

Missouri Medicaid Chart Book

The Missouri Medicaid Program:
A Graphical Profile

Medicaid Work Group, University
of Missouri--Columbia

August 2005



Acknowledgments

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For additional information about this report see: www.oseda.missouri.edu/medicaid or call OSEDA at 573-882-7396

The **Office of Social and Economic Data Analysis** is a unit of University Extension

The **Center for Health Policy** is a unit of the School of Health Professions and the School of Medicine

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The **Community Policy Analysis Center** is an Extension & Research unit of the College of Agriculture Food and Natural Resources

The **Institute of Public Policy** is a center of The Truman School of Public Affairs

Introduction

This report provides a graphical summary of the Missouri Medicaid program. It is intended to provide background information of the policy issues being considered by the Missouri Medicaid Reform Commission.

Medicaid at the national level is summarized first, and then the report describes Missouri Medicaid. The types of health care services, expenditure levels, and categories of participants are presented. Health care service types are summarized with a focus on overall expenditure levels. Participants are summarized into general enrollment groups: Children, Adults, Blind and Disabled, Elderly, and Other. The interrelationships among services, expenditures, and participants are explored using current data and historical trends. County level maps display these patterns for the state. Estimates of the effect of recent changes to the Missouri Medicaid Program are provided.

The report uses the most current summary information available and many FY2005 charts are included. However, for some graphics, it was necessary to use older data to achieve a consistent frame of reference. Some Medicaid service types, particularly managed care, are confounded because they include portions of other specific services, such as physician services that also are reported independently. Substantial Medicaid claims data containing additional information about the characteristics of participants, services, and expenditures are being made available for summarization and analyses. We anticipate extending the description of the Missouri Medicaid program with future analyses of these more detailed data.

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Background

Mandatory¹ Medicaid Benefits

- Inpatient hospital (excluding inpatient hospital services for mental illness)
- Outpatient hospital including Federally Qualified Health Centers (FQHC), and if state law permits, Rural Health Clinics
- Physician
- Nurse Midwife
- Laboratory and x-ray
- Certified Pediatric and Family Nurse Practitioner, if state law permits
- Early and Periodic Screening, Diagnosis and Treatment (EPSDT) for individuals under age 21
- Family planning services and supplies
- Pregnancy-related services
- Postpartum pregnancy related services (60 days)
- Nursing facility services for those 21 and older
- Home health for those entitled to Medicaid Skilled Nursing Facility (SNF) services under state plan: intermittent or part-time nursing services by home health agency or registered nurse when there is no home health agency, home health aides, medical supplies and appliances for use in the home
- Medical supplies and surgical services of a dentist

Note: (1) Under the Social Security Act (Section 1905(a)), the above services are required to be provided by states. (2) Medicaid eligibility groups classified as “categorically needy” are entitled to the above services unless waived under Section 1115 of the Medicaid law. (3) When the “medically needy” are included in a state’s Medicaid plan, states must provide at least the following services: prenatal and delivery, postpartum pregnancy for persons under age 18 who are entitled to institutional and ambulatory services, home health for those entitled to nursing facility services, and specific services for persons in institutions for mental disease and or ICF/MR (if included as medically needy). (4) The service list above does not apply to the SCHIP program.

Modified from: Program Information on Medicaid & State Children’s Health Insurance Program, Centers for Medicare & Medicaid Services, Office of Research, Development, & Information, 2004 Edition.

**Certain
Medicaid
benefits are
required to
be provided
by states**

Number of States¹ Providing Optional² Medicaid Benefits

Optional Medicaid Benefit ¹	Number of States Providing Benefit ²	Optional Medicaid Benefit ¹	Number of States Providing Benefit ²
Intermediate Care Facility for people who are developmentally disabled (ICF/MR)	51	Inpatient hospital care for 65 and older in IMD	43
Optometrists	51	Nursing facility for those over 65 for Mental Disease (IMD)	43
Prescribed drugs	51	Speech, hearing and language disorder therapy	43
Prosthetic devices	51	Dentures	38
Home health physical therapy services	50	Occupational therapy	38
Nursing facility for those under age 21	50	Emergency hospital care in non-Medicare participating facilities	37
Physician-directed clinical services	50	Personal care	36
Targeted case management	50	Diagnostic services	35
Home health occupational therapy	49	Preventive services	35
Home health speech/language services	49	Chiropractors	32
Transportation	48	Psychologists	32
Dental services	47	Screening services	32
Eyeglasses	47	Private duty nursing	29
Podiatrists	47	Nurse anesthetists	28
Home health audiology services	45	Primary care	22
Hospice care	45	Critical Access Hospital	21
Inpatient psychiatric for under age 21	44	All inclusive care for the elderly (PACE) ³	18
Mental health rehabilitation / stabilization	44	Respiratory care for ventilator dependent	15
Physical therapy	44	Care at a religious, non-medical health care institution	13

Note: (1) The 50 states and the District of Columbia are included. (2) The above are optional services states have elected to include under state plans and managed care waivers as of November 2002. (3) Updated figure as of March 2003. (4) No SCHIP program services or additional non-plan services through waivers or managed care entities are included.

Modified from: Program Information on Medicaid & State Children's Health Insurance Program, Centers for Medicare & Medicaid Services, Office of Research, Development, & Information, 2004 Edition.

**Some states
provide
optional
Medicaid
benefits**

FY2004 Medicaid Federal Medical Assistance Percentage (FMAP) Rates

50.00%-----60.22%-----77.08%

Lowest FMAP Rate

Median FMAP Rate

Highest FMAP Rate

50%	51%-59%	61%-69%	70% and Greater
13 States	12 States	14 States	12 States
California Colorado Connecticut Delaware Illinois Maryland Massachusetts Minnesota New Hampshire New Jersey New York Virginia Washington	Alaska Florida Georgia Hawaii Michigan Nebraska Nevada Ohio Pennsylvania Rhode Island Wisconsin Wyoming	Arizona Indiana Iowa Kansas Maine Missouri (61%) North Carolina North Dakota Oregon South Carolina South Dakota Tennessee Texas Vermont	Alabama Arkansas Dist. Of Columbia Kentucky Idaho Louisiana Mississippi Montana New Mexico Oklahoma Utah West Virginia

The states and the Federal governments finance Medicaid, Missouri's Federal Medical Assistance Percentage rate was approximately the national median

Note: (1) Mississippi has the highest FMAP rate. (2) Under Section 1905(b) of the Social Security Act a State's Federal Medical Assistance Percentage (FMAP) is calculated based on a state's per capita income and cannot be less than 50 percent nor exceed 83%. All U.S. Territories (e.g., Puerto Rico, Virgin Islands, American Samoa, Guam, Northern Mariana Islands) have a 50 percent FMAP.

Modified from: Program Information on Medicaid & State Children's Health Insurance Program, Centers for Medicare & Medicaid Services, Office of Research, Development, & Information, 2004 Edition.

FY2004 SCHIP Enhanced¹ Federal Medical Assistance Percentage Rates

65.00%-----72.15%-----83.96%

Lowest FMAP Rate

Median FMAP Rate

Highest FMAP Rate

65%-70%	71%-75%	76%-80%	81% and Greater
19 States	16 States	11 States	5 States
Alaska California Colorado Connecticut Delaware Illinois Maryland Massachusetts Michigan Minnesota Nevada New Hampshire New Jersey New York Pennsylvania Rhode Island Virginia Washington Wisconsin	Florida Georgia Hawaii Indiana Iowa Kansas Missouri (73%) Nebraska North Carolina Ohio Oregon South Dakota Tennessee Texas Vermont Wyoming	Alabama Arizona Dist. Of Columbia Idaho Kentucky Louisiana Maine North Dakota Oklahoma South Carolina Utah	Arkansas Mississippi Montana New Mexico West Virginia

