

# FOCUS

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## Recent Trends in Medicaid Health Status Indicators

Managed Care was introduced into the Missouri Medicaid population in the St. Louis area beginning September 1, 1995. It was later expanded into Central Missouri on March 1, 1996 and the Kansas City area on January 1, 1997. Since those times, the Missouri Department of Health and Senior Services (MDHSS), as part of a cooperative agreement with the Department of Social Services (DSS), has been tracking a series of health indicators, primarily maternal and child health related, to determine what effect managed care may have had on the health status of the Missouri Medicaid population. The state also tracks the same indicators for the non-Medicaid population for comparison purposes. Currently, about 60 percent of Missouri Medicaid births

occur in managed care supported regions. The remaining areas of the state still operate as fee-for-service areas. On September 1, 1998, the state initiated the Child Health Insurance Program (CHIP) to serve children under age 19 that were previously uninsured, and had a family income less than 300 percent of poverty. CHIP operates as both a managed care and a fee-for service program depending on which area of the state the participant resides. MDHSS has also been tracking four key indicators for the CHIP population since 1999 and providing comparisons with the entire Medicaid and the non-Medicaid populations for comparison.

**Table 1**  
**Trends in Missouri Medicaid Quality Indicators**  
**Medicaid vs. Non-Medicaid : Missouri Births 1994-2004**

|                                   | <i>Percents</i> |        |        |        |        |        | <i>Percent Change</i> |
|-----------------------------------|-----------------|--------|--------|--------|--------|--------|-----------------------|
|                                   | 1994            | 1996   | 1998   | 2000   | 2002   | 2004   | 1994-2004             |
| <b>MEDICAID</b>                   |                 |        |        |        |        |        |                       |
| Prenatal Care Began 1st trimester | 71.9            | 75.8   | 76.2   | 79.7   | 80.1   | 81.7   | 13.6                  |
| Inadequate prenatal care          | 23.9            | 20.2   | 18.8   | 17.2   | 17.8   | 15.6   | -34.7                 |
| Smoking during pregnancy          | 32.3            | 31.8   | 32.0   | 31.7   | 31.3   | 30.3   | -6.2                  |
| Spacing <18 mos since last birth  | 18.2            | 15.0   | 15.5   | 15.6   | 15.2   | 15.2   | -16.5                 |
| Repeat teen births                | 6.7             | 6.2    | 6.1    | 5.6    | 4.9    | 4.1    | -38.8                 |
| Percent of prenatals on WIC       | 79.8            | 82.5   | 81.5   | 78.1   | 79.0   | 78.6   | -1.5                  |
| Proportion on Managed Care(MC+)   | 0.0             | 36.1   | 59.8   | 58.5   | 59.3   | 59.6   |                       |
| Number of live births             | 29,683          | 29,423 | 28,847 | 30,029 | 31,891 | 35,424 |                       |
| <b>Non-MEDICAID</b>               |                 |        |        |        |        |        |                       |
| Prenatal Care Began 1st trimester | 92.0            | 92.0   | 92.4   | 93.0   | 93.4   | 93.6   | 1.7                   |
| Inadequate prenatal care          | 6.5             | 6.7    | 6.1    | 5.9    | 5.6    | 5.6    | -13.8                 |
| Smoking during pregnancy          | 12.6            | 11.4   | 10.9   | 9.6    | 8.4    | 7.9    | -37.3                 |
| Spacing <18 mos since last birth  | 7.9             | 7.9    | 7.5    | 7.8    | 7.5    | 7.9    | 0.0                   |
| Repeat teen births                | 0.7             | 0.7    | 0.8    | 0.6    | 0.5    | 0.5    | -28.6                 |
| Percent of prenatals on WIC       | 11.1            | 12.9   | 14.2   | 13.3   | 12.4   | 11.7   | 5.4                   |
| Number of live births             | 43,596          | 44,310 | 46,395 | 46,300 | 43,276 | 42,285 |                       |

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Managed care was designed to reduce spiraling health care costs through the use of a primary care provider who serves as a gatekeeper for enrollees' access to specialty and inpatient care. In addition, provisions were also implemented regarding access and quality of care standards to protect the managed care enrollees. Although concerns were raised that these cost-control efforts may jeopardize the health of the poor, others argued that these programs may improve access to, and continuity of care by locking in beneficiaries to one identified primary care provider who retains responsibility for assuring continuous, comprehensive care.

