

**Evaluation of the
Medicaid Section 1115 Waiver:
Report of Findings**

(Review Period: September 1, 2000 - August 31, 2001)

for

**The Missouri Department of Social Services,
Division of Medical Services**

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- ◆ *Members of the MC+ Quality Assurance and Improvement Committee and Consumer Advisory Committee*
- ◆ *Scott Lakin*, Director, Department of Insurance

About Behavioral Health Concepts, Inc.

BHC is pleased to have had the opportunity to conduct the Year 3 evaluation for the Missouri Department of Social Services, Division of Medical Services. As a company, we are committed to the provision of outstanding services through the expertise and dedication of our professional staff and associates. We pride ourselves on being flexible in the design of sound program evaluation methodology and in implementing that methodology to produce project findings that can be used by decision-makers to improve their service delivery systems.

We offer specialized services and products for health care, business, and government in the areas of:

*Organizational Effectiveness,
Employee Effectiveness,
Program Outcome and Evaluation,
Quality Improvement, and
Productivity Measurement.*

We have extensive experience in consulting with private and public sector agencies regarding human resource issues, strategic and business planning, employee training needs, health care and behavioral health care planning and evaluation, and specialized approaches to managed care service delivery and quality improvement. Our professional staff and associates include experts in the field of research methodology, data collection, child and adult health and mental health systems, and statistical analysis. Our corporate offices are located at 2716 Forum Blvd. Ste. 4, Columbia, MO 65203. Our phone number is (573) 446-0405, and our website address is: www.bhcinfo.com.

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Executive Summary

This report is the third in an ongoing evaluation of the Missouri 1115 Waiver program submitted by BHC, Inc. The evaluation described herein covers the evaluation period from, September 31, 2000 to August 31, 2001, in fulfillment of Missouri Senate Bill 632 and the Center for Medicare and Medicaid Services (CMS) requirements. The following summarizes key accomplishments of the program and findings from the last three years of evaluation.

Increased Rates of Insured Missourians

- ◆ In its first year, Missouri reached 92% of the targeted population for enrollment.
- ◆ Missouri is one of 16 states with fewer than 25% uninsured, low-income, non-elderly persons.
- ◆ The number of uninsured Missourians declined at a statistically significant rate from 1998 to 1999.
- ◆ Although the number of uninsured Missourians rose between 1999 and 2000, this was not statistically significant, and is consistent with national trends.
- ◆ Rates of uninsured persons in Missouri continue to be lower than national rates for children and adults.
- ◆ Enrollment of children remained stable or increased in 91% (105) of 115 Missouri counties between 2000 and 2001.
- ◆ Missouri ranks 9th in the nation for the largest increase of children enrolled in the State Children's Health Insurance Program (SCHIP), from FFY2000 - FFY2001, with a 44% increase in children ever enrolled in MC+ (CMS, 2002).
- ◆ Enrollment between August 2000 and August 2001 increased from 4 to 21% across all eligibility categories, with the 186 - 225% Federal Poverty Level (FPL) category showing the greatest increase.
- ◆ On average, those enrolled in the 1115 Waiver were uninsured for 33 months before enrolling in Medicaid.
- ◆ Those enrolled in the 1115 Waiver had no other source of insurance either through the primary parent, spouse, or other parent.
- ◆ Adult Missourians have higher rates of employer-based insurance and lower rates of uninsured adults

relative to nationwide averages.

- ◆ Between 1999 and 2000, there was a decline in the number of adults likely to be eligible for the 1115 Waiver who reported that they were never insured, or that they were uninsured at some point in the last 12 months.
- ◆ Family Services offices, friends, and schools are an important source of information regarding MC+, with DFS offices and health care providers becoming increasingly important.
- ◆ 1115 Waiver beneficiaries report better access to health care than 1915b beneficiaries, and better than national commercial beneficiaries.
- ◆ 1115 Waiver beneficiaries report improved access between 1999 and 2000 in the average number of dental visits for both adults and children; and the number of prescriptions obtained for children.

Improved Health of Missourians

- ◆ Overall, Missourians enrolled in the 1115 Waiver demonstrate better health status than those enrolled in the 1915b program, but poorer health status than those with other insurance.
- ◆ Relative to national rates, Missouri 1115 Waiver beneficiaries report higher levels of satisfaction with their physician and specialty care than those on Medicaid, and similar to commercial beneficiaries.
- ◆ 1115 Waiver beneficiaries in Missouri are more satisfied with their interactions (feeling treated with respect and courtesy) with their providers than 1915b beneficiaries.
- ◆ From 1999 to 2000, 1115 Waiver beneficiaries were also more satisfied with their dental care.
- ◆ The greatest impact of the 1115 Waiver for beneficiaries has been the importance of reducing financial strain of paying for health care, and obtaining care they would not have otherwise obtained without MC+.

Minimal Impact of Cost-Sharing

- ◆ Those who share in the cost of MC+ had comparable or better rates of health status, satisfaction, and access to health care relative to those who do not share in the cost of services. This is likely due to differences in socioeconomic, baseline health status, and value placed on health care services.
- ◆ Few beneficiaries reported missing medical appointments due to cost in Year 3 (7.6%).
- ◆ Most comparisons between cost and no cost sharing groups indicated few differences in health status, access, and satisfaction in Years 2 and 3.
- ◆ Those in the cost sharing group were more likely to report a chronic illness or disability, poorer health status, and lower emergency room utilization.
- ◆ Those in the cost sharing group reported significantly more improvement in school performance, and improved ability of the family to maintain stable employment since enrolling in MC+.
- ◆ Those in the cost sharing group were enrolled longer, uninsured longer prior to enrolling in MC+, used more services, had fewer dental visits, reported better access to behavioral health services, and reported less ease in scheduling appointments for adults.
- ◆ Although higher income beneficiaries are required to share in the cost of services, the pattern of findings indicates that MC+ offers a much needed source of regular health care for individuals with significant health problems that would not be able to obtain health care insurance or afford medical care.
- ◆ After three years of analysis of data from multiple sources, there has been no demonstrable negative impact of cost sharing on health status or access.

Minimal Impact of Non-Emergency Transportation (NEMT)

- ◆ Only 3.9% of children and 8.3% of adults reported missed medical appointments due to a lack of NEMT in 2000.
- ◆ When those who missed medical appointments due to lack of transportation were compared with those who did not report missing medical appointments due to transportation problems were compared on health status, access, and satisfaction, no statistically significant differences emerged.
- ◆ In 2001, very few respondents indicated missing appointments due to lack of transportation (1.3%).

Impact on Wraparound Services for Children and Youth with Serious Emotional Disturbance (SED)

- ◆ Those 1115 beneficiaries in need of behavioral health services reported that they were able to obtain needed services. These services tended to be acute, and office-based, but also included those which might be consistent with a wraparound approach to service delivery.
- ◆ The most significant barrier to obtaining needed treatment was the family's ability to pay the provider.
- ◆ Of those who reported receiving behavioral health services for their child in the last 12 months, a majority reported feeling respected by provider staff, being satisfied with the care they received, and that providers requested permission to speak to the child's primary care provider.
- ◆ Parents of beneficiaries in need of behavioral health services also reported improved child functioning in the home and school setting.

Minimal Crowd-Out

- ◆ The number of privately insured adults and children increased between 1998 and 1999.
- ◆ The number of privately insured individuals declined between 1999 and 2000, consistent with the overall number of insured and all types of insurance.
- ◆ Commercial insurers, insurance regulators, and MC+ health plans continue to report little awareness of MC+ program or of any negative impact from the program.
- ◆ The length of time that child and adult 1115 beneficiaries report being uninsured prior to becoming enrolled in MC+ (33 months) is substantially longer than the required amount of time (6 months) required to be eligible for MC+. This is true for the higher income groups as well.
- ◆ Adults in Missouri that are likely to be eligible for Medicaid were also less likely to have employer-based insurance as an alternate source of insurance, and a majority of beneficiaries reported no other sources of insurance if MC+ were not available.

Introduction

Purpose of the Evaluation

In 1998, the Missouri General Assembly passed Senate Bill 632 that authorized the State to expand Medicaid to previously uninsured children. Missouri also applied for an 1115 Waiver amendment from the federal government allowing this extension of Medicaid. The Waiver application initially was submitted on June 30, 1994 and was approved as a revised amendment in 1998. The Waiver amendment authorized an expansion of Missouri's current 1915(b) Medicaid Waiver amendment to cover uninsured children with a family income up to 300% of the federal poverty level (FPL). In addition, the Waiver amendment authorized providing Medicaid services to parents transitioning off of welfare (TANF), who would otherwise not be insured or Medicaid eligible with a family income up to 300% FPL; uninsured non-custodial parents with a family income up to 125% FPL who are current in paying their child support; uninsured non-custodial parents actively participating in Missouri's Parents' Fair Share program; uninsured custodial parents with family income up to 100% FPL; and uninsured women losing their Medicaid eligibility 60 days after the birth of their child regardless of income level. A portion of Senate Bill 632 mandated that the Missouri Department of Social Services commission a study to evaluate the effects of the 1115 Waiver Medicaid expansion. This evaluation fulfills that requirement and also fulfills a CMS requirement for an evaluation of the 1115 Waiver amendment. This report, completed by Behavioral Health Concepts, Inc., covers the study period of September 1, 2000, through August 31, 2001, and incorporates data and progress assessed through the previous two years of implementation and evaluation.

Evaluation Questions

All of the qualitative and quantitative results from this evaluation were organized to address five research questions and two additional evaluation issues identified by the State Legislature and policymakers. They are:

Research Question #1: Has the MC+ expansion provided health insurance coverage to children and families who were previously uninsured?

Research Question #2: Has the MC+ expansion improved the health of Missouri children and families?

Research Question #3: Will cost-sharing requirements for the higher income expansion population result in any negative impacts as measured by individual health and access to the MC+ system?

Research Question #4: Will lack of NEMT result in any negative impact as measured by individual health and access to the MC+ system?

Research Question #5: Will cost-sharing requirements for the higher income expansion children and some parents result in disenrollment from MC+ when three mandatory co-payments are not paid within any one year?

Evaluation Study #1: What is 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?

Evaluation Study #2: What is the effect of MC+ on the number of children covered by private insurers? Does the MC+ expansion to cover children with a gross family income above 185% FPL have any negative effect on these numbers?

Organization of the Report

The results of each evaluation question are examined using all available data sources. When appropriate, results for adults and children are discussed separately and comparisons are made between years, between 1115 and 1915b beneficiaries, and compared to other groups. Appendix A provides detailed descriptions of primary and secondary data sources employed, Appendix B provides survey protocols, and Appendix C provides detailed data tables and statistical data.

Findings

Research Question #1: Has the MC+ expansion provided health insurance coverage to children and families who were previously uninsured?

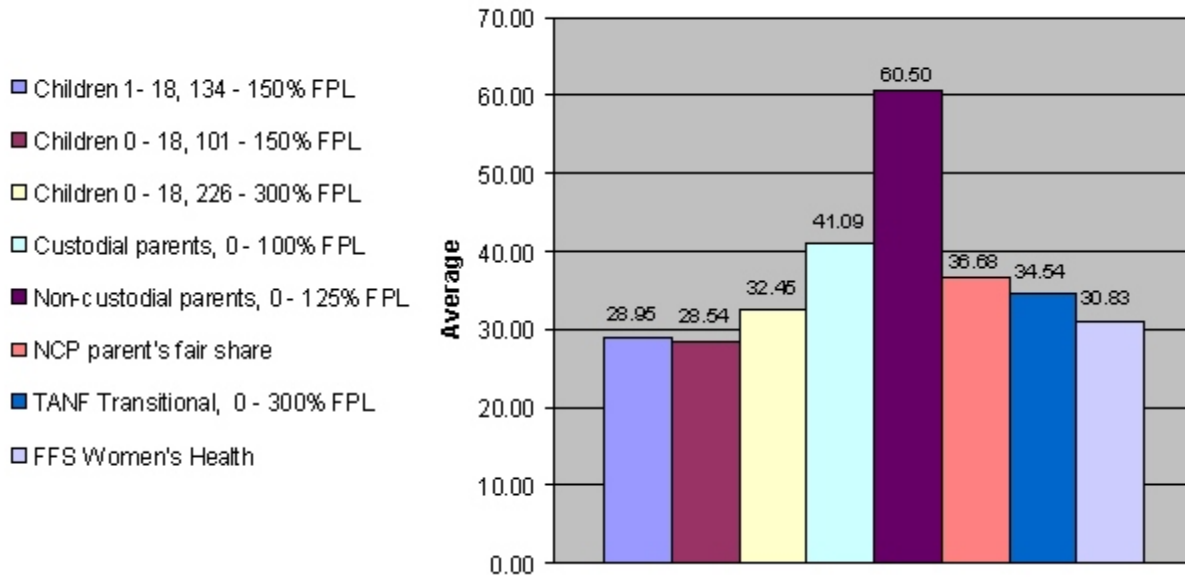
All Uninsured Persons

Overall, the rate of uninsured people declined in Missouri from 10.5% to 8.6% between 1998 and 1999. When comparing a two-year moving average for the time periods of 1997-1998 and 1998-1999, there was a 2% decline in the rate of uninsured people in Missouri, which was statistically significant (Mills, 2000). This same pattern of statistically significant decrease was not evident for 1998-1999 and 1999-2000, with a .3% increase between the two years (from 10.5% to 10.8% uninsured). This suggests that the rates of uninsured persons in Missouri have stabilized somewhat. In the nation as a whole, there was a small but statistically significant .5% decline in the rate of uninsured people over the last year (Mills, 2001). Persons living at or near poverty, those between 18 and 24 years of age, those of Hispanic and minority ethnic status, and those with less than a high school education continue to be the most likely to be uninsured. The following sections discuss the rates of uninsured children and adults in Missouri, the type of insurance for those who are insured, the rates of enrollment in the Missouri 1115 Waiver, and referral sources from which beneficiaries received information about MC+ and access to the MC+ program.

Insuring Those Previously Uninsured

Of the 1,393 total respondents to the 1115 Waiver survey, 1106 (81.9%) continued to be insured with MC+ at the time of the survey. Respondents reported having been enrolled in MC+ from 1 to 96 months, an average of 36 months (3, years; SD = 18 months; see Table C1). This length of enrollment is likely a function of sample selection and an intent to follow-up those who were enrolled 3 years ago, at the start of the 1115 Waiver. Although it is not possible for those insured under the 1115 Waiver to have been enrolled for 96 months, it is possible that they were enrolled in MC+ under the 1915b eligibility categories.

Figure 1. Average Number of Months Uninsured Prior to MC+, Missouri 1115 Eligibility Categories, 2001



Source: BHC, Inc., 1115 Waiver Beneficiary Telephone Summary

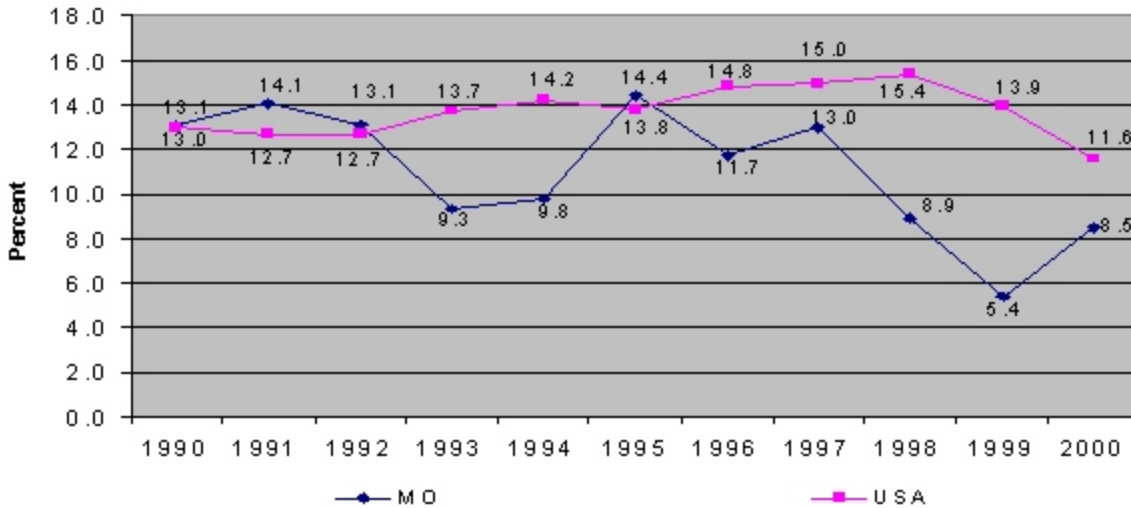
Almost all respondents (98.5%, n = 1,252) reported they had no other current sources of insurance, with the remaining minority reporting other sources such as private insurance (.4%, n = 5), First Steps (.8%, n = 12), Medicare (.1%, n = 1), and Indian Health Service (.1%, n = 1). When asked if another source of insurance was available through another parent (for child beneficiaries), almost all (99.1%, n = 763) reported none was available through this means, and .9% (n = 7) reported that some type of private insurance was available.

Only 6.6% (n = 94) reported having been insured less than 6 months prior to being insured with MC+. Respondents indicated being uninsured between 1 and 180 months, an average of 33.06 months before being enrolled in MC+ (see Table C1 and Figure 1). Overall, the majority of respondents were not aware that the State would pay for insurance if the premium was less than the premium for MC+ (84.7%, n = 1,137).

Rates of Uninsured Children

According to the U.S. Census Bureau, the rate of uninsured children under 18 years of age in Missouri was 8.9% in 1998, 5.4% in 1999, and increased to 8.5% in calendar year 2000 (see Figure 2; Mills, 2001). There was a 3.5% decline in the rate from 1998 to 1999, and a 3.1% increase in the rate of uninsured children from 1999 to 2000 in Missouri. The rate of uninsured children in Missouri continues to be well below the national average (see Figure 2, and Table C2), and as noted above, there was no statistically significant change in the number of uninsured children overall when using the two-year rolling average.

Figure 2. Percent Uninsured Children, U.S. and Missouri, 1990 - 2000

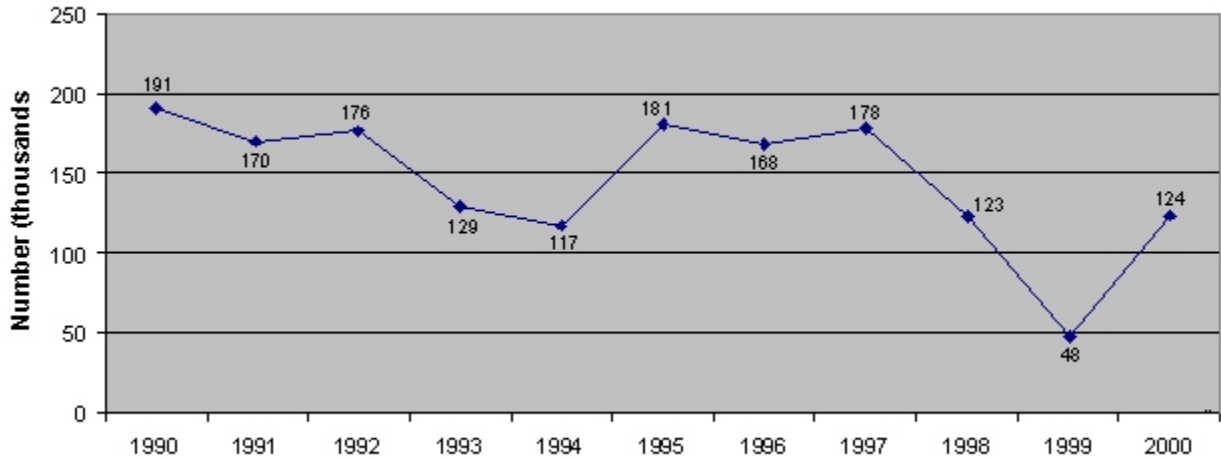


Source: U.S. Census Bureau, 2001. *Health Insurance Coverage Status and Type of Coverage by State --- Children Under 18: 1990-2000. Current Population Survey, Author*

Note: Figures from 1999 vary slightly due to revised and final figures having been published since the release of the last report. Figures for 1999 are final and are preliminary for 2000.