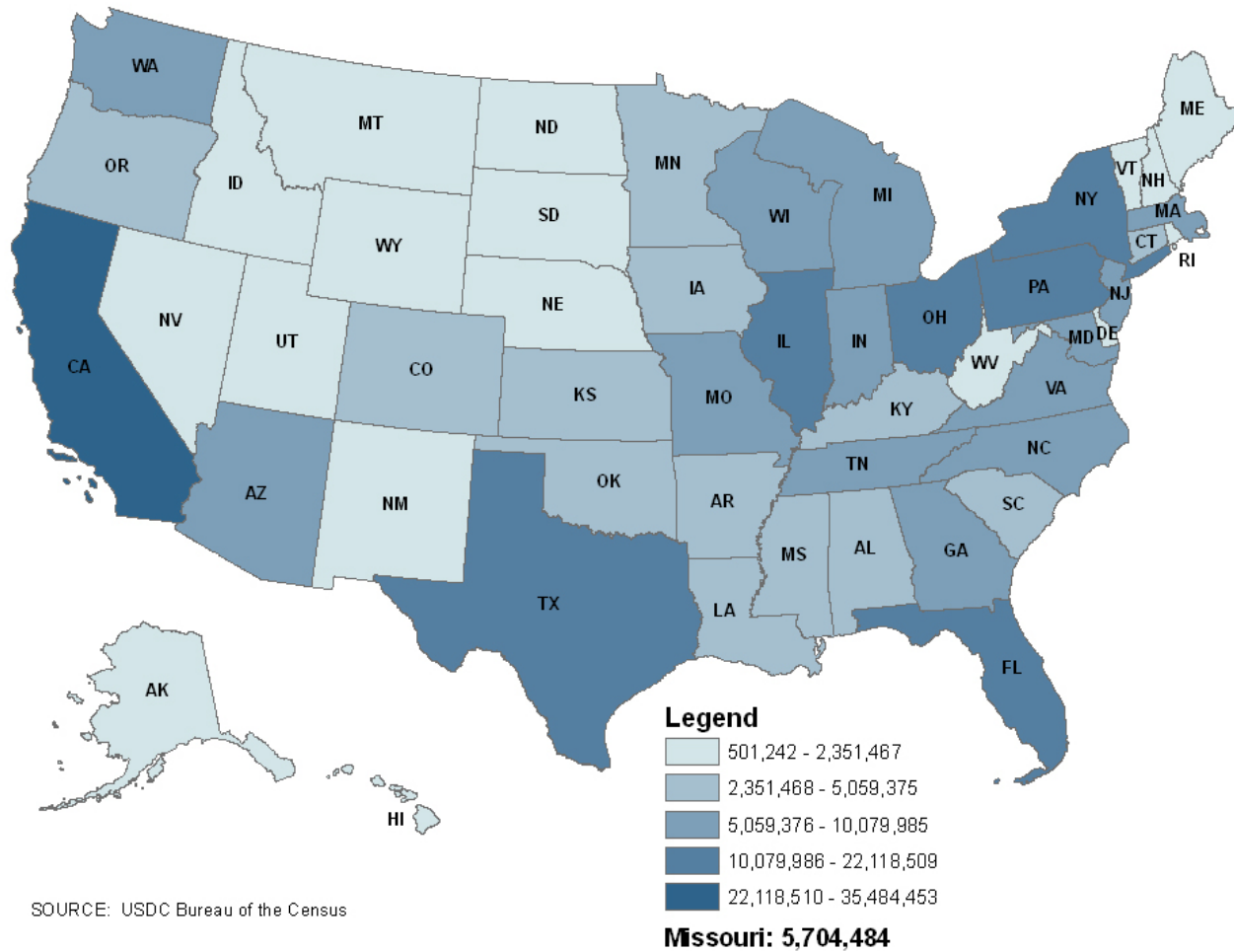
Missouri's Enhanced Federal Medical Assistance Percentage rate was approximately the same as the national median

Note: (1) Enhanced Federal Medicaid Assistance Percentage rates are for everyone covered through SCHIP such as parents of SCHIP and Medicaid children, pregnant women, and other adults through demonstration authority under Section 1115 of the Social Security Act. (2) Mississippi has the highest EFMAP rate. (3) All U.S. Territories (e.g., Puerto Rico, Virgin Islands, American Samoa, Guam, Northern Mariana Islands) have a 65 percent EFMAP.

Modified from: Program Information on Medicaid & State Children's Health Insurance Program, Centers for Medicare & Medicaid Services, Office of Research, Development, & Information, 2004 Edition.

National Maps

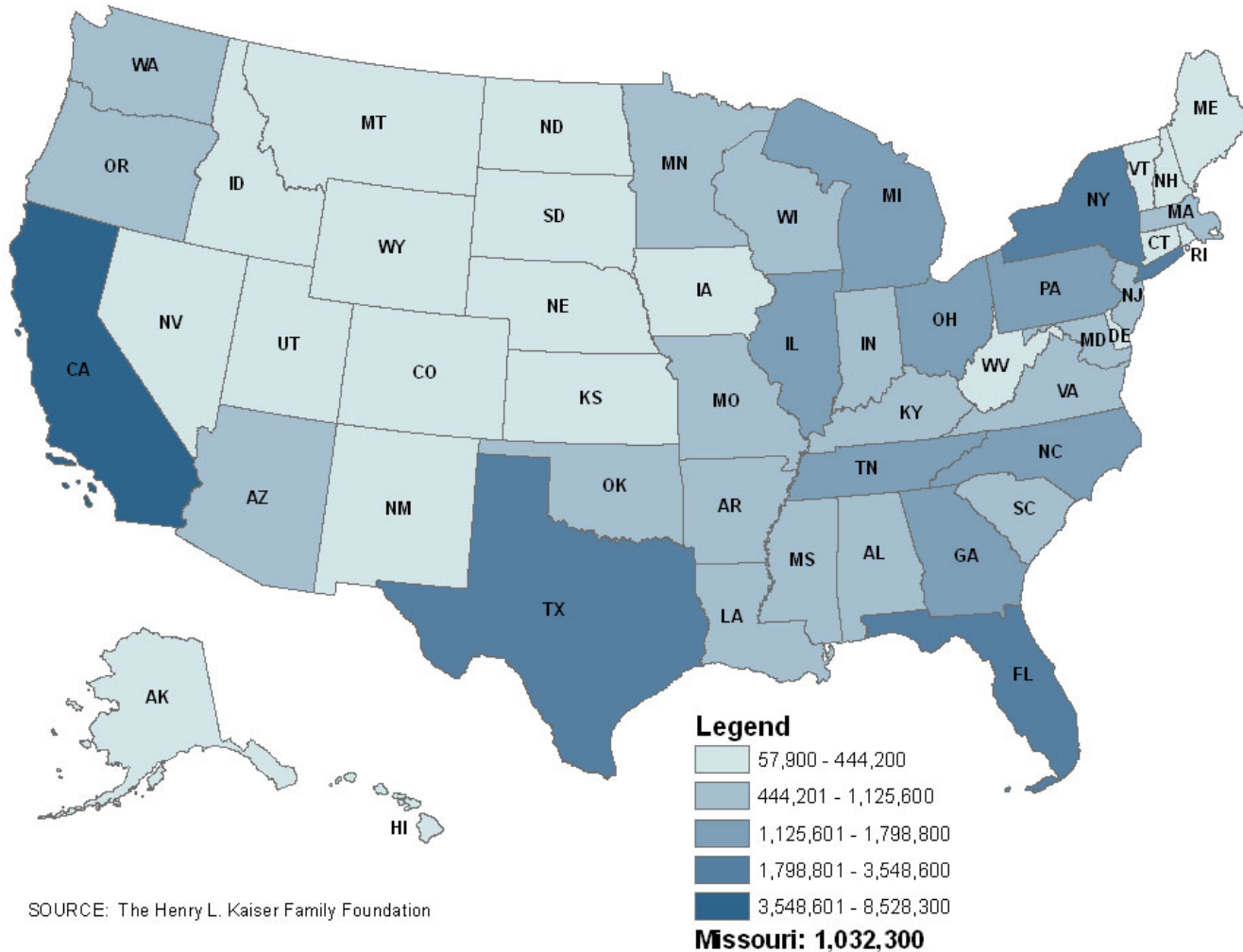
United States Population Estimates, 2003



SOURCE: USDC Bureau of the Census

States vary widely in population, ranging from about 500,000 to more than 35 million