Table 1 shows six maternal and child indicators that MDHSS has been tracking, as recommended by the statewide MC+ Quality Assessment and Improvement Advisory Group. From 1994 (baseline) until 2004, five of the six indicators have shown improvement for Medicaid births. The one exception, percent of prenatal mothers on WIC, has hovered around 80 percent throughout the ten year period studied. Mothers starting prenatal care in the first trimester increased by 13.6 percent from 1994 to 2004 while those with an inadequate level of prenatal care decreased by nearly 35 percent. Inadequate prenatal care is defined as care beginning after the first four months of pregnancy with fewer than five visits for pregnancies less than 37 weeks

of gestation and fewer than eight visits for pregnancies of 37 weeks or more gestation.

Two indicators related to family planning, short birth spacing and repeat teen births, both showed dramatic decreases of 16.5 and 38.8 percent, respectively, in the ten years since managed care was introduced. Smoking during pregnancy shows a more modest decrease of 6.2 percent.

Non-Medicaid trends were in the same general direction as the Medicaid trends. Level of prenatal care improvement was not as strong as for the Medicaid population. Family planning indicators also did not decrease as much as for Medicaid births. On the other hand, smoking during pregnancy rates decreased more for the non-Medicaid population than the Medicaid population. Primarily because of the relatively low socio-economic level of the Medicaid population, the indicators are generally much worse for the Medicaid population. For example, the rates of inadequate prenatal care and smoking during pregnancy are three to four times higher for Medicaid births than for non-Medicaid births. Using 2004 births, the inadequate prenatal care rate and the smoking rate were each about five times higher for mothers with less than a high school education compared with those with some college. After adjustment for mother's education level,

**Table 2**  
**Trends in Missouri Medicaid Quality Indicators**  
**Managed Care vs. Fee-for Service Regions: Missouri Medicaid Births 1994-2004**

|  | <i>Percents</i> |             |             |             |             |             | <i>Percent Change<br/>1994-2004</i> |
|--|-----------------|-------------|-------------|-------------|-------------|-------------|-------------------------------------|
|  | <i>1994</i>     | <i>1996</i> | <i>1998</i> | <i>2000</i> | <i>2002</i> | <i>2004</i> |                                     |
| <b><i>Managed Care Regions</i></b>     |                 |             |             |             |             |             |                                     |
| Prenatal Care Began 1st trimester      | 70.2            | 73.0        | 74.9        | 78.8        | 78.8        | 80.7        | 15.0                                |
| Inadequate prenatal care               | 25.8            | 22.6        | 20.7        | 18.7        | 18.8        | 16.9        | -34.5                               |
| Smoking during pregnancy               | 30.6            | 29.6        | 29.5        | 28.6        | 27.7        | 27.7        | -9.5                                |
| Spacing <18 mos since last birth       | 18.4            | 14.8        | 15.5        | 15.4        | 14.5        | 14.8        | -19.6                               |
| Repeat teen births                     | 7.2             | 6.4         | 6.2         | 5.8         | 4.8         | 4.1         | -43.1                               |
| Percent of prenatals on WIC            | 76.6            | 79.4        | 78.5        | 75.6        | 76.1        | 76.2        | -0.5                                |
| Number of live births                  | 18,481          | 17,689      | 17,022      | 17,559      | 18,908      | 21,123      |                                     |
| <b><i>Fee-for- Service Regions</i></b> |                 |             |             |             |             |             |                                     |
| Prenatal Care Began 1st trimester      | 74.7            | 79.9        | 77.8        | 81.0        | 82.0        | 83.1        | 11.2                                |
| Inadequate prenatal care               | 20.5            | 16.7        | 16.4        | 15.4        | 16.4        | 13.9        | -32.2                               |
| Smoking during pregnancy               | 35.2            | 34.9        | 35.6        | 36.0        | 36.6        | 34.1        | -3.1                                |
| Spacing <18 mos since last birth       | 18.1            | 15.5        | 15.3        | 15.7        | 16.0        | 15.9        | -12.2                               |
| Repeat teen births                     | 6.1             | 5.9         | 5.9         | 5.3         | 5.0         | 4.1         | -32.8                               |
| Percent of prenatals on WIC            | 84.7            | 86.8        | 85.4        | 81.5        | 82.9        | 82.0        | -3.2                                |
| Number of live births                  | 11,202          | 11,734      | 11,825      | 12,470      | 12,983      | 14,301      |                                     |

