Evaluation of the Medicaid Section 1115 Waiver

(Review Period: September 1, 1999 - August 31, 2000)

for

The Missouri Department of Social Services, Division of Medical Services

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By

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About Behavioral Health Concepts, Inc.

BHC is pleased to have had the opportunity to complete Year 2 of this evaluation project for the Missouri Department of Social Services, Division of Medical Services. As a company, we are committed to excellence 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 various 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 (1-573-446-0405, www.bhcinfo.com).

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Executive Summary

This report is the second in an ongoing evaluation of the Missouri 1115 Waiver program submitted by BHC, Inc. The evaluation described herein covers the evaluation period from September 1, 1999, to August 31, 2000, in fulfillment of Missouri Senate Bill 632 and Health Care Financing Administration (HCFA) requirements. The following summarizes key accomplishments of the program, identifies implementation issues, provides a summary of stakeholder recommendations, and cites considerations for further study.

Key Accomplishments

Improved Enrollment and Outreach

- Missouri reached 92% of the targeted population for enrollment.
- Missouri ranks 4th in the nation in SCHIP enrollment.
- Rates of uninsured in Missouri are lower than national rates for children and adults.
- The numbers of uninsured Missourians from 1998 to 1999 declined at a statistically significant rate.

Improved Processes

- The State streamlined the application process by combining several forms into one.
- The State translated application packets into Spanish, Vietnamese, and Bosnian.
- The State implemented an Interactive Voice Response (IVR) system for providers about Frequently Asked Questions.
- The State implemented Internet-based claims processing and eligibility verification.
- The State implemented tracking of no-shows for dental appointments and patient education to reduce the rates of no-shows and ultimately improve dental provider participation.
- The State instituted increased rates for orthodontic providers.

Improved Health Status, Functional Status, and Access

- Beneficiaries in managed care and fee-for-service regions showed comparable rates of health status, satisfaction, and access.
- After enrollment in MC+, the overall health and functional status of beneficiaries improved.
- Among MC+ beneficiaries, improvements in health and functional status occurred over time.
- Improvements in access to health care occurred after enrollment and one year later for MC+ beneficiaries.
- Health and functional status, as well as access, improved for both adults and children enrolled in MC+.

- High rates of satisfaction with providers for 1115 Waiver beneficiaries were comparable to national benchmarks for commercially insured beneficiaries.

Minimal Crowd-Out

- The numbers of privately insured adults and children increased between 1998 and 1999.
- Commercial insurers indicated little awareness of MC+ or of any negative impact from the program.

Minimal Impact of NEMT

- Beneficiaries reported lower rates of missed medical appointments after MC+.
- Only 3.9% and 8.3% of children and adults reported missed medical appointments due to a lack of NEMT.

Minimal Impact of Cost-Sharing

- Those who share in the cost of MC+ had comparable or better rates of health status, satisfaction, and access relative to those who do not share in the cost.
- Few beneficiaries reported disenrolling from MC+ because of the cost of services.

Implementation of Care Coordination for Children Receiving Behavioral Health Services

- 78% of those receiving behavioral health services reported that professionals met as a team to coordinate care provided.
- High ratings of accessibility to behavioral health services were documented.
- High ratings of satisfaction with behavioral health services were documented.

Summary of Interviews with Stakeholders

Providers and Payment

- There is a need to evaluate the financial impact of reduced Disproportionate Share payments.
- The State should monitor the impact of patient education on increased dental provider participation for those who did not keep appointments.
- The State should monitor the impact of increased rates of orthodontic services on access.

Accessibility

- The State should monitor NEMT in the face of economic changes to determine whether there is an impact on health status or access.
- The State should examine the adequacy of provider networks, especially of those in new managed care counties.

Enrollment

- The State should increase advertising of MC+ to dispel myths that dual income couples are not eligible.
- The State should continue targeted efforts at enrollment through free/reduced school lunch programs and other consumers.
- The State should monitor the enrollment of dual-income wage earners and immigrant families to assess effectiveness of outreach efforts.

Recommendations for Further Study

- Continue to monitor "crowd-out" (the effect of MC+ on the private insurance market).
- Further refine a definition of "wraparound services" for SED children that facilitates outcome evaluation.
- Continue to refine health status indicators comparable to state and national benchmarks.
- Integrate evaluation results of the 1115 Medicaid expansion with external review of MC+ Managed Care and other state health care initiatives.

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 was initially submitted on June 30, 1994, and was approved as a revised amendment in 1998. The Waiver authorized an expansion of Missouri's current 1915(b) Medicaid Waiver to cover uninsured children with a family income up to 300% of the federal poverty level (FPL). In addition, the Waiver 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% of the FPL; uninsured non-custodial parents with a family income up to 125% of the 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% of poverty; and uninsured women losing their Medicaid eligibility 60 days after the birth of their child regardless of income level. Part of Senate Bill 632 mandated that the Missouri Department of Social Services commission a study that would evaluate the effects of the 1115 Waiver Medicaid expansion. This evaluation fulfills that requirement and also fulfills a requirement of the Health Care Financing Administration (HCFA) for an evaluation of the 1115 expansion. This report, completed by Behavioral Health Concepts, Inc., covers the study period of September 1, 1999, through August 31, 2000, and is the second report of an ongoing evaluation of the MC+ expansion program.

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 specific data sources and procedures used to evaluate each of the evaluation questions are discussed first. Next, 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 managed care and fee-for-service beneficiaries enrolled in MC+. Finally, results of interviews with stakeholders regarding the process of implementation are discussed. Detailed appendices contain data and protocols for those interested in additional information.

Telephone Survey of Beneficiaries

In order to evaluate the MC+ expansion, a telephone survey of 2,414 beneficiaries was conducted last year. The samples for the phone survey were drawn randomly from the Missouri Department of Social Services (DSS), Division of Medical Services (DMS) database of individuals enrolled in the 1115 program during the month of August 1999. An effort was made to insure that sample sizes were sufficient to provide an accurate picture of beneficiaries in each of the eight MC+ expansion programs. The numbers of completed interviews from six of the MC+ expansion groups were large enough to provide accurate assessments of beneficiaries: health, access to medical care, and attitudes about the program. Another survey was conducted this year, following up on the sample from last year and adding new respondents. The survey was conducted from October 2000 through December 2000. New respondents were selected randomly from state enrollment databases as of August 2000 to represent all of the 1115 Waiver population and each group of beneficiaries by age (children and adults), and income (federal poverty level). The telephone survey was modified this year based on input from several stakeholders.[1] Questions were asked about enrollment status, how members learned about MC+, other possible sources of insurance, access to medical services, and health status *(see Exhibit 1 in Appendix A).*

The first survey population included those individuals who were enrolled in the programs supported by the 1115 Medicaid Waiver between September 1, 1998, and August 31, 1999. During December 1999, a phone survey was conducted on a sample of 2,414 individuals from this population, and the results of this phone survey were presented in BHC's 2000 report on Missouri's 1115 Waiver. Part of BHC's activities for the 2000-2001 contract year included conducting a follow-up survey with as many of these 2,414 enrollees (or their parents) as possible to examine DSS's outreach activities, the relative rate of disenrollment from the program, the reason for disenrollment, changes in health status since the last survey, and possible changes in health care status and access since the last survey. These 2,414 enrollees are referred to in this report as the **1999/2000 Follow-up Group.**

Another sample was drawn from the population of those enrolled as of August 2000. Phone surveys were completed on approximately 189 of these enrollees, former enrollees, or their parents. Similar to the phone survey of beneficiaries described in BHC's 2000 report, the phone survey conducted on this sample focused on changes to health status and health care access since being enrolled in the program. Throughout this report, this group will be referred to as the **2000 Survey Group**.

To investigate the effect of Missouri's 1115 Waiver program on seriously emotionally disturbed children (or SED children), DMS pharmacy claims from May through July 2000 of 1115 Waiver beneficiaries receiving psychotropic medications were sampled. From the population of

[1] Missouri Department of Mental Health, Missouri Statewide Parent Advisory Network (MOSPAN), Local Investment Commission (LINC), Area Resources for Community and Human Services (ARCHS), Missouri Alliance for the Mentally ILL (AMI), Citizens for Missouri's Children (CMC), and Families USA.

child enrollees who received psychotropic medications, we completed 277 telephone surveys. The phone survey data on this group and information from DMH's databases regarding services provided and units of service to these children were merged with the telephone survey data.

The final population involved those who enrolled in the program between September 1, 1999, and August 31, 2000. By interviewing these new enrollees or their parents, we wished to examine the success of DSS's more recent efforts at enrolling previously uninsured children and/or their parents. We completed surveys for 201 of these individuals (the **New Enrollee Group**). To achieve an acceptable sample size (n=200), we drew a sample of 683 new enrollees whose telephone numbers were listed in the DSS enrollment database. The groups that were surveyed for this report are summarized in Table A2 in the Appendix.

The phone survey data were collected by trained interviewers at Essential Marketing Research, from Kansas City, Missouri, a firm specializing in telephone interviewing in collaboration with LGC & Associates. The interview team was given names and phone numbers of MC+ expansion beneficiaries and was instructed to make five attempts to reach someone at each legitimate number before drawing additional names. Telephoning was conducted between 10 a.m. and 8 p.m. on weekdays and Saturdays. Respondents were called up to five times and received $3 for completing the interview.

Insurance Company Survey

To assess the impact of possible crowd-out of the 1115 Waiver on the private, employer-based insurance market in Missouri, we developed and conducted a telephone survey *(see Appendix A)*. Initially, BHC contacted seven of the top major health insurance companies as ranked by the Missouri State Department of Insurance to determine the focus of the insurance survey[2]. Input was gathered from directors of underwriting or marketing for group health products for these companies. Forty-two Group Comprehensive Medical insurance companies with the largest market share of small employer group contracts in Missouri as of December 1999 were selected to be contacted and interviewed. Several questions were asked to assess whether there was an impact on their market share due to MC+. One experienced interviewer was assigned to conduct all of the interviews to provide consistency in the interpretation of information. Telephoning was conducted during normal business hours with callbacks scheduled at the respondent's convenience. Interviews were conducted from November through December 2000.

The final disposition of the sample was as follows: 17 interviews were completed, 4 telephone numbers were never found, 2 numbers were always busy or did not answer, 16 companies did not return phone calls, and 3 declined to participate.

Observational Study of DFS Offices

We conducted a follow-up of the observational study of Division of Family Services and Phone Centers for last year to assess the accessibility, helpfulness, and knowledge of staff regarding the MC+ program. All county and regional DFS offices were telephoned again this year by one experienced interviewer to provide consistency in the interpretation of the information. A total

[2] Missouri Department of Insurance Statistics Section (2000). Missouri Life, Accident, & Health Supplement Report, 1999.

of 119 offices were called during normal business hours. A copy of the protocol and scoring criteria for subjectively rated items is shown in Appendix A.

Interviews with Stakeholders

We conducted telephone and personal interviews with several state, consumer, and program staff to assess the progress of implementing the 1115 Waiver. The questions and responses are summarized in the section of this report entitled Follow-up on Implementation Evaluation.

Secondary Data Sources

We analyzed a number of state administrative data sources, research data, and national benchmarks as part of the evaluation. These data sources include administrative data from the Department of Social Services, the Division of Medical Services, the Department of Health, and the Department of Mental Health; data collected by the US Census Bureau; and data collected for quality assurance and public health purposes. The following describes the sources of data used for this evaluation.

Enrollment Database (Missouri Department of Social Services). The enrollment database was used to sample child and adult beneficiaries for the telephone interview. Individual client identifiers, parent and child names, address, phone number, county of residence, and type of benefits were obtained for each beneficiary enrolled in the month of August 2000.

Phone Center Data (Division of Family Services, Department of Social Services). Secondary data from the Division of Family Services Phone Center were obtained again this year, from December 1999 through August 2000. Phone Centers track the source through which callers heard about MC+ for Kids, and the Division of Family Services summarizes this data on a monthly basis by region.

Pharmacy Claims Data (Division of Medical Services, Department of Social Services). To identify child beneficiaries that were most likely to have received some type of behavioral health services in the past year, a random sample of those 1115 Waiver beneficiaries who were prescribed psychotropic medication in the quarter preceding the telephone survey (May through July, 2000) period was conducted. The final respondents were primarily Caucasian (98.2%) and male (66.8%), with an average age of 13 years *(see Table A3 in Appendix A).*

Administrative Database (Division of Comprehensive Psychiatric Services, Missouri Department of Mental Health). Phone survey data for the special study addressing the impact of MC+ on the development of wraparound services for children with Serious Emotional Disturbances were supplemented by diagnostic, claims, and service utilization data for those who received services through the Missouri Department of Mental Health (DMH). To insure confidentiality and anonymity of those who may have received services through DMH, all identifying information (parent and child name, address, phone number, individual DCN number) was removed by DMH before data were released for analysis. A total of 27 DMH clients who completed telephone surveys were identified for analysis.

Current Population Survey (U.S. Bureau of the Census). Data were obtained from the 1999 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 for children and adults in each state, and across the nation. The CPS survey is conducted annually with a 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. However, it is one of a few sources of data that is available regarding health insurance status, and it provides comparisons of Missouri with the rest of the nation.

Behavior Risk Factor Surveillance System (BRFSS; Centers for Disease Control). The BRFSS is a health risk behavior survey for adults 18 years of age and older, conducted annually by telephone. Although funded by the Centers for Disease Control (CDC), it is administered by individual states. The BRFSS consists of several modules assessing health status, insurance status, and access for adults. In the present evaluation, the BRFSS was used to assess the health status of adults in Missouri for the most recent two years available (1998 and 1999). Although the BRFSS does not specifically address the health status of those enrolled in the 1115 Waiver, analyses were conducted on data from survey respondents who most closely resembled the demographics of 1115 Waiver enrollees on age, income, and parental status variables. Table A4 in Appendix A summarizes the demographic characteristics of the sample chosen for analysis. Data from a total of 944 individuals under 65 years with an income less than $50,000 and at least one child 16 years of age or younger were analyzed. Most of them were Caucasian (89%), and the majority were married (66%).

Consumer Assessment of Health Plans (CAHPS®[3] 2.0, Division of Medical Services, Department of Social Services). The CAHPS® was used to assess consumer satisfaction of fee-for-service and MC+ beneficiaries across the state. Detailed information on the development and validation of the CAHPS® is located in Appendix A, with a copy of the version modified by Missouri. Data for the 2000 administration of the Missouri version of the CAHPS® were analyzed to examine the satisfaction of all enrollees with the MC+ program. Four categories of beneficiaries were surveyed by the Division of Medical Services (by managed care plan and fee-for-service region), based on a stratified random sampling procedure developed by the Department of Social Services. Children and adults receiving services under 1915(b), and children and adults receiving services under the 1115 Waiver were mailed surveys March 1, 2000, to be returned by May 1, 2000. Reminder cards were mailed to those who had not returned their surveys by the deadline.

For the fee-for-service beneficiaries, the rate of undeliverable surveys was 7.78% (622 out of 8,000), and for the managed care beneficiaries, the rate was 5.17% (995 of 19,264). Of those that were deliverable, the response rate for those in fee-for-service was 20.32% (1,499), and the response rate for those in managed care was 17% (3,105). Data for 870 respondents in the fee-for-service group and 1,520 in the managed care group were received

[3] CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality, a U.S. Government agency.

and analyzed to provide comparisons with national data published by the National Committee on Quality Assurance (NCQA).