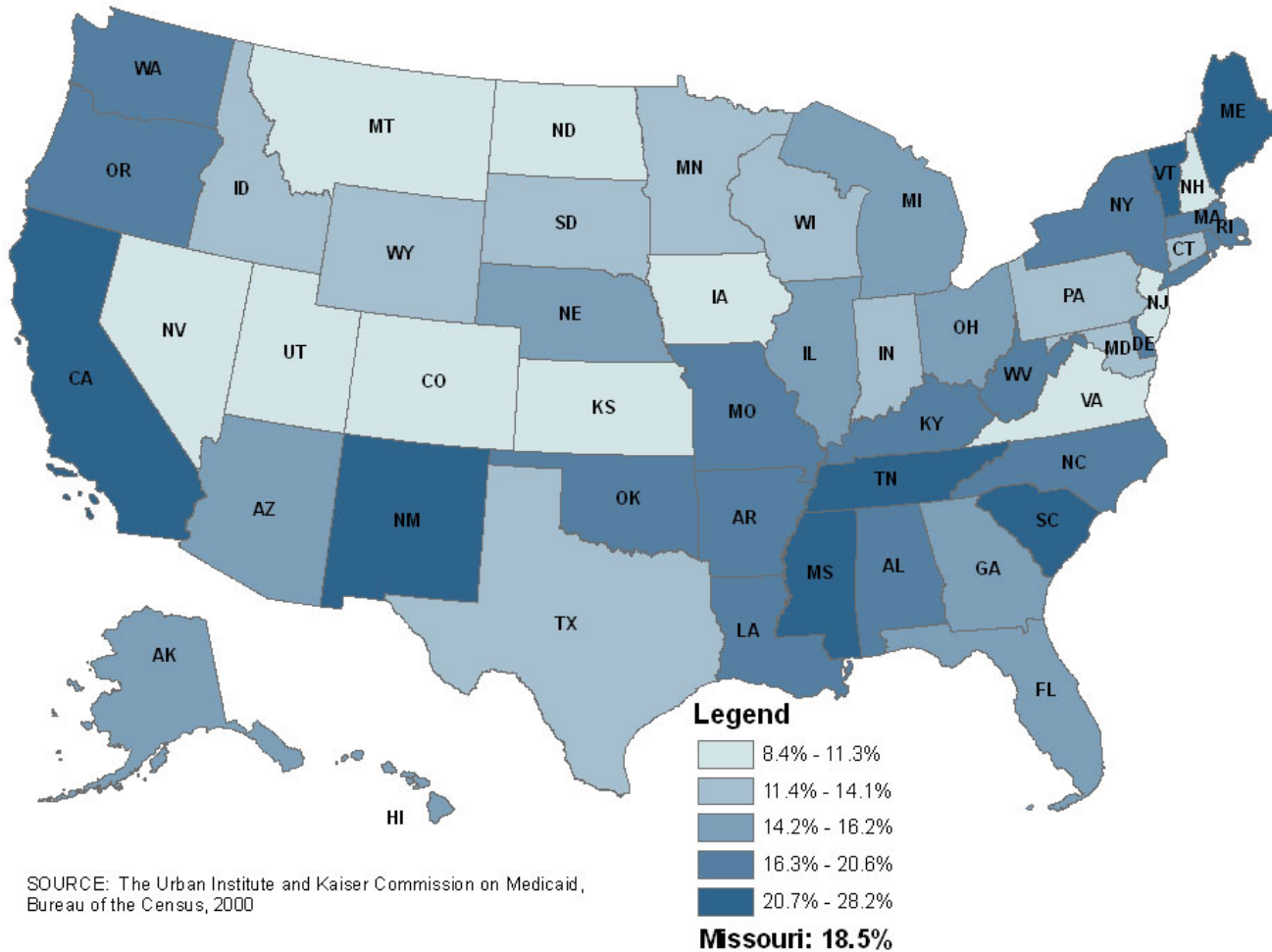
Total Medicaid Enrollment, FY2001



SOURCE: The Henry L. Kaiser Family Foundation

More than a million people were enrolled in Missouri Medicaid in 2001

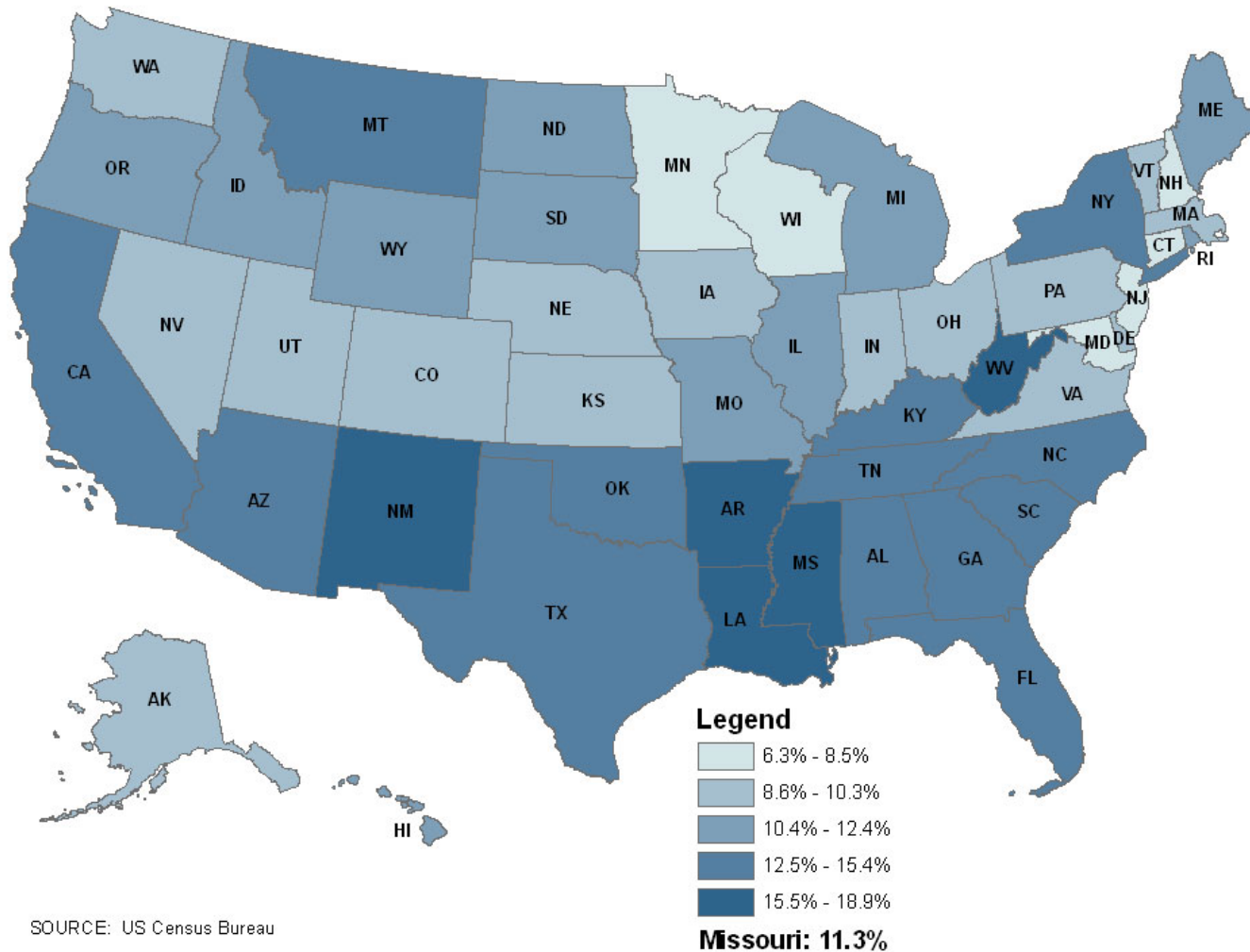
Percent of the Population Enrolled in Medicaid, 2001



SOURCE: The Urban Institute and Kaiser Commission on Medicaid, Bureau of the Census, 2000

Almost one-fifth of Missourians were enrolled in Medicaid in 2001

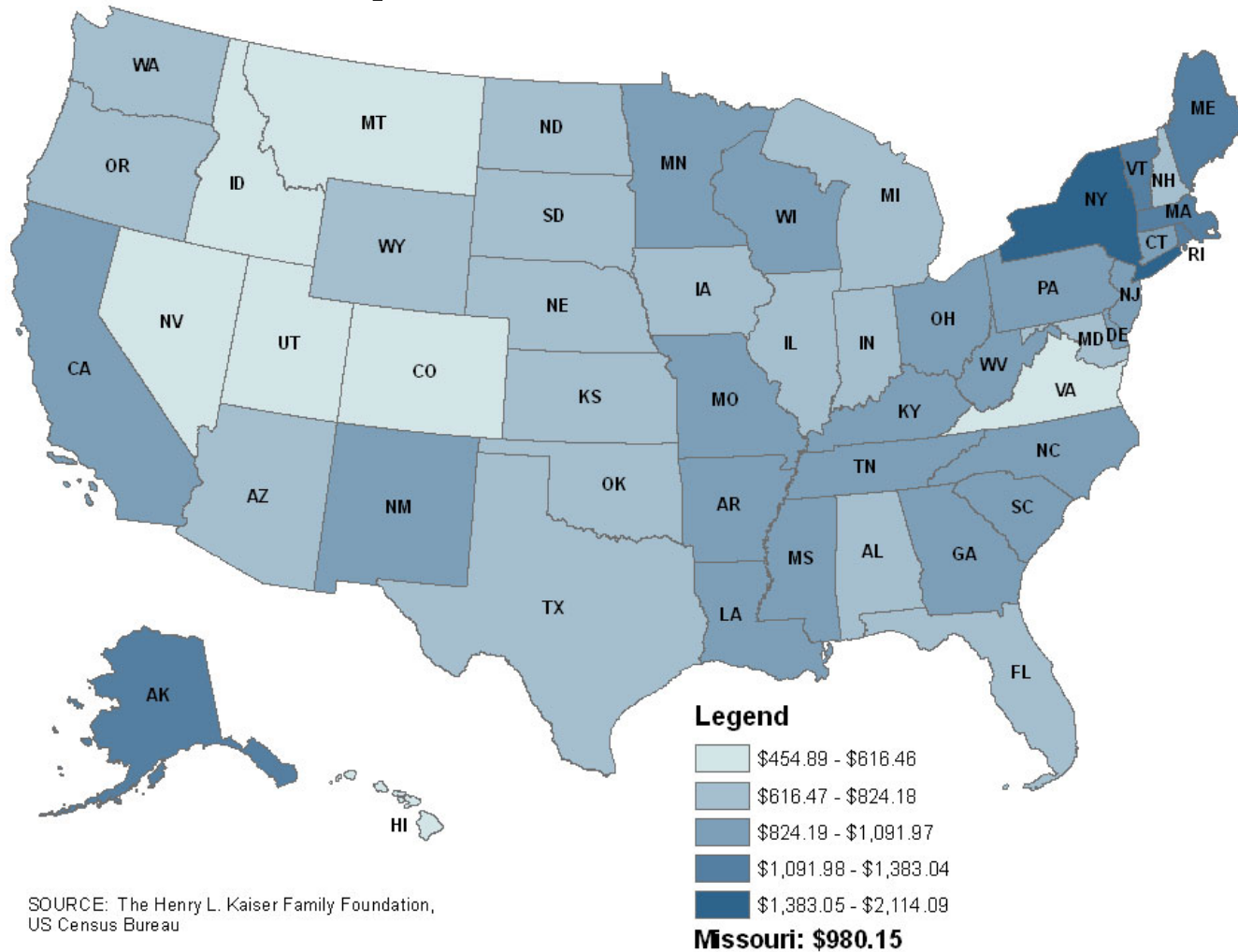
Percentage of Population in Poverty, 2002