While the Current Population Survey figures show an increase in the number of uninsured children, the Center for Medicare and Medicaid Services (CMS) reports that Missouri enrolled the 9th largest number of children between FFY2000 and FFY2001. This figure is an unduplicated count of children enrolled since the beginning of each federal fiscal year (State Children’s Health Insurance Program Annual Enrollment Report, 2002). The overall number of children without insurance in 2000 was 124,000 (see Figure 3).

Figure 3. Number of Uninsured Children in Missouri, 1990 - 2000



Source: U.S. Census Bureau, 2001. *Health Insurance Coverage Status and Type of Coverage by State --- Children under 18: 1990-2000. Current Population Survey, Author*

Note: Figures from 1999 vary slightly from last year due to revised and final figures having been published since the release of the last report. Figures for 1999 are final and are preliminary for 2000.

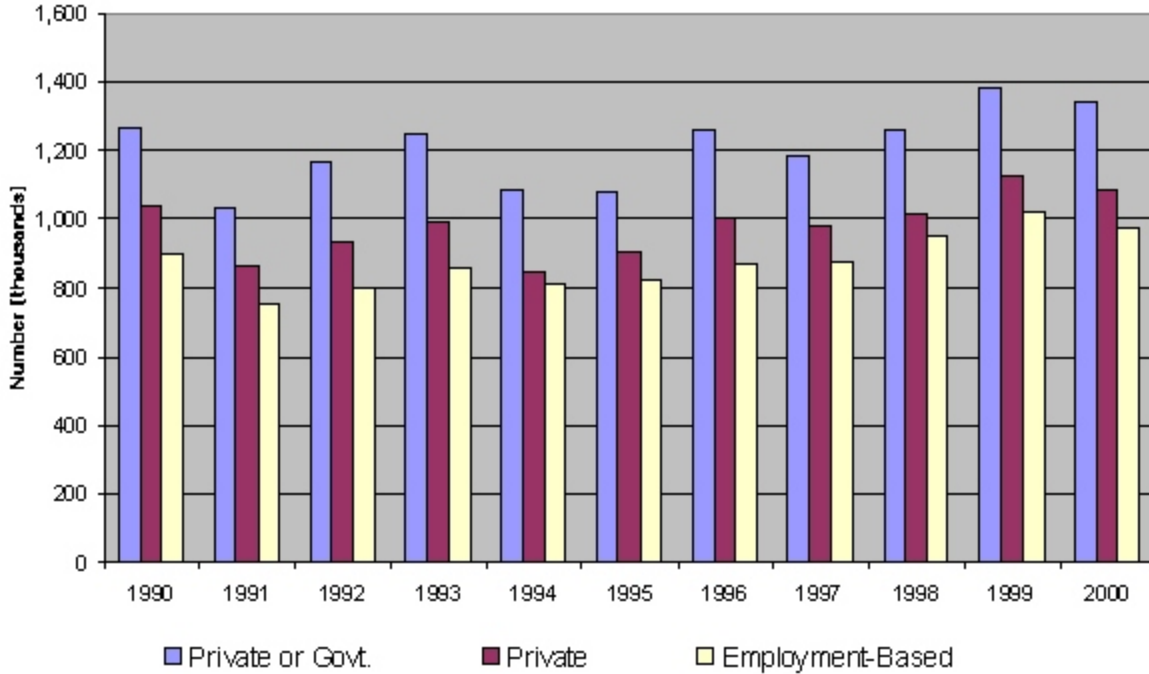
The wide variation in the estimated rates of uninsured children in Missouri may be a function of the methods used in the CPS that underestimate the number of persons enrolled in Medicaid, including the 1115 Waiver expansion population. Like Missouri, the nation as a whole experienced the greatest decline in the rate of uninsured persons between 1998 and 1999, primarily as a result of the initiation of State Children’s Health Insurance Programs (Kaiser Commission on Medicaid and the Uninsured, 2001). The trend in the rates of uninsured children in Missouri is declining consistent with national trends, but the rate of uninsured continues to be among the lowest in the nation.

Enrollment of Children

The number of children enrolled in any type of insurance plan (private or government) in Missouri rose from 1.2 million to 1.4 million from 1998 to 1999, and declined to 1.3 million in 2000. This pattern was evident across all types of insurance (private, government, and employment-based; see Figure 4). Private coverage increased by 6.4% between 1998 and 2000, and employment-based health coverage increased by 2.4%

between 1998 and 2000. According to the CPS, overall Medicaid coverage in Missouri remained relatively stable between 1998 and 2000, with a slight overall decrease of .7% for this time period (see Figure 5). In 1999, Medicaid enrollment was the only public insurance to increase.

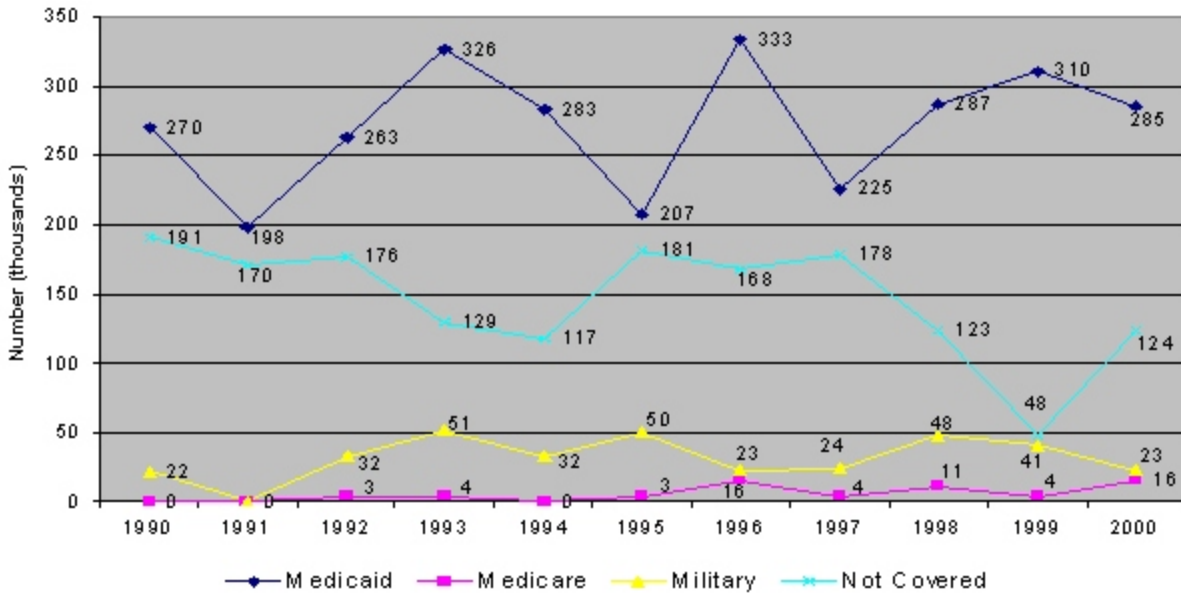
Figure 4. Number of Insured Children, by Type of Insurance, Missouri, 1990 - 2000



Source: U.S. Census Bureau, 2001. *Health Insurance Coverage Status and Type of Coverage by State - Children under 18: 1990-2000. Current Population Survey, Author*

Note: Figures from 1999 vary slightly due to revised and final figures having been published since the release of the last report. Figures for 1999 are final and are preliminary for 2000. "Private or Government" represents all those who reported some type of insurance. "Private" includes employment-based and privately purchased insurance. "Employment-Based" includes only those reporting that they were insured by their own or a relative's employer. Respondents may have had more than one type of insurance.

Figure 5. Health Insurance Coverage Status and Type for Missouri Children, 1990 - 2000



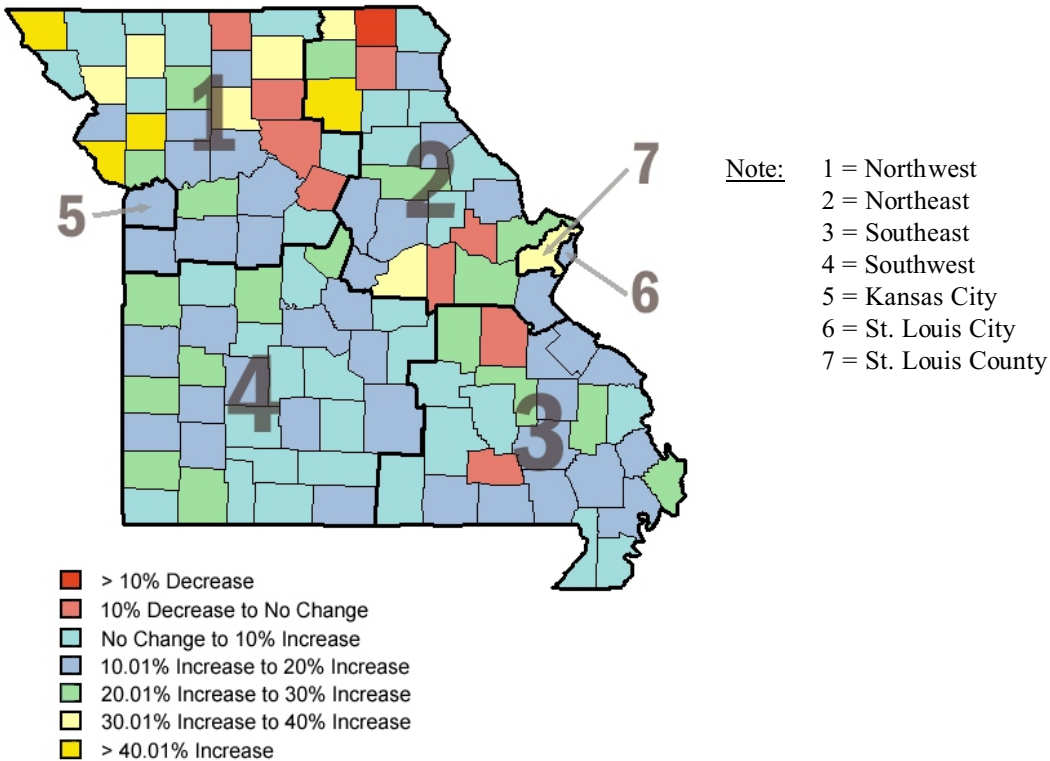
Source: U.S. Census Bureau, 2001. *Health Insurance Coverage Status and Type of Coverage by State - Children under 18: 1990 - 2000. Current Population Survey, Author*

Note: Figures from 1999 vary slightly due to revised and final figures having been published since the release of the last report. Figures for 1999 are final and are preliminary for 2000.

Enrollment data from the Missouri Department of Social Services Monthly Management Report, which examines point-in-time enrollment by month, indicates 11% more children enrolled in all Medicaid eligibility categories in August 2001 (476,922 children) than in August 2000 (427,884 children; Missouri Dept. of Social Services, 2000, 2001; see Table C3).

Data from the Missouri Department of Social Services were used to examine point-in-time enrollment for children across eligibility groups and in each region of the state. Figure 6 illustrates the percent change in enrollment in each county for 1115 Waiver children from August 2000 - August 2001 (see Table C4). Specific service regions are outlined and numbered. Enrollment in most counties remained stable or increased. Region 4 (Southwest) had the most stable enrollment and moderate increases in enrollment, with Regions 5, 6, and 7 demonstrating modest to high increases in enrollment. Regions 1, 2, and 3 showed more variability across counties. The greatest increases occurred in Atchison, Platte, Clinton, Macon, St. Louis, Anderson, Gentry, Livingston, Sullivan, Sinclair, and Osage counties. There was a decline in enrollment from August 2000 to August 2001 in Scotland (11.61%), Knox (7.07%), Mercer (7.02%), Gasconade

(3.85%), Chariton (3.79%), Linn (3.66%), Carter (2.87%), Warren (1.13%), Howard (1.10%), and Washington (.54%) counties.

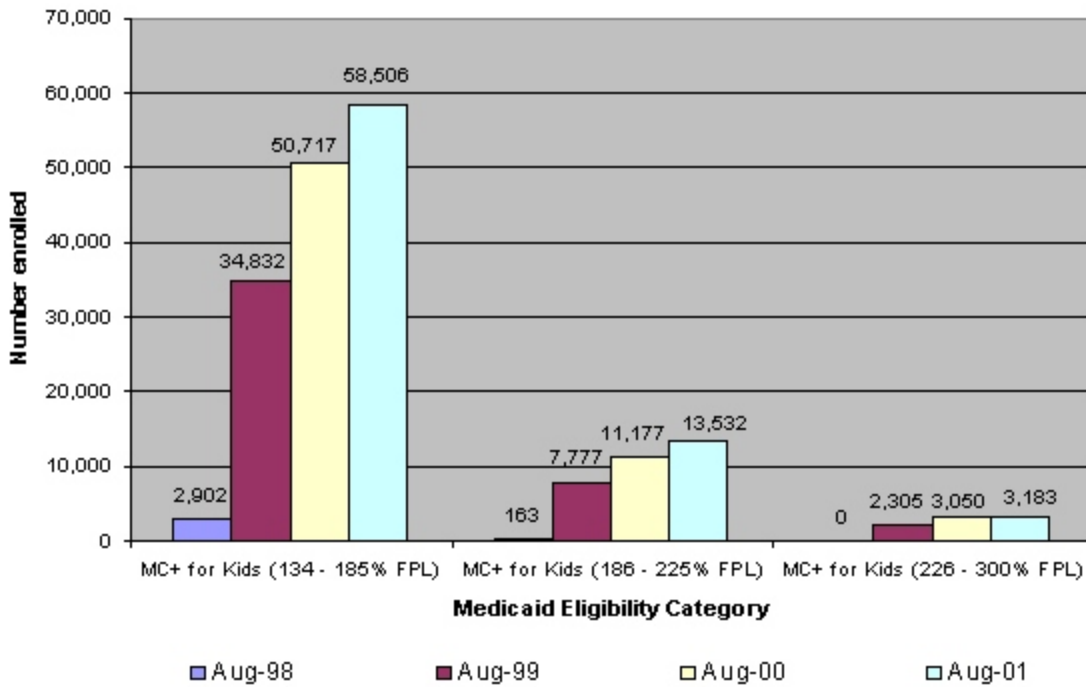


An increase in enrollment was evident in all other counties, with an overall 18.4% increase in enrollment statewide. The smallest increase in enrollment was in Holt county (.9%) and the greatest increase in enrollment was in Macon county (43.4%). Eighty-two (82), or 71% of the 115 Missouri counties are organized on the traditional fee-for-service method of reimbursement, while 33 (29%) are subject to mandatory Medicaid managed care under the 1915b Waiver. There was no discernable pattern of change in enrollment for managed care or fee-for-service counties.

Data from the Missouri Department of Social Services Monthly Management Report also were used to examine the change in enrollment of children by eligibility category since 1998. Figure 7 shows the point-in-time enrollment rates of 1115 Waiver child beneficiaries at each of three poverty levels in the month of August, from 1998 to 2001. Enrollment across all three levels has increased since August 1998, with a 15% increase in enrollment of children in the 134 - 185% Federal Poverty Level (FPL), a 21% increase in

enrollment of children in the 186 - 225% FPL, and a 4% increase for those in the highest FPL (226 - 300%) between August 1998 and 2001.

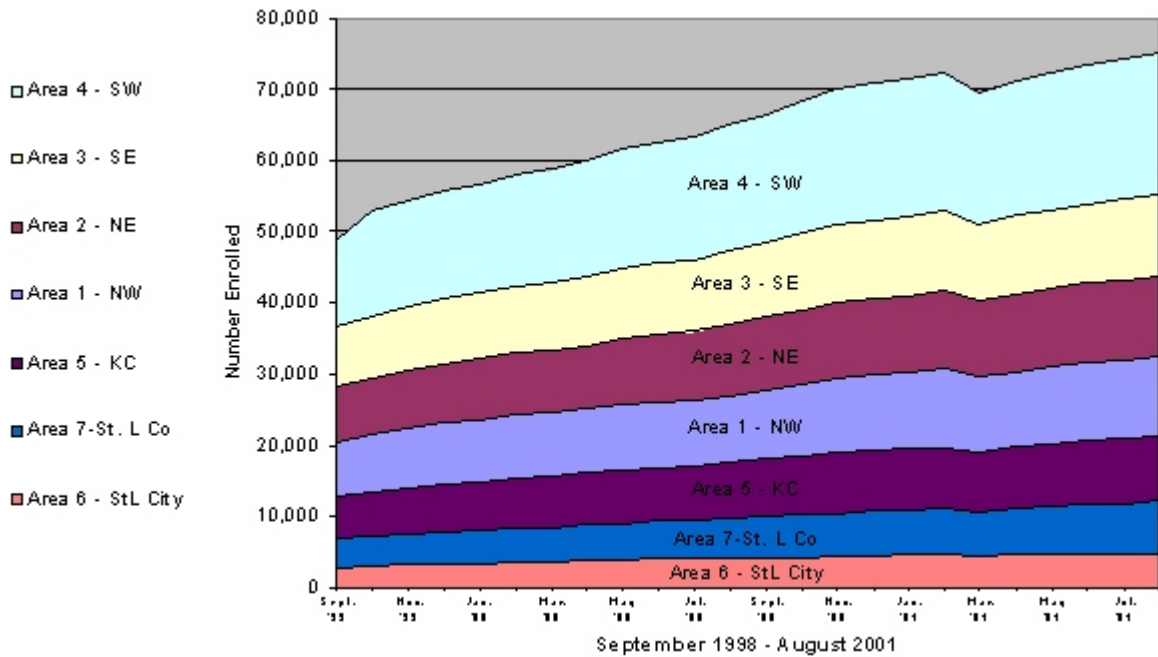
Figure 7. Children Enrolled in the 1115 Waiver, August, 1998 - August, 2001



Source: Missouri Department of Social Services, Enrollment Database

Figure 8 illustrates the total number of children enrolled in the 1115 Waiver since its implementation, by region. As of August 2001, there were 75,221 children enrolled in the 1115 Waiver. The same pattern of enrollment across regions was evident as in 1998 and 1999, with the Southwest, Southeast, Northwest, and Northeast regions enrolling the greatest number of children overall. Enrollment in both managed care and fee-for-service counties increased, as did enrollment across all regions.

Figure 8. 1115 Children Enrollment Trend by Region, 1998 - 2001



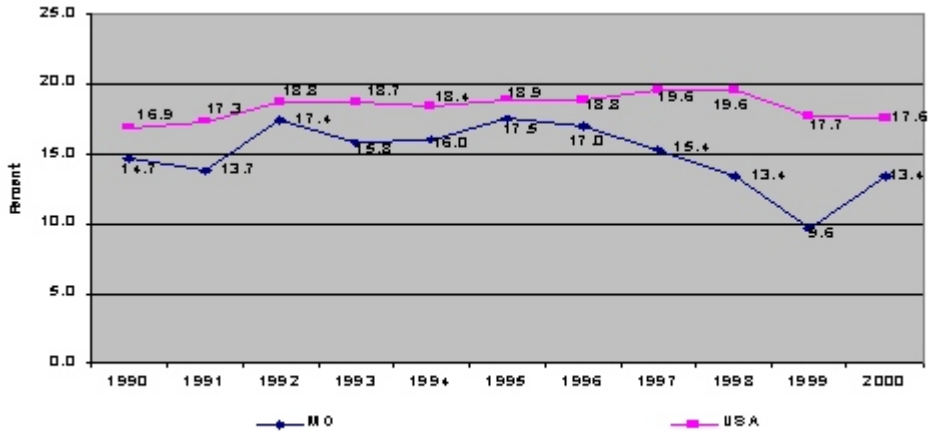
Source: Missouri Department of Social Services, Research and Evaluation Unit, Monthly Management Reports

Overall, the rate of Medicaid enrollment has remained relatively stable, increasing since the implementation of the 1115 Waiver, and remaining at relatively high levels. Although the rate of uninsured increased between 1999 and 2000, both in Missouri and nationally, a decline in health insurance coverage was observed across all sources of insurance and was not statistically significant. Point-in-time enrollment figures indicate that between 2000 and 2001, there was an increase in the number of children enrolled in Medicaid at any time. Missouri continues to lead the nation in the low rate of uninsured children and the ability to enroll children.

Rates of Uninsured Adults

As was the case with children, Missouri’s rate of uninsured adults between 18 and 65 years of age was lower than the national average (17.6% and 13.4%, respectively; see Figure 9). The rate of uninsured adults was examined using U.S. Census data, Missouri Department of Social Services data, and the Centers for Disease Control (CDC) Behavioral Risk Factor Surveillance System (BRFSS) data analyses.