Evaluation Findings and Discussion

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

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)*[4]. In the nation as a whole, there was a small, but statistically significant .3% decline in the rate of uninsured people. 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 were most likely to be uninsured. The following sections discuss the rates of uninsured children and adults, the type of insurance for those who are insured, the rates of enrollment in the 1115 Waiver, and referral sources from which beneficiaries heard about MC+.

Rates of Uninsured Children

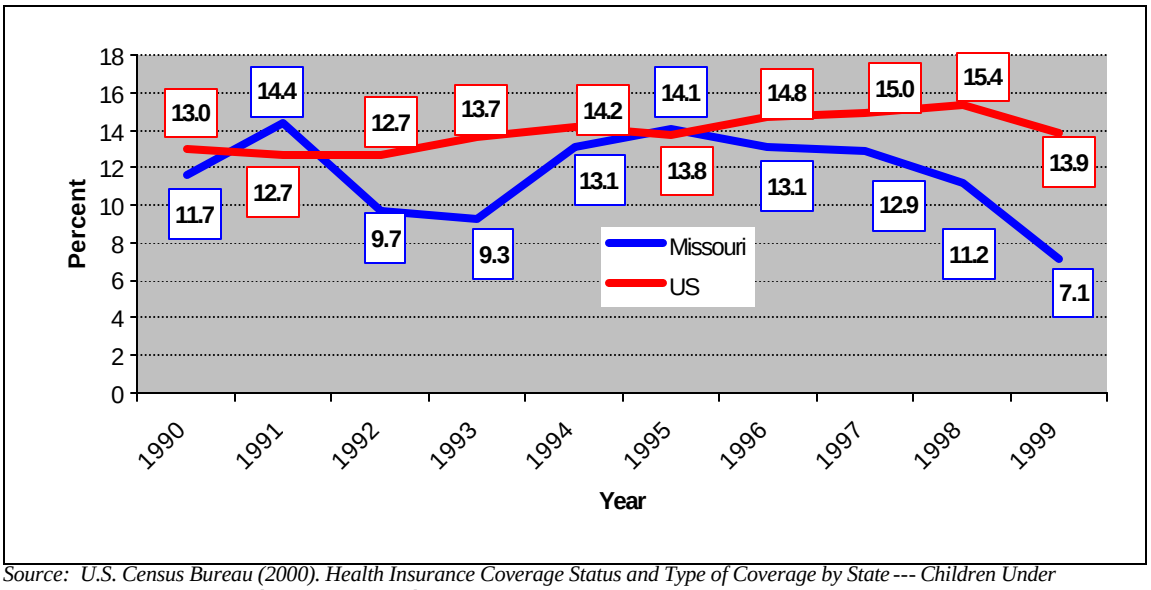
According to the U.S. Census Bureau, the rate of uninsured children under 18 years of age in Missouri in 1998 was 11.2%, while in 1999, the rate was 7.1% *(see Figure 1)*. This represents a 4.1% decline in the rate from l998 to 1999. In an examination of the ten-year period from 1990-1999, one interesting trend is the decline of the proportion of uninsured children in Missouri that occurred in 1992 and 1993. This diverges from the national trend. One possible explanation for this is the expansion of Medicaid in 1991 for children up to six years of age in families with incomes less than 133% FPL.[5] The reasons for the subsequent increase in rates of uninsured children in 1994 are unclear. Several factors, including economic changes, unemployment rates, and affordability of private insurance cannot be ruled out.

The number of children who were uninsured in Missouri declined from 123,000 to 78,000 from 1998 to 1999, a reduction of 45,000 *(37%; see Figure 2)*.

[4] Mills, R.J. (2000), Current Population Reports, 1999: Health insurance coverage. U.S. Census Bureau: Washington, D.C., p. 60-211.

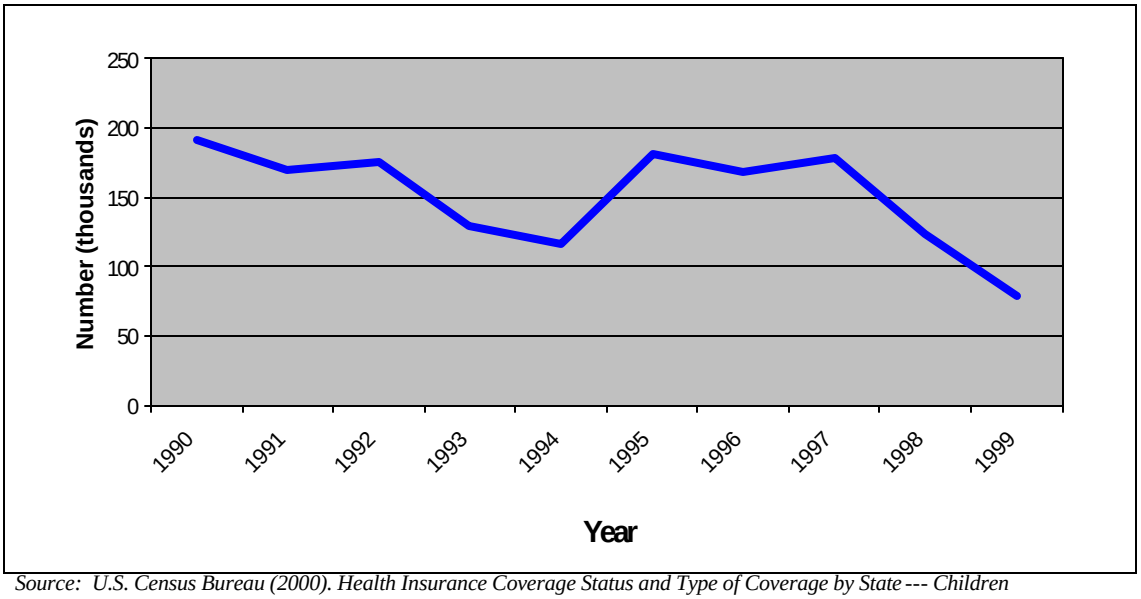
[5] Missouri Department of Social Services, Division of Medical Services.

Figure 1. Percent Uninsured Children, U.S. and Missouri, 1990 - 1999



Source: U.S. Census Bureau (2000). Health Insurance Coverage Status and Type of Coverage by State --- Children Under 18: 1990-1999. Current Population Survey, Author.

Figure 2. Number of Uninsured Children in Missouri, 1990 – 1999



Source: U.S. Census Bureau (2000). Health Insurance Coverage Status and Type of Coverage by State --- Children under 18: 1990-1999. Current Population Survey, Author.

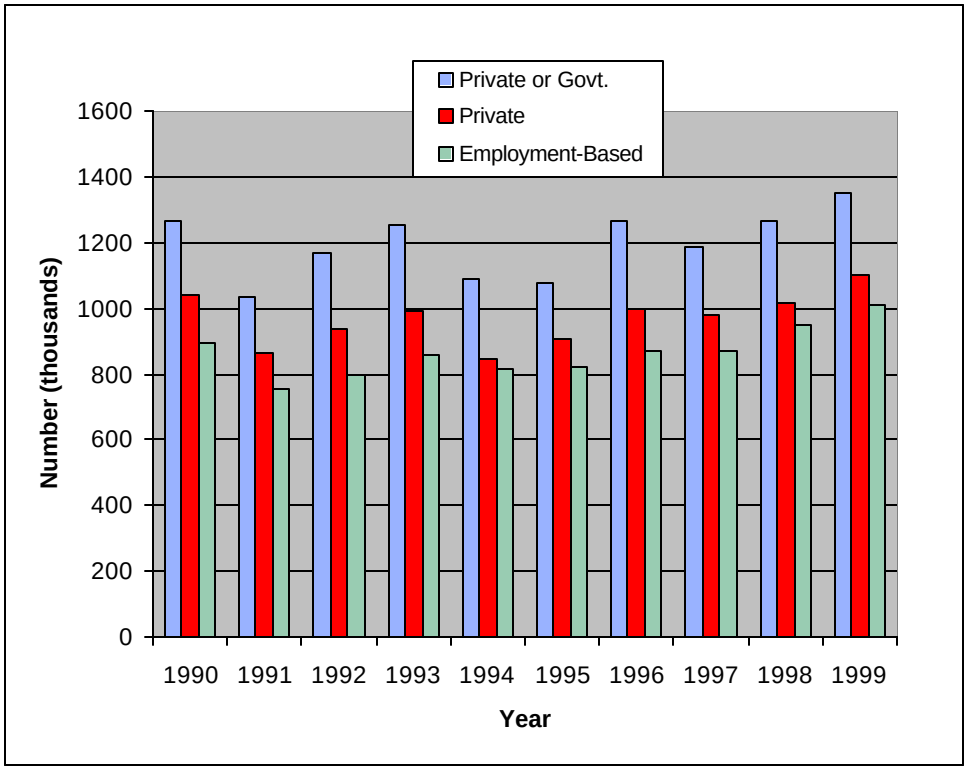
Relative to the rate of children who were uninsured in the U.S. overall, Missouri's rate is lower than the national average (13.9% compared to 7.1%; *see Figure 1*). Tables B1 and B2 in Appendix B summarize the number of uninsured from the Current Population Survey, and Figure 2 illustrates the trend in the number of uninsured children in Missouri. These figures show a steady decline in the number and proportion of uninsured children in Missouri.

Enrollment of Children

Data from the March 1999 CPS were also examined for type of insurance coverage. Figure 3 shows the number of insured children in Missouri by the type of insurance. The number of children enrolled in any type of insurance plan (private or government) rose from 1.2 million to 1.4 million from 1998 to 1999. There was an increase in the number of children enrolled in all types of insurance, whether it was employment-based, private, or government-based.

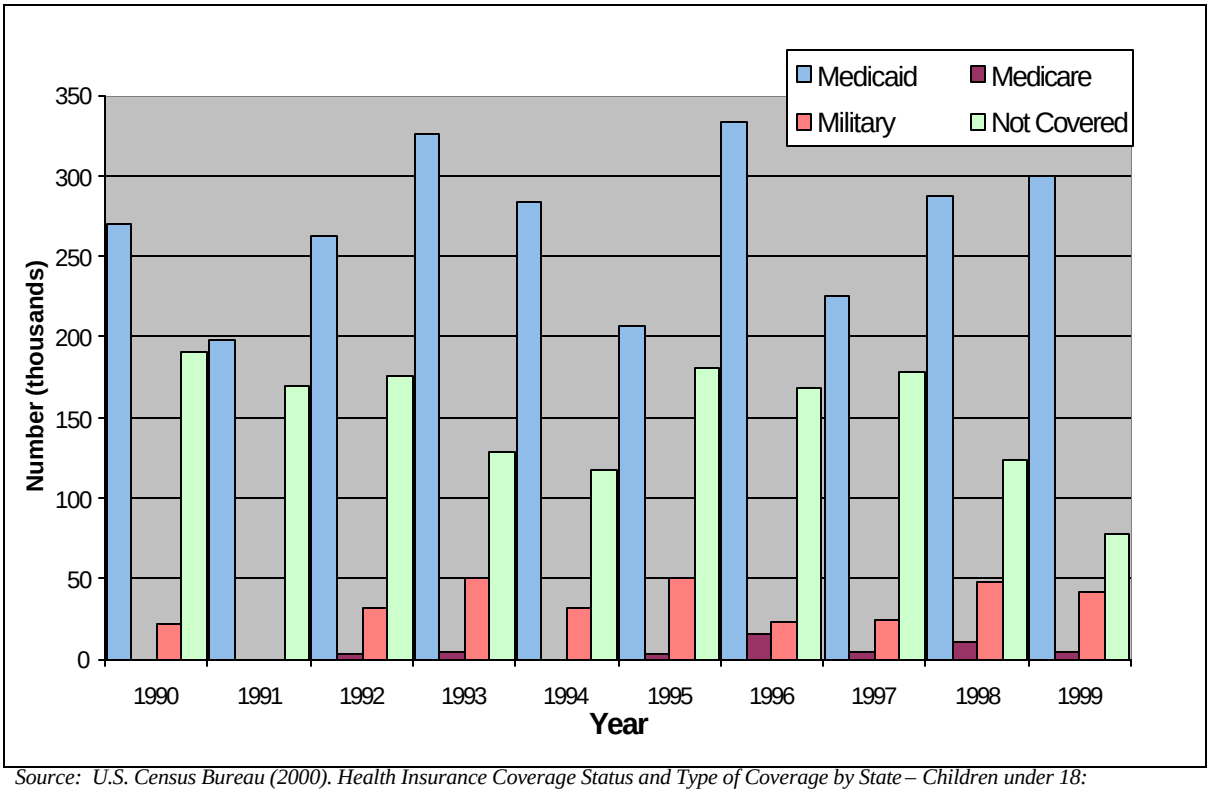
Private and employment-based health coverage increased by 88,000 children in Missouri between 1998 and 1999 *(see Figure 4)*. At the present time, CPS data do not make a distinction between children enrolled in Medicaid, those enrolled in the 1115 Waiver, and those enrolled under the State Children's Health Insurance Program. This is of little consequence for Missouri, as all three programs are combined, but it makes it difficult to estimate the relative contribution of the expansion in reducing the rate of uninsured children.

Figure 3. Number of Insured Children and Type of Insurance in Missouri, 1990 - 1999



Source: U.S. Census Bureau (2000). Health Insurance Coverage Status and Type of Coverage by State --- Children under 18: 1990-1999. Current Population Survey. Author. "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.

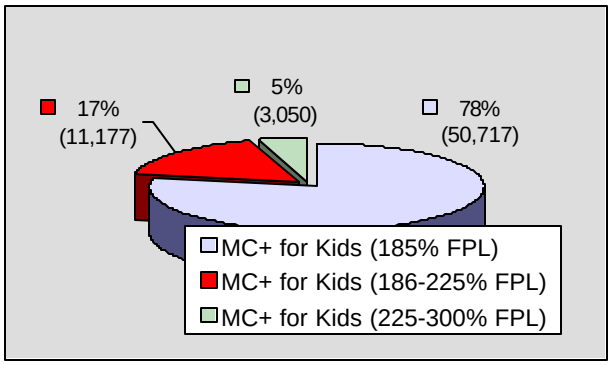
Figure 4. Health Insurance Coverage Status and Type for Missouri Children, 1990 - 1999



Source: U.S. Census Bureau (2000). Health Insurance Coverage Status and Type of Coverage by State – Children under 18: 1990-1999. Current Population Survey, Author.

Figure 4 compares the number of children insured through government programs and the number uninsured from 1990 through 1999. From 1998 to 1999, the number of children estimated to have been enrolled in Medicaid increased by 12,000, while the number enrolled in Medicare and military health insurance declined by 7,000 each. This decline in the rate of uninsured children is likely at least partially due to increased Medicaid as well as private insurance coverage.