SOURCE: US Census Bureau

Medicaid participation is related to poverty rates

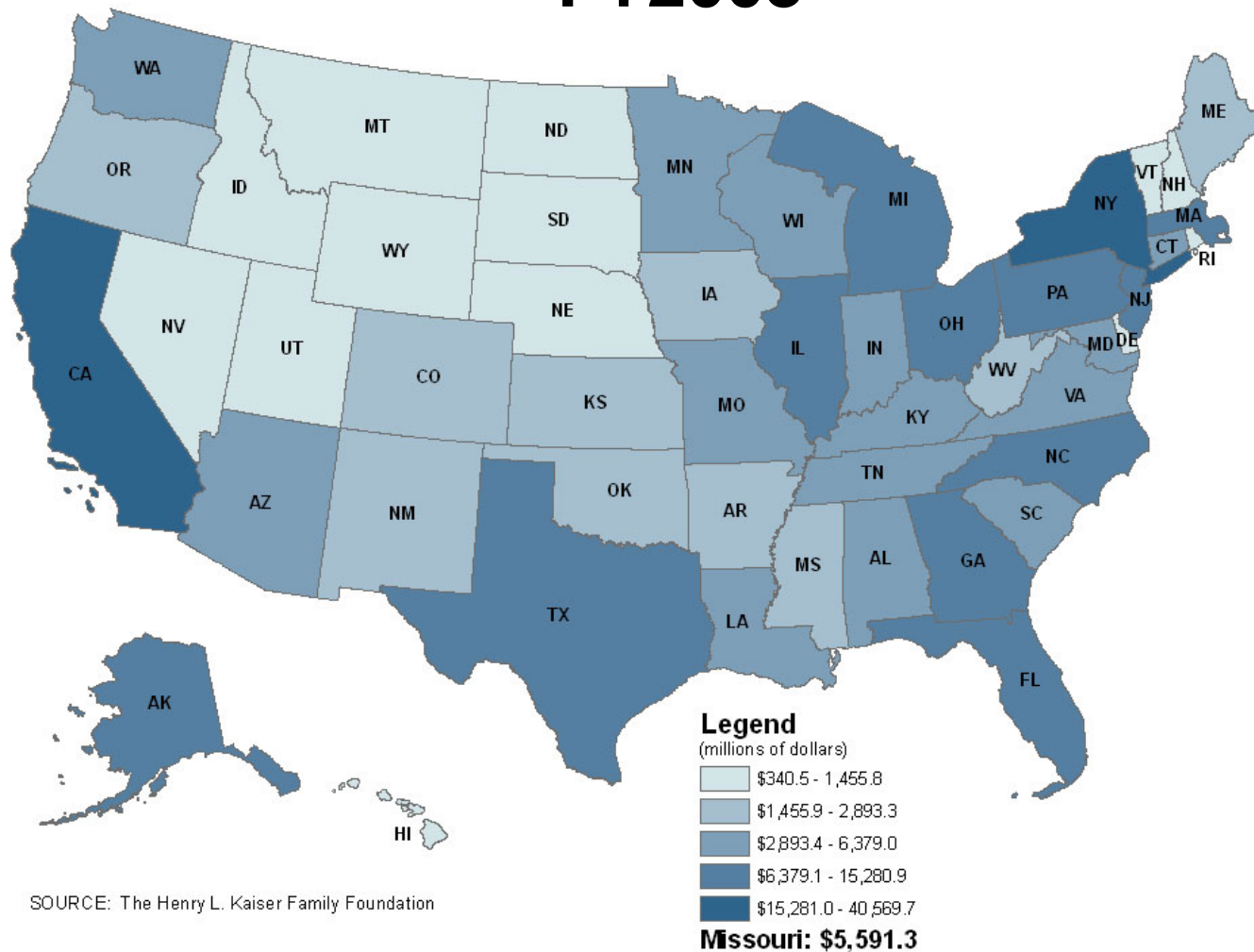
Per Capita Medicaid Expenditures, 2003



SOURCE: The Henry L. Kaiser Family Foundation, US Census Bureau

Missouri ranked 15th in per capita Medicaid expenditures, reflecting relative need, state benefits covered, and price