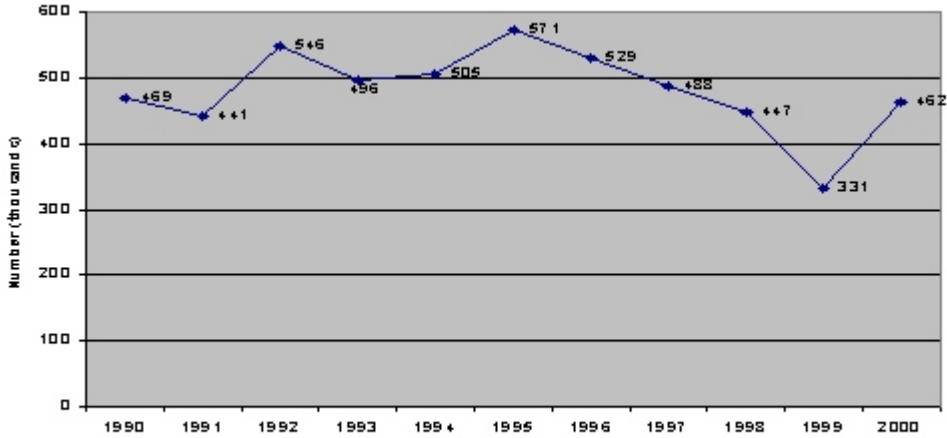
Figure 9. Percent Uninsured Adults 18 to 65 years, U.S. and Missouri, 1990 - 2000



Source: U.S. Census Bureau, 2001. *Health Insurance Coverage Status and Type of Coverage by State --- Adults under 65: 1990-2000. Current Population Survey, Author.*

Based on U.S. Census data, the rate of uninsured adults between 18 and 65 years of age in Missouri declined from 13.4% to 9.6% between 1998 and 1999, and increased again to 13.4% between 1999 and 2000 (see also Table C5). This is the same trend observed with rates of uninsured children in Missouri and nationwide. The total number of uninsured adults between 18 and 65 years of age declined from 447,000 to 331,000 from 1998 to 1999, and increased to 462,000 in 2000 (see Figure 10). The overall rate of change in uninsured adults between 1998 - 1999 and 1999 - 2000 was not statistically significant.

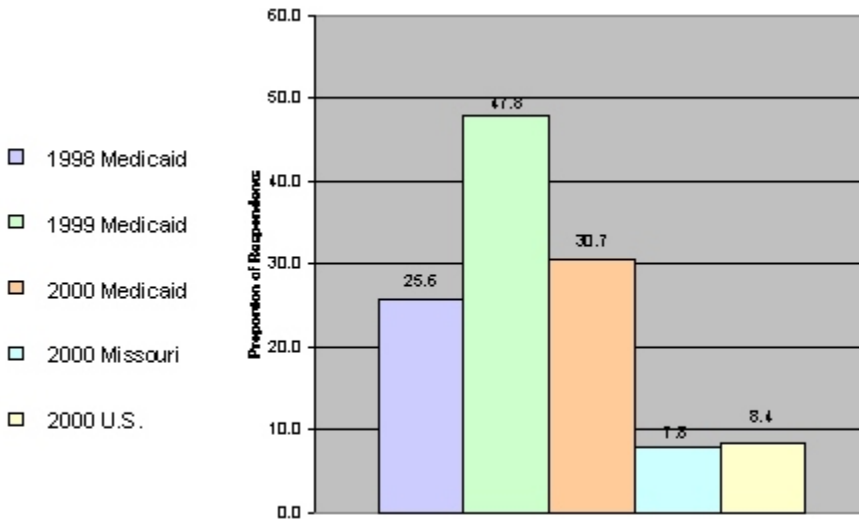
Figure 10. Number of Uninsured Adults 18 to 65 years, Missouri, 1990 - 2000



Source: U.S. Census Bureau (2001). *Health Insurance Coverage Status and Type of Coverage by State --- Adults under 65: 1990-2000. Current Population Survey, Author*

BRFSS data were also examined to obtain another estimate of adults who were uninsured. Figure 11 shows the proportion of adults in Missouri who reported having been uninsured at some point during the previous 12 months (see also Table C6). Data from 1998 to 2000 are reported, with comparison figures for Missouri respondents and nationwide rates. Results indicate that approximately 50% (47.8%) of adults with Medicaid in 1999 were uninsured at some point in time during the previous 12 months. The lower rate in 2000 reflects the increased enrollment in 1999, when the Missouri 1115 Waiver began. The higher rates among those on Medicaid relative to the state and nation, suggest that adults enrolled in Medicaid were more likely to have had no other source of insurance at some point in the previous 12 months. The rate of uninsured adults in Missouri is slightly lower than the nationwide rate (7.8% and 8.4%, respectively). This is likely in part due to Missouri's decision to insure adults under MC+.

Figure 11. Medicaid Beneficiaries, Missouri Residents and U.S. Residents Uninsured at Some Point in the Last 12 months, 1998 - 2000

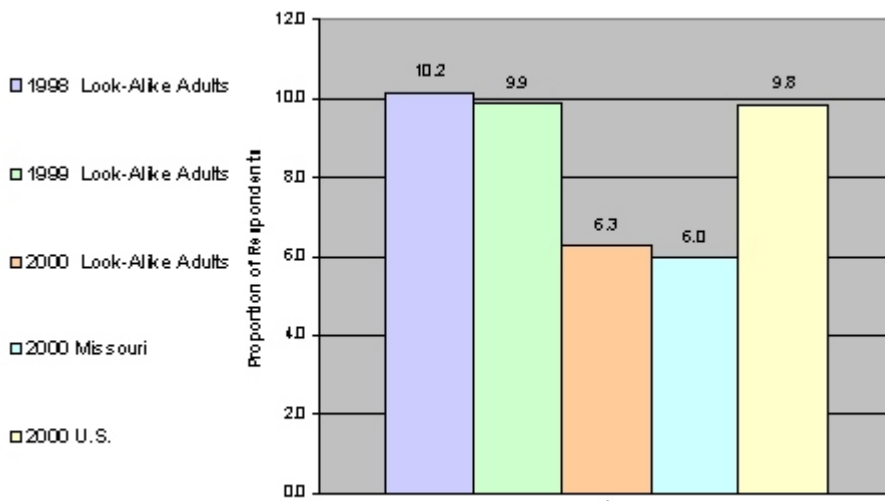


Source: Centers for Disease Control (CDC). Behavior Risk Factor Surveillance System (BRFSS) data, 2000

Note: There were significant differences from 1998 to 2000 for Missouri Medicaid beneficiaries ($p < .05$).

For further comparison, rates of those who are likely to be eligible for MC+ (Look-Alike Adults) were examined across time (see Figure 12 and Table C7). There was a significant decrease in the rate of adults who had never had insurance, between 1999 and 2000. The rate of adults who were never insured in

Figure 12. Adults Never Insured, Missouri 1115 Look-Alike Group, All Missouri Adults, and Nationwide



Missouri as of 2000 was much lower than the national rate (6.0% and 9.0%, respectively).

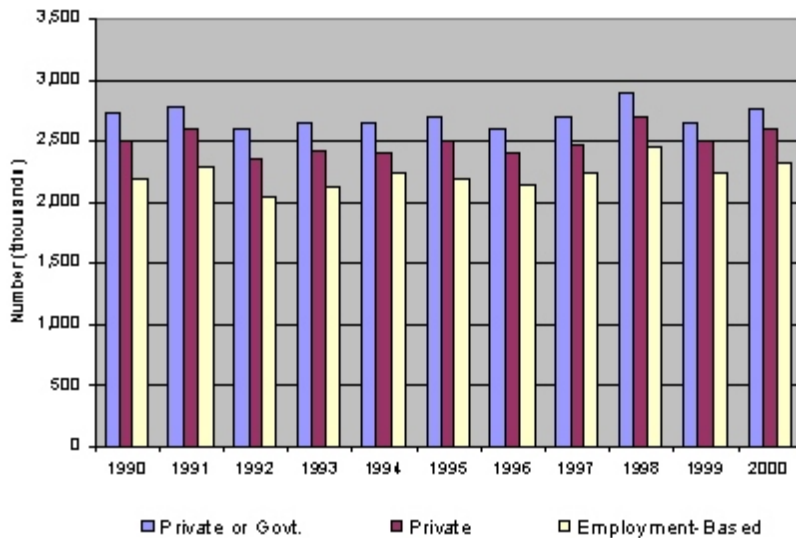
Source: Centers for Disease Control (CDC). Behavior Risk Factor Surveillance System (BRFSS) data, 2000

Note: There were significant differences between 1998 and 2000 ($p < .05$).

Enrollment of Adults

Figure 13 shows the type of insurance programs in which adults between the ages of 18 and 65 were enrolled. As is the case with children, all types of insurance coverage have increased between 1999 and 2000 among adults (private, government, and employer-based). The increase in all sources of insurance appears inconsistent with the overall decrease in the number of insured adults. However, this discrepancy is likely due to individuals having more than one source of insurance (see Figure 14). Thus, it is probable that adults are reporting more than one source of insurance when they report having insurance, and that the number without any insurance rose somewhat over the past year. The CPS methodology was changed in 2000 to provide a more accurate picture of the rates of uninsured. As a result, direct year-to-year comparisons should be viewed with caution.

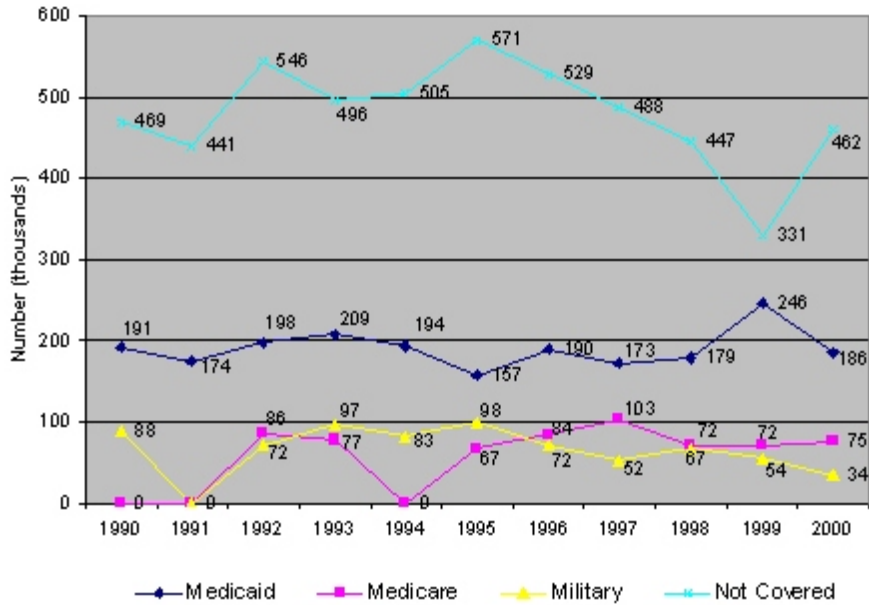
Figure 13. Number of Insured Adults 18 to 65 years and Type of Insurance, Missouri, 1990 - 2000



Source: U.S. Census Bureau, 2001. *Health Insurance Coverage Status and Type of Coverage by State --- Adults under 65: 1990-2000. Current Population Survey, Author*

Note: Figures were calculated by subtracting numbers on rates for children 18 years of age and under from the figures for all persons under 65 years of age. "Private or Government" represents all those who reported some type of insurance. "Private" includes employment-based and privately purchased insurance. "Employment-Based" includes only those reporting that they were insured by their own or a relative's employer. Respondents may have had more than one type of insurance.

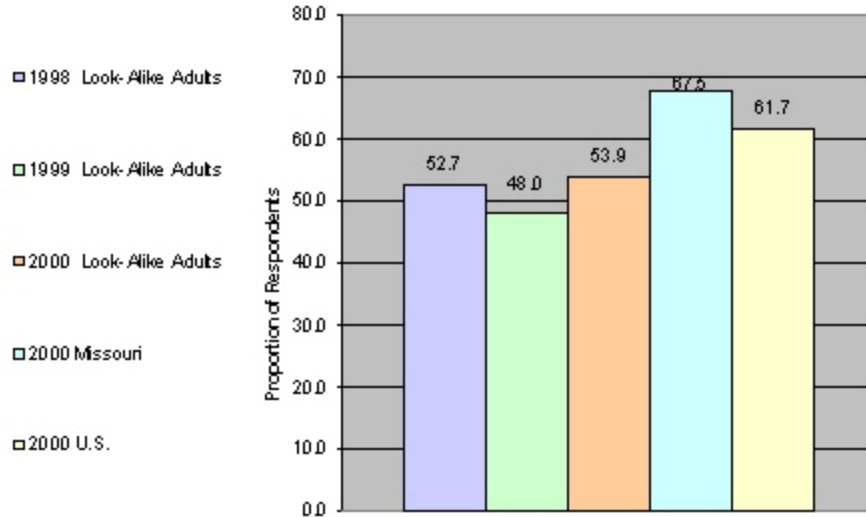
Figure 14. Health Insurance Coverage Status and Type of Adults for Missouri under 65 in Missouri, 1990 - 2000



Source: U.S. Census Bureau, 2001. Health Insurance Coverage Status and Type of Coverage by State --- Adults under 65: 1990-2000. Current Population Survey, Author

Figure 15 shows the proportion of BRFSS survey respondents in the “Look-Alike” group (those adults likely to qualify for the 1115 Waiver) who reported having employer-based insurance as a major source of health insurance (see also Table C8). The rate declined in 1999, and increased again in 2000, with 53.9% reporting employer-based insurance. This is lower than the overall state and nationwide rates (67.5% and 61.7%, respectively). BRFSS data suggest that the 1115 Waiver provides health insurance to those unable to obtain employer-based insurance or other sources of insurance.

Figure 15. Adults with Employer Based Insurance As their Primary Source of Insurance, Missouri 1115 Look-Alike Group, All Missouri Adults, and Nationwide, 2000

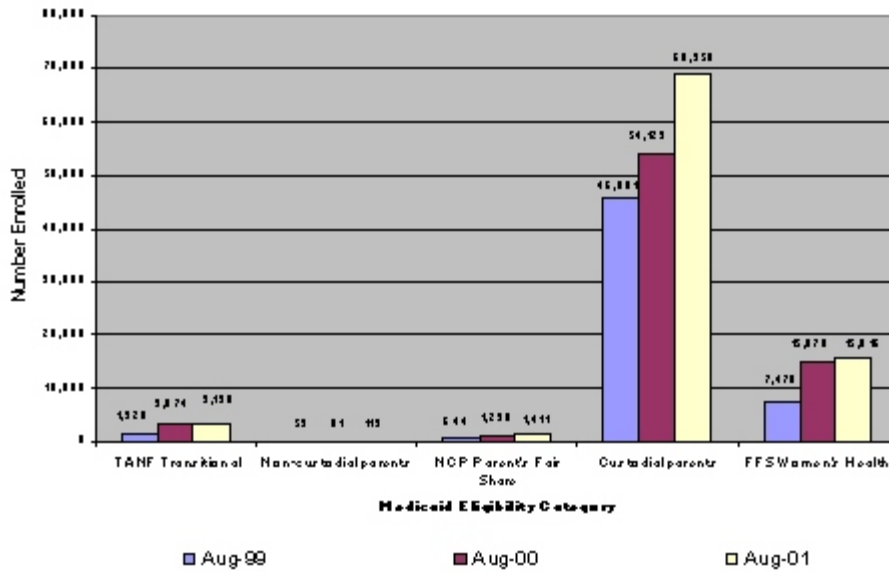


Source: Centers for Disease Control (CDC). Behavior Risk Factor Surveillance System (BRFSS) data, 2000

Note: There were significant differences from 1998 to 2000 ($p < .05$).

Data from the Missouri Department of Social Services reflects actual point-in-time enrollment. Figure 16 illustrates that all categories of enrollment for adults increased each August from 1999 to 2001. Enrollment of adults in the Missouri 1115 Waiver has continued to grow from 54,517 between February and October 1999 to 89,375 as of August 2001. The largest proportion of parents insured under the 1115 Waiver continues to consist of custodial parents (77%; 68,950 beneficiaries), followed by those on the fee-for-service women’s health plan (18%; 15,816 beneficiaries). Non-custodial parents constituted the smallest proportion of adults, comprising less than one percent (113 beneficiaries) of the adult population insured through the 1115 Waiver. The NCP Parents’ Fair Share beneficiaries comprised 1.5% (1,411 beneficiaries) of the 1115 adults, and those with TANF transitional benefits represented 3.6% (3,198) of adult beneficiaries. The greatest increase in enrollment from August 2000 and 2001 occurred among custodial parents, with an observed decline in enrollment among non-custodial Parents’ Fair Share program participants.

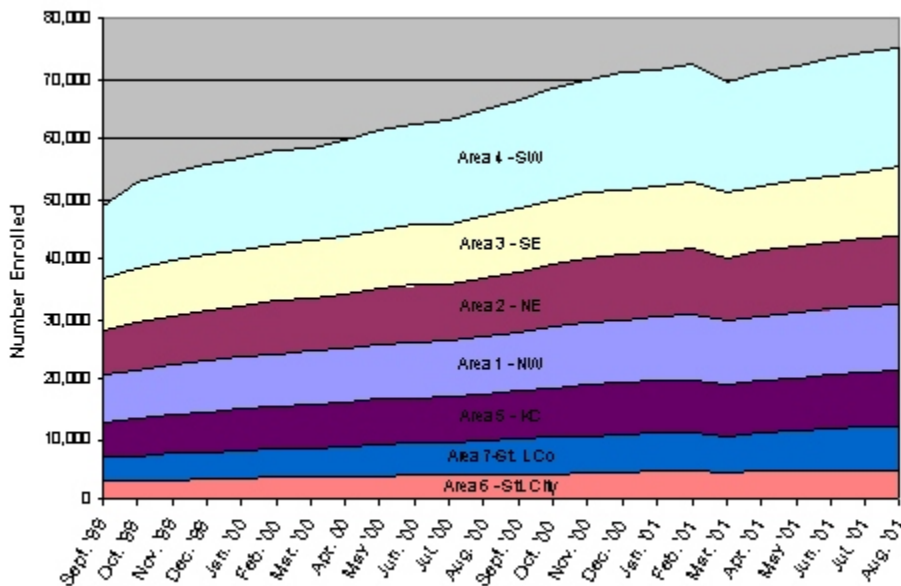
Figure 16. Adults Enrolled in the 1115 Waiver, August 1999 - August 2001



Source: Missouri Department of Social Services, Research and Evaluation Unit, Monthly Management Reports

Figure 17 illustrates parent enrollment growth in MC+ across regions (see also Table C9). Last year's study showed the same trend in enrollment occurring across regions, with the Southwest, Southeast, Northeast, and Northwest regions enrolling the largest number of beneficiaries, and St. Louis City and County enrolling the

Figure 17. 1115 Parent Enrollment Trend by Region, 1999 - 2001



fewest adults.

Source: Missouri Department of Social Services, Research and Evaluation Unit

Across several sources of data, there has been a consistent pattern of increased insurance rates for adults, with Missouri adults more likely to be insured since the implementation of the 1115 Waiver. Almost all (98.5%) of current Missouri 1115 beneficiaries reported they had no other sources of insurance.

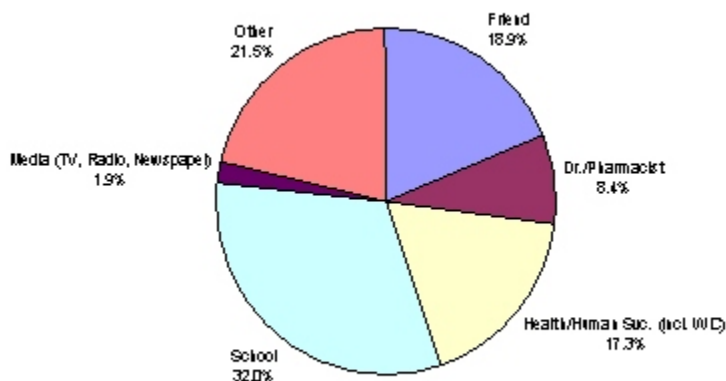
Furthermore, there has been a decline in the number of adults in Missouri who reported that they have never had health insurance. Adult Missourians have higher rates of employer-based insurance than the nation as a whole, and lower rates of uninsured adults.