Figure 5. Children Enrolled in the 1115 Waiver, August 2000



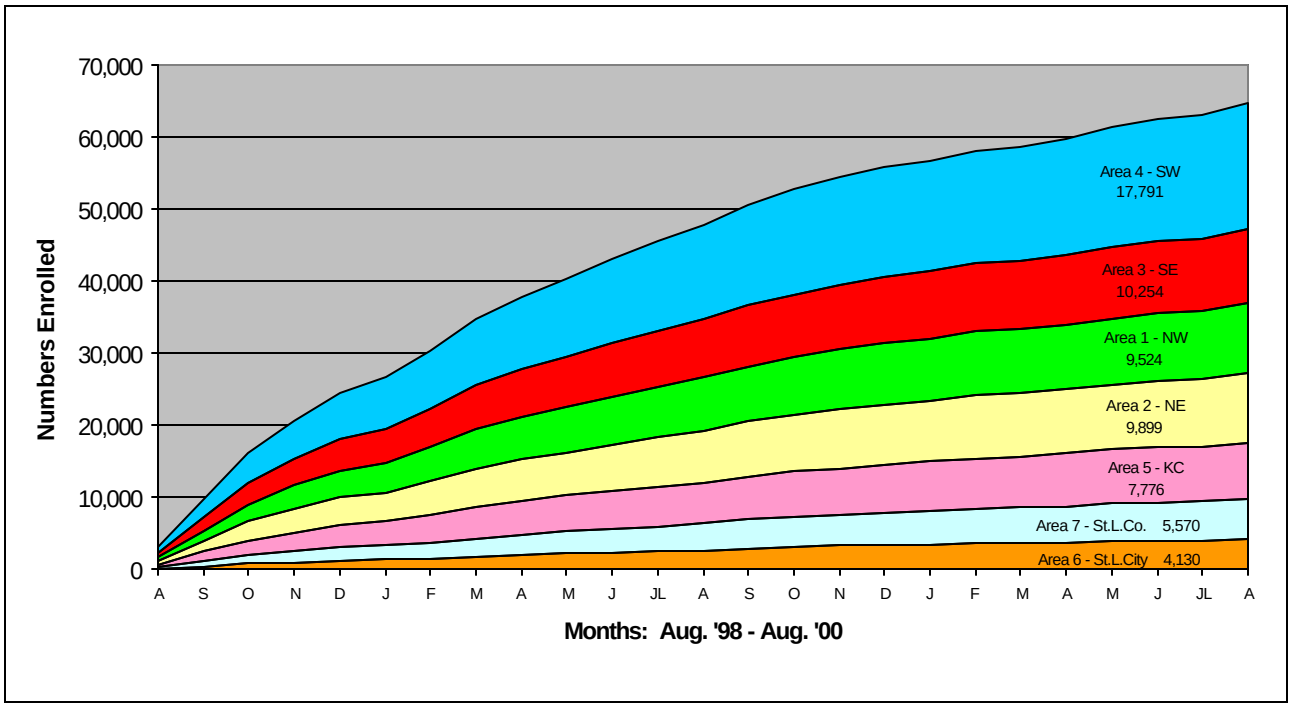
Source: Missouri Department of Social Services, Enrollment Database. Table A1, Appendix A, summarizes the eligibility criteria and benefit packages for child 1115 beneficiaries.

Data from the Missouri Department of Social Services were used to examine enrollment for children across eligibility groups and in each region of the state. From September 1999 through August 2000, there has been a continuing increase in enrollment of children in MC+ *(see Table B3 in Appendix B).* As of August 2000, there were 64,944 children enrolled in MC+ *(see Figure 5).* The majority of these (50,717, or 78%) were children (18 years of age or under) in families with incomes at or below 185% of the federal poverty level (FPL). Seventeen percent (11,177) lived in families with incomes between 186 and 225%

FPL. Five percent, or 3,050, were children who lived in families between the 226 and 300% FPL.

The same pattern of enrollment across regions was evident in 1998 and 1999, with the Southwest, Southeast, Northwest, and Northeast regions enrolling the largest number of children. Consistent with the trend from last year, St. Louis City and County enrolled the fewest beneficiaries *(see Figure 6).*

Figure 6. 1115 Children Enrollment Trend by Region *(Total State Enrollment: 64,944)*

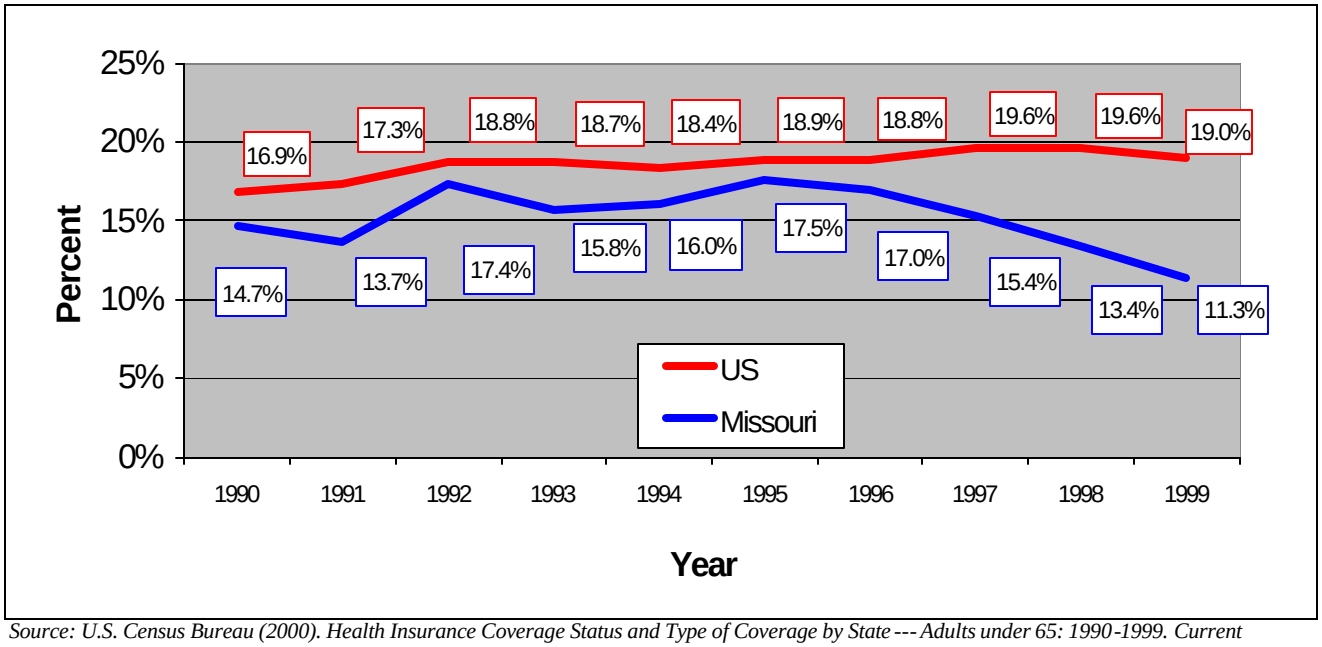


Source: Missouri Department of Social Services.

Rates of Uninsured Adults

As is the case with children, Missouri's rate of uninsured adults under 65 years of age is lower than the nation overall (11.3% and 19%, respectively; *see Figure 7*). The rate of uninsured adults was examined using both U.S. Census data and DSS data. Based on U.S. Census data, the rate of uninsured adults under 65 years of age in Missouri declined from 13.4% to 11.3% from 1998 to 1999 *(see Figure 7).* The total number of uninsured adults under 65 years of age declined from 447,000 to 389,000, with 58,000 more adults insured in Missouri in 1999 than in 1998 *(see Figure 8).*

Figure 7. Percent Uninsured Adults under 65, U.S. and Missouri, 1990 - 1999



Source: U.S. Census Bureau (2000). Health Insurance Coverage Status and Type of Coverage by State --- Adults under 65: 1990-1999. Current Population Survey. Author.

Figure 8. Number of Uninsured Adults under 65 in Missouri, 1990 - 1999

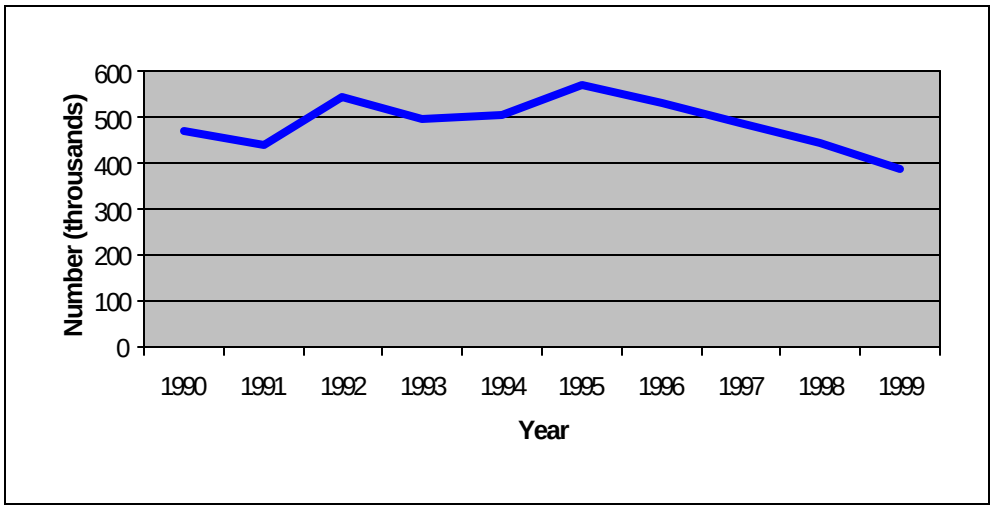
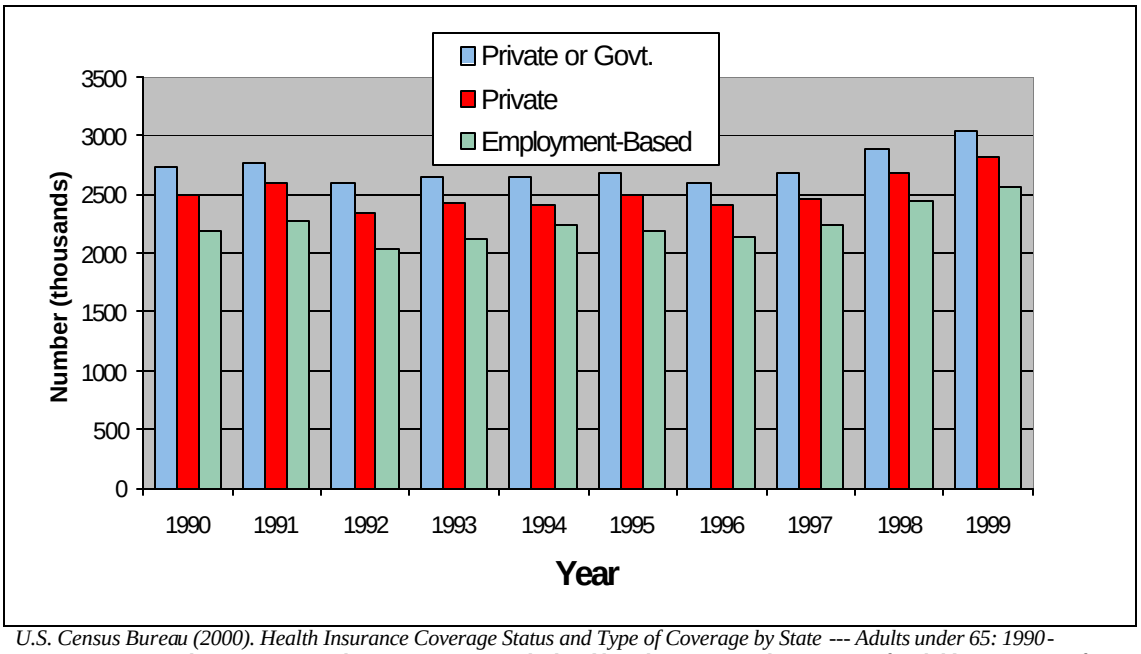


Figure 8. Source: U.S. Census Bureau (2000). Health Insurance Coverage Status and Type of Coverage by State --- Adults under 65: 1990-1999. Current Population Survey. Author.

Enrollment of Adults

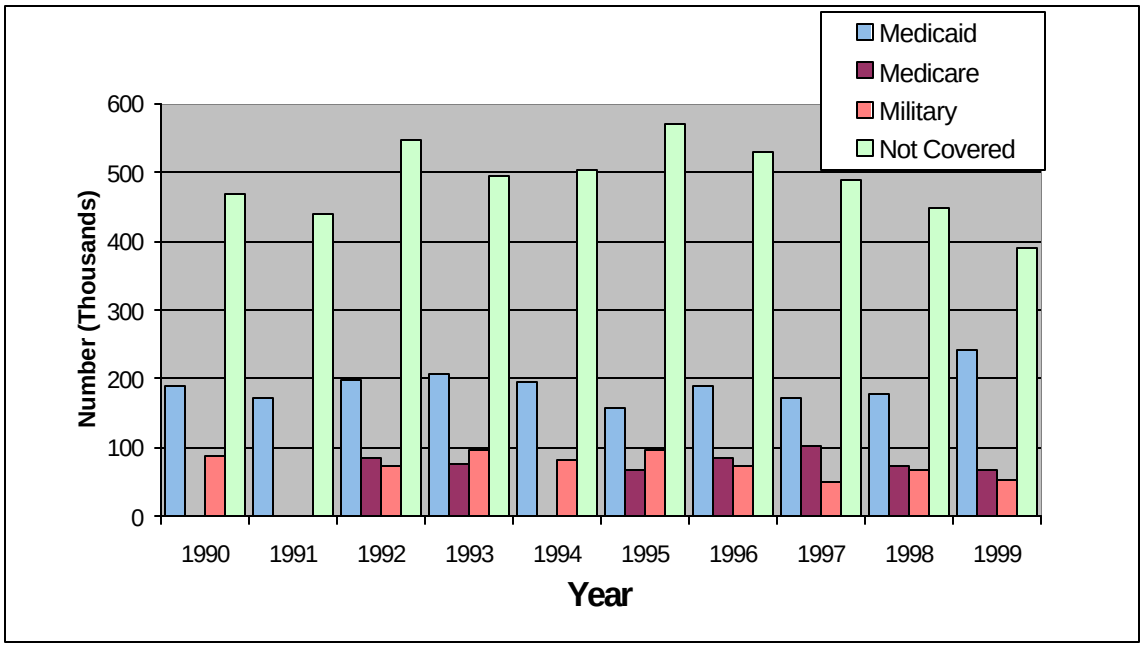
Figure 9 shows the type of insurance in which adults under 65 were enrolled. As is the case with children, all types of insurance coverage have increased among adults (private, government, and employer-based) from 1998 to 1999. Table B2 in Appendix B summarizes the number of uninsured adults from the Current Population Survey. Figure 10 shows the types of public health insurance for adults and the number of uninsured adults. Medicaid enrollment increased by 64,000, and military health insurance declined by 13,000 adults.

Figure 9. Number of Insured Adults under 65 and Type of Insurance in Missouri, 1990 - 1999



U.S. Census Bureau (2000). Health Insurance Coverage Status and Type of Coverage by State --- Adults under 65: 1990-1999. Current Population Survey. Author. 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 10. Health Insurance Coverage Status and Type of Adults under 65 in Missouri, 1990 - 1999

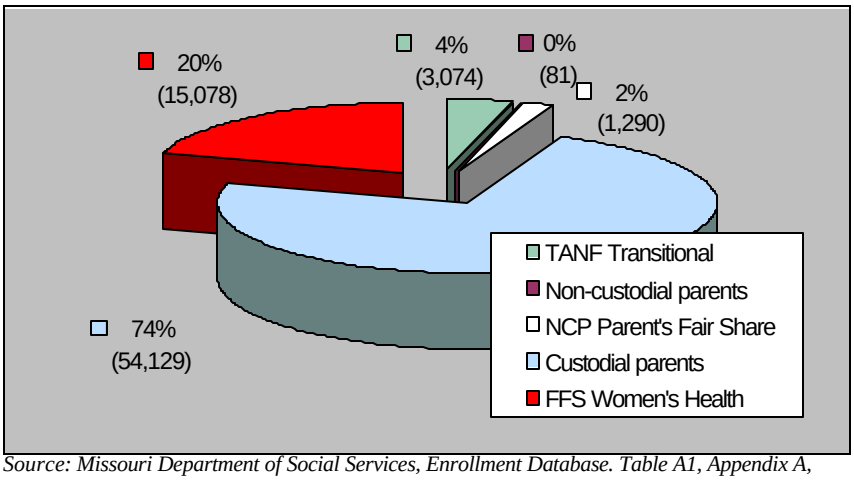


Source: U.S. Census Bureau (2000). Health Insurance Coverage Status and Type of Coverage by State – Children under 18: 1990-1999. Current Population Survey, Author.