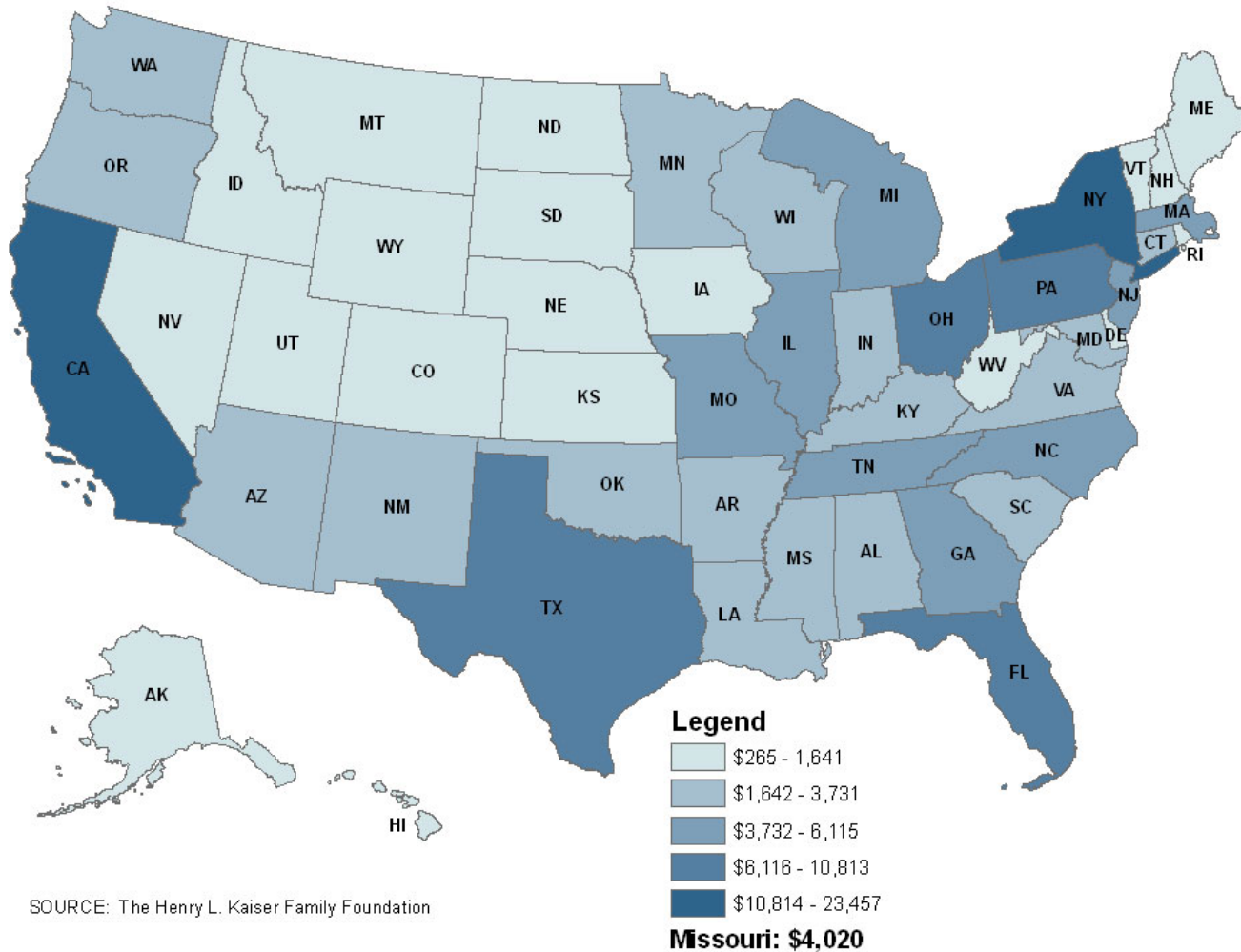
Total Medicaid Expenditures, FY2003



SOURCE: The Henry L. Kaiser Family Foundation

**Missouri
ranked 14th
in total
Medicaid
expenditures**

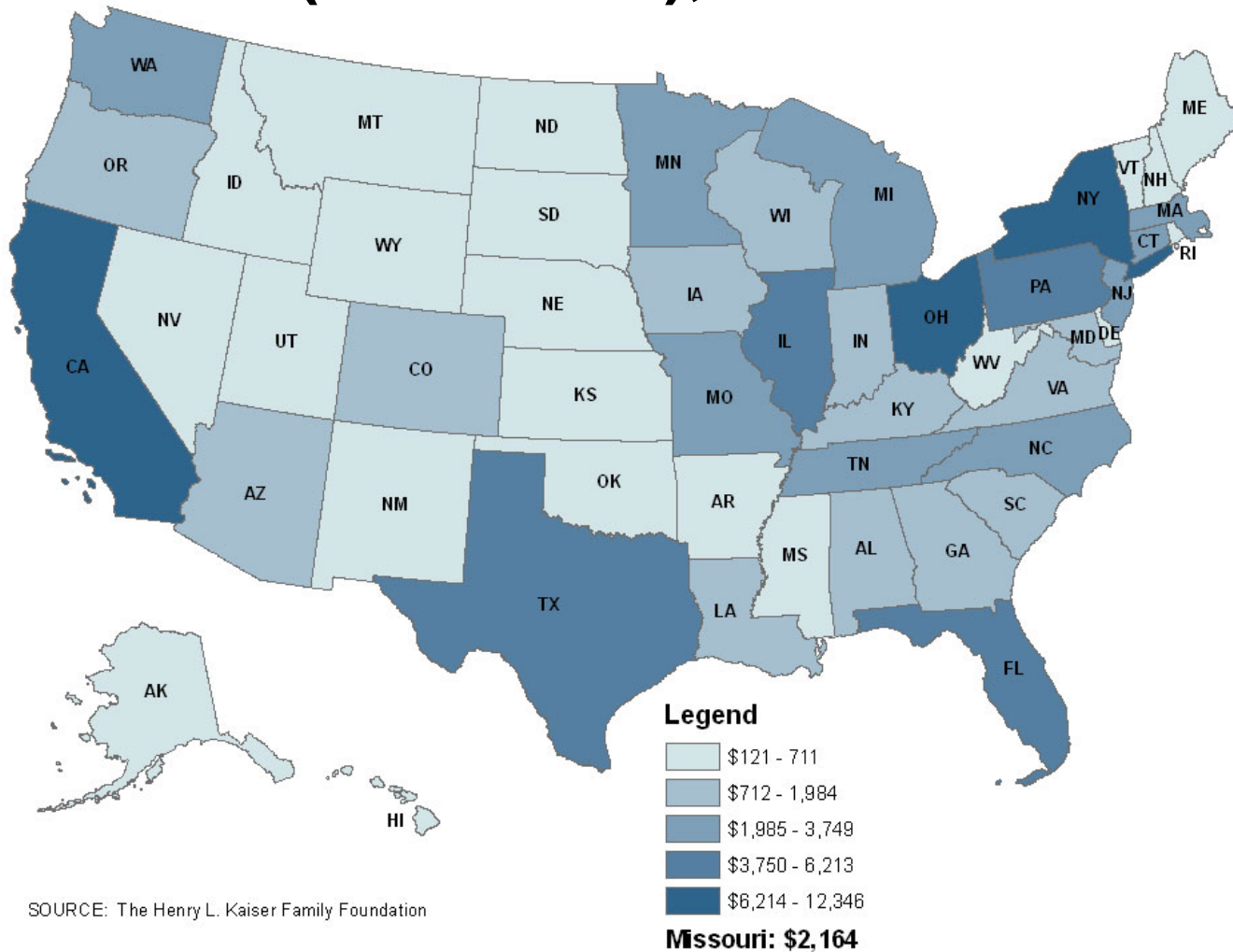
Federal Medicaid Expenditures (in millions), FY2004



SOURCE: The Henry L. Kaiser Family Foundation

Missouri ranked 14th in Federal contributions to Medicaid expenditures

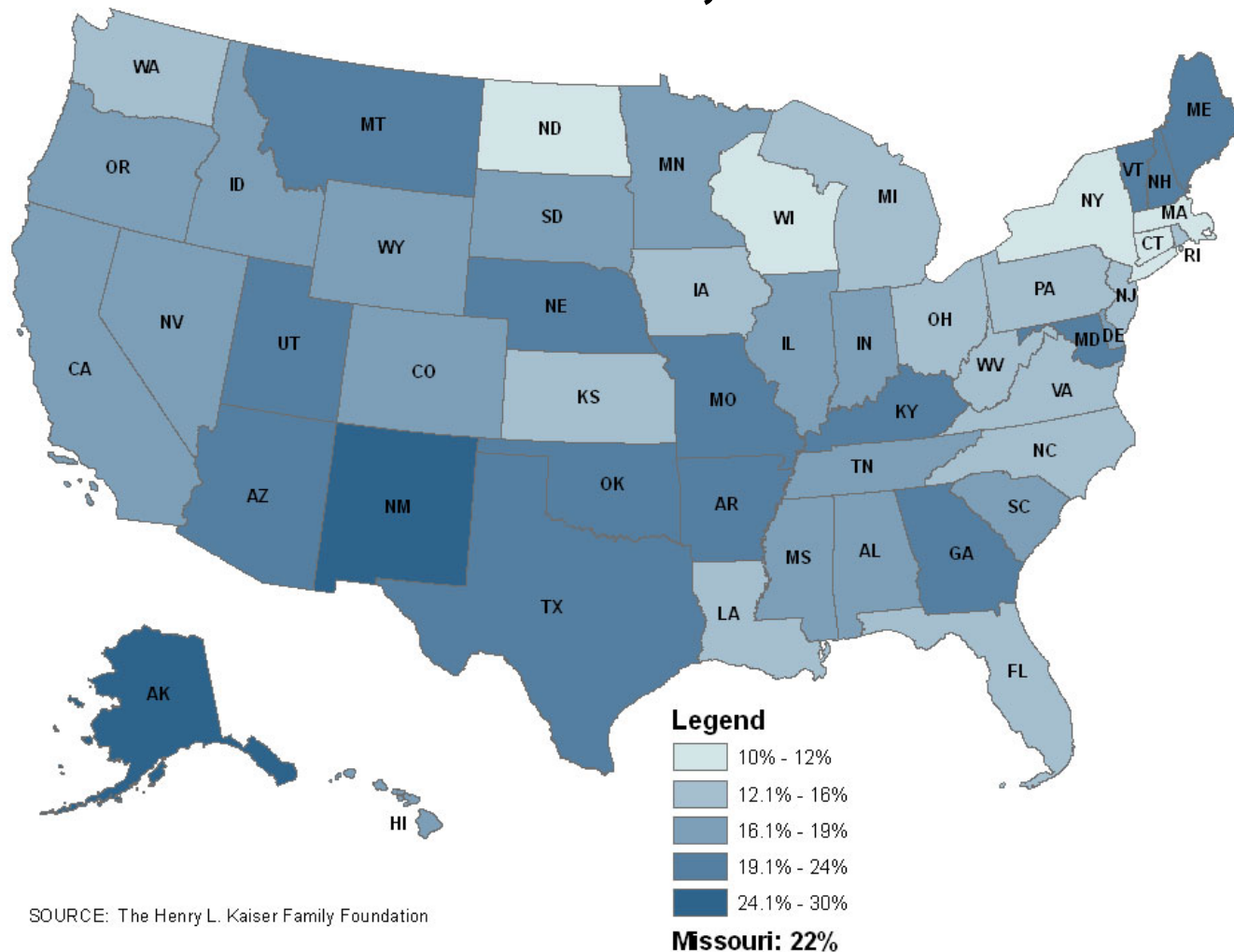
State Medicaid Expenditures (in millions), FY2003



