**	**10,570**	**10,705**	**10,493**	**10,638**	**10,743**	**10,831**	**10,955**	**11,053**
AREA 6-St. Louis City												
No Cost	4,466	4,494	4,461	4,533	4,543	4,599	4,560	4,576	4,576	4,572	4,590	4,688
Copay	809	836	822	840	862	863	805	837	854	849	850	853
Premium	125	131	135	138	138	145	123	129	129	129	117	117
TOTAL	**5,400**	**5,461**	**5,418**	**5,511**	**5,543**	**5,607**	**5,488**	**5,542**	**5,559**	**5,550**	**5,557**	**5,658**
AREA 7-St. Louis Cnty												
No Cost	7,006	7,164	7,223	7,413	7,504	7,751	7,643	7,674	7,731	7,775	7,810	7,918
Copay	1,427	1,463	1,513	1,559	1,576	1,605	1,538	1,569	1,615	1,707	1,744	1,775
Premium	196	209	208	229	216	220	201	201	189	216	208	229
TOTAL	**8,629**	**8,836**	**8,944**	**9,201**	**9,296**	**9,576**	**9,382**	**9,444**	**9,535**	**9,698**	**9,762**	**9,922**
STATE WIDE (In Thousands)												
No Cost	**61,685**	**63,446**	**63,641**	**64,252**	**65,276**	**66,225**	**66,230**	**66,731**	**66,842**	**67,116**	**64,549**	**65,198**
Copay	**15,551**	**15,869**	**16,098**	**16,344**	**16,623**	**16,864**	**15,669**	**15,942**	**16,224**	**16,472**	**15,842**	**16,029**
Premium	**2,423**	**2,465**	**2,476**	**2,501**	**2,326**	**2,233**	**2,024**	**2,027**	**208**	**2,166**	**208**	**2,138**
TOTAL	**79,659**	**81,780**	**82,215**	**83,097**	**84,225**	**85,322**	**83,923**	**84,700**	**83,274**	**85,754**	**80,599**	**83,365**

EVALUATION OF THE MISSOURI SECTION 1115 WAIVER ***Review period: September 1, 2004-August 31, 2005***

Table 4b: Waiver Enrollment by Area/Region - Adults

Data source: Missouri Department of Social Services, Family Support Division, Division of Medical Services. Monthly Management Reports for September 2004 – August 2005. Available at: http://www.dss.mo.gov/re/fsmsmr.htm.

	Sept. 2004	Oct. 2004	Nov. 2004	Dec. 2004	Jan. 2005	Feb. 2005	Mar. 2005	Apr. 2005	May. 2005	Jun. 2005	Jul. 2005	Aug. 2005
AREA 1-Northwest												
Ext. TMA	104	108	122	128	113	124	136	137	170	187		
Ext. Womens	998	1,023	1,001	1,043	1,068	1,081	1,098	1,093	1,067	1,089		
TOTAL	**1,102**	**1,131**	**1,123**	**1,171**	**1,181**	**1,205**	**1,234**	**1,230**	**1,237**	**1,276**		
AREA 2-Northeast												
Ext. TMA	162	163	172	155	165	179	176	181	205	225		
Ext. Womens	1,047	1,050	1,082	1,133	1,142	1,193	1,241	1,233	1,222	1,242		
TOTAL	**1,209**	**1,213**	**1,254**	**1,288**	**1,307**	**1,372**	**1,417**	**1,414**	**1,427**	**1,467**		
AREA 3-Southeast												
Ext. TMA	343	352	395	398	408	434	440	455	465	484		
Ext. Womens	1,192	1,227	1,241	1,258	1,274	1,304	1,380	1,330	1,310	1,331		
TOTAL	**1,535**	**1,579**	**1,636**	**1,656**	**1,682**	**1,738**	**1,820**	**1,785**	**1,775**	**1,815**		
AREA 4-Southwest												
Ext. TMA	341	375	383	375	411	429	441	487	526	567		
Ext. Womens	2,585	2,595	2,593	2,630	2,678	2,676	2,733	2,635	2,575	2,554		
TOTAL	**2,926**	**2,970**	**2,976**	**3,005**	**3,089**	**3,105**	**3,174**	**3,122**	**3,101**	**3,121**		
AREA 5-Kansas City												
Ext. TMA	63	71	78	79	83	83	87	98	104	104		
Ext. Womens	1,627	1,587	1,626	1,649	1,664	1,653	1,707	1,682	1,616	1,619		
TOTAL	**1,690**	**1,658**	**1,704**	**1,728**	**1,747**	**1,736**	**1,794**	**1,780**	**1,720**	**1,723**		
AREA 6-St. Louis Region												
Ext. TMA	133	127	126	128	123	124	126	121	120	135		
Ext. Womens	2,071	2,107	2,129	2,157	2,185	2,212	2,280	2,208	2,153	2,190		
TOTAL	**2,204**	**2,234**	**2,255**	**2,285**	**2,308**	**2,336**	**2,406**	**2,329**	**2,273**	**2,325**		