Enrollment of adults into the Missouri 1115 Waiver has continued to grow, from 54,517 between February and October 1999 to 73,652 as of August 2000, representing an increase of 19,135 beneficiaries *(see Table B4 in Appendix B)*. The largest proportion of parents insured

under the 1115 Waiver (73.5%) consisted of custodial parents (54,129), followed by those on the Women's Health plan (20.5%, a total of 15,078 beneficiaries). Non-custodial parents constituted the smallest proportion of adults, comprising less than one percent (81 beneficiaries) of the adult population insured through the 1115 Waiver. The NCP Parents' Fair Share beneficiaries comprised 1.8% (1,290) of the 1115 adults, and those with TANF Transitional benefits represented 4.2% (3,074) of adult beneficiaries *(see Figure 11)*.

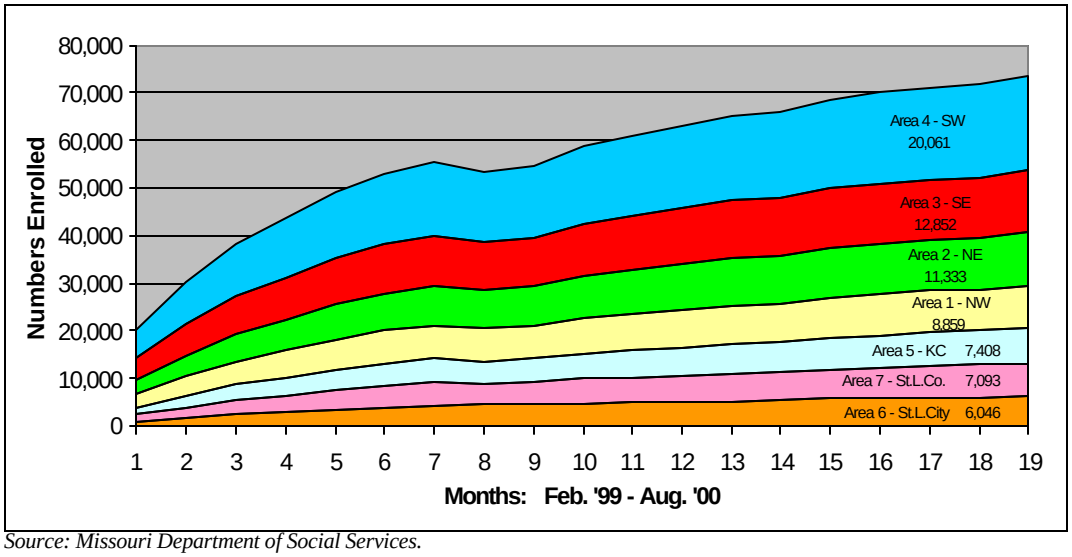
Figure 11. Adults Enrolled in the 1115 Waiver – August, 2000



Source: Missouri Department of Social Services, Enrollment Database. Table A1, Appendix A, summarizes the eligibility criteria and benefit packages for adult 1115 Waiver beneficiaries.

Figure 12 illustrates the growth across regions. The same trend in enrollment as last year occurred across regions, with the southwest, southeast, northeast, and northwest regions enrolling the largest number of beneficiaries, and St. Louis City and County enrolling the fewest adults.

Figure 12. 1115 Parent Enrollment Trend by Region *(Total State Enrollment: 73,652)*



Source: Missouri Department of Social Services.

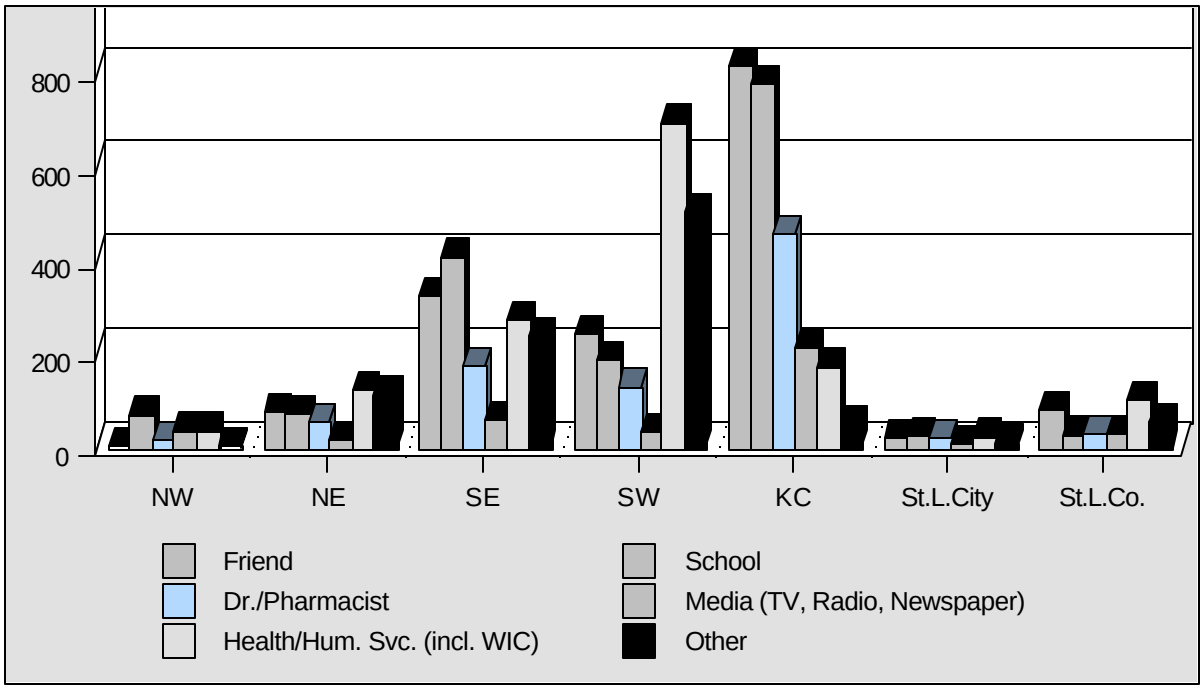
BRFSS Data on Rates of Insurance for Adults

On the BRFSS, 9.4% (65 of 693) of respondents in Missouri indicated being enrolled in Medicaid or medical assistance. Eight-six percent (597 of 693) were enrolled in employer-based or private insurance, and three percent (23 of 693) were enrolled in military insurance. Fourteen percent (100 of 716) were without health insurance at some point in the past 12 months. This is slightly higher than the estimates provided by the CPS (11.3%) for the rate of uninsured adults in Missouri. This is likely due to varying survey methodology.

Referral Sources and Outreach

To continue to monitor the trend in referral sources to the MC+ program, we obtained data through August 2000 from DFS phone centers that track referral information about MC+. The most frequent referral sources were family or friends, schools, and health and human service agencies for those who called the phone centers. This is consistent with the pattern observed last year. In the Northwest and Southeast regions and in Kansas City and St. Louis City, schools were a major source of referrals for the MC+ program. Thus, it seems that targeting families through schools is an effective avenue for advertising the program. Relatively few reported having heard about MC+ from print, radio, and television ads *(see Figure 13 and Table B5).* This is consistent with concerns raised during administrative interviews that there were not enough advertisements from the state regarding the program. Health plans can advertise the MC+ program and facilitate enrollment, but are contractually prohibited from attempting to target this advertisement to persuade beneficiaries to join a particular plan.

Figure 13. "How Did You Hear About MC+ for Kids? *(December 1999 – August 2000)*



Referral sources as tracked by Phone Centers. Source: Division of Family Services, Missouri Department of Social Services (2000).

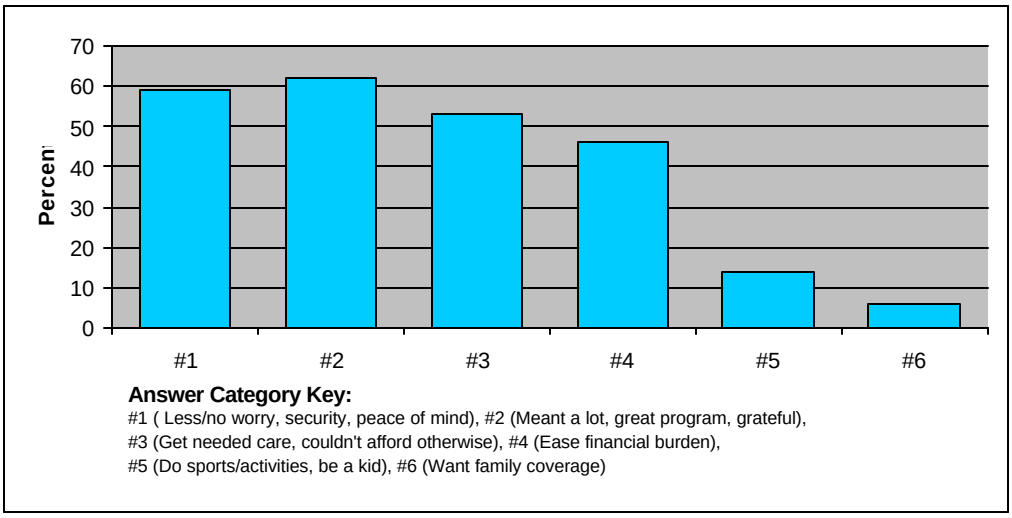
Table B6 in Appendix B summarizes responses to the telephone survey question across survey groups, asking "How did you first learn about MC+?". Results indicate that, across all groups, most reported learning about MC+ from human service agencies (45.5% to 53.4%). A relatively small proportion of respondents indicated they learned about MC+ from schools (2.6 to 7.9%). These findings differ from those who reported to phone centers that they learned about MC+ from friends and schools. One possible reason for the difference is the source of information. Those who call phone centers may be those who were not able or did not consider obtaining applications from human service agencies. These findings indicate that human service agencies, schools, health care professionals, and friends/family members serve as the most useful mechanisms for informing potential beneficiaries about the program and getting them enrolled.

Impact of Coverage

Respondents were asked "What has having health insurance coverage meant to you and your family?". Comments were grouped into the same categories used in the last survey and are summarized in Table B7, Appendix B *(also see Figure 14)*.

Results indicate that respondents across all groups expressed appreciation and less worry after having been enrolled in MC+. The newly enrolled group was more likely to report financial relief and a desire for expanded coverage for other family members, as well as enhanced freedom for children in their physical activities than the other groups. It is possible that the newly enrolled members are more aware of the immediate impact of enrollment on their financial situations and the concerns about limiting the physical activities of their children.

Figure 14. Answers to Telephone Survey Question: "How much has having coverage meant to you and your family?"



Summary and Conclusions

Through the 1115 Waiver, the State of Missouri has succeeded in enrolling more children and adults into the MC+ program. Current national estimates indicate that the rate of uninsured

persons has declined significantly in Missouri (Current Population Estimates, U.S. Census Bureau) over the past two years, with increases in public as well as private insurance. Compared to all other states, Missouri ranks 4th in the nation in enrolling children in State Children=s Health Insurance and 7th in the nation in enrolling children in both CHIP and Medicaid.[6]

Enrollment for children and adults eligible for the 1115 Waiver varied across regions, with the Southeast and Southwest regions of the state enrolling the largest number of eligible people, and the St. Louis and Kansas City regions enrolling the fewest. Caution should be used in interpreting the relative success of enrolling children and families in the MC+ program. The number of uninsured children and parents eligible for the 1115 Waiver in Missouri was based on state administrative data and U.S. Census Bureau data for the state overall. Because there is no scientifically valid method to estimate the number of uninsured in each county, estimates by county or region have the potential for substantial error. The amount of error inherent in the method is illustrated by examining the targeted number of children to be enrolled for each county and comparing it to the number that were actually enrolled. Although a high rate of enrollment was achieved across the state relative to the target (92%), the range of the number of enrolled to the target for each county was from 53% to 264%. Interviews with stakeholders revealed the perception that the number of eligible children in the St. Louis region in particular was overestimated. Based on the above data, it appears that the number of eligible children was overestimated in the urban areas and underestimated in rural regions of the state *(see Table B8 in Appendix B for enrollment figures)*.

Missouri=s decision to expand insurance coverage to adults may have had some impact on the success of enrolling children. One study has examined the rates of enrollment in states that included parents in their Medicaid expansions with states that did not provide coverage for parents.[7] There was a 16% increase in child Medicaid enrollment in states with early expansions, while the remaining states had only a 3% increase. Thus, in states where insurance was expanded to include parents, there was a higher rate of increase in enrollment of children. This suggests that one key factor in enrolling children in state health insurance programs is also providing coverage for their parents.

[6] Edmunds, M., Teitelbaum, M., & Gleason, C. (2000). All over the map: A progress report on the State Children=s Health Insurance Program. Children=s Defense Fund. Washington, D.C.

[7] Ku, L., & Broaddus, M. (2000). The importance of family-based insurance expansions: New research findings about state health reforms. Center on Budget and Policy Priorities, www.cbpp.org.

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

Beyond assessing the success of the ability to reach and enroll children and parents who qualify for the MC+ program, it is essential to assess the extent to which the program is impacting the health status of Missourians. One of the most critical questions about the implementation of the 1115 Waiver is whether the expansion of insurance to those who were previously uninsured contributes to improved health outcomes as a result of increased access to care, including prevention, primary care, and acute care. Health status as well as health access were examined to address this question, using original data collection, secondary data, and national benchmarks. Data were collected through telephone surveys of adults whose children or who themselves were enrolled in the MC+ program. Secondary analyses of a statewide and nationwide health survey (Behavior Risk Factor Surveillance System; BRFSS), the Consumer Assessment of Health Plans Survey (CAHPS®), administered by the Division of Medical Service, and the Missouri Department of Health data were conducted to assess beneficiaries' health status and satisfaction with the MC+ program. Whenever possible, comparisons were made between those receiving health care services under managed care and fee-for-service payment mechanisms. Also, comparisons between those who were enrolled longer were compared with those who were enrolled one year or less.

Health Status

Children

A summary of telephone survey results comparing health status and access of children across payment mechanisms (fee-for-service and managed care), before and after enrollment and across time (for the follow-up survey group) is presented in Table B9 in Appendix B. For the health status variables, significant differences were found across all respondents before and after enrolling their child in MC+. Respondents reported higher ratings of health status after MC+ than before MC+ across both fee-for-service and managed care payment mechanisms. The health status rating was on a scale from "1" to "5," with "5" indicating better health status. The higher rating of health status was accompanied by higher ratings of functional status after children were enrolled in MC+. There were significantly fewer days of school missed following enrollment in MC+ across both fee-for-service and managed care payment mechanisms (an average of 3.23 to 2.21 for the fee-for-service group, and 2.99 to 2.00 for the managed care group). There were no significant differences between managed care and fee-for-service beneficiaries on health status.