SOURCE: The Henry L. Kaiser Family Foundation

Missouri ranked 16th in state contributions to Medicaid expenditures

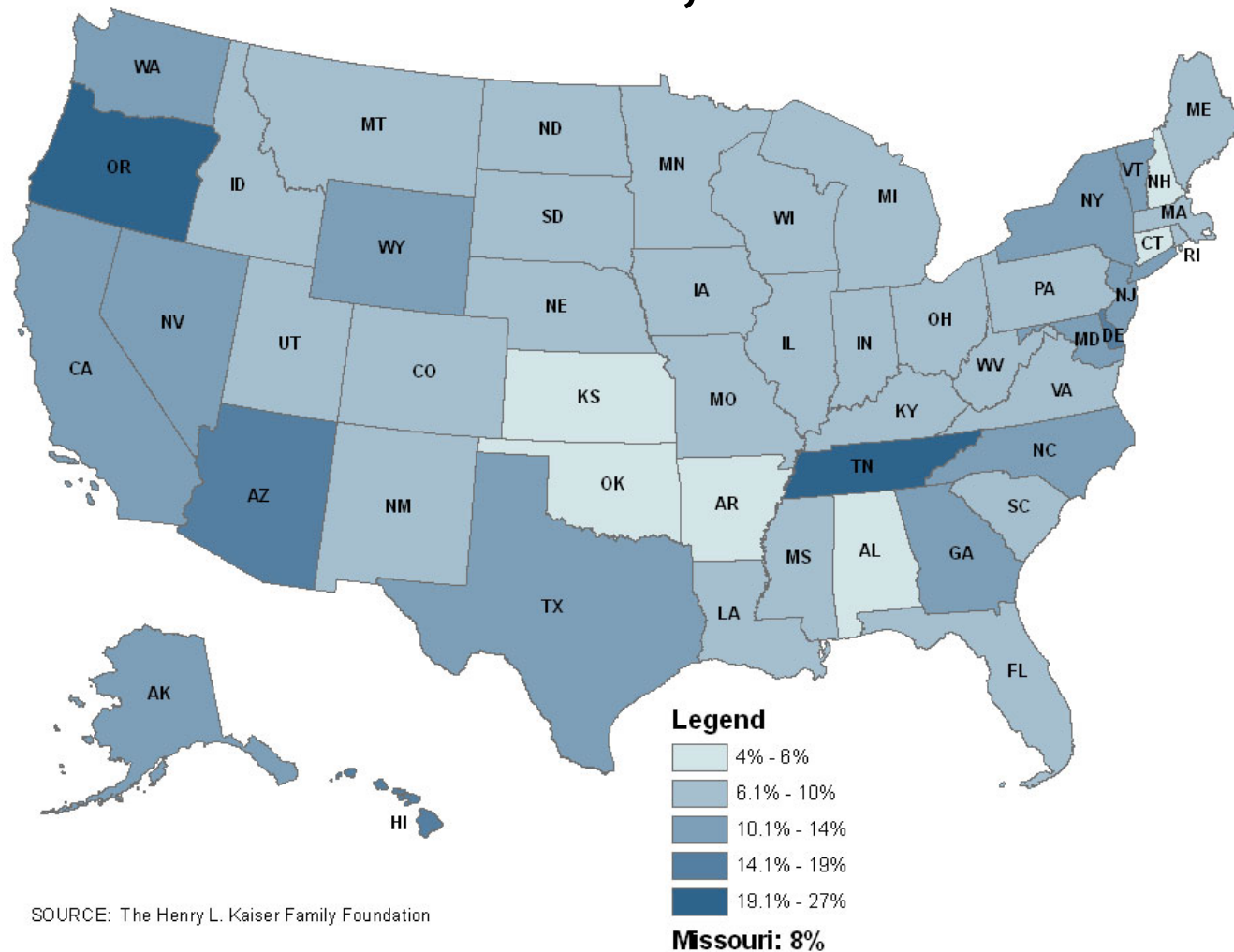
Distribution of Medicaid Payments for Children, FY2001



SOURCE: The Henry L. Kaiser Family Foundation

Missouri ranked 8th in Medicaid spending for children

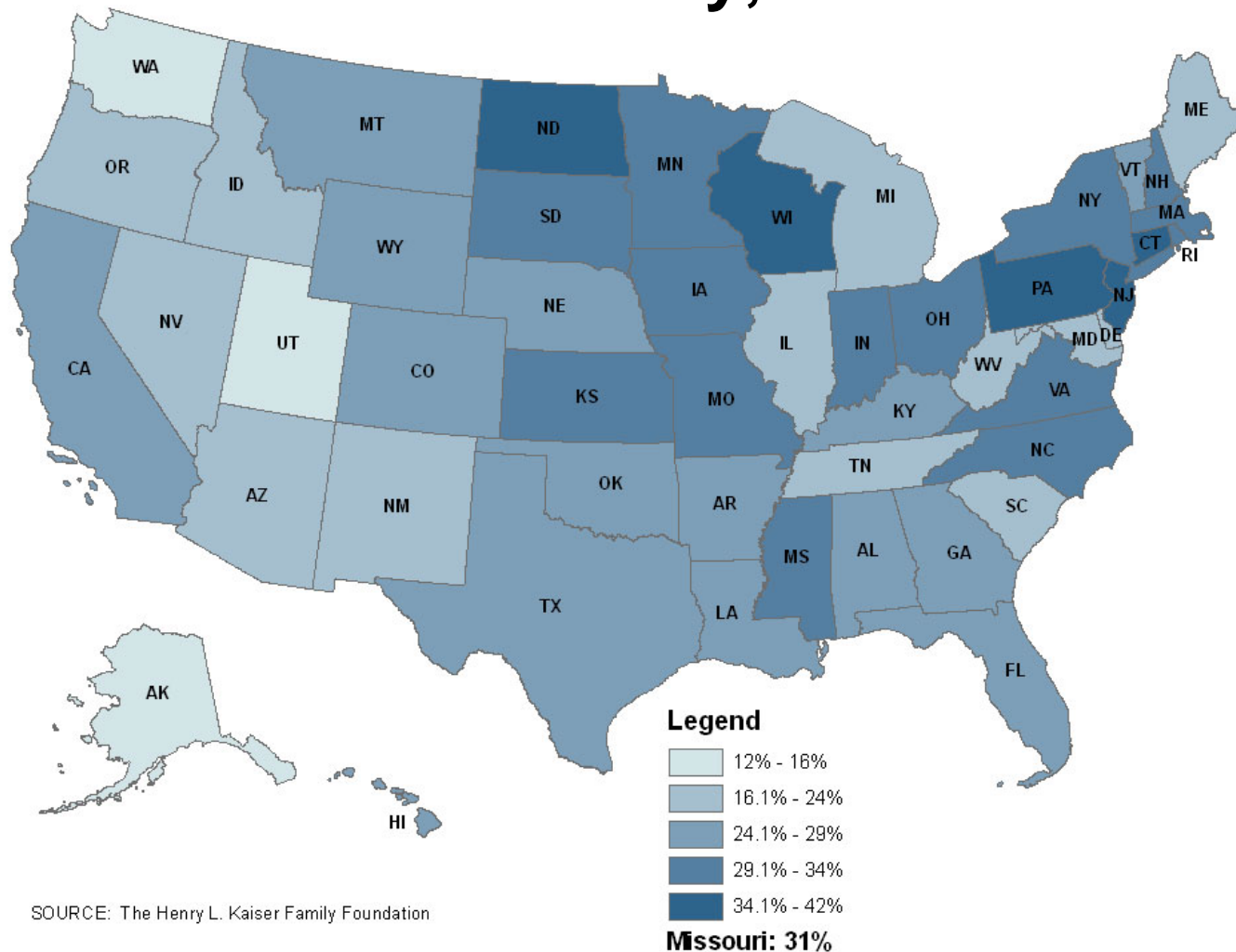
Distribution of Medicaid Payments for Adults, FY2001