STATE WIDE												
Ext. TMA	**1,146**	**1,196**	**1,276**	**1,263**	**1,303**	**1,373**	**1,406**	**1,479**	**1,590**	**1,702**		
Ext. Womens	**9,520**	**9,589**	**9,672**	**9,870**	**10,011**	**10,119**	**10,439**	**10,181**	**9,943**	**10,025**		
TOTAL	**10,666**	**10,785**	**10,948**	**11,133**	**11,314**	**11,492**	**11,845**	**11,660**	**11,533**	**11,727**		

1115 WAIVER EVALUATION (Evaluation Cycle: 9/1/04-8/31/05)

APPENDIX I - DATA REQUESTS

RESEARCH QUESTION 2 DATA REQUEST

Calendar Years 1999-2004 Waiver (CHIP) Indicator Rates Compared to Medicaid and Non-Medicaid Regional Rates

About this data request

The statistics associated with this request will be used in our response to Research Question 2.

The indicators for which these statistics are requested are the same as those reported and analyzed in last year's evaluation, namely:

1. Avoidable/preventable hospitalizations, children (ages 0 to 18), all applicable primary diagnoses
2. Avoidable/preventable hospitalizations, children (ages 0 to 18), asthma as the primary diagnosis
3. Emergency visits, children (ages 0 to 18), all primary diagnoses
4. Emergency visits, children (ages 0 to 18), asthma as the primary diagnosis

The statistics are compiled and reported to us by Medicaid region (Eastern, Central, Western, Other) in two ways:

1. As a total number of events (hospitalizations, visits)
2. As a use rate (events per 1,000 program enrollees/population)

For reference purposes, we also ask for the program enrollment and population statistics used to compute the use rates.

To assess the waiver's impact on the utilization of these services, we compare these indicators for the Waiver population to those of the "Non-Medicaid" and "Other/Any Medicaid" populations (same age range). Thus we request these statistics for the three distinct populations.

In previous evaluations we have obtained these statistics from Wayne Schram, who is with the Dept. of Health of Senior Services.

We already have statistics for calendar years 1999, 2000, 2001, 2002 and 2003; it is our understanding that these statistics do not need to be restated.

Our goal for this evaluation cycle is to incorporate data for calendar year 2004 into our analysis and reporting.

The last three years we have obtained this information from Wayne Schramm, DHSS.

Calendar Years 1999-2004 Waiver (CHIP) Indicator Rates Compared to Medicaid and Non-Medicaid Regional Rates

Data Request - Part 1 of 3

* Update figures from previous years as needed;
add explanation of change in Notes sheet.