In examining health status for the respondents who completed the survey last year and again this year (1999/2000 Follow-Up Group), we noted the same pattern of improved health status and fewer days of school missed *(see bottom of Table B9 in Appendix B)*. In addition, health status continued to improve this year, and the number of school days missed declined. There were no significant differences between those receiving services under managed care and fee-for-service payment mechanisms. Thus, beneficiaries under both payment mechanisms fared equally well on health status improvement.

Table B10 *(Appendix B)* shows the results of comparisons between those who were enrolled as of August 2000 and those who were enrolled one year or less on health status and access. The group that was enrolled as of August 2000 reported significantly fewer days of school missed due to illness than those who were newly enrolled and greater ease of obtaining an appointment and getting to the doctor. This may, however, be due to more experience with the system. Overall, results indicate that as beneficiaries are enrolled longer, functional status continued to improve.

Another method of examining the impact of the 1115 Waiver expansion on the health status of beneficiaries was to compare their health status with those of Medicaid beneficiaries covered under Title XIX and those who were not enrolled in public health insurance. Data were obtained from the Missouri Department of Health on several health status indicators for children. 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 15 through 18. It should be noted that the illustrations in Figures 15 through 18 represent rates for particular regions of the state. For the non-Medicaid group, the payment mechanisms (managed care and fee-for-service) for state health insurance beneficiaries do not apply. Thus, they represent only regional variations in health status and not variations as a result of payment mechanisms.

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.[8] They include hospitalizations for the following diagnoses:

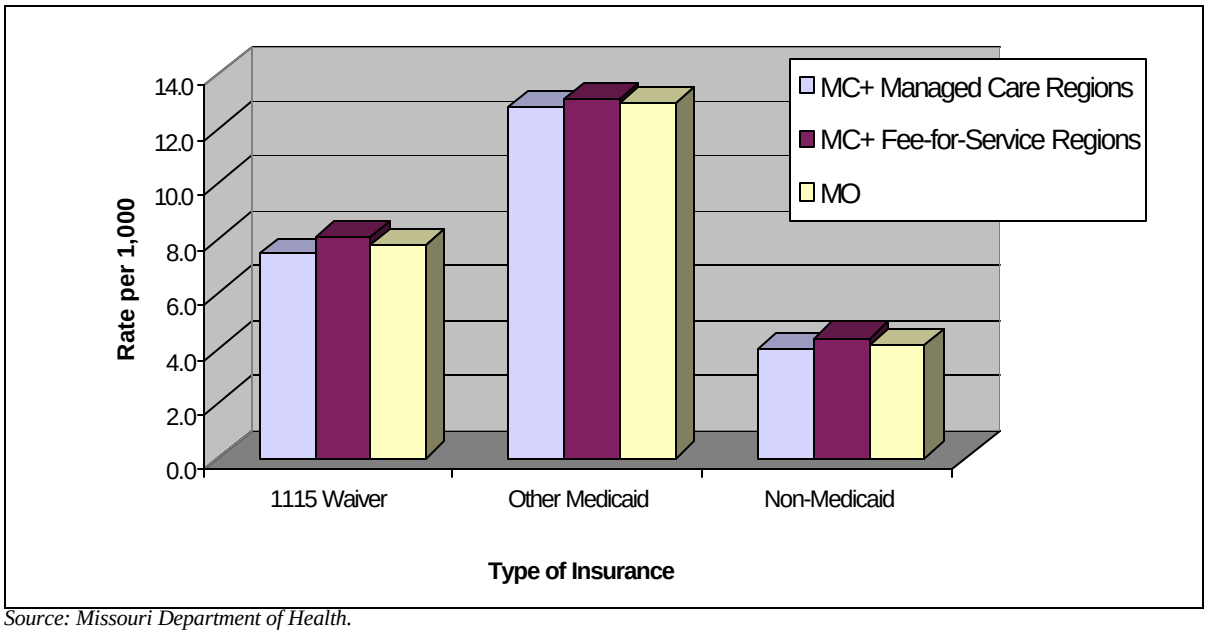
- ✓ Angina
- ✓ Asthma
- ✓ Bacterial pneumonia
- ✓ Cellulitis
- ✓ Chronic obstructive pulmonary disease
- ✓ Congenital syphilis
- ✓ Congestive heart failure
- ✓ Dehydration – volume depletion
- ✓ Dental conditions
- ✓ Diabetes
- ✓ Epilepsy or convulsions
- ✓ Failure to thrive
- ✓ Gastroenteritis
- ✓ Hypertension
- ✓ Hypoglycemia
- ✓ Kidney or urinary infection
- ✓ Nutritional deficiencies
- ✓ Pelvic inflammatory disease
- ✓ Severe ear, nose or throat infection
- ✓ Tuberculosis

As shown in Figure 15, 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. These findings indicate that 1115 Waiver beneficiaries 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. This pattern is likely more related to income and poverty level than any other factor, and this pattern is evident for all of the indicators presented. In 1995, the Missouri Department of Health found that the geographic

[8] Missouri Department of Health (1995). Missouri Monthly Vital Statistics, 29(4). State Center for Health Statistics.

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 15. Preventable Hospitalizations under 19 Years of Age, 1999

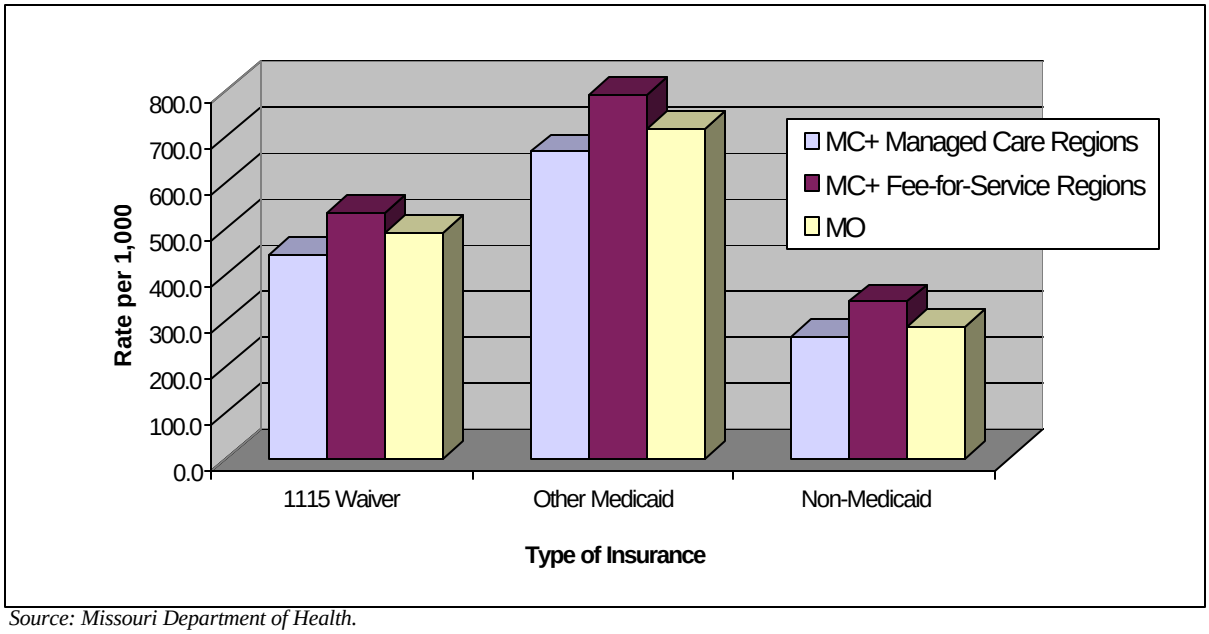


Source: Missouri Department of Health.

When examining the rates of preventable hospitalizations by the region of the state, we noted that the rate of preventable hospitalizations was higher in fee-for-service regions than in managed care regions. Given that this trend was evident for those not on Medicaid or enrolled in the 1115 Waiver, this suggests that these differences represent regional variation rather than payment mechanism variation, as the Non-Medicaid group consists of those who are enrolled in a variety of other service delivery models across all counties. It is possible that the delivery systems are different in the MC+ managed care regions, which are all urban locations, while the fee-for-service regions consist primarily of rural counties, where access to primary care is more limited.

Similar trends across Medicaid, the 1115 Waiver, and other Non-Medicaid beneficiaries on health status were observed for emergency department visits *(see Figure 16)*. Children receiving 1115 Waiver benefits had fewer emergency department visits than Medicaid beneficiaries and more than others who did not receive either type of coverage. It is likely that income also has an impact on the rate of emergency department visits and overall health status. The same trend was noted for fee-for-service and managed care regions, with those in fee-for-service regions having higher rates of emergency department visits than those in the MC+ regions. A lack of access to primary care services may account for these regional variations in emergency department rates and is likely related to preventable hospitalizations.

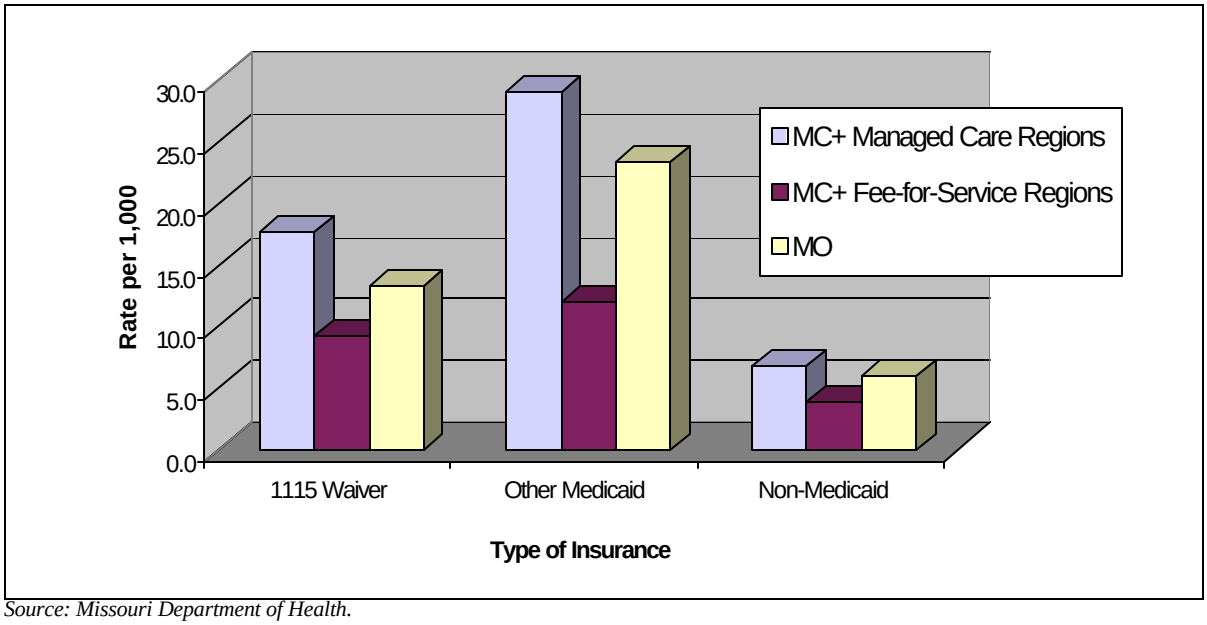
Figure 16. All Emergency Department Visits under 19 Years of Age, 1999



Source: Missouri Department of Health.

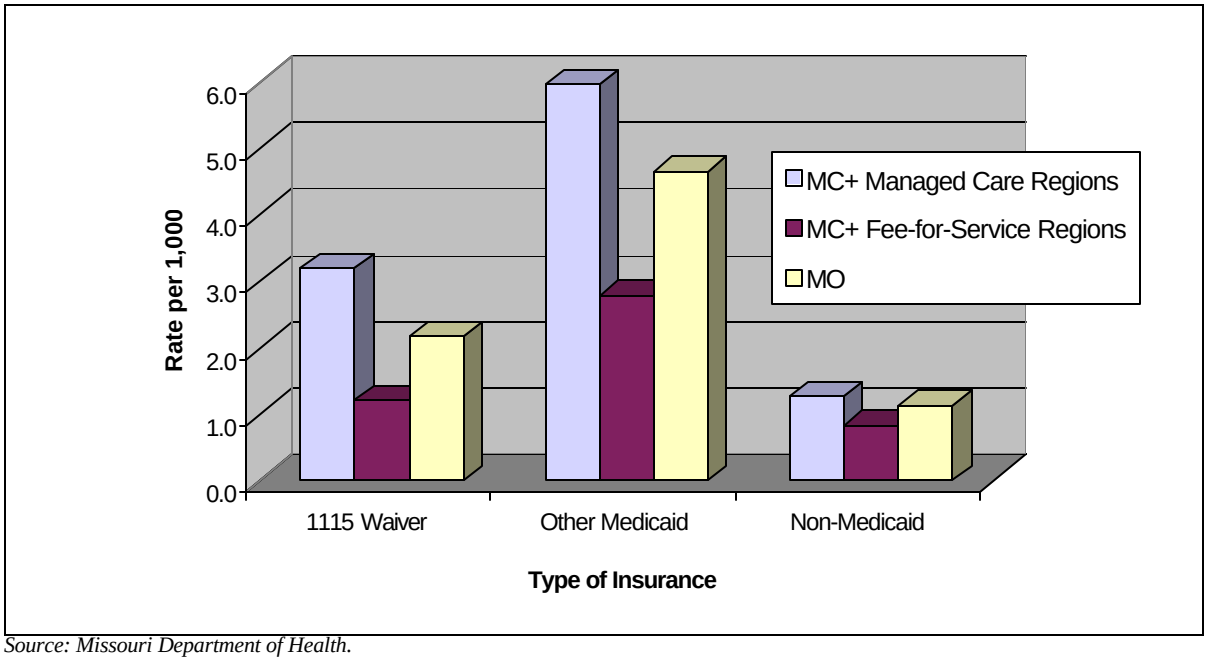
Two other indicators of health status, asthma emergency department visits and asthma hospitalizations, were examined for children. These are important indicators, as asthma has been identified as a controllable illness that when not well managed, costs the nation billions of dollars in emergency department visits, hospitalizations, and lost productivity. Asthma emergency department visits were also examined across beneficiary groups and regions. The pattern of overall rates of asthma emergency department visits and hospitalizations from 1115 Waiver beneficiaries was similar to preventable hospitalizations and other emergency department visits. Those in the 1115 Waiver had fewer asthma emergency department visits and hospitalizations than Medicaid beneficiaries and more than those with other forms of insurance. There were **fewer** asthma emergency department visits and hospitalizations in fee-for-service than managed care regions. The geographic characteristics (rural/urban) of these regions likely account for these differences, as the rates of asthma in urban locations is higher than in rural regions (where fee-for-service payment is dominant).

Figure 17. Asthma Emergency Department Visits under 19 Years of Age, 1999



Source: Missouri Department of Health.

Figure 18. Rate of Asthma Hospitalizations under 19 Years of Age, 1999



Source: Missouri Department of Health.

Adults

A summary of telephone survey results comparing health status and access of adults across payment mechanisms (fee-for-service and managed care), before and after enrollment, and across time (for the Follow-Up Survey Group) is presented in Table B11 in Appendix B. For

the number of days of work missed, significant differences were found across all respondents before and after enrolling in MC+. There were significantly fewer days of work missed following enrollment in MC+ for both fee-for-service and managed care payment mechanisms. There were no significant differences in adults' ratings of health status before and after MC+.