SOURCE: The Henry L. Kaiser Family Foundation

Missouri ranked 32nd in Medicaid spending for adults

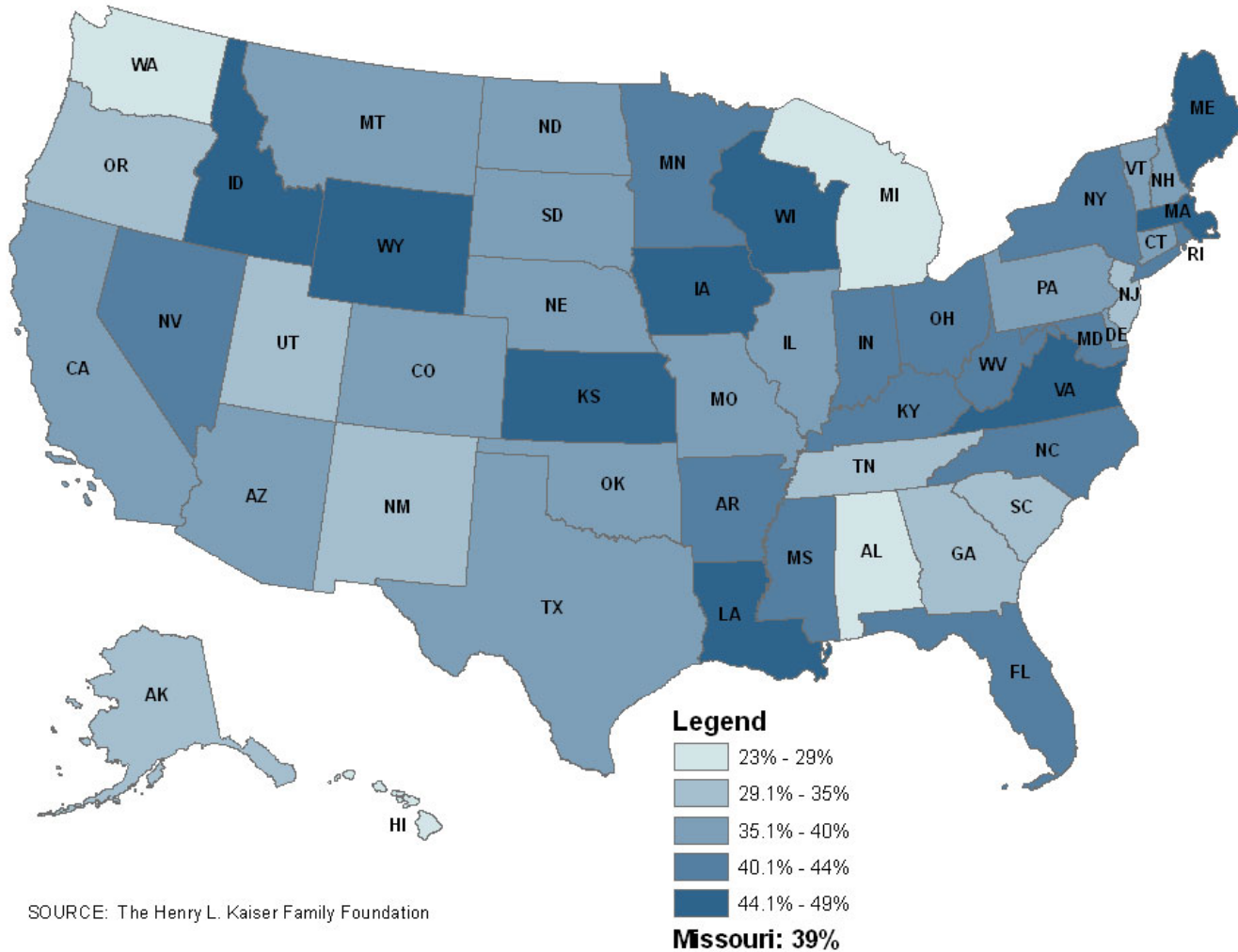
Distribution of Medicaid Payments for the Elderly, FY2001



SOURCE: The Henry L. Kaiser Family Foundation

Missouri ranked 16th in Medicaid spending for the elderly

Distribution of Medicaid Payments for the Blind/Disabled, FY2001

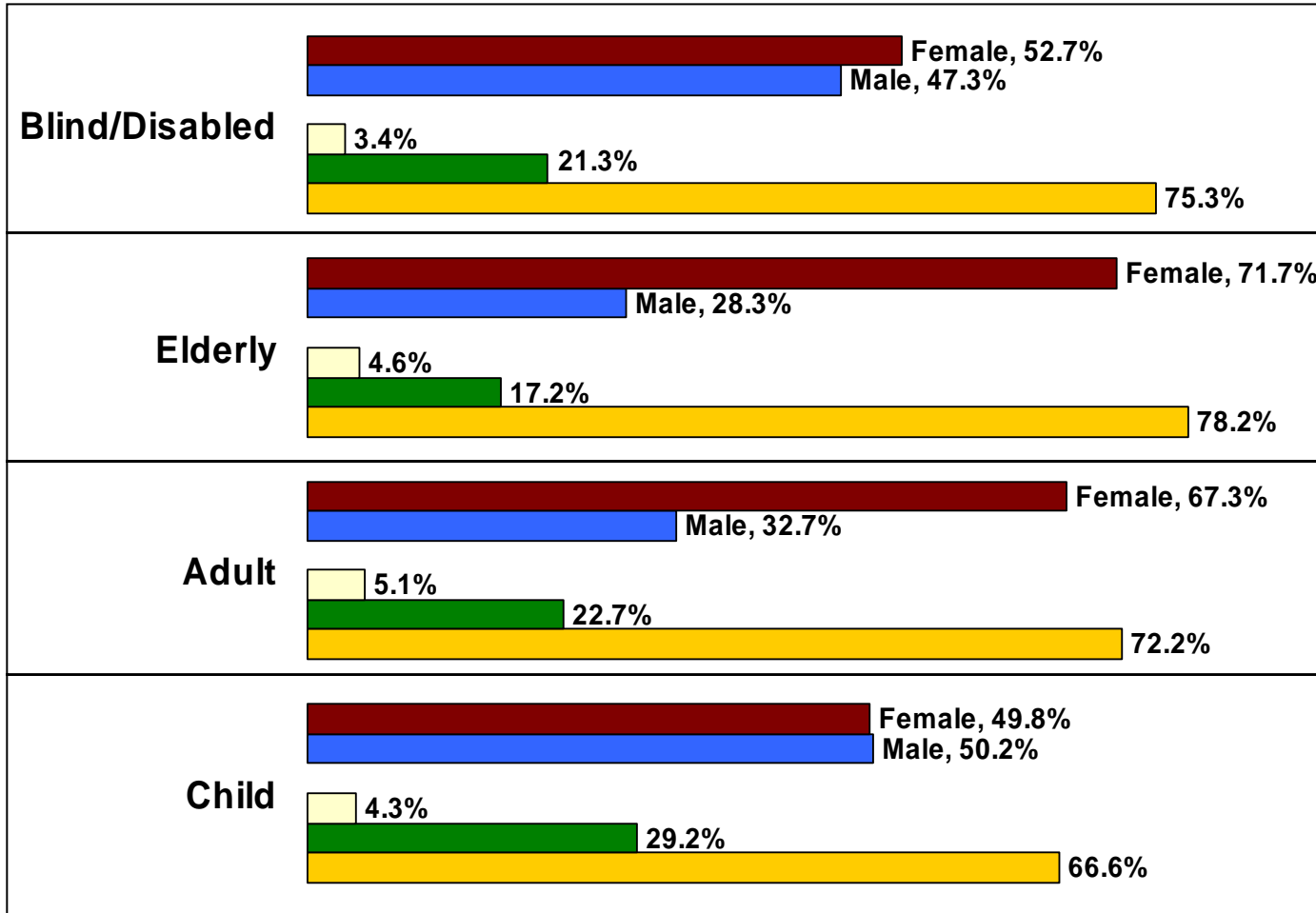


SOURCE: The Henry L. Kaiser Family Foundation

Missouri ranked 29th in Medicaid spending for the blind and disabled

Missouri Charts

Missouri Percentage of Enrollment Groups by Sex and Race, Feb 2005

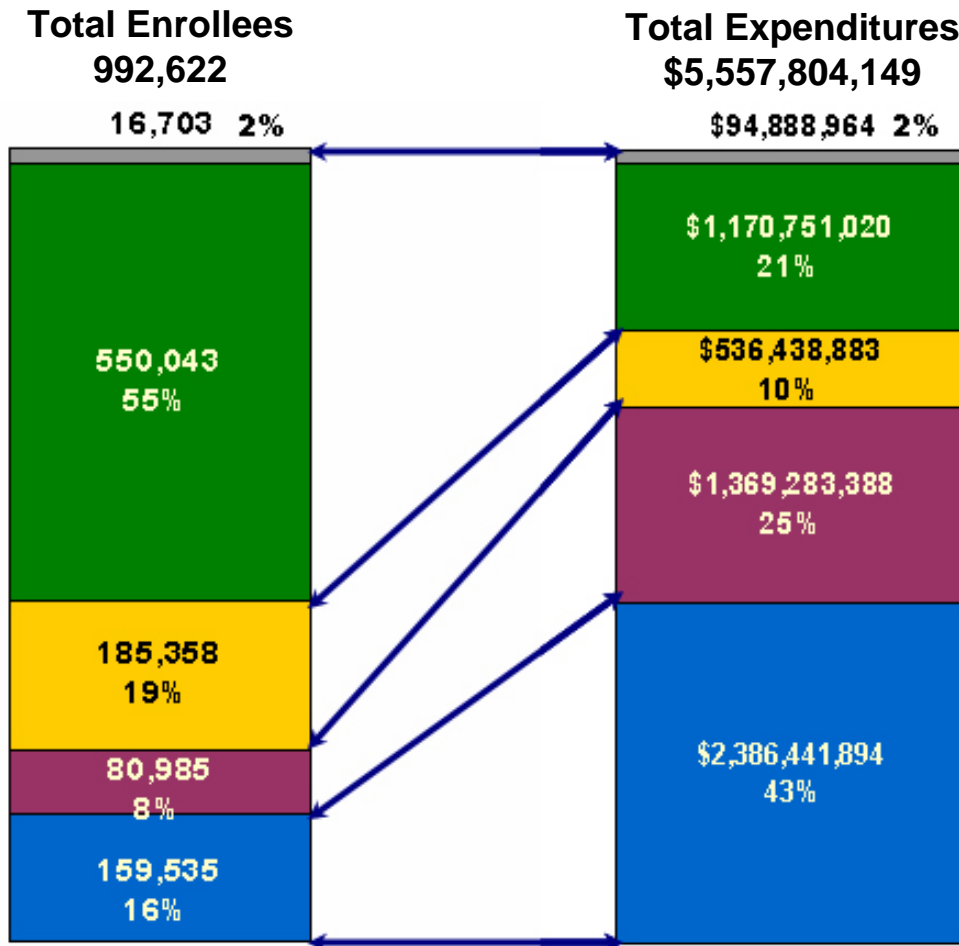


■ White
 ■ Black
 ■ Other/Unknown

Medicaid enrollment reflects the characteristics of Missouri's poor

Source: DHSS, MICA; USDC, Bureau of the Census.