Referral Sources and Outreach

This was the first full evaluation year for phone center data from Division of Family Services (DFS) phone centers that track referral information about MC+. Between December 1999 and August 2000, the most frequent referral sources were family or friends, schools, and health and human service agencies for those who called the phone centers (see Figures 18 and 19). Last year, the majority of sources of information about MC+ were family/friends and school. This year, the majority (32.0%) of sources of information about MC+ were from school, followed by other sources (21.5%; including clergy and internet), family/friend (18.9%), and health/human service agencies (17.3%; including WIC clinics; see Table C10). This is somewhat consistent with the pattern observed over the past two years, although the most consistent source of information is through the school system. This has been an especially important source of information and education about MC+ in the Northwest and Southeast regions, as well as in Kansas City. Thus, it seems that targeting families through schools continues to be an effective avenue for advertising the program. The "other" category includes clergy and internet sources, but only a very small proportion of the "other" category consists of clergy, suggesting that consumers are increasingly accessing information about MC+ through the Internet.

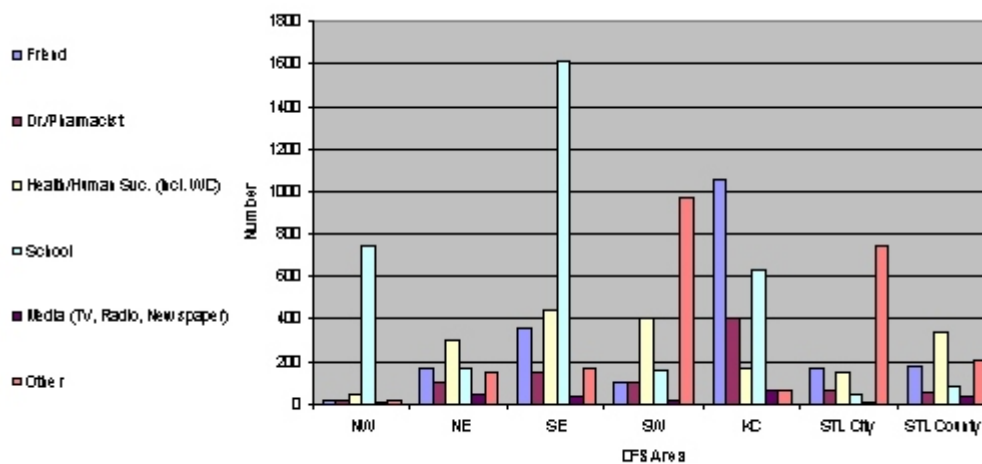
Relatively few consumers continue to report having heard about MC+ from print, radio, and television ads (1.9%). This is consistent with concerns raised during administrative interviews that there were not enough advertisements from the state regarding the program. It is also possible that, given the number of working parents, the Internet and information through the child's school are more readily accessible sources of information.

Figure 18. "How Did You Hear About MC+ for Kids?": Proportion of Sources, September 2000 - August 2001



Source: Referral sources as tracked by Phone Centers. Division of Family Services, Missouri Department of Social Services, 2001

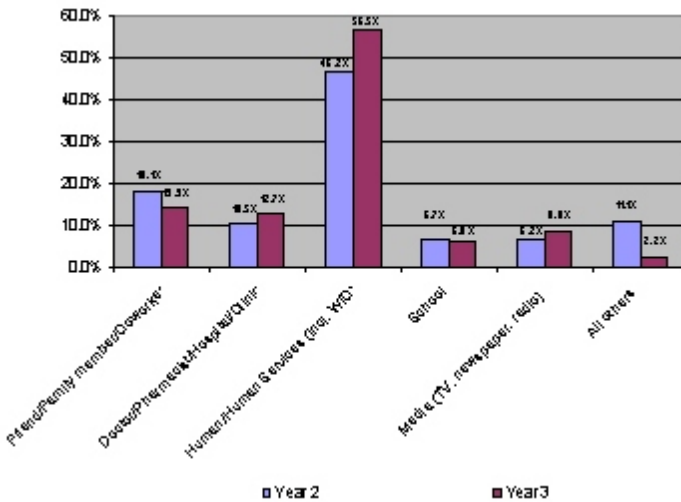
Figure 19. "How Did You Hear About MC+ for Kids?": Source by Region, September 2000 - August 2001



Source: Referral sources as tracked by Phone Centers. Division of Family Services, Missouri Department of Social Services, 2001

Figure 20 shows the sources through which telephone survey respondents reported having first learned about MC+, with data from last two years. A total of 56.5% of respondents (n = 852) reported having heard about MC+ specifically from family services offices, which is somewhat higher than with that reported by beneficiaries in at least one other state, South Dakota (47.0%). DFS offices appear to be an important source of information and outreach for MC+, especially in Missouri. It is interesting to note that only .2% of respondents (n = 3) indicated that they heard about MC+ through their church or clergy (included in the “other” category).

Figure 20. “Where Did You First Hear About MC+?”



Source: BHC, Inc., 1115 Waiver Beneficiary Telephone Summary

Access to Care

Access to care was examined by studying the accessibility of MC+ insurance through an observational study of DFS Phone Centers and beneficiary reports of service utilization and ability to obtain care. Consumers who wish to learn about the MC+ program may call a toll-free phone center or a local Division of Family Services office in any county of residence to obtain an application or inquire about benefits. Over the last three years, an observational study was conducted to assess the process of obtaining information through DFS offices and phone centers. In the first year of 1115 Waiver implementation, it was found that the new program increased the burden on front line staff, who possessed widely varying levels of information about the program and benefits. A standardized protocol was used to assess the ability of consumers to obtain information regarding the program and the ease of obtaining this information. Parents of children currently

enrolled in MC+ and who themselves are enrolled in MC+ were trained to conduct the protocol and enter the data. Each phone center was called once, during the weeks of May 13th and 20th, 2002.

Eight indices of access were chosen:

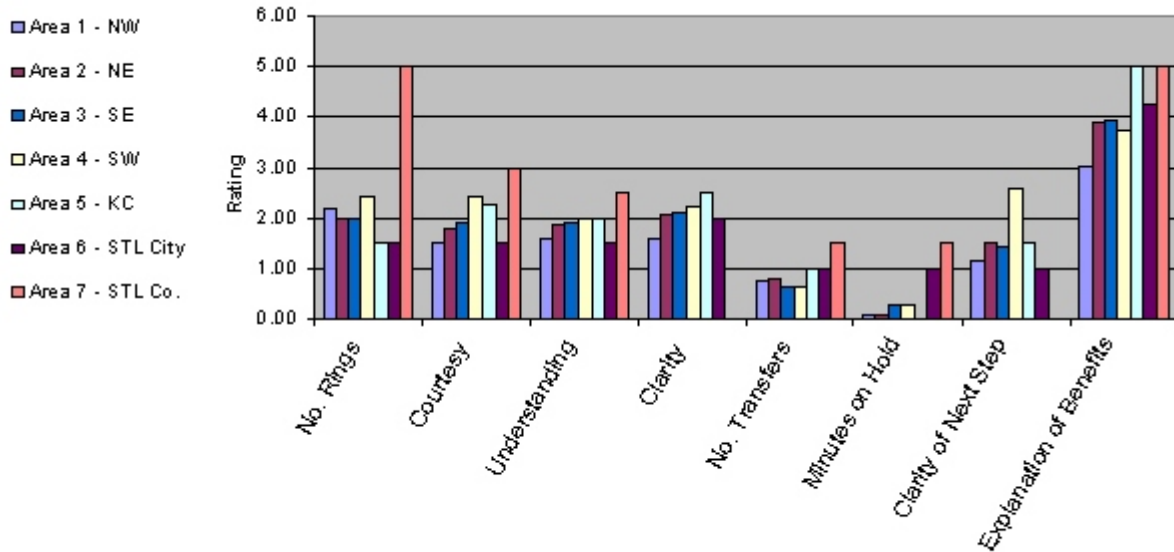
- * The number of rings before the phone was answered
- * Courteousness of the person answering the telephone
- * The ability of the caller to understand the speaker
- * Clarity of information
- * Number of transfers
- * Number of minutes on hold
- * Clarity of instructions for the next step in enrollment
- * Clarity of explanation of benefits

Table C11 shows the results of the phone center study for the past three years. For the number of rings, number of minutes, and number of transfers, the actual number of rings or minutes was counted. The remaining items were rated on a 5-point scale, with a lower number representing the best possible rating, and a higher number the worst possible rating. Overall, the ability to access information regarding MC+ for Kids through phone centers and Division of Family Services offices was comparable to the previous two years' positive results. Overall, receptionists and case managers were considered courteous and easy to understand. Callers waited an average of 2 rings before the phone was answered (2.3 rings), were transferred once (if at all), and were on hold an average of less than one minute (.28 minutes). Clarity of the information provided, courtesy of the speaker, and ability to understand the speaker also were positively rated for receptionists and caseworkers.

Ratings of the ability to understand the next step showed a downward trend over the past three years, as did the rating of the explanation of the program and benefits. These ratings were due to some offices indicating that they "do not discuss eligibility over the telephone, because it depends on a lot of circumstances" or that "as a matter of policy, we do not give out information over the phone". In all areas where the caller was able to make contact, they either were offered the opportunity to have their case referenced while on the phone, advised to come into the office to obtain an application, or offered a packet by mail. Figure 21 shows the average ratings for each area on all items. It should be noted that the average scores for areas 5, 6, and 7 are based on few offices, several of which were not rated because no one answered the telephone (see Table C12). The Area 5 rating represents the East Jackson office only, while Area 6 represents Midtown and

Prince Hall, and Area 7 represents the St. Louis County and North County Center offices. All offices in Areas 1 (Northwest), 3 (Southeast), and 4 (Southwest) answered the telephone; and all except one in Area 2 (Northeast; St. Charles) answered the telephone.

Figure 21. DFS Phone Center Service Area and Average Ratings



Source: BHC, Inc., 1115 Waiver Beneficiary Telephone Summary

Note: A higher number indicates a poorer rating

Overall, Area 1 (Northwest) outperformed the other areas across all items, with the best average ratings on courtesy, understanding of speaker, clarity of instructions next steps, and explanation of benefits. Offices in the Northwest region also had the second fewest number of rings before the phone was answered as well as the second fewest number of transfers.

One area of improvement that was noted from the first to the second evaluation was the responsiveness of Areas 6 and 7 telephone responders. In the first year, of the four St. Louis area regional offices, three did not answer the telephone, with one of the three having an answering machine that referred the caller to another office that did not answer the telephone. In the second year, three St. Louis offices answered the telephone within three to five rings, and all were rated as a 1 or 1.1 (with 1 being the most positive) on courteousness, comprehensibility, and clarity. However, this year, two St. Louis City offices, and two of the three offices in the St. Louis County areas answered the telephone. Also, two of the four offices in the Kansas City area

answered the telephone.

The actual explanation of the program and its benefits was the most problematic area for the offices as a whole. Some offices indicated that they did not provide detailed explanations over the telephone, and others explained that they did not discuss eligibility as a matter of policy, partly due to the complexity of eligibility. DFS offices continue to be a valuable resource for outreach and informing potentially eligible beneficiaries about program benefits and the qualification process. There was wide variation across regions in the ease with which callers were able to speak with someone knowledgeable and helpful.

Access to care was also examined using consumer reports of access to care and utilization of services from the Consumer Assessment of Health Plans Survey (CAHPS) from 1999 and 2000. Comparisons were made between 1115 and 1915b beneficiaries, and for 1115 beneficiaries between 1999 and 2000 (see Figure 22 and Table C13). Several findings reached statistical significance. The 1115 Waiver beneficiaries reported significantly greater ease in obtaining health care when needed, as compared to 1915b beneficiaries. Average ratings for both groups were higher than that reported on a national level. Other indices of access included utilization of specific services. There were statistically significant increases in the average number of dental visits in the last twelve months, for both child and adult 1115 beneficiaries, between 1999 and 2000 (see

Figure 22. Consumer Report of Ability to Obtain Needed Health Care, Missouri 1115 and 1915b Beneficiaries, 2000

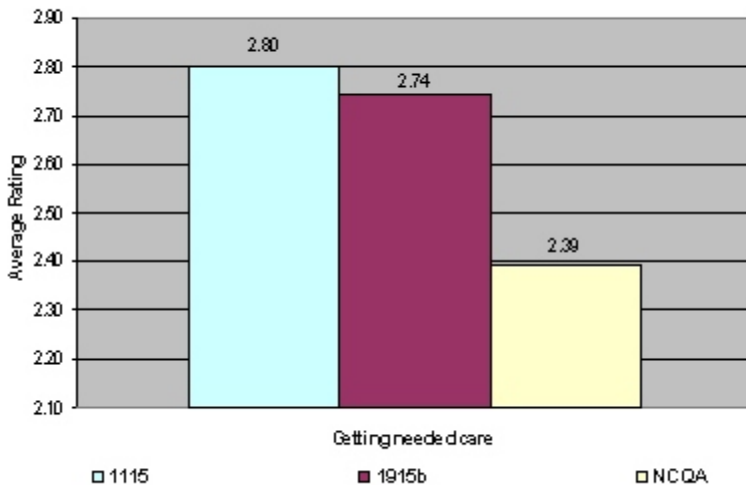
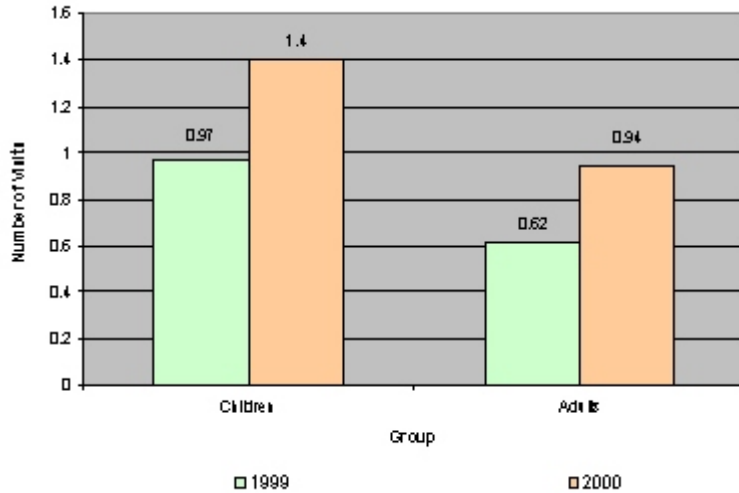


Figure 23 and Table C14). For children, ratings of the ease of obtaining a prescription increased from 1999 to 2000, from an average of 2.85 to 2.91, with “5” being the highest possible rating (see Figure 24).

Source: Missouri Department of Social Services, Consumer Assessment of Health Plans data, 2000

Note: NCQA = National Committee on Quality Assurance, 2000; Range of possible scores is from 1 to 3, with 1 being the lowest and 3 being the highest possible rating; There were statistically significant differences between 1115 and 1915b beneficiaries. ($p < .001$).

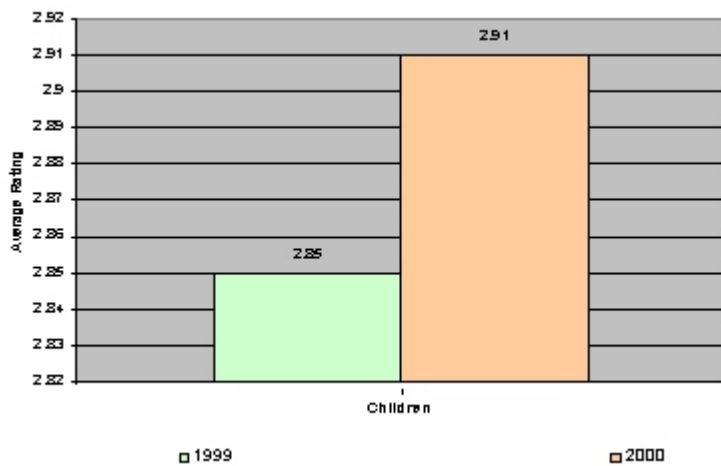
Figure 23. Average Number of Dental Visits in the Past Year, Missouri 1115 Beneficiaries, 1999-2000



Source: Missouri Department of Social Services, *Consumer Assessment of Health Plans data, 2000*

Note: There were statistically significant increases between 1999 and 2000 visits for children ($p < .001$).

Figure 24. Ease of Obtaining a Prescription, Missouri 1115 Child Beneficiaries, 1999 - 2000



Source: Missouri Department of Social Services, *Consumer Assessment of Health Plans data, 2000*

Note: There were statistically significant increases in the reported ease of obtaining prescriptions between 1999 and 2000 ($p < .05$).

Research Question #2: Has the MC+ expansion improved the health of Missouri children and families?

Health Status

One method of examining the impact of the 1115 Waiver expansion on the health status of beneficiaries is to compare their health status with those of Medicaid beneficiaries covered under Title XIX ("other Medicaid") and those who were not enrolled in public health insurance ("non-Medicaid"). Data were obtained from the Missouri Department of Health and Senior Services (DHSS) on several health status indicators for children. Another source of data was beneficiary ratings of care. Comparisons were made with national and commercial beneficiary responses between 1999 and 2000, for Missouri 1115 beneficiaries and between 1115 and 1915b beneficiaries.

The numbers and rates of preventable hospitalizations, emergency department visits, emergency department visits for asthma, and hospitalizations for asthma by region were examined and are presented in Figures 25 through 28 for calendar years 1999 and 2000. It should be noted that the illustrations in Figures 25 through 28 represent rates for each category of insured and do not take into account the differences in baseline health status associated with poverty. For the non-Medicaid group, it was not possible to separate those who were commercially insured with those who were uninsured.

Preventable hospitalizations are those that were necessary at the time of admission, but may have been avoided with better access to primary care health services (Missouri Department Of Health, 1995). They include hospitalizations for the following diagnoses:

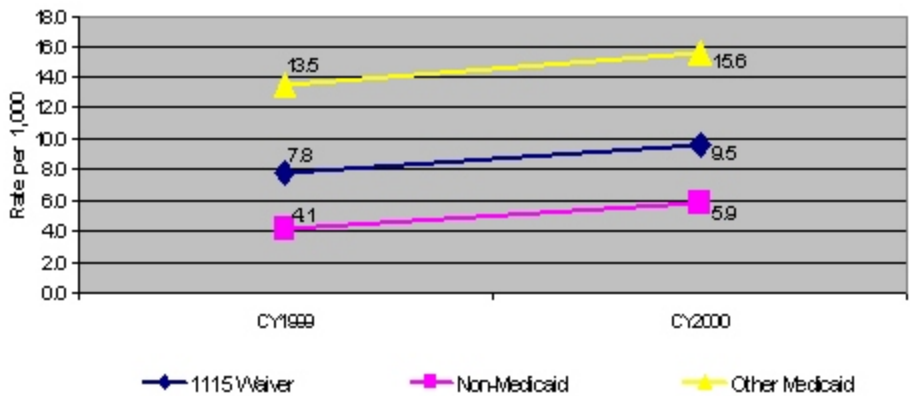
- | | |
|---|---|
| * Angina | * Epilepsy |
| * Asthma | * Failure to Thrive |
| * Bacterial Pneumonia | * Gastroenteritis |
| * Cellulitis | * Hypertension |
| * Chronic obstructive pulmonary disease | * Hypoglycemia |
| * Congenital syphilis | * Kidney or urinary infection |
| * Dehydration | * Pelvic inflammatory disease |
| * Dental Conditions | * Severe ear, nose, or throat infection |
| * Diabetes | * Tuberculosis |

As shown in Figure 25, the highest rates of preventable hospitalizations occurred for Medicaid beneficiaries, the lowest rates were for those who are not on any type of public insurance, and beneficiaries of the 1115

Waiver demonstrated moderate levels of preventable hospitalizations.

Figure 25 also illustrates the change in rates of preventable hospitalizations from 1999 to 2000. However, the greatest increase in preventable hospitalizations between 1999 and 2000 was in the non-Medicaid population, with a 43.3% increase in the rate of preventable hospitalizations. The smallest increase in the rate of preventable hospitalizations was observed in the "other Medicaid" population, indicating relatively stable rates, with an increase of only 14.9%. For the 1115 population, there was a 22.8% increase in preventable hospitalization between 1999 and 2000. These findings indicate that non-Medicaid children have better health status with regard to preventable hospitalizations than Medicaid beneficiaries, but somewhat lower health status ratings than those who are not enrolled in public health insurance. The non-Medicaid category does not separate out those who had no insurance. In 1995, the Missouri Department of Health found that the geographic areas of Missouri with the highest rates of preventable hospitalizations were also the areas with the highest prevalence of poverty (rural counties south of Kansas City, counties of Southeast Missouri, and the City of St. Louis), and income was a significant predictor of the incidence of preventable hospitalizations.