When examining health status for the respondents who completed the survey last year and this year (1999/2000 Follow-Up Group), we noted that the same patterns of improved health status and fewer days of work missed were evident. In addition, health status continued to improve this year, and the number of work days missed declined. There were no significant differences between those receiving services under managed care and fee-for-service payment mechanisms.

Table B10 shows the results of comparisons on health status and access between those who were enrolled as of August 2000 and those who were enrolled one year or less. The group that was enrolled as of August 2000 reported significantly better health status and ease of getting to the doctor than those who were enrolled for one year or less, suggesting that as the length of enrollment increased, so did health status and access.

Access to Health Services

A key aspect of improving health outcomes is improving access to health care services, which is often measured through consumer reports of satisfaction. This question was addressed using the results of the telephone survey and secondary analyses of CAHPS® data from 2000, as well as an observational study of the ability of callers to obtain information about MC+ for Kids. Before presenting results separately for adults and children, comparisons of combined ratings of access and satisfaction with health services on the CAHPS® with national benchmarks are presented. Detailed figures are presented in Table B12.

The overall rates of satisfaction with health care services were compared with regional (West North Central United States) and national data published by the National Committee on Quality Assurance (NCQA) for commercial health plans. In addition, the rates of satisfaction with MC+ by those who receive services in fee-for-service regions and those who receive managed care health services were compared with one another. Respondents were asked to rate their level of satisfaction with their personal doctor or nurse, their specialist, their overall health care, and their health plan on a scale from 1 to 10, with zero representing the worst services possible and 10 representing the best services possible. Table 1 below summarizes these comparisons. Results indicate that the satisfaction of MC+ respondents with their personal doctor or nurse, their specialist, and their health care closely approximated the satisfaction of commercially insured respondents enrolled in managed care plans regionally and nationally. Of particular note is that the rate of satisfaction of MC+ beneficiaries is higher (70.7%) than that of commercially insured beneficiaries regionally and nationally (57 and 56.7 %, respectively).

When comparing the responses of fee-for-service and MC+ respondents on their satisfaction with health care, we found that the two groups reported comparable rates of satisfaction with their personal doctor or nurse and with their health care overall. However, MC+ respondents reported significantly greater satisfaction with their specialty care than fee-for-service respondents ($\div^2 = 10.23$, df = 2, $\underline{p} = .006$).

Table 1. CAHPS® National and Regional Benchmarks

	HEDIS®/CAHPS®[9]		MO CAHPS®[10]			
Rating	**National**	**Regional**	**Fee-for-service**		**Managed Care**	
	%	**%**	**n**	**%**	**n**	**%**
Rating of doctor						
0 – 7	NA	NA	193	26.0	304	22.4
8 – 10	72.7	72.4	549	74.0	1,051	77.6
Rating of specialist						
0 – 7	NA	NA	110	37.0	114	27.1
8 – 10	75.0	74.6	187	63.0	307	72.9**
Rating of health care						
0 – 7	NA	NA	225	31.5	336	27.4
8 – 10	70.2	71.0	490	68.5	891	72.6
Rating of health plan						
0 – 7	NA	NA	-	-	418	29.3
8 – 10	56.7	57.0	-	-	1,007	70.7

These figures represent the percent of those who rated care as either "8", "9", or "10" on a scale ranging from 0 to 10, with 0 representing the least satisfaction and 10 representing the greatest satisfaction. The total number of respondents in the Fee-for-Service group was 870; and the total in the MC+ group was 1,520. Only cases with complete and valid data were analyzed, consistent with NCQA published standards. States in the West North Central Region of the United States are Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.
NA = Not Available
***p < .01*

Data from the Behavior Risk Factor Surveillance System (BRFSS) Survey were also analyzed, comparing those who were uninsured, enrolled in Medicaid, or otherwise insured on selected health status and health access indices. Table B13 summarizes the findings. Given the relatively low number of respondents, caution should be used in concluding that there were no differences between groups. Overall, individuals' ratings of their health status were comparable across groups, as was their self-report of experiencing asthma and being able to see a doctor when needed. One significant difference that emerged was the rate of pap smears across groups. Medicaid enrollees reported comparable rates of receiving a pap smear within the last year (79.5% of the Medicaid group and 75.5% of those otherwise insured) as those with other types of insurance, and a higher rate than those who were uninsured (58.3%). The same health status and access variables were examined for those in managed care and fee-for-service regions, with no significant differences emerging *(see Table B14).*

Children

A summary of telephone survey results comparing health access of children across payment mechanisms (fee-for-service and managed care), before and after enrollment, and across time (for the Follow-Up Survey Group) is presented in Table B9. For the health access variables, significant differences were found across all respondents before and after enrolling their child in MC+. Respondents reported greater ease of getting to the doctor and obtaining an appointment,

[9] National Results for Selected 2000 HEDIS and HEDIS/CAHPS Measures, Commercial Adult CAHPS.
[10] The responses for child and adult beneficiaries have been combined for analysis.

as well as more physician visits after MC+ than before MC+ and across both fee-for-service and managed care payment mechanisms. There were no significant differences before and after MC+ on the number of emergency room visits.

When examining health access for the respondents who completed the survey last year and this year (1999/2000 Follow-Up Group), we found the same pattern of improved health access *(see Table B9).* In addition, health service access continued to improve this year, with the ease of getting to a physician and obtaining an appointment continuing to increase after being enrolled in MC+. There were no significant differences between those receiving services under managed care and fee-for-service payment mechanisms. There were no significant differences between the number of emergency room visits for those from last year to this year.

Another measure of access to health services through the MC+ program is the Consumer Assessment of Health Plans 2.0 Survey (CAHPS®). Data from the CAHPS® administered in Missouri were compared with those available on the national level. Only results from the CAHPS® on those enrolled in commercial health plans were available on the national level, so caution should be used in making comparisons between Missouri and the national results. Data were aggregated across all MC+ beneficiaries (those receiving 1115 Waiver benefits and those receiving 1915(b) benefits), and examined separately for children and adults as well those in managed care and fee-for-service plans. To provide a comparison with national commercial benchmarks, some of the ratings were calculated consistent with NCQA methods.[11]

Selected indices of the ratings and composite scores for health care services for children on the CAHPS® are presented in Table 2. For Missouri, comparisons were made for fee-for-service and managed care beneficiaries. Results indicate statistically significant differences in the ratings of quality of care (doctors and specialists), access to care (getting needed care and getting care quickly), and interactions with health care professionals (doctor communication and courteousness of staff). Parents of children enrolled in managed care reported significantly more positive ratings than those in fee-for-service programs.

[11] Scores on rating scales were converted from a 0 – 10 scale to a 0 – 3 scale, with 0 – 6 being recoded as "1", scores of 7 and 8 recoded as "2", and scores of 9 and 10 recoded as "3". This was done to provide comparisons for health plans based on previous versions of NCQA health surveys.

Table 2. Child CAHPS® National Benchmarks

HEDIS®/CAHPS®[12]				MO CAHPS®					
	National			Fee-for-service			Managed Care		
Index	n	Mean[13]	SD	N	Mean	SD	n	Mean	SD
Rating of doctor	69	2.53	.06	354	2.52	.73	963	2.56*	.67
Rating of specialist	69	2.42	.09	118	2.39	.77	237	2.47	.75
Rating of health care	69	2.50	.09	376	2.34	.80	961	2.43**	.73
Rating of health plan	69	2.31	.12	-	-	-	967	2.40	.74
Getting needed care	69	2.79	.06	390	2.81	.44	999	2.84**	.38
Getting care quickly	69	2.46	.08	400	2.18	.61	994	2.30**	.58
Doctor communication	69	2.65	.05	386	2.48	.61	950	2.63**	.50
Courteous staff	69	2.67	.06	383	2.57	.63	941	2.68**	.52

** $p < .01$; * $p < .05$

Although no comparable regional or national benchmark data were available, the ratings of beneficiaries were examined across fee-for-service and managed care beneficiaries *(see Table 3 below).* These figures can serve as a comparison in subsequent years. One indicator for which there were no national benchmark data at all was the rating of behavioral health care. Of those parents who reported that their children received behavioral health services, there was no significant difference in the ratings of beneficiaries in fee-for-service and managed care. Overall, the ratings of behavioral health care were lower than primary and specialty care.

Table 3. Child CAHPS Ratings for Missouri

MO CAHPS® 10-Point Rating Scales						
	Fee-for-service			Managed Care		
Index	N	Mean	SD	n	Mean	SD
Rating of doctor	354	8.67	1.86	963	8.73**	1.69
Rating of specialist	118	8.30	2.06	237	8.38	2.26
Rating of health care	376	8.16	2.06	961	8.34+	1.99
Rating of behavioral health care	74	7.50	3.02	129	7.78	2.74
Rating of health plan	-	-	-	967	8.31	1.93

** $p < .01$; + $p < .10$

Adults

A summary of telephone survey results comparing health service access of adults across payment mechanisms (fee-for-service and managed care), before and after enrollment, and across time (for the Follow-Up Survey Group) is presented in Table B11. For the health service access variables, significant differences were found across all respondents before and after

[12] National Results for Selected 2000 HEDIS and HEDIS/CAHPS Measures, Commercial Child CAHPS.

[13] For the composite means of Getting Needed Care and Customer Service, the "not a problem" response gets 3 points, the "small problem" response gets 2 points, and the "big problem" response gets 1 point. For the composite means of Getting Care Quickly, How Well Doctors Communicate, Courteous and Helpful Office Staff and Claims Processing, the "always" response gets 3 points, the "usually" response gets 2 points, and the "sometimes" and "never" responses get 1 point. For the ratings means of the Rating of Doctor, Rating of Specialist, Rating of Health Care and Rating of Health Plan, responses of "9" and "10" get 3 points, responses of "7" and "8" get 2 points, and responses of "0" through "6" get 1 point.

enrolling in MC+. Respondents reported greater ease of obtaining an appointment, getting to the doctor, and more physician visits after MC+ than before MC+ across both fee-for-service and managed care payment mechanisms. There were no significant differences between fee-for-service and managed care.

For those respondents who completed the survey last year and this year (1999/2000 Follow-Up Group), the same pattern of improved health service access was found. There was a steady increase in reported ease of obtaining an appointment from before and after enrolling in MC+, and one year later. The same trend in increased ease of getting to the physician was noted. There were no significant differences in health access between those receiving services under managed care and fee-for-service payment mechanisms.

Selected indices of the ratings and composite scores for health care services for adults on the CAHPS® are presented in Table 4. For Missouri, comparisons were made for fee-for-service and managed care beneficiaries. For adult beneficiaries, there were very few differences between fee-for-service and managed care beneficiaries, with the exception that adults enrolled in managed care rated their specialists higher than those enrolled in fee-for-service systems.

Table 4. Adults CAHPS® National Benchmarks

	HEDIS®/CAHPS®[14]			MO CAHPS®					
	National			Fee-for-Service			Managed Care		
	n	Mean	SD	n	Mean	SD	n	Mean	SD
Rating of doctor	365	2.34	.08	311	2.46	.72	155	2.43	.72
Rating of specialist	366	2.39	.09	130	2.22	.87	66	2.26*	.77
Rating of health care	366	2.28	.11	338	2.24	.80	196	2.15	.84
Rating of health plan	366	2.05	.15	-	-	-	201	2.19	.85
Getting needed care	366	2.66	.11	350	2.73	.49	204	2.68	.49
Getting care quickly	365	2.24	.11	361	2.15	.61	208	2.16	.59
Doctor communication	366	2.47	.07	348	2.37	.64	198	2.45	.61
Courteous staff	366	2.54	.08	347	2.51	.62	193	2.52	.63

* $p < .05$

One indicator for which there was no national benchmark data was the rating of behavioral health care *(see Table 5)*. Of those who reported that they received behavioral health services, there were no significant differences in ratings in fee-for-service and managed care.

Table 5. Adult CAHPS® Ratings for Missouri

MO CAHPS® 10-Point Rating Scales						
		Fee-for-service			Managed Care	
	n	Mean	SD	n	Mean	SD
Rating of doctor	311	8.55	1.74	155	8.34	2.00
Rating of specialist	130	7.68	2.57	66	7.92	2.39
Rating of health care	338	7.91	2.10	196	7.53	2.48
Rating of behavioral health care	56	7.23	2.98	31	7.10	3.35
Rating of health plan	-	-	-	201	7.79	2.26

[14] National Results for Selected 2000 HEDIS and HEDIS/CAHPS® Measured, Commercial Adult CAHPS®.

Access to MC+

Another approach used to assess the ability of beneficiaries to access health care was to assess the ability to access the MC+ program itself. Consumers who wish to learn about the MC+ program may call a phone center, toll-free, or a local Division of Family Services office in their county of residence to obtain an application or inquire about benefits. Last year, an observational study was conducted to assess the process of obtaining information. In the first year of implementation of MC+, 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. Nevertheless, the observational study of offices found positive results in front-line staff responsiveness, with the exception of the Eastern region offices.

This study was repeated to assess the accessibility of phone centers and DFS offices to potential beneficiaries. A standardized protocol was used to assess the ability to obtain information regarding the program and the ease of obtaining this information. The protocol is contained in Appendix A and detailed data are presented in Table B15 of Appendix B.

Eight indices of access were chosen:

1. The number of rings before the phone was answered
2. Courteousness of the person answering the telephone
3. The ability of the caller to understand the speaker
4. Clarity of information
5. Number of transfers
6. Number of minutes on hold
7. Clarity of instructions for the next step in enrollment
8. Clarity of explanation of benefits

Overall, the ability to access information regarding MC+ for Kids through phone centers and Division of Family Services offices was comparable to last year's positive results. Receptionists and case managers were considered courteous and easy to understand. Callers waited for an average of 2.4 rings (ranging from 1 to 7), were transferred very few times, and were on hold for brief periods of time (an average of 1.1 minutes).

One area of improvement that was noted from last year to this year was the responsiveness of Areas 6 and 7 telephone answerers. Last 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. This year's observations found that all three St. Louis offices answered the telephone within 3 to 5 rings, and all were rated as a 1 or 1.1 (with 1 being the most positive) on courteousness, comprehensibility, and clarity. Only one of the two offices transferred the call a total of three times.

Summary and Conclusions

Relative to those enrolled in commercial health plans, beneficiaries in managed care and fee-for-service plans in Missouri's MC+ program report comparable levels of satisfaction with their

health care providers, accessibility to health care, and their interaction with health care providers.

Findings from data analyses across multiple sources indicate that the MC+ expansion has improved the health status, functional outcomes, and health service access for children and families over time and relative to other sources of health care. On the telephone survey, respondents indicated better ratings of their health status after MC+ than before MC+, and fewer days of school or work missed. They also reported greater ease of obtaining appointments and getting to physicians after MC+. These gains were maintained at follow-up one year later.

Finally, the responsiveness of phone centers and DFS offices has improved and likely contributed to the success in enrolling more children and adults.

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?

One concern with the requirement for families to share the cost of MC+ through co-payments and/or premiums is that the cost would prohibit their use of services and thus impact their health status or constitute a barrier to seeking needed care. As of August 2000, less than 18% of families with enrolled children were required to share the cost of MC+ through a co-payment and/or a premium, and approximately 77% of parents who were enrolled were required to share the cost of their services (composed primarily of custodial parents).