			Number					*Use/Incidence Rate per 1,000 Members*				
			Eastern	*Central*	*Western*	*Other*	*State*	*Eastern*	*Central*	*Western*	*Other*	*State*
Asthma hospitalizations, age <19:												
	1999	CHIP	37	6	24	27	94	4.6	1.3	2.9	1.2	2.2
		Any Medicaid	998	106	297	453	1,854	7.8	3.2	4.1	2.8	4.7
		Non-Medicaid	572	96	223	250	1,141	1.5	1.0	1.0	0.8	1.1
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	…											
Fill:												
	2004	CHIP										
		Any Medicaid										
		Non-Medicaid										
Asthma ER visits, age <19:												
	1999	CHIP	203	43	126	207	579	25.1	9.3	15.2	9.3	13.4
		Any Medicaid	4,833	471	2,013	1,957	9,274	37.6	14.2	27.6	12.0	23.3
		Non-Medicaid	3,125	356	1,359	1,175	6,015	8.1	3.5	6.3	3.9	6.0
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	…											
	…											
Fill:												
	2004	CHIP										
		Any Medicaid										
		Non-Medicaid										

Calendar Years 1999-2004 Waiver (CHIP) Indicator Rates Compared to Medicaid and Non-Medicaid Regional Rates

Data Request - Part 1 of 3

* Update figures from previous years as needed; add explanation of change in Notes sheet.

			Number					*Use/Incidence Rate per 1,000 Members*				
			Eastern	*Central*	*Western*	*Other*	*State*	*Eastern*	*Central*	*Western*	*Other*	*State*
ER Visits, age <19:												
	1999	CHIP	3,761	2,030	3,513	11,839	21,143	465.2	440.7	424.1	534.0	490.1
		Any Medicaid	84,572	23,078	48,814	128,639	285,103	658.5	697.2	668.9	789.6	717.3
		Non-Medicaid	102,215	24,207	59,699	101,537	287,658	265.5	239.7	275.1	339.6	287.1
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Fill:												
	2004	CHIP										
		Any Medicaid										
		Non-Medicaid										
Preventable hospitalizations, age <19:												
	1999	CHIP	73	22	61	179	335	9.0	4.8	7.4	8.1	7.8
		Any Medicaid	1,851	368	783	2,133	5,135	14.4	11.1	10.7	13.1	12.9
		Non-Medicaid	1,664	354	788	1,311	4,117	4.3	3.5	3.6	4.4	4.1
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Fill:												
	2004	CHIP										
		Any Medicaid										
		Non-Medicaid										

Calendar Years 1999-2004 Waiver (CHIP) Indicator Rates Compared to Medicaid and Non-Medicaid Regional Rates

Data Request - Part 2 of 3

* Update figures from previous years as needed;
add explanation of change in Notes sheet.

			Number				
			Eastern	*Central*	*Western*	*Other*	*State*
Program Membership (Monthly Average During the Year):							
	1999	CHIP under 19	8,085	4,606	8,284	22,169	43,144
		Any Medicaid	128,441	33,103	72,979	162,920	397,443
		Non-Medicaid	385,000	101,000	217,000	299,000	1,002,000
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Fill:							
	2004	CHIP under 19					
		Any Medicaid					
		Non-Medicaid					

Calendar Years 1999-2004 Waiver (CHIP) Indicator Rates Compared to Medicaid and Non-Medicaid Regional Rates
Data Request - Part 3 of 3

Notes (update old notes as needed):

1 *Source Missouri Dept. of Health and Senior Services xx-xx-xx*
2 *Rates are per 1,000 population. For non-CHIP population, age is under 18.*
3 *Note: 2000 data should be interpreted with caution because of a possible programming error.*
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APPENDIX I - DATA REQUESTS

RESEARCH QUESTION 2 DATA REQUEST

Utilization by Waiver Children of Preventive and Wellness Services Compared to Medicaid (non-Waiver) Children

About this data request

The statistics associated with this request will be used in our response to Research Question 2. Specifically, our goal is to assess the waiver's impact on the utilization of the services defined in early preventive, screening, diagnostic and treatment (EPSDT) guidelines. The underlying assumption behind the analysis of these statistics, as it pertains to the research question, is that utilization of these services by a progam enrollee should correlate with and have a discernible impact on the enrollee's health status.

The information we would like to obtain through this request is by and large the same information we aimed to obtain in the previous evaluation cycle, namely:

1. Monthly enrollment statistics for waiver and Medicaid children ages 0-19 in specific eligibility categories.
2. The utilization of the abovementioned services, reported monthly, for all of these children going back to as close to the start of the waiver program as feasible, inclusive of services provided by MCOs as well as those paid for on a fee-for-service basis.