Figure 25. Preventable Hospitalizations under 19 Years of Age, 1999 - 2000

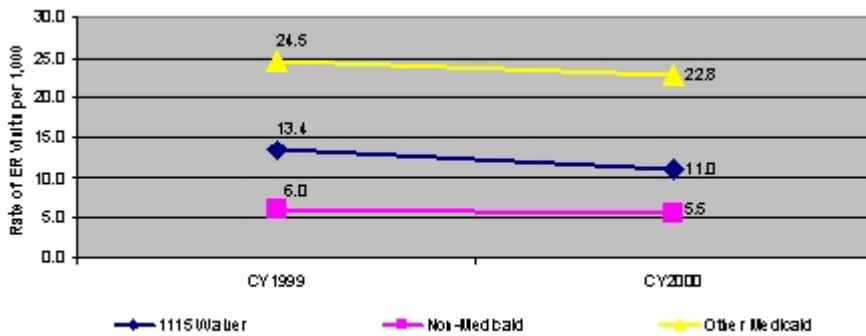


Source: Missouri Department of Health and Senior Services, Community Health Information Management And Epidemiology (CHIME)

When examining the rates of preventable hospitalizations by the region of the state, it was noted that the rate of preventable hospitalizations was higher for fee-for-service than MC+ managed care and non-Medicaid beneficiaries in all regions of the State. In addition, the highest rate of preventable hospitalizations was observed in the Western region fee-for-service beneficiaries (32.6 per 1,000 beneficiaries in 2000).

Similar trends across Medicaid, 1115 Waiver, and other Non-Medicaid beneficiaries on health status were observed for emergency department visits (see Figure 26). Overall, children receiving 1115 Waiver benefits had fewer emergency department visits than other Medicaid beneficiaries and more than others who did not receive either type of coverage. The rate of decline in emergency room visits between 1999 and 2000 among 1115 Waiver beneficiaries was 5.4%, while the rate of decline was greater for other Medicaid beneficiaries (8.0), and smaller for non-Medicaid beneficiaries.

Figure 26. All Emergency Department Visits under 19 Years of Age, 1999 - 2000



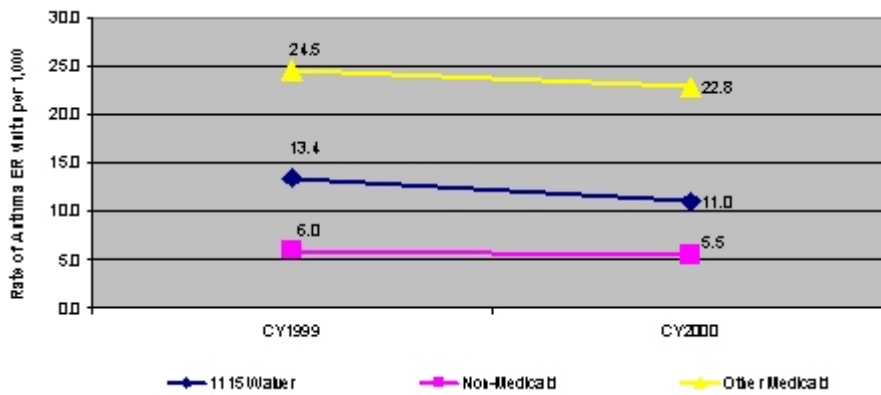
Source: Missouri Department of Health and Senior Services, Community Health Information Management And Epidemiology (CHIME)

Two other indicators of health status, asthma emergency department visits and asthma hospitalizations were examined for children. These are important indicators, as asthma has been identified as a controllable illness that when not well managed, costs the nation billions of dollars in emergency department visits, hospitalizations, and lost productivity.

Figure 27 shows the rates of emergency department visits for asthma, and Figure 28 shows the rate of hospitalization for asthma. The greatest decrease in asthma emergency room visits occurred for 1115 Waiver beneficiaries from 1999 to 2000. However, this group also showed the greatest increase in hospitalizations for asthma during the same time period (26.6%) while the rate decreased for non-Medicaid and other Medicaid beneficiaries. Thus, although 1115 Waiver children and their parents are using less emergency room care, they are using more acute hospitalization for the asthma or are being hospitalized more often when they present to the emergency room. This suggests a need for more preventive measures targeted specifically at 1115 Waiver families and children, such as asthma action plans, helpful medications, and the need for early identification of problems that exacerbate symptoms. Another possible explanation for this

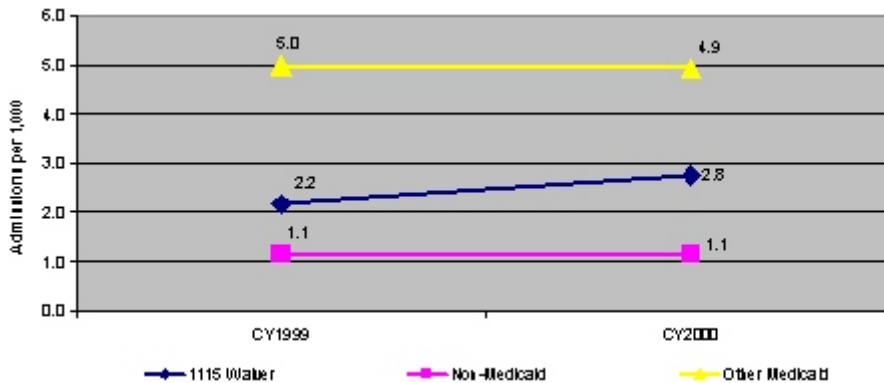
pattern of findings is that 1115 Waiver families are more reluctant to use the emergency room for fear of cost. However, the same pattern was not noted in the above findings on all emergency room visits or preventable hospitalizations. These findings do not take into account the baseline health status or severity of illness, which likely varies significantly with income/poverty status associated with different sources of insurance.

Figure 27. Asthma Emergency Department Visits under 19 Years of Age, 1999 - 2000



Source: Missouri Department of Health and Senior Services, Community Health Information Management And Epidemiology (CHIME)

Figure 28. Rate of Asthma Hospitalizations under 19 Years of Age, 1999 - 2000

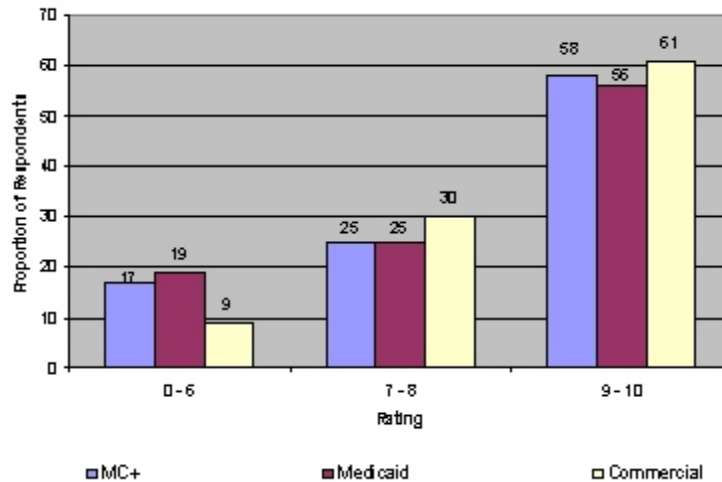


Source: Missouri Department of Health and Senior Services, Community Health Information Management And Epidemiology (CHIME)

Satisfaction with Health Care

Another method of assessing health is through beneficiary satisfaction with the provision of services. The CAHPS survey conducted in Missouri was used to assess satisfaction with primary and specialty care, and interactions with providers. Comparisons were made with national Medicaid and commercial beneficiaries; between 1115 and 1915b beneficiaries; and from 1999 to 2000 for 1115 beneficiaries (see Table C15). Figure 29 shows the rating of physicians by parents of MC+ 1115 child Waiver beneficiaries. Consistent with national Medicaid and commercial rates, over half (58%) gave the highest rating to their physician (“9” or “10”). Also, parents of Missouri MC+ 1115 child beneficiaries were more likely to rate their specialty care a “9” or a “10” than were Medicaid beneficiaries in the United States as a whole, and commercial beneficiaries (56%; see Figure 30).

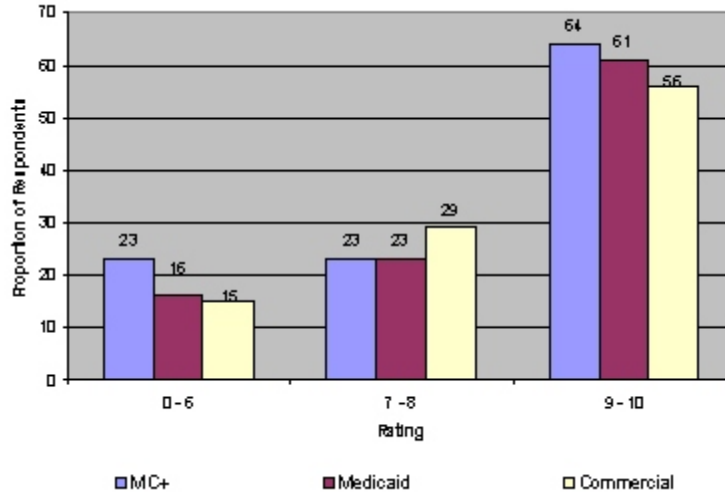
Figure 29. Consumer Satisfaction with Physician, Missouri MC+ Child Beneficiaries and National and Commercial Child Beneficiaries, 2000



Sources: Missouri Department of Social Services, Consumer Assessment of Health Plans data, 2000
 U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, Annual Report for the National CAHPS Benchmarking Database (NCBD), 2000

Note: MC+ = Missouri 1115 Beneficiaries; Medicaid = Nationwide Medicaid Average, NCBD; Commercial = Commercial beneficiary average, NCBD; Ratings ranged from 1 to 10, with 1 being the lowest and 10 being the highest possible rating.

Figure 30. Consumer Satisfaction with Specialist Care, Missouri MC+ 1115 Child Beneficiaries, National Medicaid, and Commercial Beneficiaries, 2000

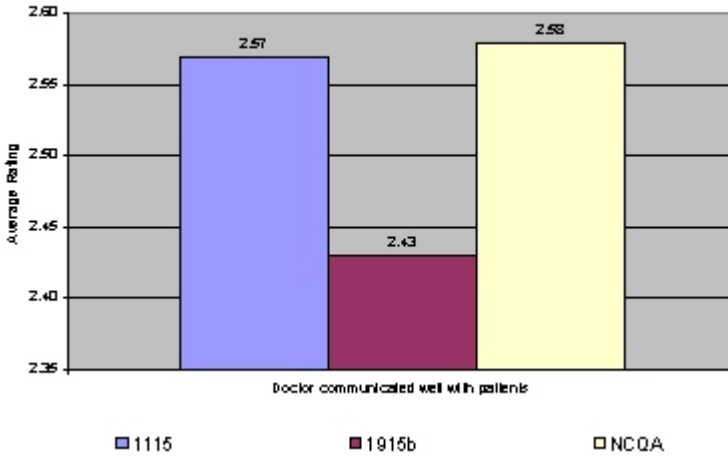


Sources: Missouri Department of Social Services, *Consumer Assessment of Health Plans data, 2000*
 U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, *Annual Report for the National CAHPS Benchmarking Database (NCBD), 2000*

Note: MC+ = Missouri 1115 Beneficiaries; Medicaid = Nationwide Medicaid Average, NCBD; Commercial = Commercial beneficiary average, NCBD; Ratings ranged from 1 to 10, with 1 being the lowest and 10 being the highest possible rating.

When 1115 and 1915b beneficiaries were compared on their satisfaction of communication with providers, 1115 beneficiaries rated communication with the primary care provider significantly higher than did 1915b beneficiaries. The average rating for Missouri 1115 beneficiaries was similar to that of commercial beneficiaries nationwide (NCQA, 2000; see Figure 31). The same pattern was evident for 1115 beneficiaries' rating of treatment with respect to courtesy and helpfulness by providers, and was actually higher than national commercial beneficiary ratings (see Figure 32).

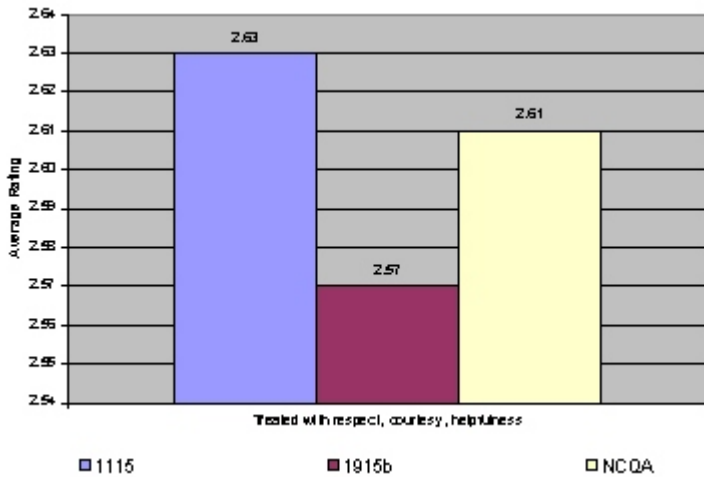
Figure 31. Consumer Report of Physician Communication with Patients, Missouri 1115 and 1915b Beneficiaries, and National and Commercial Ratings, 2000



Sources: Missouri Department of Social Services, Consumer Assessment of Health Plans data, 2000
 U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, Annual Report for the National CAHPS Benchmarking Database (NCBD), 2000

Note: 1115 = MC+ 1115 beneficiaries; 1915b = MC+ 1915b beneficiaries; NCQA = National Committee on Quality Assurance.

Figure 32. Consumer Report of Interactions with Providers Missouri 1115 and 1915b Beneficiaries, and National Commercial Ratings

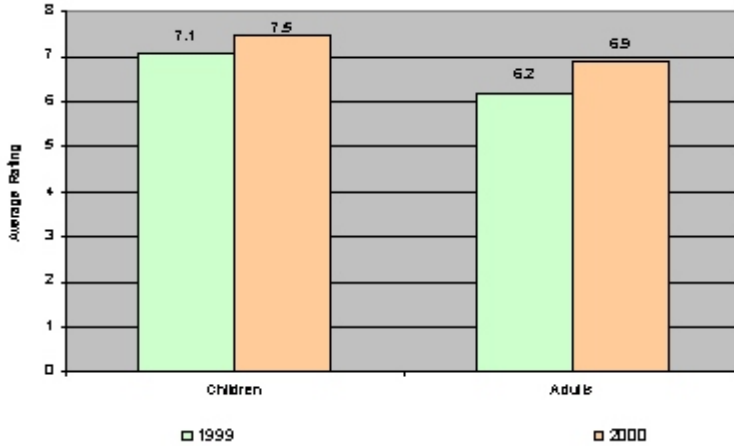


Sources: Missouri Department of Social Services, Consumer Assessment of Health Plans data, 2000
 U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, Annual Report for the National CAHPS Benchmarking Database (NCBD), 2000

Note: 1115 = MC+ 1115 beneficiaries; 1915b = MC+ 1915b beneficiaries; NCQA = National Committee on Quality Assurance.

Consumer satisfaction with dental care for both children and adults was examined and compared between 1999 and 2000. Satisfaction with dental care for both children and adults was significantly higher among 1115 beneficiaries in 2000 than it was in 1999 (see Figure 33).

Figure 33. Consumer Satisfaction with Dental Care, Missouri MC+ 1115 Beneficiaries, 1999-2000

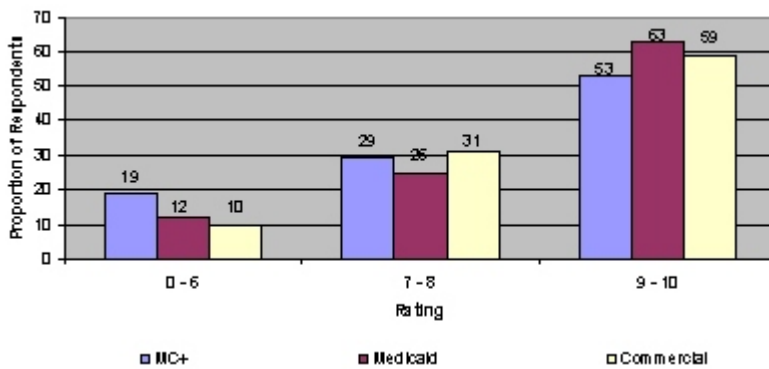


Sources: U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, Annual Report for the National CAHPS Benchmarking Database (NCBD), 2000

Note: Differences between 1999 and 2000 for children and adults were significant at the $p < .001$ level of significance; Ratings ranged from 1 to 10, with 1 being the lowest and 10 being the highest possible rating.

Figure 34 shows consumer satisfaction with all health care, comparing Missouri MC+ child beneficiaries and national Medicaid and commercial beneficiaries in 2000. Somewhat fewer 1115 beneficiaries reported the highest rating of overall care (53%), relative to national Medicaid ratings (63%) and national commercial ratings (59%).

Figure 34. Consumer Satisfaction with All Health Care, Missouri MC+ 1115 Child Beneficiaries, and National Medicaid and Commercial Beneficiaries, 2000



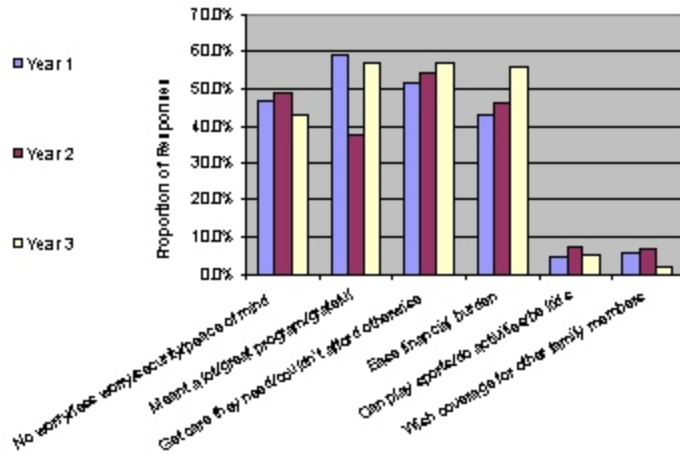
Sources: Missouri Department of Social Services, Consumer Assessment of Health Plans data, 2000
U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, Annual Report for the National CAHPS Benchmarking Database (NCBD), 2000

Note: MC+ = Missouri 1115 Beneficiaries; Medicaid = Nationwide Medicaid Average, NCBD; Commercial = Commercial beneficiary average, NCBD; Ratings ranged from 1 to 10, with 1 being the lowest and 10 being the highest possible rating.

Impact of Coverage

For the third year in a row, respondents were asked what it has meant to have MC+ coverage. The overwhelming majority of responses were consistent with the last two years. Most respondents indicated less worry and gratefulness for having the opportunity for insurance. These were the most frequent responses for the first two years, while the ability to obtain needed care and the financial assistance with health care seem to be the most significant factors impacting beneficiaries at the present time (see Figure 35 and Table C16).

Figure 35. “What Has Having MC+ Meant?”



Source: BHC, Inc., 1115 Waiver Beneficiary Telephone Summary

Research Question #3: Will cost-sharing requirements for the higher income expansion population result in any negative impacts as measured by individual health and access to the MC+ system?

This question was examined by comparing those who shared (“cost” group, comprised of those who made co-pays and/or paid premiums) and did not share in the cost of health insurance (“no cost” group). Last year there were no significant differences between the two groups on most access (to a regular medical doctor or clinic, or to a dentist, number of actual visits, emergency room visits) and health status indicators (health rating, sick days, limitations in physical activities). Statistically significant differences emerged in the perceived ease of access (seeing a doctor and obtaining a medical appointment), with the cost group reporting better perceptions of accessibility.

Based on secondary analysis of the CAHPS data from the 1999 administration, there were significant differences found between cost and no-cost groups on several indices of health status and access. However, these differences were not in the direction expected. For children, the cost group reported significantly better health status and lower rates of emergency room utilization. For adults, there were no significant differences between the cost and no-cost groups on health status. Adults in the cost group reported more difficulty getting to the doctor than those in the no-cost group.