In the previous evaluation of this question, it was found that there were few significant differences in health care access for those who shared the cost of services (through premiums and/or co-pays) and those who did not. There were no significant differences in the extent to which those who shared the cost and those who did not share the cost of services in their self-report of having a regular medical doctor, clinic, or dentist; limiting their physical activities; having poorer health and more sick days; and the number of times they visited the doctor and emergency room. There were two exceptions: Those who did share the cost of services reported significantly greater ease of seeing a doctor and obtaining an appointment than those who did not. This is counterintuitive to the concern about this group having poorer access to care. The reasons for this are unclear, as it is unlikely that they are receiving preferential treatment by providers, because many providers would not likely be aware of individual patients who share the cost of the premium itself. Additional telephone survey data were obtained from those who responded to the telephone survey last year, and from new enrollees to the program to determine if the same trend existed this year. This question was also evaluated through secondary analysis of the CAHPS® data. Health and access indicators of children receiving health care services at no cost to the family (i.e., from households with incomes less than 185% of FPL) were compared to those of children from families having to share costs of health care services (i.e., co-pays/premiums).

Children

Results of the telephone survey comparing the health status and health access of children enrolled in MC+ whose parents share in the cost of health care and those who do not are presented in Table B16 of Appendix B. For health status measures, the cost-sharing group reported significantly better health status of their children after enrolling in MC+. This increase in health status rating for children continued for the Follow-Up Group one year later. For health service access, the cost-sharing group reported significantly lower rates of emergency room visits than the no-cost group. There were no significant differences between cost and no-cost groups on their reported ease in obtaining an appointment, getting to the doctor, the number of physician visits they attended, or the number of school days missed.

Results of secondary analyses on the CAHPS® were generally consistent with those of the telephone survey *(see Table B17 in Appendix B).* Those in the cost-sharing group reported significantly higher ratings than those in the no-cost group in their ability to obtain a referral to a specialist, obtain needed care, and obtain behavioral health treatment or counseling when

needed. They reported significantly fewer emergency room visits and dental visits. These differences are likely due to the better reported health status of those in the cost-sharing group. Those in the cost-sharing group also reported significantly lower rates of emergency room visits, fewer dental visits, and poorer ratings of dental care than those in the no-cost group. When there were differences between cost-sharing and no-cost groups, the cost-sharing group had better access and health status.

Adults

For adults in the cost and no-cost groups, comparisons of health status and access in their responses to the telephone survey *(see Table B18)* indicated no significant differences in reported health status or number of days of work missed due to illness. The only significant difference between cost and no-cost groups on health access was their reported ease of getting to the doctor. Those in the cost group reported more difficulty than the no-cost group in getting to the doctor. This pattern was evident prior to enrollment in MC+ as well as after, suggesting that this was not related to the MC+ program. There were no differences between the cost-sharing and no-cost groups in their reported ease of obtaining appointments or the number of physician or emergency room visits after enrolling in MC+. Both groups reported significantly greater ease of obtaining an appointment, getting to the doctor, and had more physician visits after enrolling in MC+.

On the CAHPS® survey, adult beneficiaries in the cost-sharing group reported significantly better health status than those in the no-cost group, but no significant differences in days of work missed, access to health care, or frequency of service use emerged *(see Table B17).*

Summary and Conclusions

In summary, for children, health status differences existed for cost and no-cost beneficiary groups such that those in the cost groups had better health status than those in the no-cost groups. They also visited the emergency room and dentist less frequently than those in the no-cost group. Given that there were no significant differences between the cost and no-cost groups in their ratings of access to care on either the telephone or mail-in survey, the differences in emergency room and dental care utilization are likely a function of the better health status of the cost group as well as their higher socioeconomic status.

Similar results were found for adults in the cost and no-cost groups. The cost-sharing group reported better health status and more difficulty getting to the doctor than those in the no-cost group. This difference may be due to factors other than MC+, such as a greater proportion of this group working full time and being unable to leave work to get to an appointment. Overall, there were relatively few differences between cost-sharing and no-cost adults and children in their access to health care services, and there was no negative impact observed as a result of requirements to share in the cost of services provided through MC+. The cost-sharing group reported better health status than the no-cost group, which may affect their need for services.

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

Missouri policy makers initially indicated that non-emergency medical transportation (NEMT) would not be a part of MC+ Expansion groups. The rationale for this decision was that people in the upper economic levels (133% FPL) and above would likely have access to automobiles and/or public transportation and, therefore, would not need transportation to ensure access to medical services.

In the 1999 1115 Waiver evaluation, it was reported that some MCOs continued to provide NEMT for MC+ Expansion groups because they felt that providing transportation for those that really needed services was cost-effective in the long run. It was also concluded that not providing NEMT had no negative effect on self-reported health status and access to medical services. In the most recent survey of families, it was reported that 3.9% of children missed medical appointments due to lack of transportation. This percentage is compared to 2.3% last year, which represents a slight but non-significant increase. In the most recent survey of MC+ adult members, 8.3% reported missed medical appointments due to lack of transportation. This is compared to 8.0% last year *(see Table B19).* Therefore, we can conclude that there has been no significant change in the number of people reporting missed medical appointments due to the lack of NEMT.

In order to estimate any negative impact on not receiving NEMT, those who reported missed appointments due to the lack of transportation (n=34 children & 65 adults) were compared with those who reported no missed appointments for both children and adults on indices of health status and access to services. Families who reported they had difficulty getting their children to medical appointments because of lack of transportation also reported slightly lower scores on a health status index for children, which was part of the telephone survey. The 65 adults that were reported to have missed medical appointments due to the lack of transportation also reported lower mean scores on a health status index and more ER visits in the last six months.

Summary and Conclusions

Similar to findings from the 1999 1115 Waiver evaluation, MC+ families reported that there were few instances where children missed medical appointments due to the lack of NEMT (3.9%). Likewise, the number of adults reporting missed medical appointments due to the lack of NEMT remained constant at approximately 8.3%. The percentages of people reporting missed medical appointments due to the lack of transportation under the 1115 Waiver was less than the number of reported missed medical appointments prior to the beginning of MC+. It does appear that the MCOs who provide NEMT without reimbursement from the State are wise in doing so since the few children and adults who report missing medical appointments because of the lack of transportation also report lower levels of health status. As with the previous evaluation, there seems to be little evidence that not paying for NEMT has any significant impact on access and health status of the 1115 Waiver membership as a whole.

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?

The findings from last year indicated that there were relatively few beneficiaries who disenrolled from 1115 Waiver services because they could not make the co-payment or deductibles (6.7%), based on a survey conducted by the Office of Research and Evaluation at the Missouri Department of Social Services. To further examine this issue, new items were incorporated into the telephone survey to assess whether respondents were disenrolled from MC+, and if so, for what reasons. Results are presented for adults and children in Table B20 of Appendix B. Findings indicate significant differences between those in the no-cost, co-pay, and premium groups in the proportion of children that continue to be insured. Sixty-eight percent of the premium group remained insured through MC+ and had not disenrolled at the time of the survey, compared to 82.6% of those in the co-pay group and 83.4% in the no-cost group. For those that indicated they were no longer insured through MC+, the major reason they indicated was that they were no longer eligible for MC+ (67% of the premium group, 55.3% of the co-pay group, and 47.9% of the no-cost group). Twelve and a half (12.5) percent the premium group indicated they dropped MC+ because it was "too expensive", while 4.3% of the co-pay group indicated expense as the reason for dropping MC+. Almost 14% of those in the premium group indicated they had other insurance available, which was fewer than those in the co-pay (21.3%) and no-cost groups (23.0%).

For adults in the cost-sharing and no-cost groups, the opposite pattern emerged, with significantly fewer in the no-cost group remaining enrolled in MC+ (63.8% for the no-cost and 78.0% for the cost-sharing group). None of those who were disenrolled reported expense as the reason for being disenrolled. The majority in both groups indicated they were disenrolled because they were no longer eligible (70.8% for the no-cost, and 74.0% for the cost-sharing groups).

Summary and Conclusions

On the telephone survey, there were few respondents who were disenrolled from MC+. Although more children in the premium group were disenrolled, the main reason was due to eligibility (67%) rather than cost (12%). Thus, there appears to be very little impact on disenrollment of families due to cost or their willingness to cost share.

Evaluation Study I

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?

Background and Definitions

The term Serious Emotional Disturbance (SED) refers to children who require substantial mental health intervention and a wide array of social and community support services. It is a broad federal definition used for funding state public mental health services for children. States are free to define the specific eligibility for Serious Emotional Disturbance. In general, children with Serious Emotional Disturbance are those who experience significant impairment in social and role (school, community, family) functioning as a result of a clinically diagnosed emotional or behavioral disorder. National prevalence estimates of the number of children that qualify for services under the definition of Serious Emotional Disturbance range from 5 - 9%, depending on the specific criteria used. In one Missouri school district, the estimate for the prevalence of Serious Emotional Disturbance among 14 to 16 year-olds was 18.7%[15]. Approximately 20% of all children qualify for a diagnosable behavioral health disorder, but not all of them demonstrate the significant impairment in social and role functioning that would qualify them as SED.

National models of community-based treatment have been developed for children who are in need of behavioral health services as a result of a Serious Emotional Disturbance which emphasize treatment in the least restrictive environment, prevention of out-of-home placement for treatment, culturally competent service planning, and child-centered as well as family-focused service delivery systems. The provision of wraparound services is centered around this philosophy. The Missouri Department of Mental Health defines wraparound as a "philosophy and a process for assessing, planning, and implementing strategies to improve the functioning of children, young adults, and their families across all life domains."[16] Examples of services funded through the wraparound service planning process include, but are not limited to:

- transportation support (enables family, child, and childcare worker to get to needed services and supports because they are unable to do so through other means),
- social-recreational support (enables the child and family to participate in activities to which it is difficult to get access, due to distance, cost, or inadequate supports),
- basic needs supports (assistance in meeting basic needs of family on a temporary and/or emergency basis that cannot be met through other means),
- clinical/medical support (assistance that helps facilitate meeting the child's treatment goals, including maintenance or reunification of family and/or helps to meet non-

[15] Kashani , J., Danoy, A., Vaidya, A., Soltys, S., et.al. (1990). Risk factors and correlates of severe psychiatric disorders in a sample of inpatient children. American Journal of Psychiatry, 147(6), 780-784.

[16] Missouri Department of Mental Health.

psychiatric treatment needs that cannot be met through other means. *Note that this does not include traditional outpatient services*), and

- other supports (all other assistance including crisis, legal, school, and vocational that cannot be met through other means).

One of the concerns of advocates, consumers, and providers of services to children with Serious Emotional Disturbances is that the complex psychosocial and support needs of these children and families may not be adequately addressed through traditional health and behavioral health delivery systems. In addition to those with SED, this special evaluation question also addresses the needs of children who are affected by substance abuse. Children who are affected by substance abuse may be those who have a relative or family member with a substance-related (alcohol or other drugs) problem, or who are themselves experiencing problems with substance use.

Children who receive 1115 Waiver services primarily receive behavioral health services through fee-for-service public or private providers or through managed behavioral health care companies in the managed care regions of the state. These systems have traditionally been oriented toward office-based services, while public mental health service systems have served children and families requiring more supports and services. In order to facilitate the adoption of more community-based alternatives to traditional treatment for children and families receiving behavioral health services through the 1115 Waiver, the Missouri Department of Social Services, Division of Medical Services, and the Missouri Department of Mental Health have collaborated to facilitate coordination of services among DMH providers and MCOs across the state. Specific protocols for psychiatric services were developed by the DMH Division of Comprehensive Psychiatric Services and DMS, and guidelines were developed by the DMH Division of Alcohol and Drug Abuse and DMS for the promotion and adoption of the wraparound approach. A recent task force, led by DMH, has developed a draft document defining wraparound services, philosophy, and mechanisms for planning. This special evaluation question is aimed at assessing the extent to which this philosophy has been adopted for children receiving 1115 Waiver insurance and behavioral health services and builds upon the evaluation of this question from the previous report.

Evaluation

In the previous evaluation, the characteristics of children receiving 1115 Waiver services and their utilization of wraparound services through the Department of Mental Health were examined. This year=s evaluation attempted to identify all of those children in the 1115 Waiver who received behavioral health and substance abuse treatment services.

The population was identified by asking parents who responded to the health status and access survey whether or not their child received services for an emotional or behavioral health problem and whether or not the child or someone in the household had problems with substance abuse. Those who had pharmacy claims from the state for psychotropic medication (Pharmacy group) were identified and sampled to determine if the child had received behavioral health services. For those who were identified as having received behavioral health services, questions regarding the child=s level of functioning, satisfaction with the array of services offered, and team treatment planning were asked to determine whether services were provided that might be

consistent with the wraparound philosophy. Finally, for those who received psychotropic medication and also received behavioral health services, aggregate data were obtained from the Missouri Department of Mental Health to examine the clinical and service characteristics of those who received services through DMH. Without specific eligibility and utilization data and information about all the individuals involved in the care of the child, it is not possible to conclude that survey respondents received wraparound services consistent with the DMH definition. The following questions relating to behavioral health and wraparound services were asked:

- *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?*

Results

To examine the impact of the 1115 Waiver on children with mental health needs, comparisons were made between those who were receiving psychotropic medication and those children who were not receiving medication on their rates of receiving mental health treatment in the last six months and problems with alcohol or drugs *(see Table B21 in Appendix B).* There were significant differences between the groups, with children in the group receiving psychotropic medication being significantly more likely to have been involved in mental health services and more likely to have used alcohol/substances or lived with someone who used alcohol/substances than those not receiving psychotropic medication.

Next, for those who acknowledged receiving mental health services in the past six months, comparisons were made between those who did and did not receive psychotropic medication *(see Table B22).* There were no statistically significant differences between those receiving medication and those not receiving medication in their parents' rating of emotional functioning, or their parents' rating of satisfaction with behavioral health services and the choice of these services. This means 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 were also 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 services *(see Table B23 in Appendix B).* 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. This finding may be due to the relatively small sample size or characteristics of those in fee-for-service regions. Some possibilities include those in fee-for-

service regions being more in need of services or having easier access to providers. In either case, it is difficult to conclude that the difference is due to the payment mechanism alone.

Of those who received psychotropic medications, approximately half (45.5%) were currently receiving mental health counseling at the time of the survey, and approximately the same number (48.4%) received services in the past six months *(see Table B24)*. For those who reported receiving services in the past six months, 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. Parents rated their child's emotional functioning an average of 3.26 on a scale from 1 (Very Poor) to 5 (Excellent), and as noted earlier, this was not significantly different from those who were not receiving medication. Ratings of satisfaction and choice of services were relatively high as well (average of 4.30 and 4.13, respectively).

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. A total of 27 of the 263 received wraparound-like services from DMH. This constitutes approximately 10% of those on medications. 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. Tables B25 through B27 summarize the diagnostic, medication, and service utilization characteristics of these children. 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).

Table B27 summarizes the types of services provided and funded through the Department of Mental Health for the 27 children. 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 (37.0%), Individual Wraparound Services (29.6%), and Physician services (18.5%).

CAHPS® Data

On the CAHPS data obtained in 2000, there were three questions that pertain to behavioral health services. A total of 330 (14.5%) respondents indicated a need for counseling services (treatment or counseling for a personal or family problem). Data were analyzed across all groups of adults and children due to the relatively small number who indicated a need for services. Over half (58.9%) of the group represented children from birth to 18 years of age. Table 6 below summarizes the responses of those in the fee-for-service and MC+ groups. The results indicate that those in the fee-for-service group reported a significantly greater need for some type of counseling than those in the MC+ (17.5 and 12.7%, respectively). There were no significant differences between the fee-for-service and MC+ groups in their report of being able

to access treatment or counseling services. Most of the respondents reported that obtaining services was Anot a problem@ (71.0% in the fee-for-service group and 65.7% in the MC+ group), and the majority rated the quality of their services as either A8", A9", or A10" on a scale ranging from A0" (AWorst treatment or counseling possible@) to A10" (ABest treatment or counseling possible@). The fee-for-service group rated the quality of treatment or counseling services slightly (÷ = 7.40, SD = 2.86), but significantly higher than the MC+ group (÷ = 7.06, SD = 3.19, p < .05).