In response to the concerns raised during the previous evaluation cycle about the data set submitted in fulfillment of this data request, we have modified the request for this evaluation cycle as follows:

1. The eligibility statistics stratified by age and, if applicable, health plan (at the start of the month for which eligibility is reported).
2. The utilization statistics are to be stratified by age and, where applicable, health plan (at the time the service was rendered).
3. The timeframe associated with this data request extends from January 2004 to June 2005. This would give us the opportunity to receive updated and/or restated data, which should address data completeness and accuracy concerns. This would also give us 18 full months of historical utilization, which would enable us to account for seasonal and other variations inherent to the data.
   * The timeframe associated with this request can be revised if providing data for the entire period is not feasible or if completeness or accuracy concerns remain for certain segments of the data.

To assess the waiver's impact on the utilization of these services, we compare these statistics for the Waiver population to those of the "Other Medicaid" populations. Thus we request these statistics for the two distinct populations.

In the last evaluation cycle we obtained these statistics via Kim Carter, DSS.

Timeframe -

January 2004 - June 2005

Populations in Scope -

Children ages 0-19 with the following eligibility codes:

06-40, 50-57, 60, 62-75, 87

File Layout and Sample Records (sample records are for illustrative purposes only) -

FILE 1: ELIGIBILITY FILE

			Eastern, Central, Western, etc.	*Blank or some other unique indicator if eligible was in FFS*		
Month of Service	**Eligibility Code**	**Age**	**MC+ Region**	**Health Plan**	**Unduplicated Count**	**Member Months**
January-04	6	2	Central	MissouriCare	100	95
January-04	6	3	Central	MissouriCare	50	40
January-04	71	71	Central	MissouriCare	150	140

Timeframe -

Months of service between and including January 2004 and June 2005

Populations in Scope -

Children ages 0-19 with the following eligibility codes:

06-40, 50-57, 60, 62-75, 87

Services -

Capture utilization of any of the following procedures:

	Description	Procedure Code Range	Apply the Following Qualifiers to these Procedures:
Type #1	Preventive medicine	99381-99385, 99391-99395, 99431-99432	
Type #2	E&M/preventive diagnosis	99201-99205, 99211-99215	Capture utilization of these procedures **only** when they are used in conjunction with the following diagnosis codes: V20-V20.2 and/or V70.0 and/or V70.3-V70.9
Type #3	Preventive vaccinations	90476-90748	

File Layout and Sample Records (sample records are for illustrative purposes only) -

FILE 2: FFS SERVICE FILE

Eastern, Central, Western, etc.

Month of Service	Eligibility Code	Age	MC+ Region	Procedure Code	Diagnosis Code	# Services
January-04	6	2	Central	99381	V20	15
January-04	71	3	Central	99382	V70.0	32

Timeframe -

Months of service between and including January 2004 and June 2005

Populations in Scope -

Children ages 0-19 with the following eligibility codes:

06-40, 50-57, 60, 62-75, 87

Services -

Capture utilization of any of the following procedures:

	Description	Procedure Code Range	Apply the Following Qualifiers to these Procedures:
Type #1	Preventive medicine	99381-99385, 99391-99395, 99431-99432	
Type #2	E&M/preventive diagnosis	99201-99205, 99211-99215	Capture utilization of these procedures **only** when they are used in conjunction with the following diagnosis codes: V20-V20.2 and/or V70.0 and/or V70.3-V70.9
Type #3	Preventive vaccinations	90476-90748	

File Layout and Sample Records (sample records are for illustrative purposes only) -

FILE 3: MCO SERVICE FILE

			Eastern, Central, Western, etc.				*Not a required field*	*Not a required field*	
Month of Service	**Eligibility Code**	**Age**	**MC+ Region**	**Health Plan**	**Procedure Code**	**Diagnosis Code**	**Place of Service**	**Service Type**	**# Services**
January-04	6	2	Central	MissouriCare	99381	V20	Office	Well child care	24
January-04	71	3	Central	MissouriCare	99382	V70.0	Office	Well child care	45

Purpose of Request:
Input to our response to Research Question 2 of the waiver evaluation.