the 3 to 1 ratio of Medicaid to non-Medicaid inadequate prenatal care and 4 to 1 ratio of Medicaid to non-Medicaid smoking were each reduced by approximately one-half.

Table 2 divides the Medicaid trends into managed care and fee-for-service regions to help determine which system might be more beneficial. The populations of the two regions are quite different, making comparisons of the rates difficult, although the trends should be comparable. The managed care regions are more urban with a higher proportion of African-Americans.

population actually include some 18 year olds, but this should not have any major effect on the rates.) The CHIP population doubled from 1999 to 2004 while the total Medicaid population under 18 increased by more than one-third, resulting in a decrease in the non-Medicaid population for this age group. For all four indicators, the rates for the Medicaid population were highest, followed by the CHIP population, and then the non-Medicaid population. This reflects the socio-economic level of the populations, with the total Medicaid population being the lowest, followed by CHIP and then non-Medicaid.

**Table 3**

**Child Health Insurance Program (CHIP) Rates per 1,000 Population Compared with Any Medicaid and Non-Medicaid Rates for Selected Indicators: Missouri 1999-2004**

|                                  |              | 1999      | 2000    | 2001    | 2002    | 2003    | 2004    | Percent Change<br>1999-2004 |
|----------------------------------|--------------|-----------|---------|---------|---------|---------|---------|-----------------------------|
| Asthma hospitalizations <18      | CHIP         | 2.2       | 2.8     | 2.1     | 1.9     | 2.1     | 1.8     | -18.2%                      |
|                                  | Any Medicaid | 4.7       | 4.6     | 3.6     | 3.9     | 3.7     | 3.4     | -27.7%                      |
|                                  | Non-Medicaid | 1.1       | 1.1     | 0.9     | 1.0     | 0.9     | 1.0     | -9.1%                       |
| Asthma emergency room visits <18 | CHIP         | 13.4      | 13.3    | 11.4    | 13.3    | 12.3    | 10.1    | -24.6%                      |
|                                  | Any Medicaid | 23.3      | 21.7    | 18.5    | 19.9    | 18.0    | 16.0    | -31.3%                      |
|                                  | Non-Medicaid | 6.0       | 5.5     | 5.2     | 5.4     | 5.1     | 5.3     | -11.7%                      |
| Emergency Visits <18             | CHIP         | 490.1     | 463.4   | 506.1   | 508.1   | 508.7   | 426.2   | -13.0%                      |
|                                  | Any Medicaid | 717.3     | 676.0   | 571.0   | 673.2   | 700.7   | 620.5   | -13.5%                      |
|                                  | Non-Medicaid | 287.1     | 257.9   | 265.0   | 264.7   | 245.1   | 260.4   | -9.3%                       |
| Preventable hospitalizations <18 | CHIP         | 7.8       | 9.7     | 9.4     | 8.9     | 8.0     | 7.7     | -1.3%                       |
|                                  | Any Medicaid | 12.9      | 16.3    | 16.1    | 15.2    | 14.2    | 14.0    | 8.5%                        |
|                                  | Non-Medicaid | 4.1       | 5.4     | 5.8     | 5.9     | 5.5     | 5.8     | 41.5%                       |
| Population <18                   | CHIP         | 43,144    | 58,711  | 70,742  | 74,377  | 83,374  | 87,403  | 102.6%                      |
|                                  | Any Medicaid | 397,443   | 427,230 | 477,454 | 506,849 | 535,284 | 542,302 | 36.4%                       |
|                                  | Non-Medicaid | 1,002,000 | 973,000 | 929,867 | 890,612 | 872,058 | 842,240 | -15.9%                      |

Note: CHIP rates include 18 year olds in numerator and denominator. Any Medicaid includes CHIP population under age 18.