Table 6. Responses on CAHPS

	Fee-for-service		MC+	
	n	%	n	%
Needed Counseling**				
Yes	147	17.5	183	12.7
No	691	82.5	1258	87.3
Problem Getting Care				
Big Problem	21	11.5	39	15.5
Small Problem	32	17.5	47	18.7
Not A Problem	130	71.0	165	65.7
Rating of counseling/treatment				
0 – 4	34	15.2	61	22.6
5 - 7	60	26.9	52	19.2
8 - 10	129	57.8	158	58.3

*** p < .01*
Fee-for-Service n = 870; MC+ n = 1,520

Summary and Conclusions

The results of the telephone survey, parent reports of satisfaction, and analysis of DMH data for children enrolled in MC+ indicate that those in fee-for-service systems indicate a greater need for behavioral health services than those who are enrolled in managed care systems, and they report greater satisfaction with these services. There were no differences in reports of access to behavioral health services among beneficiaries in the two payment mechanisms. For those who reported their child received behavioral health services in the last six months, a majority (78%) indicated that professionals met as a team.

This study attempted to assess the extent to which those receiving 1115 Waiver services received and benefited from behavioral health services consistent with DMH criteria for Serious Emotional Disturbance and Wraparound services. Given the limited available data and information about specific clinical, utilization, and service coordination characteristics, it is not possible to make conclusions about the impact of wraparound services for children with SED in the MC+ program. It is not possible to identify those in the 1115 Waiver program based on

claims data, as this is an eligibility criteria, not a clinical diagnosis that would be submitted with a claim. Very specific diagnostic, utilization, and clinical data are needed to adequately address the question. It is recommended that survey items and procedures continue to be refined to form proxy measures in the absence of such data.

Evaluation Study 2

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?

This is the same question that was addressed last year and raises the concern of "crowd-out" or whether offering MC+ expansion services to children and families above 185% FPL has a negative impact on the number of children and families covered by private insurers. Several sources of information were used in examining the effect of MC+ on the private insurance market, including CPS data, telephone survey data of MC+ members, and a survey of commercial insurers.

First, the most recent Current Population Survey data indicate increases in private insurance coverage for children and adults between 1998 and 1999. There was an increase of 88,000 children and 136,000 for adults in Missouri covered by private insurers *(see Tables B1 and B2 and Figures 3 and 9)*. These considerable increases argue that, overall, the impact of MC+ on the private insurance market is negligible.

Second, a follow-up telephone survey of last year's respondents and new MC+ members asked a specific question about private insurance *(see Tables B28 and B29).* The question is, "*If MC+ were not available, would you have purchased insurance for yourself/your child?"* Last year's findings indicated that 22.9% of those surveyed said that they would have purchased insurance from other sources if MC+ were not available. This year, 21.4% (485 of 2,268) of respondents said they would have purchased insurance elsewhere. When asked the potential source of insurance, 26% (112) would have obtained insurance through an employer, and 22% (96 of 431) would have purchased it on their own. Another 18.3% did not know where they would have purchased insurance (79 of 431). A total of 267 of the 2,268 respondents (12%) indicated they would have purchased insurance through an employer, someone else's employer, or on their own. Thus, fewer people than last year said they would purchase insurance on their own without MC+. There was a slight increase in people's knowledge of where they would purchase insurance if MC+ were not available (12% versus 10%).

As would be expected, there were significant differences between eligibility groups in their report of purchasing insurance elsewhere, if MC+ were not available. Those in the higher income and in the Extended Transitional Medicaid groups reported higher rates.

Finally, two surveys of insurance companies were conducted to evaluate the potential impact of MC+ on crowd-out. A survey of Missouri insurance companies was completed, targeting the 20 with the largest market share. To assess the impact of crowd-out from the perspective of insurers, several questions were asked using a standard protocol. Very few were aware of the MC+ program, and those who were reported no impact. Based on the suggestion of one of the respondents, a more targeted survey of small employer insurance companies was conducted. Seventeen small employer insurance representatives were contacted, and 10 were providing insurance at the time of the survey. Only 1 in 10 respondents indicated an awareness of the

MC+ program. None of the 10 respondents reported a decrease in major medical policies in Missouri or in any particular regions of the state. In response to a question of whether insurers found any impact of MC+ on their book of business, one respondent replied, "Not able to determine. I can't see where we are losing clients going to the MC+ for Kids program."

Summary and Conclusions

This evaluation indicates that very little crowd-out is occurring, and that MC+ is not having a significant impact on the private insurance market. The enrollment of children and adults in both private insurance and Medicaid has increased between 1998 and 1999. In last year's 1115 Medicaid waiver report, we estimated that the percentage of expansion recipients that would buy insurance from the private insurance market if MC+ were not available was somewhere between 1.6 and 3.2%. The current evaluation provides no evidence to change these estimates. Survey data of 2,268 recipients, Current Population Census survey data on the increases in the number of covered families in private insurance, and telephone surveys of large insurance companies and companies that specialize in small employer company insurance do not suggest any evidence of increases in crowd-out. As the economy changes, this issue may need to be revisited in future evaluations.

Implementation Evaluation

Implementation of 1115 Medicaid Expansion Program

Introduction

As part of last year's evaluation, 42 key informant interviews were conducted to provide a qualitative analysis of the implementation of the Missouri 1115 Medicaid Expansion Waiver. To follow-up on the development of the 1115 program over the course of the past year, 14 interviews were conducted with a subset of individuals who were interviewed last year. As with last year, key informants included administrative staff from the Division of Medical Services (DMS), the Division of Family Services (DFS), the Office of the Director of Social Services (DSS), one legislator, one representative from the Governor's Office, and representatives from managed care organizations (MCOs), as well as community/advocacy groups and mental health representatives.

The format of questions varied depending upon the role of the individual in the planning and delivery of 1115 Waiver services. However, several questions were common across individuals:

- What improvements have you seen in the delivery of MC+ for Kids?
- What barriers to implementation continue to exist?
- How much has enrollment improved?
- What has been the impact of MC+ on:
  1) Providing wraparound services for children with Serious Emotional Disturbances;
  2) the decision not to provide non-emergency medical transportation (NEMT); and
  3) the effect of crowd-out?
- What progress has been made in identifying outcomes?

Key Informants

Division of Medical Services
Gregory A. Vadner, Director
Pam Victor, Chief Operating Officer
Billie Waite, Legal Counsel

Division of Family Services
Denise Cross, Director

Managed Care Organization Representatives
Family Health Partners - Joe Cecil, CEO
First Guard - Dr. William Pankey, Medical Director
HealthCare USA - Dr. Mark Calderon, Medical Director

Other State Agencies
Mike Hartmann, Assistant to Governor Roger Wilson

State Legislature
Scott Lakin, Representative

Provider and Advocacy Groups
Mary Bell, Health Coordinator, ARCHS
Steve Winburn, Deputy Director, Health Services, LINC
Cindy Keele, Executive Director, NAMI of Missouri

Other Agencies
Dwight Fine and Randy Boulch, Missouri Hospital Association

Improvements

There was a general consensus among state administrative staff, providers, and advocates regarding some of the improvements in the program that have occurred over the course of the year. First, it was reported that front-line staff at DFS offices have a better understanding of the benefit packages and options available to families through MC+ for Kids. There has been significant cooperation between phone center staff and outreach centers. In fact, the phone center located in Kansas City was publicly recognized by the community for the services it provides to families. Second, the changes in the application packet were viewed as improvements. Initially, families were confused by the packet from First Health. However, the application form has been shortened and standardized across Title XIX and Title XXI programs, making it easier for enrollees to complete and leaving eligibility determination to administrative staff. Also, the translation of the enrollment packet into Spanish, Vietnamese, and Bosnian was viewed as positive in improving the outreach and enrollment of foreign-born parents.

In terms of the administration of the program, changes that were viewed as positive include increased reimbursement rates for providers and administrative systems as well as performance-based contracting for preventive services, such as EPSDT screens. As of July 2000, several rate increases for dental and in-home services took effect. The increase in rates for orthodontic services was decided due to concerns about lack of access to this specialty care. There was also a change from the Automatic Response Unit (ARU) to an Interactive Voice Response (IVR) system for providers to obtain information regarding frequently asked questions. The hope is that this will result in a reduced frequency of busy signals for providers and beneficiaries seeking information. Also, the processes for claims submission, eligibility checks, and denials and resubmissions were improved with the implementation of Internet-based services. Another effort to support dental providers involves allowing the use of a "Did Not Keep Appointment" (DNKA) code to track beneficiaries who miss appointments so that DFS can follow-up with them to conduct patient education, encourage them to maintain scheduled appointments, and assess whether there were specific barriers in keeping an appointment.

From the provider perspective, the performance-based contracting for EPSDT screens presents somewhat of a difficulty due to the limited ability to conduct outreach to highly mobile clients. Overall, several respondents spontaneously reported that the inclusion of adults in the program was a positive step for Missouri, and one health plan administrator even recommended that other states follow suit.

Challenges, Barriers, and Concerns

When informants were asked about barriers or concerns in implementing the 1115 Waiver, most of their comments centered around the beneficiary's understanding of the benefit package and eligibility for the program, as well as the adequacy of provider networks to serve the population. This is especially problematic in the area of dental services when there is already a shortage of dentists. The concern is about the low level of reimbursement of providers and their willingness to participate in caring for the MC+ population. However, from the health plan perspective, there have been no major concerns or access issues observed.

There is some controversy over insuring families up to 300% of the federal poverty level and allocating a premium, which has increased for this group. Another concern is the general anti-managed care sentiment and an attempt to apply Medicare Plus Choice rates to the Medicaid population, which is not viewed as being cost-effective and may present cost neutrality issues. Furthermore, federal requirements for documenting services for children with special healthcare needs and submitting reports and documentation are quite burdensome, taking significant time from administrative staff in implementing the program itself.

Enrollment and Outreach

The efforts of outreach have become more focused and targeted, specifically in the schools, with an effort directed toward dispelling the perception that families who work are not eligible for the MC+ program. For example, efforts have been made to target children in free/reduced lunch programs to inform their parents and assess how many of these children may be uninsured, but eligible for MC+. Outreach efforts seem to be successful, especially in enrolling additional Title XIX children and families.

Overall, respondents provided very positive feedback about the ability of Missouri to continue to enroll children in Title XIX in addition to insuring children and parents under the 1115 Waiver. Administrators and policy makers express concern about the lower than anticipated enrollment in the St. Louis region. However, the general impression from administrators and policy makers alike is that the formula used to estimate the number of unenrolled but eligible children and families in the St. Louis region overestimated these numbers.

Wraparound, NEMT, and Crowd-Out

Interviewees were asked about the impact of MC+ on wraparound services, the decision not to provide non-emergency medical transportation, crowd-out, and co-payments.

Several representatives from the Department of Mental Health were interviewed to obtain their impressions about the ability of children with Serious Emotional Disturbance (SED) to access services consistent with the wraparound service delivery philosophy through the 1115 Waiver. Currently, the Department of Mental Health is facilitating education and participating collaboratively with the Division of Medical Services in conducting administrative reviews of health plans. As part of this process, education is being provided regarding the types of wraparound services that can be made available to families. Although plans are beginning to

adopt this philosophy and approach, the focus is relatively slow in developing and is often used as a last resort rather than a comprehensive approach to addressing families' strengths and needs. Currently, the Department of Mental Health is examining their own processes and models of wraparound services and further defining this through a Wraparound Task Force. In addition, the Department of Mental Health assists in outreach activities through written guidance, memorandums, and incorporation of information about the 1115 Waiver in their Targeted Case Management (TCM) training. Thus, there are significant efforts at bringing the wraparound philosophy to health plans and providers for children enrolled in the 1115 Waiver. Some plans have demonstrated the desire to have families involved in their own planning and redesign processes by developing consumer panels and obtaining consumer input.

In terms of crowd-out, administrators, policy makers, health plans, and advocates all indicated that they were not aware of any concerns raised about crowd-out, and did not believe it was an issue. In fact, it was noted by one outreach administrator that private health plans are aware of the MC+ program and are distributing application packets to those who may not be able to afford private insurance. On the other hand, there is concern that employers are dissuading employees from signing on for employer-based insurance in favor of MC+ to offset their own costs.

Interviewees were also asked about the impact of the decision not to provide Non-Emergency Medical Transportation (NEMT). None felt this was a barrier to access for beneficiaries, and health plan administrators felt that this population did not have significant difficulties in accessing transportation or that they were willing to provide this as a service to their members without being reimbursed due to its relatively low cost.

Progress in Identifying Outcomes

There is a major emphasis at the federal and state level in identifying health status and access outcomes for the 1115 population. This has been difficult to do, since health plans provide HEDIS® reporting data, but this only includes managed care beneficiaries, and there is a desire to have the same information for the fee-for-service beneficiaries. Also, using the HEDIS® criteria has resulted in numbers that are too small to make comparisons or conclusions about health status, and there has only been one year of data collected.

There is a keen understanding of the need to examine functional outcomes, such as school and work attendance among those who are enrolled in the 1115 Waiver. Future evaluation efforts should continue to refine data sources and focus on identifying health status, access, and functional outcomes for the 1115, managed care and fee-for-service, and non-Medicaid members. As cumulative data become available over time, benchmarks can be identified for performance-based contracting and program improvement. As one policy maker stated "Now that we have expanded coverage, have we improved health care?".

Cost Concerns

Two cost issues were identified by interviewees that were not mentioned last year. A possible unintended result of the 1115 Waiver is the loss of resources to the State of Missouri through Disproportionate Share (DSH) payments for indigent care. A Missouri Hospital Association

report estimates that in fiscal year 2000 the state's Disproportionate Share payments were reduced by approximately $60 million dollars because of the 1115 Waiver. The Balanced Budget Act of 1997 (BBA) placed caps on DSP payments to states and the 1115 Waiver further reduces this cap for Missouri. Another issue raised by the Governor's staff concerns rising pharmacy costs. With Missouri's success in enrolling both uninsured children and adults, how will the state be able to pay for and control the potential pharmacy costs?

Summary

There is overall recognition of the success of Missouri in enrolling previously uninsured children and adults in the 1115 Waiver program. Likewise, interviewees perceive that the state is continuing to improve its care system through addressing provider access issues and administrative effectiveness. Increasing provider rates in low access areas, such as dental services and home health care is one example. The implementation of Internet-based data systems for better communication to providers and improved invoicing and payment mechanisms holds promise for improving efficiency. Most interviewees felt that inclusion of adults in the Waiver was appropriate and helped to insure that children obtained medical insurance. There continues to be little evidence that crowd-out is a problem in Missouri. Frequently, the interviewees stated that Missouri needs to continue to focus on developing ways of measuring improvement in health care status and quality of life of children and families covered by the 1115 Waiver.

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Appendices

Appendix A: Background and Methods

Appendix B: Data Tables

Appendix A

Background and Methods

Tables A1-A4

Exhibits 1-4

Appendix B

Data Tables

Tables B1 – B29

Appendix C

Miscellaneous Comments from Beneficiary Telephone Survey