Approach:
Please provide an itemization of each grievance filed against an MCO that provides services to 1115 Waiver enrollees (or providers that served these enrollees within the MCO) during the period of September 2004 (9/04 would be restated) through August 2005.

Each reported grievance will include the detail requested in the File Format section (below).

The detail will allow us to compute the total number of grievances by type and service region for all of the Waiver Groups (*no co-pay*, *co-pay*, *premium*, etc.).

File Format:
Provide the following data elements (sample data shown) -

Service Region	Member's Eligibility Code (MEC)	Date Grievance Received	Grievance Code
Central	71	10/20/04	111

Send the file to:

- Alicia Smith & Associates, LLC, Attn.: Juan Montanez

Special Request:
If new grievance codes were added during the period for which the file is being created (9/04-8/05), please send a spreadsheet with a record for each grievance code, description and mapping to grievance category in the format illustrated below (sample data shown) -

Grievance Code	Grievance Description	Mapping to Grievance Categories (see list below)
116	Problems with clinic	11

Grievance categories (for grievance code mapping purposes):

```
11    Quality of Care
12    Timeliness of Appointments
13    Denial of Services
14    Other Member Medical Grievances
21    Transportation Grievances
22    Interpreter Grievances
23    Denial of Claims Grievances
24    Office Waiting Grievances
25    Office Staff Behavior Grievances
26    Other Non Medical Grievances
31    Quality of Care
32    Denial of Specialist Referral
33    Denial of Service
34    Other Medical
41    Transportation
42    Interpreter Issues
43    Denial of Claims
44    Other Non Medical
51    Provider Grievances with State or Plan
```

APPENDIX 1 – DATA REQUESTS

RESEARCH QUESTION 3 DATA REQUEST – Mental Health Services Received by Children in 1115 Waiver

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Purpose of Request:
To examine the impact of MC+ on providing a comprehensive array of community based wraparound services for seriously emotionally disturbed children (SED) and children affected by substance abuse (Research Question 3 of the 1115 Waiver Evaluation).

Approach:
To match children who were enrolled in the MC+ expansion program (ME codes 71 through 75) to DMH service data, Medicaid fee-for-service data and Medicaid managed care encounter data to determine the extent to which children in the MC+ expansion program were receiving community-based wraparound services and whether those services were being provided in the absence of, or in conjunction with other mental health/substance abuse services.

Data Requests to DMS/DSS

DATA REQUEST 1 (FILE 1)
Generate a list of every child with an ME eligibility code of 71, 72, 73, 74, or 75 **AND** an eligibility period that either starts, ends or crosses-over the period beginning January 1, 2004 and ending June 30, 2005.

Provide the following data elements in a spreadsheet or text file following this format/layout -

DCN	**First Name**	**Last Name**	**Date of Birth**	**ME Code**	(If applicable) **Health Plan Name**	(For each period of uninterrupted eligibility) **Eligibility Effective Date - Month/Year**	(For each period of uninterrupted eligibility) **Eligibility End Date (Month/Year)**

Send FILE 1 to:

- Alicia Smith & Associates, LLC, Attn.: Juan Montanez
- Department of Mental Health, Attn.: Joel Zemmer

DATA REQUESTS 2 AND 3 (FILES 2 AND 3)
For each child identified in **FILE 1** extract **all** mental health and substance abuse services rendered during the period beginning January 1, 2004 and ending June 30, 2005. The services must include those that are reimbursed on a fee-for service basis – **FILE 2 –** as well as those provided within an MCO, for which reimbursement would not be a fee-for-service basis – **FILE 3**.

The data would be provided in the format specified in the attachments labeled ***Q3F2*** (for FILE 2) and ***Q3F3*** (for FILE 3).