Generally the trends were nearly the same in both regions. For example, the rate of inadequate prenatal care decreased by 34.5 percent from 1994 to 2004 in the managed care regions and 32.2 percent in the fee-for-service regions. Improvements were slightly better in the managed care regions, but only the larger decrease for smoking during pregnancy was statistically significantly greater than in the fee-for-service regions.

Table 3 provides a comparison of four hospitalization and emergency room visit indicators for children under age 18 for the CHIP, all Medicaid (including CHIP) and non-Medicaid populations for the years 1999-2004. (These indicators for the CHIP

Downward trends are shown for the two asthma indicators with the largest decreases occurring in the Medicaid population. Total emergency room rates under age 18 decreased for both Medicaid and non-Medicaid populations, with the larger decrease also occurring among non-Medicaid children. Preventable hospitalization rates under age 18 increased for all three populations, although they peaked in 2000 and have actually generally decreased since 2000. Generally, the trends in the four indicators from 1999 to 2004 are in the same direction for each population, with the Medicaid population showing greater decreases or smaller increases than the non-Medicaid population.

(Focus continued)

Member satisfaction was compared between Medicaid and commercial managed care plans in Table 4 from results of the Consumer Assessment of Health Providers and Services (CAHPS) for 2002 to 2005. The results should be interpreted with caution since only about 40 percent of commercial members and 30 percent of Medicaid members responded to these surveys. However, Medicaid members were consistently more satisfied with their plans than commercial members by 12 to 18 percent overall, as close to 80 percent of Medicaid managed care members were satisfied with their plans each year. For specific categories of satisfaction such as getting care quickly, customer service, rating of doctor and health care, the

differences between commercial and Medicaid satisfaction rates was much less.

In summary, the key maternal and child health indicators are generally improving and are following the same patterns for Medicaid and non-Medicaid populations and within Medicaid, for managed care and fee-for service populations. Customer satisfaction among managed care members is slightly higher for Medicaid members than for commercial members. The Missouri Department of Health and Senior Services, in cooperation with DSS, will continue to monitor trends in these key indicators to help determine if quality health care continues in the Medicaid population.

**Table 4**  
**Member Satisfaction--Medicaid vs. Commercial Managed Care Plans: Missouri 2002-2005**

| <u>Survey Item</u>               | <u>Plan Type</u> | <u>Percent Satisfied</u> |             |             |             |
|----------------------------------|------------------|--------------------------|-------------|-------------|-------------|
|                                  |                  | <u>2002</u>              | <u>2003</u> | <u>2004</u> | <u>2005</u> |
| Getting Needed Care              | Medicaid         | 84                       | 75          | 80          | 80          |
|                                  | Commercial       | 79                       | 80          | 81          | 82          |
| Getting Care Quickly             | Medicaid         | 84                       | 80          | 80          | 80          |
|                                  | Commercial       | 80                       | 78          | 80          | 80          |
| Courteous & Helpful Office Staff | Medicaid         | NA                       | 91          | 91          | 92          |
|                                  | Commercial       | 91                       | 92          | 93          | 94          |
| How Well Doctors Communicate     | Medicaid         | NA                       | 88          | 90          | 91          |
|                                  | Commercial       | 91                       | 91          | 92          | 92          |
| Customer Service                 | Medicaid         | 76                       | 75          | 73          | 73          |
|                                  | Commercial       | 65                       | 69          | 71          | 71          |
| Rating of Doctor                 | Medicaid         | NA                       | 81          | 80          | 81          |
|                                  | Commercial       | NA                       | 75          | 76          | 78          |
| Rating of Specialist             | Medicaid         | NA                       | 73          | 78          | 74          |
|                                  | Commercial       | NA                       | 77          | 80          | 79          |
| Rating of Health Care            | Medicaid         | NA                       | NA          | 80          | 80          |
|                                  | Commercial       | 73                       | 75          | 77          | 80          |
| Rating of Plan                   | Medicaid         | 79                       | 78          | 78          | 78          |
|                                  | Commercial       | 61                       | 61          | 61          | 66          |

Source: Consumer Assessment of Health Care Providers and Services (CAHPS)