Analysis of data from the 2000 CAHPS administration indicated few significant differences again between the cost and no-cost groups for children and adults. For children, those in the cost group reported better access to behavioral health services (see Table C17), and a higher frequency of obtaining prescription medication. There were no other significant differences in health status or access for cost and no-cost children. Adults in the cost-sharing group reported less difficulty with language barriers, and higher ratings of feeling respected by their provider. There were no significant differences between the cost and no-cost groups in reported access to primary or specialty care, ratings of providers, access, or satisfaction.

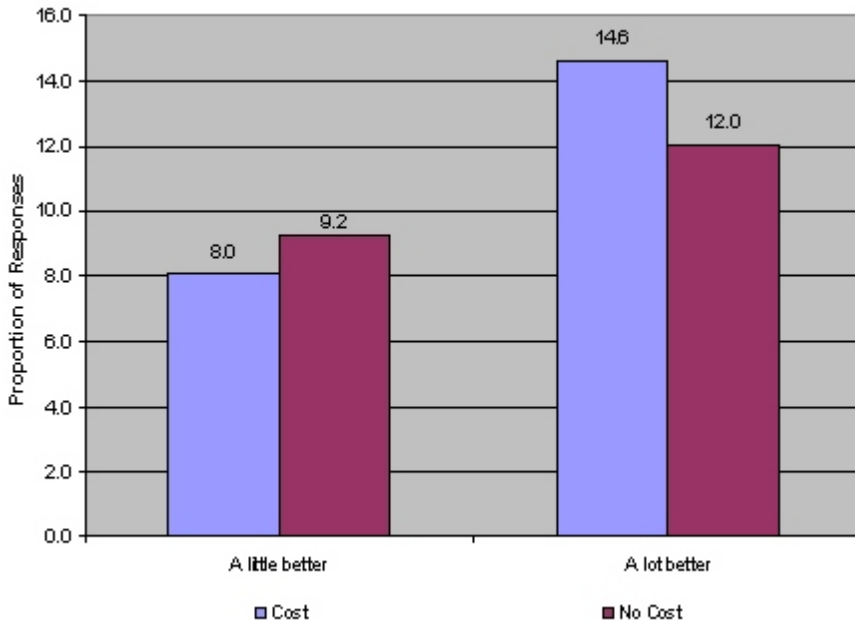
Results of responses to BHC’s telephone survey of beneficiaries were also examined, comparing cost and no-cost groups. For adults and children combined, the cost group reported significantly longer enrollment with MC+ (see Table C1); a lengthier time of having been uninsured prior to MC+ (an average of 36.40 and 29.48 months, respectively); lower ease in scheduling an appointment (average rating of 4.23 and 4.38,

respectively, with “5” being the highest possible rating); greater utilization of physicians when ill (an average of 3.95 and 3.07 physician visits in the past year, respectively); and fewer dental visits in the past year (an average of .71 and .97, respectively).

Table C18 shows the results of chi-square analyses examining the differences between cost and no-cost groups. All analyses presented were significant at the .05 level of significance (95% confidence level). Results indicated that those in the cost group were more likely to have a chronic illness than those in the no-cost group (26.2% and 19.6%, respectively). The impact on child functioning was significant, with those in the cost group being more likely than the no-cost group to report that their child’s school performance improved “a lot” or a “a little” since enrolling in MC+ (22.6% and 21.28%, respectively; see Figure 36). Also, the impact of MC+ on family stability was significant, with those in the cost group being more likely to report that the family’s ability to maintain employment has improved “a lot”, or a “a little” since enrolling in MC+ (25.7% and 17.3%, respectively; see Figure 37). Only the ease of scheduling an appointment was significant for the adult cost and no-cost groups. Otherwise, all significant differences were for children in the cost and no-cost groups. Children in the cost group had lower ratings of health status than those in the no-cost group (an average of 3.97 and 4.25, respectively, with “5” being the highest rating); and were less likely to go the doctor when needed (15% and 8%). This is likely due to the larger proportion of children with

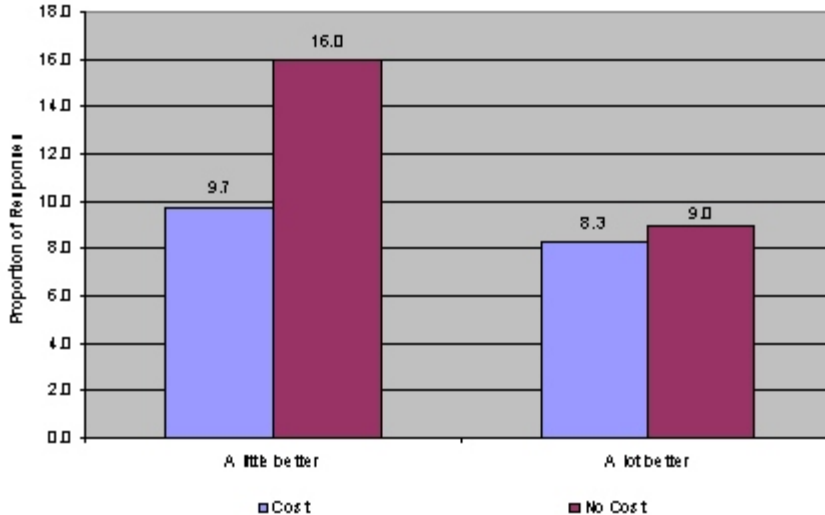
chronic illnesses in the cost group.

Figure 36. Change in School Performance Since MC+



Source: BHC, Inc., 1115 Waiver Beneficiary Telephone Summary

Figure 37. Change in Family Employment Stability Since MC+



Source: BHC, Inc., 1115 Waiver Beneficiary Telephone Summary

In summary, the cost group is equally or more satisfied with their access to health care, demonstrates greater access to care for their children when they are ill, are better able to maintain family functioning with respect to employment stability, and have improved school performance since being insured with MC+. The only negative impact that the cost group showed on all comparisons across all sources of data were the lower number of dental visits for children, greater difficulty scheduling appointments for adults, and not going to the doctor when needed for children. Overall, it appears that MC+ affords many families with children with chronic illnesses that may not otherwise be able to obtain or afford insurance because of the chronic health conditions to participate in health insurance. Furthermore, the cost group reports better access to behavioral health services, and better access to prescriptions than the no-cost group. Thus, there is little demonstrable negative impact of cost sharing.

Research Question #4: Will lack of NEMT result in any negative impact as measured by individual health and access to the MC+ system?

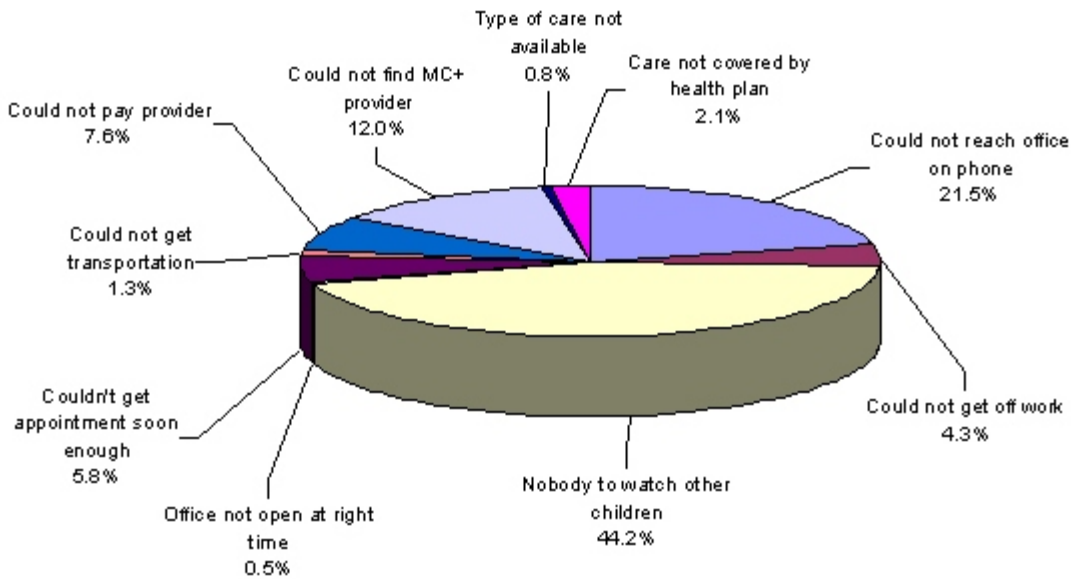
In an effort to contain costs, the Missouri State legislature decided not to include non-emergency medical transportation (NEMT) as a benefit to 1115 Waiver beneficiaries. The impact of this decision on the accessibility to health care and health status outcomes has been assessed over the past three years through surveys of parents and adult beneficiaries. The first year included comparing those who received transportation (at a time when health plans and the transportation vendor were not distinguishing between those who did and did not receive this benefit) with those who did not receive transportation on their self-report of access to health care and health status. In the first year, 5.3% (129 of 2,414) of adult and child beneficiaries missed medical appointments due to lack of transportation. These 129 individuals who did not receive transportation and who reported missing medical appointments were compared with 55 beneficiaries who received transportation that was not reimbursed by the State. Comparisons of the two groups indicated no differences in reported health status, number of sick days from school or work, or number of emergency room visits. Those who missed appointments had a higher rate of utilization, suggesting that they tended to use services more frequently despite comparable levels of health status.

In the second year of evaluation, comparisons between those who reported missing medical appointments due to lack of transportation (164 of 3,056; 6%) and those who did not report missing medical appointments were conducted on health services access and status variables. Data obtained from those surveyed in years one and two were combined. Those who missed medical appointments due to lack of transportation reported statistically significantly lower scores on health status, less ease of getting to the doctor, more sick days, and a greater number of sick visits. They also were significantly more likely to report a chronic illness or disability, requiring them to use medical care more frequently, as evidenced by the greater number of doctor visits. This pattern suggests that those with more need for medical services are likely to benefit most from non-emergency transportation services.

In the third year (conducting the telephone survey of beneficiaries), there were very few beneficiaries who reported missing medical appointments due to lack of transportation. This precluded conducting statistical comparisons between groups of those who did and did not receive NEMT. Respondents were asked if they missed needed medical, dental, mental health, and substance abuse treatment appointments and the reasons

they missed appointments. The most frequent reason was due to not having child care (44.3%), followed by not being able to reach the provider on the telephone (21.5%). Being unable to attend a needed appointment due to difficulty with transportation was endorsed by only 24 of the respondents (1.3%, see Figure 38 and Table C19).

Figure 38. Reasons for Not Attending Needed Care



Source: BHC, Inc., 1115 Waiver Beneficiary Telephone Summary

Research Question #5: Will cost-sharing requirements for the higher income expansion children and some parents result in disenrollment from MC+ when three mandatory co-payments are not paid within any one year?

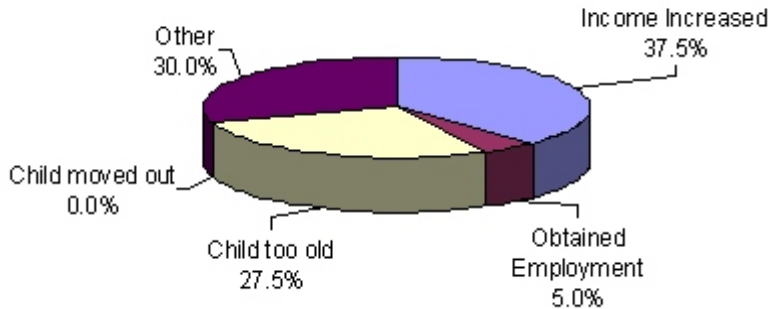
An addendum and additional survey were conducted at the end of the last evaluation year to assess the impact of making premium payments for those who disenrolled, and to assess the MC+ processes of disenrollment. It was found in the Year 2 evaluation that there was a disproportionate number of children in the cost-sharing group (both those that made co-payments and those that made premium payments) who were disenrolled at the time of the survey (30.6%), compared to those in the no-cost group (15.9%). The same pattern did not emerge with parents in the cost-sharing group. Follow-up on the child group was conducted to determine whether beneficiaries disenrolled as a result of inability to share in the cost and whether there were mitigating factors associated with their disenrollment.

Data from First Health, the MC+ enrollment vendor, were examined to assess the rate of disenrollment between January and August 2000. A total of 841 cases were closed due to non-payment of premium. Analysis of the data revealed that on average, 8.5% of children whose parents are required to make a premium payment were disenrolled each month as a result of missing either an initial or recurring premium payment. Most were disenrolled as a result of not making the initial premium payment. Of the 841 closed cases, there were only 19 reinstatement requests, comprising less than 1% of the cases closed due to failure to make a premium payment. Seven of the 19 requests (37%) resulted in reinstatement and 12 (63%) were denied. No information about the reasons for denial was available. Thus, seven of 841 (again, less than 1%) cases may have been disenrolled due to mitigating circumstances, but later were reinstated. This is a relatively small and insignificant impact with regard to the overall system, although it is not possible to account for the significance to individuals. The system for tracking and following up on reinstatement requests allows for individual case review to permit identification of mitigating circumstances (i.e. errors in disenrollment) and re-instatement of benefits.

Fifty-four respondents whose children were disenrolled from MC+ at the time of a follow-up survey were contacted to assess their understanding of the process of eligibility and enrollment, and assess whether any were disenrolled due to mitigating circumstances (see Figure 39). In addition to examining the process and

resolution status of disenrollment for failure to make premium payments, a follow-up telephone survey of those who reported their children as disenrolled was conducted.

Figure 39. Reasons Disenrolled



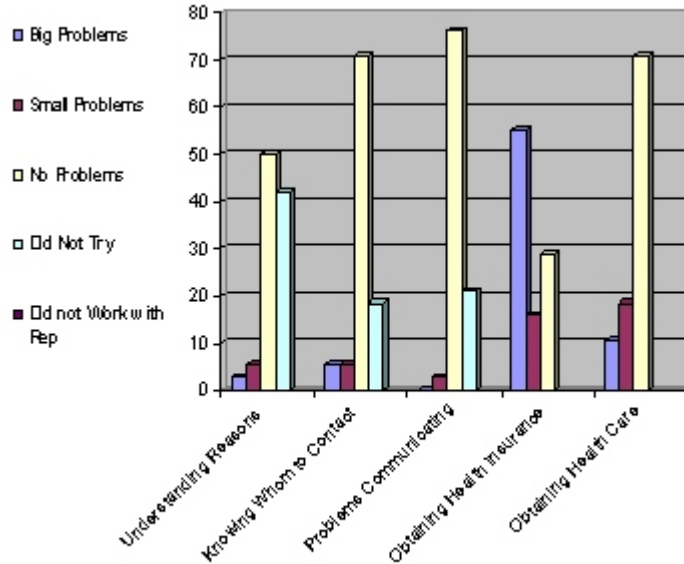
Source: BHC, Inc., 1115 Waiver Beneficiary Telephone Summary

Thirty-eight of the 54 respondents (70%) were able to be contacted and interviewed. One (1) respondent declined, one (1) requested a call back and was not able to be reached, five (5) had non-working numbers, and nine (9) did not answer. Respondents were called up to six times to attempt an interview. A majority of respondents were disenrolled because their income increased (37%), rendering them no longer eligible for the program. Other reasons for being disenrolled (30% of responses) included: 1) obtaining other insurance, 2) fluctuating income, 3) child dropped out of school, 4) inability to meet paperwork timelines, and 5) misunderstanding of eligibility resulting in beneficiary not re-enrolling. Another large proportion of respondents were no longer eligible because the child was too old (28%; percentages are greater than 100, as more than one response was possible, see Figure 39).

Respondents were asked several questions about their understanding of the process of disenrollment. In particular, they were asked to rate how much of a problem it was for them to 1) understand the reason(s) their child was no longer eligible, 2) know whom to contact for information or questions about MC+ after disenrollment, 3) contact someone for assistance, and 4) obtain other health insurance for their child after disenrollment. Results are summarized in Figure 40. Findings indicate that those who were disenrolled reported no problem understanding why they were disenrolled, knowing when to contact if they had questions,

and being able to communicate their concerns with appropriate parties. Although a majority reported big problems obtaining health insurance, most reported no problems subsequently finding and obtaining health care.

Figure 40. Understanding the Process after Disenrollment

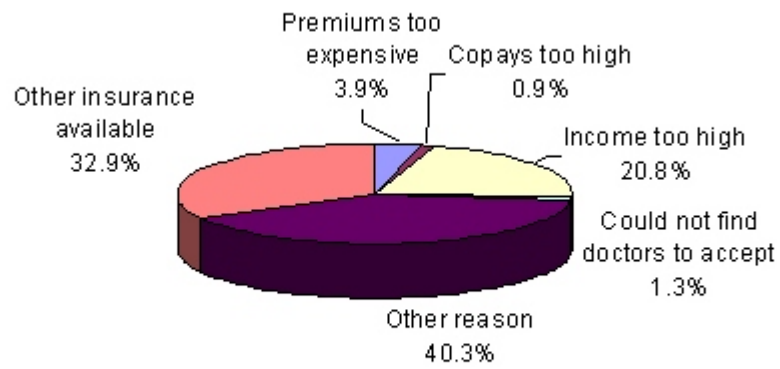


Source: BHC, Inc., 1115 Waiver Beneficiary Telephone Summary

Disenrollment

Of all respondents, 241 (17.2%) reported having been disenrolled from MC+ at the time of the survey. Of the 231 who gave a response, 32.9% indicated they had other insurance available, another 20.8% indicated their income was too high to qualify them for continued insurance, and 40.3% indicated there was some other reason they disenrolled (e.g., disabled, no longer working, a full-time student, etc.). Only 9 (3.9%) indicated that premiums were too expensive, and 2 (.9%) indicated that co-pays were too high (see Figure 41).

Figure 41. Reasons for No Longer Being Insured with MC+



Source: BHC, Inc., 1115 Waiver Beneficiary Telephone Summary

Evaluation Study #1: What is the impact of MC+ on providing a comprehensive array of community-based wraparound services for children with a Serious Emotional Disturbance (SED) and children affected by substance abuse?

Characteristics of Beneficiaries

The first year evaluation of the 1115 Waiver examined the services which were categorized as "wraparound" types of services provided to children with serious emotional disturbance (SED) through the Missouri Department of Mental Health (DMH).

The sample data were limited because services provided by MCOs and other 1115 Waiver services provided on a fee-for-service basis were not included. However, children with SED who were enrolled in MC+ through the 1115 Waiver program were able to be identified. Their median age was 14 years, with a majority considered to be of Caucasian, non-Hispanic race/ethnicity. The most frequent diagnosis was ADHD (hyperactivity), followed by major depression, acute stress or adjustment disorders, and oppositional defiant disorders or conduct disorders. We have presented data on the array of services provided by DMH to a sample of children with SED, as well as children receiving drug and alcohol abuse services. Some of these services are through Medicaid, such as alcohol and drug abuse services (CSTAR), which is provided as a carve-out Medicaid service.

To better evaluate this question during the Year 3 evaluation, several specific questions were incorporated into the telephone surveys on health status and access. These questions were given to a sample population of parents whose children received some type of psychotropic medication and were more likely to demonstrate a need for wraparound services.

- * Is your child currently receiving mental health services of any kind?
- * In the past six months, has your child received help for an emotional problem?
- * Have those who work with your child and family met with you as a group to discuss your strengths, needs, concerns, and treatment options?
- * How would you rate your child's emotional functioning now?
- * How satisfied are you with the services that your child receives?
- * How satisfied are you with the CHOICE of services that your child is able to receive?
- * Has anyone ever suggested that your child has a problem with alcohol or drugs?

- * Has your child ever been in trouble because of alcohol or drugs?
- * Has your child ever lived with anyone who had a problem with alcohol or drug use?

As expected, children in the group receiving psychotropic medication were significantly more likely to have received some form of mental health service and were more likely to have used alcohol/substances or lived with someone who used alcohol/substances than those not receiving psychotropic medication.

There were no statistically significant differences between those receiving medication and those not receiving medication in their parents' rating of emotional functioning, their parents' rating of satisfaction with behavioral health services, or the choice of behavioral health services. This indicates that parents of children who were taking psychotropic medication and parents of children not taking psychotropic medication were relatively equally satisfied with the quality of behavioral health services and their choice of services.