Mental health and substance abuse services include the following procedure codes:

90801 – 90899	W1351	Y3102	Y3113
	W1352	Y3103	Y3118
96100			
	W1353	Y3104	Y3119
99271			Y311952
	W1355	Y3105	
9927122			Y1350
	W1356	Y3106	
J2680			Y1351
	W1368	Y3107	
J1631			Y9450
	W1369	Y3108	Y945021
	W1370	Y3109	Y9451
			Y945122
		Y3110	
			Y9452
		Y3111	Y945223
		Y3112	Y3128
		Y311252	Y3127

Data Requests to DMH

DATA REQUEST 4 (FILE 4)
For each child identified in FILE 1 extract all rehab and wraparound services rendered through CPS or ADA during the period beginning January 1, 2004 and ending June 30, 2005. The data would be provided in the format specified in the attachment labeled ***Q3F4***.

CPS rehab and wraparound services include the following procedure codes are listed below (**NOTE**: if this list has been modified since our last evaluation, please send us an updated list – with procedure codes and descriptions – and use the most up-to-date list of procedures when fulfilling this request):

200000	200007	440021	W1351L W1351	W1369L W1369	Y1350L Y1350
200001	200008	44000W	W13522 W1352	W1370L W1370	
200004	200013	490041	W1353L W1353	Y1351L Y1351	
200005	Y3128H	02500W	W1355L W1355	Y3119L Y13119	
200006	Y3127H	025001	W1356L W1356	Y3118L Y13118	

ADA rehab and wraparound services (ADA adheres to a more traditional rehab treatment model so it is not expected to have many, if any, wraparound services) are listed below (**NOTE**: if this list has been modified since our last evaluation, please send us an updated list – with procedure codes and descriptions – and use the most up-to-date list of procedures when fulfilling this request):

451022	Y3111J Y3111	Y9451J Y9451	Y31087	9451J7	Y31108	9452J8
Y3102J Y3102	Y31122 Y3112	Y9451W	Y31097	9451Z7	Y31118	9452Z8
Y3103A	Y3114J Y3114	Y9451Z	Y31107	9452J7	Y31148	
Y3103J Y3103	Y3115J Y3115	Y9452J	Y3117	9452Z7	Y31168	
Y3104J Y3104	Y3116J Y3116	Y9452W Y9452	Y31147	Y31028	Y31178	
Y3107J Y3107	Y3117J Y3117	Y9452Z	Y31167	Y31048	9450J8	
Y3108J Y3108	Y9450J Y9450	Y31027/ Y3102	Y31177	Y31078	9450Z8	
Y3109J Y3109	Y9450W	Y31047	9450J7	Y31088	9451J8	
Y3110J Y3110	Y9450Z	Y31077	9450Z7	Y31098	9451Z8	

Record content as shown is for illustrative purposes only.

File 2: Services History

Paid claims for date of service range = January 1, 2004 to June 30, 2005; refer to document titled Data Request RQ3 DSS and DMH for population in-scope.

DCN

Not a required field (do not include in the interest of file size)

Unique Identifier	Date of Service	Category of Service Code	Category of Service Description	Procedure Code	Units of Service
1111111	1/1/2004	49	Psychologist	90804	3
1111111	1/1/2004	75	Physician Services	90806	1
1111111	1/1/2004	49	Psychologist	90811	2
1111111	1/1/2004	75	Physician Services	90815	1

Record content as shown is for illustrative purposes only.

File 3: Services History

Paid claims for date of service range = January 1, 2004 to June 30, 2005; refer to document titled Data Request RQ3 DSS and DMH for population in-scope.

DCN

Not a required field (do not include in the interest of file size)

Unique Identifier	Date of Service	Health Plan	Category of Service Code	Category of Service Description	Procedure Code	Units of Service
1111111	1/1/2004	MissouriCare	49	Psychologist	90804	3
1111111	1/1/2004	MissouriCare	75	Physician Services	90806	1
1111111	1/1/2004	MissouriCare	49	Psychologist	90811	2
1111111	1/1/2004	MissouriCare	75	Physician Services	90815	1

Record content as shown is for illustrative purposes only.

File 4: Services History

REQUEST TO DMH

Paid claims for date of service range = January 1, 2004 to June 30, 2005; refer to document titled Data Request RQ3 DSS and DMH

for population in-scope.