Comparisons also were made across all survey respondents receiving 1115 Waiver services to examine whether those in the fee-for-service or managed care payment systems received more behavioral health services. Findings indicated that those in fee-for-service regions were more likely to have received services currently and in the last six months than those in managed care regions. It is unclear why those in fee-for-service regions would report receiving services more recently. However, this finding may be due to the relatively small sample size or characteristics of those in fee-for-service regions. Also, it is possible that those in fee-for-service regions were more in need of services or had easier access to providers. In either case, it is difficult to conclude that the difference is due to the payment mechanism or service system alone.

For those who reported receiving services in the past six months (45.5% of those surveyed), 78% reported that professionals met as a team to discuss treatment. Without information about who was present at the team meeting, it cannot be assumed that this was a "wraparound" team meeting. However, it does indicate that there was some level of coordination among service providers.

In addition to the telephone survey findings, data were obtained from the Missouri Department of Mental Health to determine how many children in the 1115 Waiver who received psychotropic medications also received services from the Department of Mental Health (DMH). A total of 27 of the 263 (approximately 10%) received wraparound-like services from DMH. These 27 children received services from DMH, but it is not possible to determine whether they were served or funded because the child met SED criteria, was

court-ordered for treatment, or had an acute psychiatric disorder.

A majority (40.7%) had a primary Axis I diagnosis of an Attention Deficit/Hyperactivity Disorder. The next most prominent diagnosis among this group was Oppositional Defiant Disorder (18.5%), followed by a Depressive or Bipolar Disorder (14.8%). The types of medication prescribed were consistent with the diagnostic representation of the group, with the majority receiving methylphenidate (Ritalin), a psychostimulant used to treat ADHD (11.1%), followed by medications used to treat mood disorders (18.5% Zoloft and 14.8% Wellbutrin).

It should be noted that these figures do not capture the amount or types of services that children may have received through private managed care or fee-for-service providers. The majority of children received Targeted Case Management services (51.9%), followed by 503 project services (37.0%), individual wraparound services (29.6%), and physician services (18.5%).

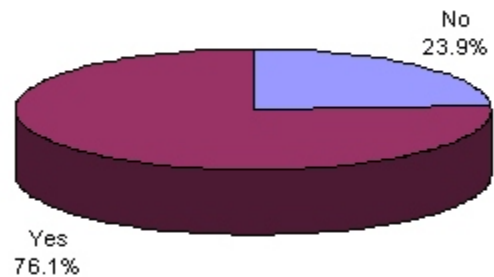
The ability to draw conclusions about the level of services across public, mental health, and private behavioral health plans contracting with MC+ to provide services is limited by provider concerns about confidentiality of behavioral health encounters and medical records data as well as the fact that SED is not a diagnostic criteria that is documented in encounter or claims data. The variety of data systems and disparate sources of administrative data make it difficult to arrive at the same conclusions. Thus, in Year 3, a separate, more detailed mental health survey was conducted on a sample of children likely to be receiving some type of behavioral health services.

A separate survey of access to, utilization of, and satisfaction with mental health service for children in MC+ who had filled a prescription for psychotropic medication in the last year was conducted in Year 3 (see Appendix B). A total of 313 caregivers of children 18 years of age and under completed the telephone-administered survey. The demographic and background characteristics of respondents are detailed in Tables C21 through C27. Descriptive statistics are also provided in Table C28. A majority of respondents identified themselves as Caucasian (83.5%), followed by African American (12.5%). Caregivers who responded to the survey consisted primarily of mothers (76.7%), grandparents (12.5%), and fathers (8.0%). This is consistent with the child's primary living arrangements.

A majority of respondents were still insured with MC+ at the time of the survey (94.8%), with the average length of enrollment reported to be 55 months (SD = 31.69). There were no significant differences between those who were no longer insured with MC+ and those with longer periods of enrollment, therefore, all data were analyzed together. To assess the extent to which respondents might meet the federal and state definitions of Serious Emotional Disturbance, caregivers were asked whether or not the child had an emotional or behavioral problem that has lasted or is expected to last six months or longer, with a majority indicating that this was true (76.1%, see Figure 42).

Another 31.3% reported a physical disability or chronic illness; and 2% (six respondents) reported an alcohol or substance abuse problem. Thus, it appears that the sampling method was able to reach the population of interest, which was children with Serious Emotional Disturbance and significant behavioral health needs who were enrolled with MC+ under the 1115 Waiver.

Figure 42. Severity of Emotional or Behavioral Disorder



Need and Access to Services

To assess the ability of families to obtain needed services for their children, caregivers were asked whether or not their child needed mental health counseling or treatment; or treatment for alcohol/substance abuse problems. Over half (61.1%) reported that their child needed mental health counseling or treatment in the last 12 months (see Figure 43 and Table C29); and only eight (2.6%) of caregivers reported their child needed substance abuse counseling or treatment. For those that needed mental health counseling or

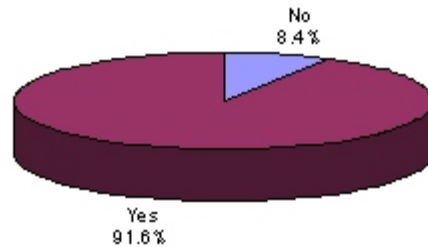
Figure 43. Identified Need



treatment, a majority (91.6%) reported being able to obtain all the services needed (see Figure 44 and Table C30). All of those who reported a need for alcohol or substance abuse treatment or counseling reported that they received all the services needed.

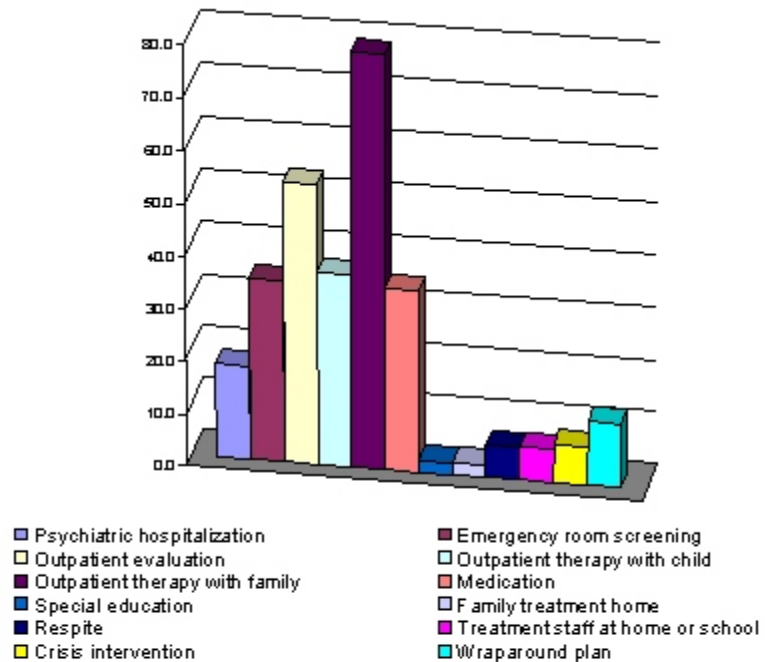
For those who reported receiving mental health treatment, they were asked about all the services received

Figure 44. Ability to Obtain Needed Services



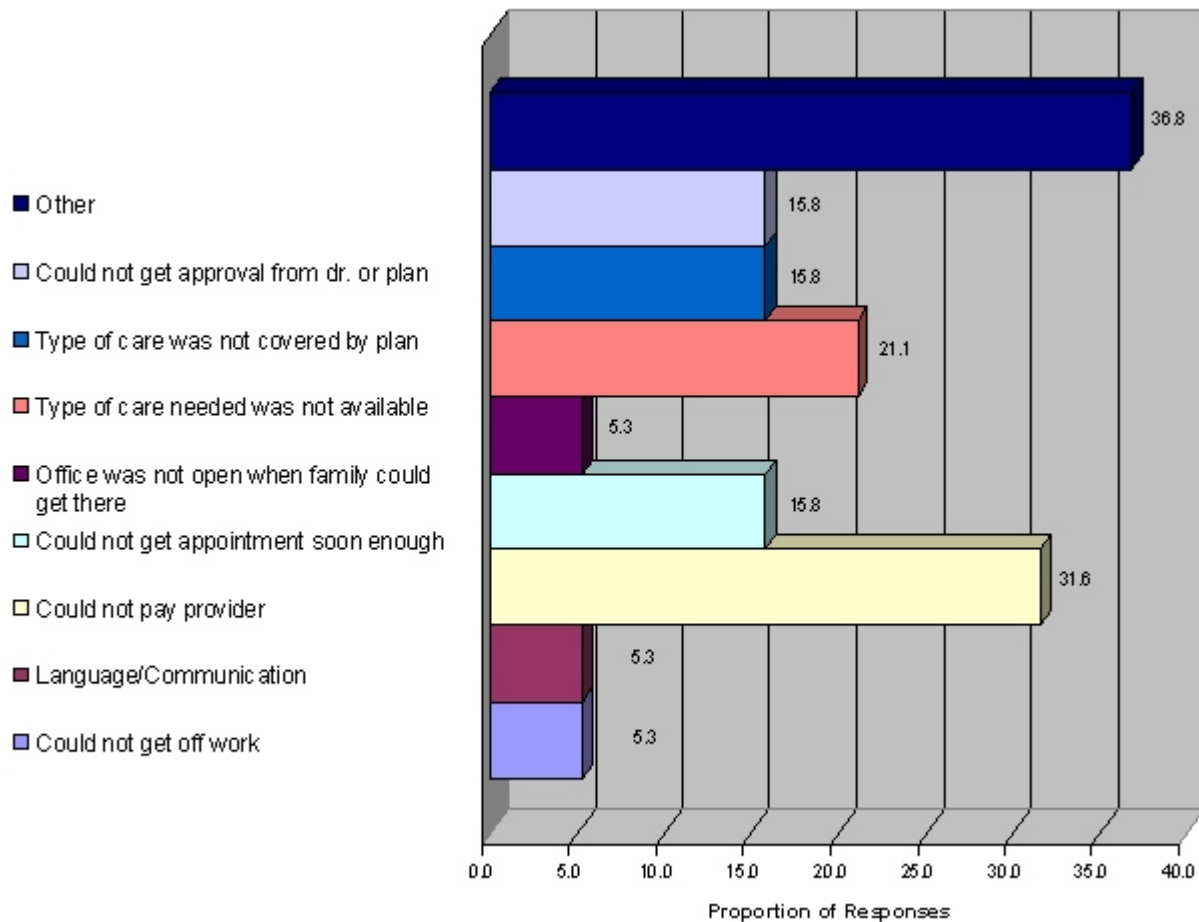
in the past 12 months (see Figure 45 and Table C31). The greatest majority of services were outpatient family therapy (78.8%), followed by outpatient evaluation (53.4%), and outpatient individual therapy with the child (36.7%). Although potential respondents were sampled based on having filled a prescription for psychotropic medication, only 34.5% reported currently obtaining medication. A total of 47 (17.8%) of caregivers reported that their child received psychiatric hospitalization some time in the past 12 months. This indicates the severity of the difficulties encountered by those sampled. A total of 12.1% reported receiving services that might be formally defined as wraparound treatment planning. Many of the services tend to be traditionally office-based services, but it is not possible to conclude that services were not provided through the Missouri Department of Mental Health, or within the framework of the wraparound model.

Figure 45. Services Received in the Last 12 Months



Respondents were also asked all of the reasons they did not receive mental health counseling or treatment (see Figure 46 and Table C32). A total of six respondents (31.6%) indicated they did not obtain services because they could not pay the provider; followed by the type of care needed not being available (21.1%), and several indicated they could not get an appointment soon enough, the type of care needed was not covered by the health plan, and they could not obtain authorization for the service (15.8% each). The majority (seven caregivers, 36.8%) reported other, unspecified reasons for not obtaining needed treatment.

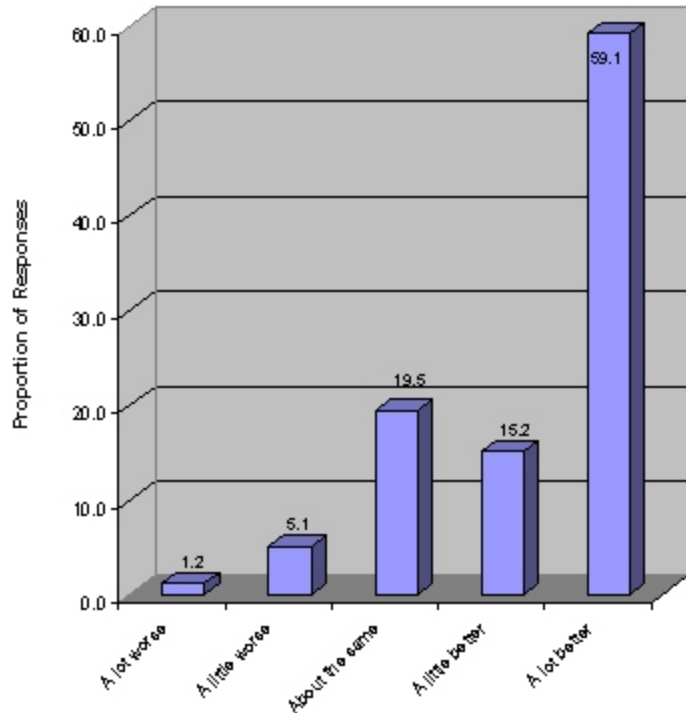
Figure 46. Reasons Unable to Obtain Needed Treatment



Satisfaction with Behavioral Health Services

To assess the satisfaction with mental health and alcohol/substance abuse treatment, questions regarding the ease of obtaining an appointment and the interactions with providers were asked of caregivers (see Tables C29 through C32). Respondents were asked to rate the ease of obtaining treatment since being enrolled in MC+. A majority reported that the ease of obtaining help was either “a lot better” (59.1%), or “a little better” since enrolling in MC+ (see Figure 47).

Figure 47. Ease of Obtaining Treatment



Regarding interactions with and between providers, respondents were asked about their satisfaction with the cultural sensitivity of providers. A majority reported being “extremely” (75.4%) or “somewhat” satisfied (12.9%) with provider staff respecting the family’s ethnic and cultural background (see Figure 48 and Table C30). The communication between behavioral health and primary care providers was assessed by asking whether or not providers requested permission to speak to the child’s primary care physician about the child’s care. A majority indicated that providers did at least ask permission to speak with the primary care provider, indicating at least an attempt at some coordination of care at the direct service level (73.9%; see Figure 49 and Table C31).

Figure 48. Satisfaction with Provider Staff

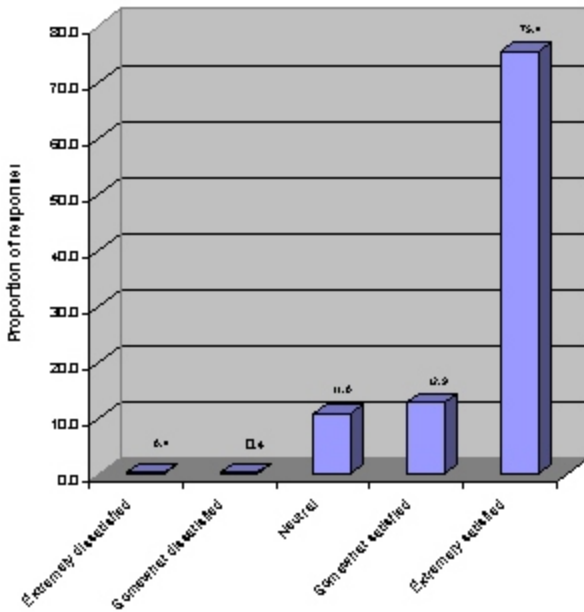
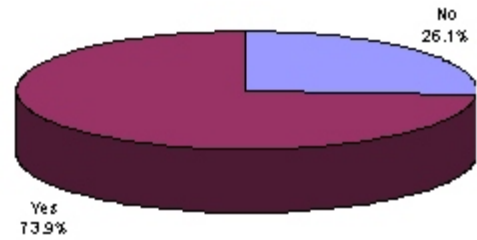
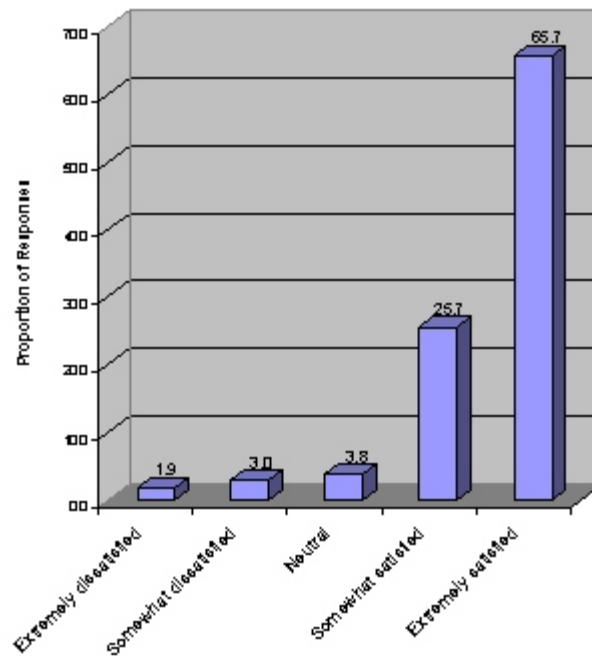


Figure 49. Provider Asked Permission to Speak to Primary Care Provider



Finally, respondents were asked about their overall satisfaction with services they received. They reported being “extremely satisfied” (65.7%) and “somewhat satisfied (25.7%), for the most part (see Figure 50 and Table C36).

Figure 50. Overall Satisfaction



Caregiver ratings of child emotional/behavioral functioning, and home and school functioning, were obtained to assess the impact of the 1115 Waiver and behavioral health services since the time that children were enrolled (see Tables C37 through C39). Figure 51 indicates that caregivers believed their child’s emotional and behavioral functioning was “a lot better” (45.5%), “a little better” (14.1%), or “about the same” (24.0%).

Functional Outcomes

Child functioning was also reported to improve since being enrolled in MC+ (see Figure 52), with 36.8% reporting their child’s ability to remain in a home setting had improved “a little” or “a lot” since being enrolled in MC+. The child’s ability to remain in school was also reported to be “a lot” or “a little” better since being enrolled in MC+ (37.7%; Figure 53).