DCN *CPS, ADA*

Unique Identifier 1	Date of Service	Division of Service	Procedure Code	Units of Service
1111111	1/1/2004	CPS	Y3128H	3
1111111	1/1/2004	CPS	490041	1
1111111	1/1/2004	CPS	Y3119L	2
1111111	1/1/2004	CPS	Y3119L	1

APPENDIX I - DATA REQUESTS

RESEARCH QUESTION 5 DATA REQUEST

Services Provided by ConnectCare

About this data request

The statistics associated with this request will be used in our response to Research Question 5. Specifically, our goal is to assess the extent to which ConnectCare is providing services to uninsured and underinsured populations in the St. Louis region.

The information we would like to obtain through this request is by and large the same information we aimed to obtain in the previous evaluation cycle, namely monthly visits and utilization of services by ConnectCare facility (the four primary care centers plus the urgent care center), payer, type of service/procedure and procedure (as codified by ConnectCare).

In the last evaluation cycle we obtained these statistics via Michael Austrin, ConnectCare.

1115 Waiver Evaluation Data Request - ConnectCare Service Utilization and Charge Statistics

Grouping fields (AKA file indices) are highlighted in *italic bold* characters.

Dimensions

Bases for organizing/categorizing/analyzing data

FILE 1) PAYOR TYPES

Payor Type ID	Payor Type Name	Payor Type Mapping

Payor Type Mapping examples:

- Indigent
- Self pay (non-indigent)
- Medicaid/CHIP
- Commercial
- Medicare
- Military (CHAMPUS, TRIcare, etc.)

FILE 2) PROCEDURES

Proc ID	Proc Desc	Procedure Charge per Unit of Service ($)

FILE 3) SERVICE TYPES

Svc Type ID	Svc Type Desc

Service Type examples:

Primary care service types:

- Adult/Internal Medicine
- Women's Health
- Pediatrics

Specialty care service types:

- Dental
- Dermatology
- Eye/Opthalmology
- Podiatry
- Cardiology
- Otolaryngology
- GI
- General Surgery
- Infectious Disease
- Neurology
- Oncology
- Orthopedics
- Nephrology
- GU/Urology
- Pulmonary

FILE 4) FACILITIES

Fac ID	Fac Name

Just those facilities that are part of ConnectCare's network (and for which you would report encounters and procedures in Files 5 and 6).

Facts

Based on activity as recorded in a decision support system, billing system or other application

FILE 5) ENCOUNTERS BY MONTH, FACILITY, ETC.

Month of Svc	***Fac ID***	***Payor Type ID***	***Svc Type ID***	# Encounters (Visits)

FILE 6) PROCEDURES BY MONTH, FACILITY, ETC.

Month of Svc	***Fac ID***	***Payor Type ID***	***Svc Type ID***	***Proc ID***	# Procs

APPENDIX II

Wraparound Services Provided to Children with Serious Emotional Disturbances (SED) and Children Affected by Substance Abuse

Joel Zemmer of DMH helped identify the following services as wraparound services.

Service Code	Service Description (from DMH):
025001	FAMILY SUPPORT
02500H	FAMILY SUPPORT
02500W	FAMILY SUPPORT PRESCHOOL
200001	CASE MANAGEMENT IND 1/4 HR
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
20008H	CASE MGMT-CHILD PSYCHITRST
39601W	WRAP-AROUND SRVCS-YOUTH IND
39603W	WRAP-AROUND SRVCS ADULT AS
440001	RESPITE CARE - IND. -
44000W	RESPITE SRVCS /SHARED UNIT-
440021	RESPITE CARE YOUTH
44006W	RESPITE CARE ONE-TIME-ONLY PRESC
490041	CHILD/ADOLES FAMILY ASSIST
49004H	CHILD/ADOLES FAMILY ASSIST
Y3127H	TARGETED CASE MANAGEMENT SED MHP
Y3127J	TARGET C M SED/MHP IND
Y3127K	--TARGET CASE MGMT (TCM) YTH
Y3128H	TARGETED CASE MANAGEMENT SED CM
Y3128J	TARGET C M SED/CM IND
Y3128K	--TARGET CASE MGMT (TCM) YTH