Figure 51. Emotional/Behavioral Functioning Since MC+

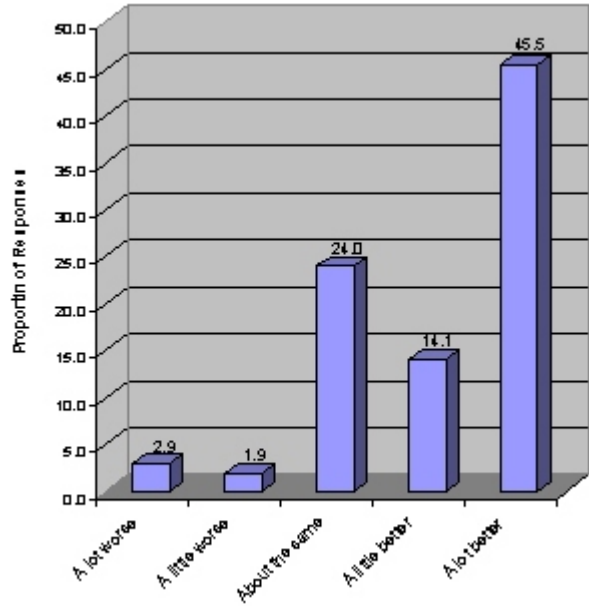


Figure 52. Ability to Remain in the Home Since MC+

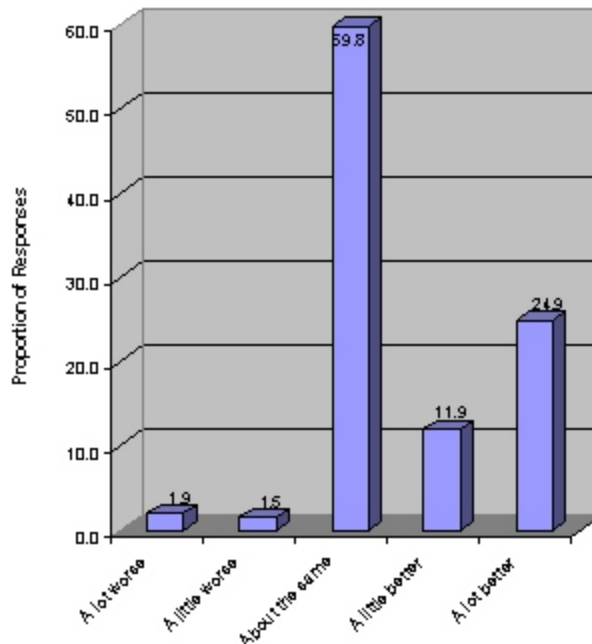
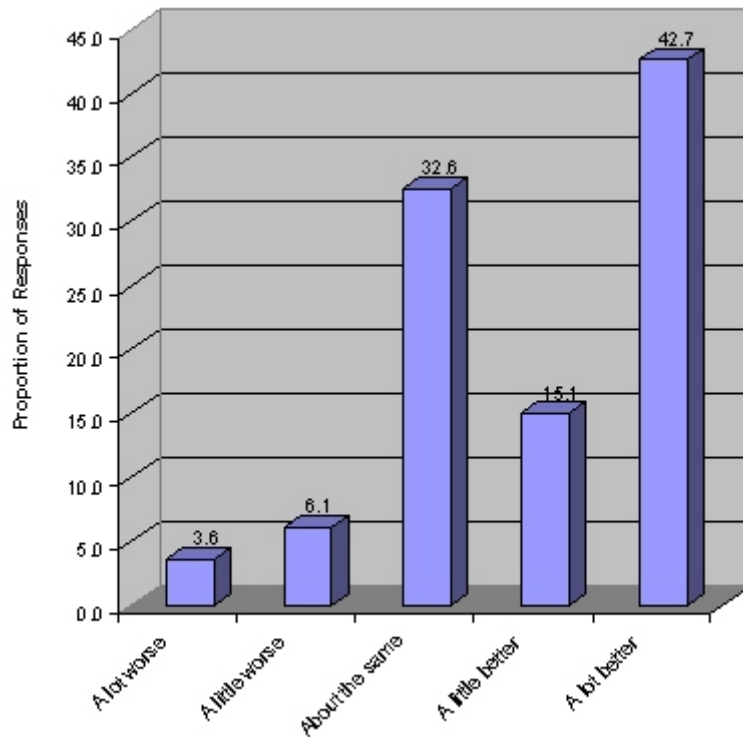


Figure 53. Ability to Remain in School Since MC+



Overall, the results of the 1115 Waiver Wraparound survey suggest that those who need mental health services are able to obtain them when needed, and that they are satisfied with them. In addition, caregivers indicate that they are satisfied with the services received, and that since their child has been enrolled in MC+, their child’s emotional, family, and school functioning improved. Although it is not possible to definitively state that children whose caregivers were surveyed met the definition of Serious Emotional Disturbance, it is clear by the level of acuity of services (psychotropic medication and psychiatric hospitalization) that the needs of the sample were significant. Also, it is not possible to conclude that children received “wraparound” services according to the Missouri Department of Mental Health’s definition, or that they received services directly from the Department of Mental Health. Further, caregiver ratings of need for services are likely based on their own perceptions of need, and do not take into account professional or community opinions about the need for services. However, the results do indicate that from the caregivers’ perspective, children’s behavioral health needs are being met, and their emotional, behavioral, and functional status has improved since being enrolled in MC+ under the 1115 Waiver.

Evaluation Study #2: What is the effect of MC+ on the number of children covered by private insurers? Does the MC+ expansion to cover children with a gross family income above 185% FPL have any negative effect on these numbers?

The simple definition of crowd-out is the substitution of private insurance (typically referred to as ESI- employer sponsored insurance) for public insurance programs. However, it is important to note that this substitution can occur due to an individual substituting their coverage as well as employers dropping or changing the insurance coverage they have, thus forcing the employee to switch insurance plans. The concept of crowd-out began in the 1980's, during the expansion of Medicaid, and gained additional attention in 1997 due to the enactment of the State Children's Health Insurance Program (SCHIP). According to Lisa Dubay of the Urban Institute,

“concerns about crowd-out under CHIP stems in part from misperceptions that the Medicaid expansions of the 1980's had a significant crowd-out effect. However, a significant body of literature has emerged indicating the contrary—that is, that only a small share of Medicaid program increases was attributable to the crowding out of private coverage.”

The bodies of literature that Dubay referred to were studies conducted in the mid-to-late 1990's (Dubay, 1999). While the methodologies of these studies varied (some were longitudinal and others were cross-sectional and the population demographics varied) the investigators concluded that the increase in Medicaid coverage was due to covering children who otherwise would have been uninsured.

In March 1998, the Children's Defense Fund published a compilation of study results from individual states (Children's Defense Fund, 1998). Minnesota, the first major state with an insurance program for children, found that only 3% of their enrollees previously had employer-based insurance coverage. In Florida, only 2% of the children in their plan had previous employer coverage. Washington state also found that crowd-out was not a problem. In Florida, Kansas, and Tennessee, they found that crowd-out was not occurring and thus dropped their wait period for children. Crowd-out was not viewed as a major problem for the state of Missouri.

In addition to the above mentioned studies which examined beneficiaries, there were studies conducted that included employers to determine if they would discontinue the insurance coverage they provided for their employees in favor of public insurance, SCHIP. These studies include the work of Meyer and colleagues at

the Economic and Social Research Institute, and the work of Fox and McManus (Fox and McManus, 1998). Although results varied, 19% and 7% (respectively) of the employers said they would consider dropping or reducing insurance coverage in favor of SCHIP. However, when the employers were told of wait periods before dependents would be eligible for public insurance coverage, both studies found that these percentages dropped quickly. In fact, Fox and McManus found that if the Medicaid program had a six-month wait period during which dependents could not have any insurance coverage in order to be eligible for public insurance, only 1% of employers would consider dropping the insurance coverage they currently provided to employees and their dependents. It should be noted that the Missouri MC+ plan has this six-month waiting period of uninsurance as part of its eligibility requirements.

Due to studies like these and the fact that SCHIP statutes require states to develop their SCHIP plans with crowd-out limiting strategies in mind, many states have adopted wait periods and other methods to help limit/eliminate the potential crowd-out effect. According to Fallieras, et al., the primary mechanisms used by states to limit crowd-out include:

1. Evaluating affordability of private coverage,
2. Requiring periods of uninsurance,
3. Providing subsidies, and
4. Limiting the scope of benefit packages (Fallieras, et al.).

In the previous two reports, CPS findings were used. From these, it was shown that the impact of MC+ on the private insurance market for 1998 and 1999 was negligible. A survey of MC+ beneficiaries and insurance companies also was conducted. The results from both indicated that crowd-out is seldom occurring and MC+ has very little impact on the private insurance market. This is likely due to the provision that potentially eligible persons be uninsured for at least six months to qualify for MC+.

To verify this, administrators and medical directors of the various MC+ health plans were interviewed during site visits. They responded that crowd-out was not occurring. Additionally, Director Scott Lakin, of the Missouri Department of Insurance, was interviewed regarding possible crowd-out. He echoed earlier sentiments that crowd-out was not a concern.

Despite findings that crowd-out is not an issue in the state of Missouri (and nationally) and that MC+ is not affecting the private insurance market, it is important to stay abreast of this situation, as many state budgets

are in the red. There is a great deal of concern about increasing Medicaid expenditures, especially here in Missouri, and some of the concern is that it is due to crowd-out. Families USA estimated that even if crowd-out occurred at a rate of 20%, it would amount to less than one percent (1%) of total Medicaid expenditures. Therefore, it can be concluded that crowd-out is not a problem nationally or in Missouri. However, given state budget concerns, crowd-out should continue to be monitored through sources such as CPS and other nationally-conducted studies.

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Appendix A

Methods, Procedures and Data Sources

MC+ Eligibility, Enrollment and Encounter Databases (Missouri Department of Social Services)

This is the third consecutive year for a telephone survey of MC+ 1115 Waiver beneficiaries to assess the health status, impact, and access to health care for beneficiaries. In the first year, 2,414 beneficiaries, stratified across all MC+ expansion groups were surveyed by telephone. These included surveys of parents of children as well as parent beneficiaries themselves. Samples for the telephone survey were drawn randomly from the enrollment database of individuals enrolled in the 1115 program, as of August 1999. In the second year, the same group of 2,414 beneficiaries was followed up to assess their health status, access to MC+ and health care, and satisfaction with MC+ one year following initial enrollment and implementation of the program. A total of 1,655 (74.8%) of those surveyed in Year One were able to be contacted and interviewed during Year Two. The Year Two survey also included 201 enrollees who were new to the program, as well as 189 randomly selected beneficiaries who were completing the survey for the first time. Finally, in Year Two, a group of individuals (n=227) who had filled a prescription for some type of psychotropic medication were interviewed, to assess differences in access, satisfaction, and need for behavioral health services. Adults and children from both fee for service and managed care regions were sampled.

In Year Three, the enrollment database was used to sample child and adult beneficiaries for the telephone interview. Those who were interviewed in Years One and Two were followed up again, and a new sample of enrollees was added. Those beneficiaries who had already been interviewed in Years One and Two were selected out prior to conducting random samples. The payee of record was telephoned regarding the beneficiary themselves, or one of their children in particular. Also, a sample of children receiving psychotropic medication were sampled for an in-depth interview regarding mental health wraparound service. All survey participants were reimbursed \$3.00 for participation.

Telephone Survey of Beneficiaries

The telephone survey has been modified slightly from year to year to further refine the ability to answer the evaluation questions and to compare groups (e.g. fee for service vs. managed care; 1915b vs. 1115 beneficiaries, cost vs. no-cost). The telephone survey has consistently been aimed at assessing enrollment status, impact of MC+, access to health services, health status, functional status, and satisfaction with services. The survey was again modified this year, evaluation Year 3, to obtain individuals' opinions about their experiences and health status since having been enrolled in MC+. The survey was divided into two components, one for assessing satisfaction with health care services through MC+, and the other aimed at addressing the question regarding the impact of MC+ on wraparound services for children likely to be in need of behavioral health services. This allowed for more focused questions and more detailed gathering of information from consumers of behavioral health services.

There was a notable difference in response rates this year, primarily due to a large proportion of individuals having telephone "blocks" placed on their telephone service such that interviewers could not reach the parent or beneficiary to offer them the opportunity to participate in the survey. In addition to following up on those interviewed in Years Two and Three, beneficiaries who were enrolled as of August 2001 were randomly selected across all 1115 eligibility categories for administration of the survey. Potential respondents for the

wraparound telephone survey were identified through the same process as last year, selecting individuals under the age of 21 who had filled a prescription for some type of psychotropic medication within the past year. Both protocols are included in Appendix B, and the following table summarizes samples and response rates for Years One, Two, and Three.

Observational Study of DFS Offices

To evaluate the accessibility of the MC+ program to potential beneficiaries, a third year of evaluation of Division of Family Services (DFS) phone centers, which are a first point of contact for individuals, was conducted. Current Medicaid beneficiaries were recruited and trained to call each of the 119 telephone center offices using a structured protocol to assess the helpfulness, knowledge, and understanding of staff regarding the MC+ Program. The caller was instructed to call each office and:

- ◆ Track the number of rings before the phone was answered,
- ◆ Rate the courteous of the receptionist,
- ◆ Rate the intelligibility of the speaker,
- ◆ Rate the quality of information provided,
- ◆ Track the number of transfers and number of times they were transferred to get someone knowledgeable,
- ◆ Time the total number of minutes placed on hold,
- ◆ Rate the clarity of instructions regarding the next step for the caller, and
- ◆ Rate how well the person explained the MC+ For Kids program and benefits.

DFS Phone Center Outreach Data (Division of Family Services, Department of Social Services)

Secondary data from the Division of Family Services Phone Center Outreach tracking system were obtained through August 2001 to provide a summary of trends in sources of referral information across regions and across time. This information includes the source through which callers heard about the MC+ For Kids program and is summarized on a monthly basis, by region.

Interviews With Stakeholders

As with last year, telephone and personal interviews were conducted with state, consumer, and program staff to assess the progress of implementing the 1115 Waiver, the impact of not providing non-emergency medical transportation, and the implementation of the 1115 Waiver overall. One addition this year was the opportunity to interview all health plan administrators and staff regarding the 1115 Waiver. This information was used to update knowledge of the program and understand changes in the program since its implementation. The following is a list of individuals who participated in interviews.

Delorse Mays, Medicaid Manager, Missouri Department of Social Services, Division of Medical Services
Andrea Smith, Quality Services, Missouri Department of Social Services, Division of Medical Services
George Oestreich, Director of Pharmacy, Missouri Department of Social Services, Division of Medical Services
Janice Gentile, MC+ Managed Care Administrator, Missouri Department of Social Services, Division of Medical Services
Pam Victor, Deputy Director, Missouri Department of Social Services, Division of Medical Services
Sandra Levels, Program Director, Program Management, Missouri Department of Social Services, Division of Medical Services
Susan Eggen, Missouri Medicaid, Missouri Department of Social Services, Division of Medical Services

Judy Muck, Assistant Deputy Director, Missouri Medicaid, Missouri Department of Social Services, Division of Medical Services

Randy Rust, Contract Compliance, Missouri Department of Social Services, Division of Medical Services

Joann Morrow, Director of Legal Services of Eastern Missouri

Cathy Goldstein, Former Director of Legal Services of Eastern Missouri

Paula Nickelson, Chair, Maternal and Child Health Subcommittee, Missouri Department of Health and Senior Services

Scott Lakin, Director, Missouri Department of Insurance

Gary Harbison, Outcomes Coordinator, Missouri Department of Mental Health

Encounter Claims Data (Division of Medical Services, Department of Social Services)

To identify child beneficiaries who were most likely to receive some type of behavioral services in the past year, encounter data were used to sample those who had filled a prescription for a psychotropic medication. This resulted in approximately 1,922 unique individuals who had filled a prescription within the past year. A list of 1,500 beneficiaries with contact information was targeted for the mental health wraparound survey.

Current Population Survey (U.S. Bureau of The Census)

Data were again obtained from the 2000 U.S. Census Bureau's current population survey (CPS), which provides estimates of the rates of various types of insurance and the number of uninsured children and adults in each state and across the nation. The CPS survey is conducted annually, with a nationwide sample of 50,000 households. According to the Census Bureau, one limitation of this data is that it tends to provide underestimates of the rates of beneficiaries enrolled in Medicare and Medicaid. There was one change in the CPS protocol last year regarding the rates of uninsured individuals. In order to confirm that individuals who reported no specific types of insurance were actually uninsured, a follow-up question was added to specifically ask whether or not an individual was uninsured. Another limitation of the data presented is that individuals may have more than one source of insurance. This limits the ability to directly compare data from 1999 - 2000. However, the figure for the number of uninsured is likely to be more accurate this year than it has been in the past. The rates of uninsured in Missouri and for the nation as a whole were examined for adults 18 to 65 years of age and children under 18 years of age, from calendar year 1990 to calendar year 2000.

Behavior Risk Factor Surveillance System (BRFSS; Centers for Disease Control).

The BRFSS is the health risk behavior survey for adults eighteen years of age and older, conducted annually by telephone. The protocols are developed and administered by The Centers for Disease Control (CDC), but are individually administered by states. The BRFSS consists of several modules assessing health status, insurance status, and access to health care for adults as well as health risk behavior. In the present evaluation, the BRFSS was used to assess the health status, rates of insurance, and utilization of health care by adults within Missouri. Although the BRFSS does not specifically address the health status of those enrolled in the 1115 Waiver, analyses were conducted with data from survey respondents who most closely resembled the demographics of 1115 Waiver enrollees on age, income, and parental status variables. This is referred to as the "Look Alike" group. In addition, a subset of those in the "Look - Alike" group, who also indicated that they were enrolled in Medicaid at the time of the survey, was assessed.

When examining the demographics of the two groups, those in the Medicaid group appear to more likely resemble individuals enrolled in the 1915b MC+ program, as the income range is substantially lower than those in the "Look - Alike" group (see table presented in Appendix C). Thus, analyses were not able to

control for differences in health status and access that may be related to socioeconomic status and level of income.

Comparisons using the 1999 and 2000 data were conducted using non-parametric (chi-square) and parametric statistical techniques (t-tests, Analysis of Variance) whenever possible, to examine improvement in health status over time. Data for Missouri as a whole and for the nation are presented for comparison. One caution in interpreting this data is that the Medicaid group likely represents adults who are eligible for Medicaid because they are chronically ill/disabled, or who are eligible under the 1915b Waiver. The following are definitions of the comparison groups.

Group	Definition	N
2000 Uninsured	Missouri "Look-Alike" Adults who reported no source of health insurance, 2000.	162
2000 Medicaid	Missouri "Look-Alike" Adults who reported Medicaid as their major source of insurance, 2000.	73
2000 Other	Missouri "Look-Alike" Adults who reported some other source of health insurance, 2000.	654
1998 Adults	All "Look-Alike" Missouri Adults who responded to BRFSS, 1998.	676
1999 Adults	All "Look-Alike" Missouri Adults who responded to BRFSS, 1999.	632
2000 Adults	All "Look-Alike" Missouri Adults who responded to BRFSS, 2000.	889
2000 Missouri	All Adults, Missouri, 2000.	2,802
2000 U.S.	All Adults in U.S., aggregate data across states, 2000.	52
2000 F.F.S.	"Look-Alike" Missouri Adults living in Medicaid fee-for-service managed counties, 2000.	47
2000 M.M.C.	"Look-Alike" Missouri Adults living in Medicaid managed care counties, 2000.	26
1998 Medicaid	Missouri "Look-Alike" Adults reporting Medicaid as major source of insurance, 1998.	49
1999 Medicaid	Missouri "Look-Alike" Adults reporting Medicaid as major source of insurance, 1999.	73
2000 Medicaid	Missouri "Look-Alike" Adults reporting Medicaid as major source of insurance, 2000.	73

Consumer Assessment of Health Plans (CAHPS 2.0, Division of Medical Services, Department of Social Services)

The CAHPS is a standard satisfaction survey used with health plans, that has been implemented by the Division of Medical Services for individuals in both fee for service and managed care as well as the 1915b and 1115 Waiver groups. Raw data were obtained and analyzed, to compare any changes over time and within groups. There were some changes in administration of the survey implemented sometime in the year

2000, thus making it difficult to assess whether any methodological differences account for findings. Several health plans (Eastern region) administered the CAHPS through a vendor, while the state administered the surveys for the remaining plans, and the fee for service groups. Comparisons were made between 1999 and 2000 for 1115 beneficiaries to examine trends over time; between 1115 and 1915b child beneficiaries to examine differences in benefits; and between cost and no-cost groups to examine the impact of cost sharing. It should be noted that without individual-level socioeconomic data, it was not possible to control for baseline differences in health status, access, or utilization that are likely associated with socioeconomic factors. The following is a summary of the number of respondents by group, and definitions of the groups used for comparison. Individual variables may have fewer subjects due to missing data.

National Committee on Quality Assurance (NCQA)

The National Committee on Quality Assurance (NCQA) annually publishes data submitted by NCQA accredited health plans for benchmark data, using the Health Employer Data Information Set (HEDIS), and the Consumer Assessment of Health Plans (CAHPS). Where comparable aggregate national data are available, it is presented alongside Missouri MC+ data for comparison purposes. This provides a reference point for comparison, but it cannot be assumed that data are directly comparable due to differences in data collection and analysis.

National CAHPS Benchmarking Database (NCBD)

The National CAHPS Benchmarking Database (NCBD) is an Agency for Healthcare Research and Quality, which provides CAHPS Benchmark data for commercial as well as public sector beneficiaries. Data are presented for comparison and benchmarking purposes.

Group	<u>N</u>
1115 Child Beneficiaries, 1999	1,548
1115 Child Beneficiaries, 2000	887
Adult Cost Beneficiaries, 1999	70
Adult No-Cost Beneficiaries, 2000	544
Child Cost Beneficiaries, 1999	721
Child No-Cost Beneficiaries, 2000	166
1115 Beneficiaries, 1999	887
1915b Beneficiaries, 2000	554
1115 Adult Beneficiaries, 1999	593
1115 Adult Beneficiaries, 2000	620

Appendix B

1115 Waiver Survey

1115 Mental Health Survey

Appendix C