Missouri Medicaid Expenditures by Enrollment Group, FY2005



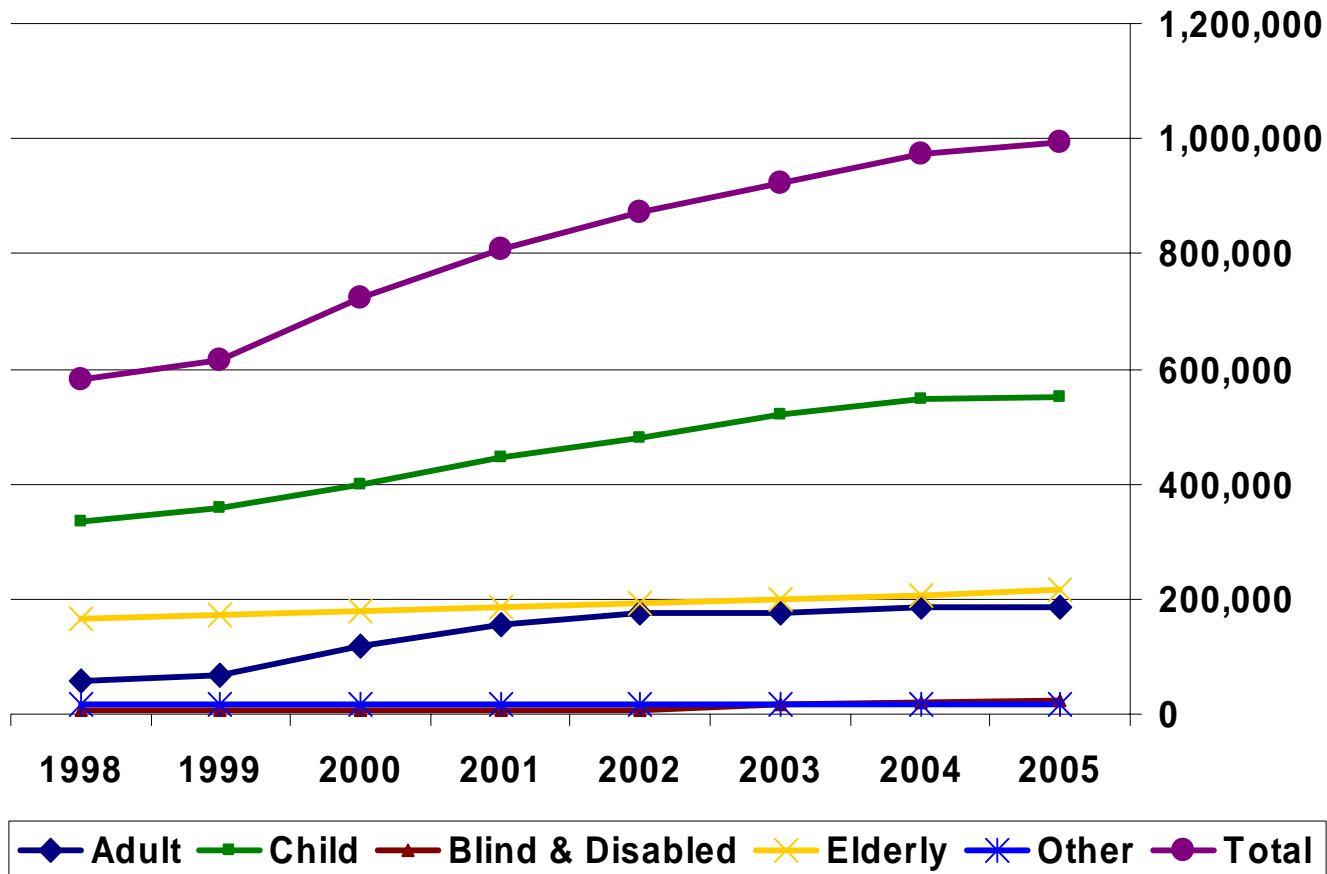
Children accounted for 55% of enrollees, but only 20% of expenditures

■ Blind & Disabled ■ Elderly ■ Adult ■ Children ■ Other

Note: Other includes Medicaid Assistance to Pregnant Women and the Breast or Cervical Cancer Program.

Source: MoDSS Summary Table 5, FY2005.

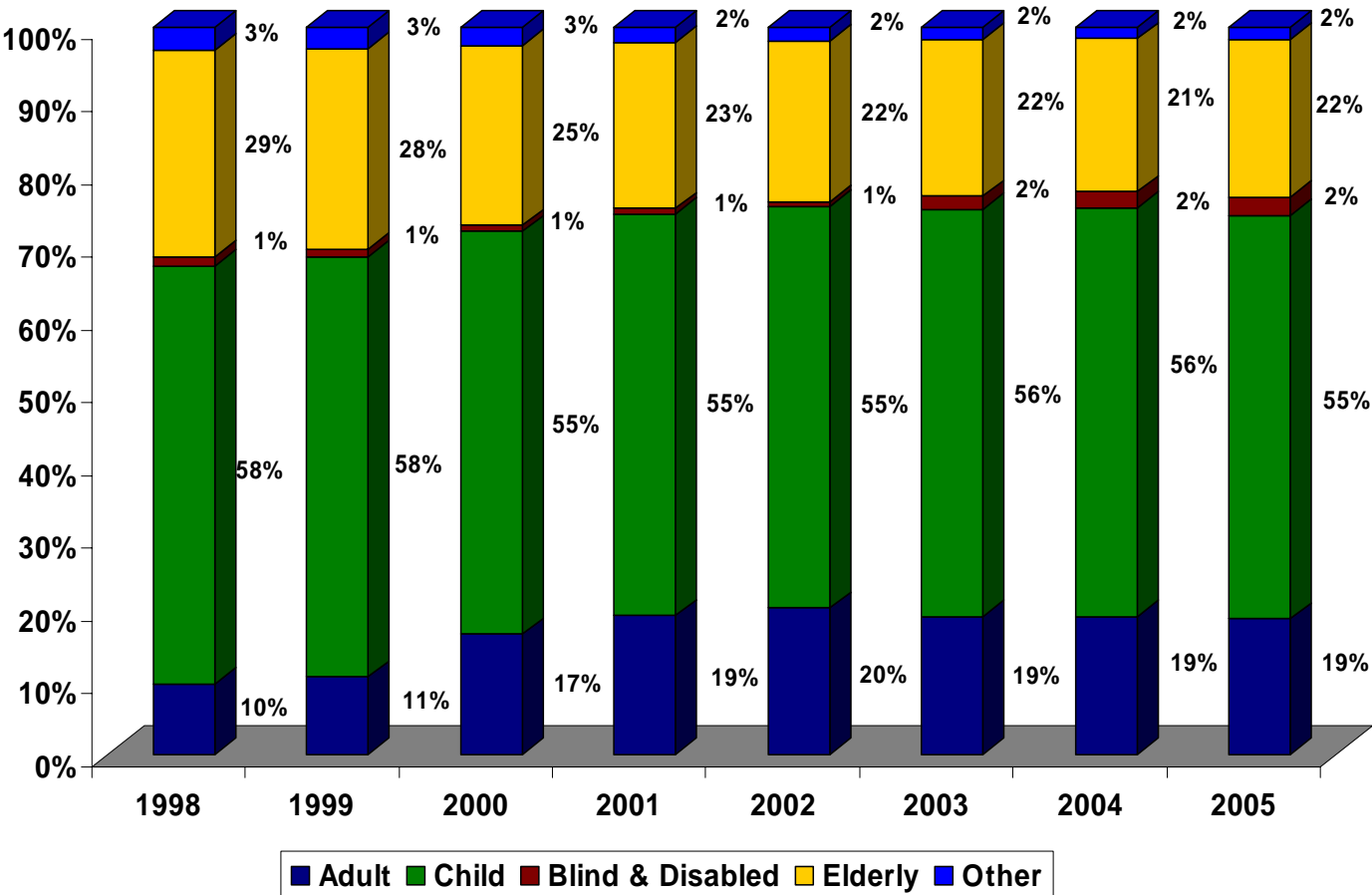
Medicaid Enrollees by Enrollment Group, FY1998 – FY2005



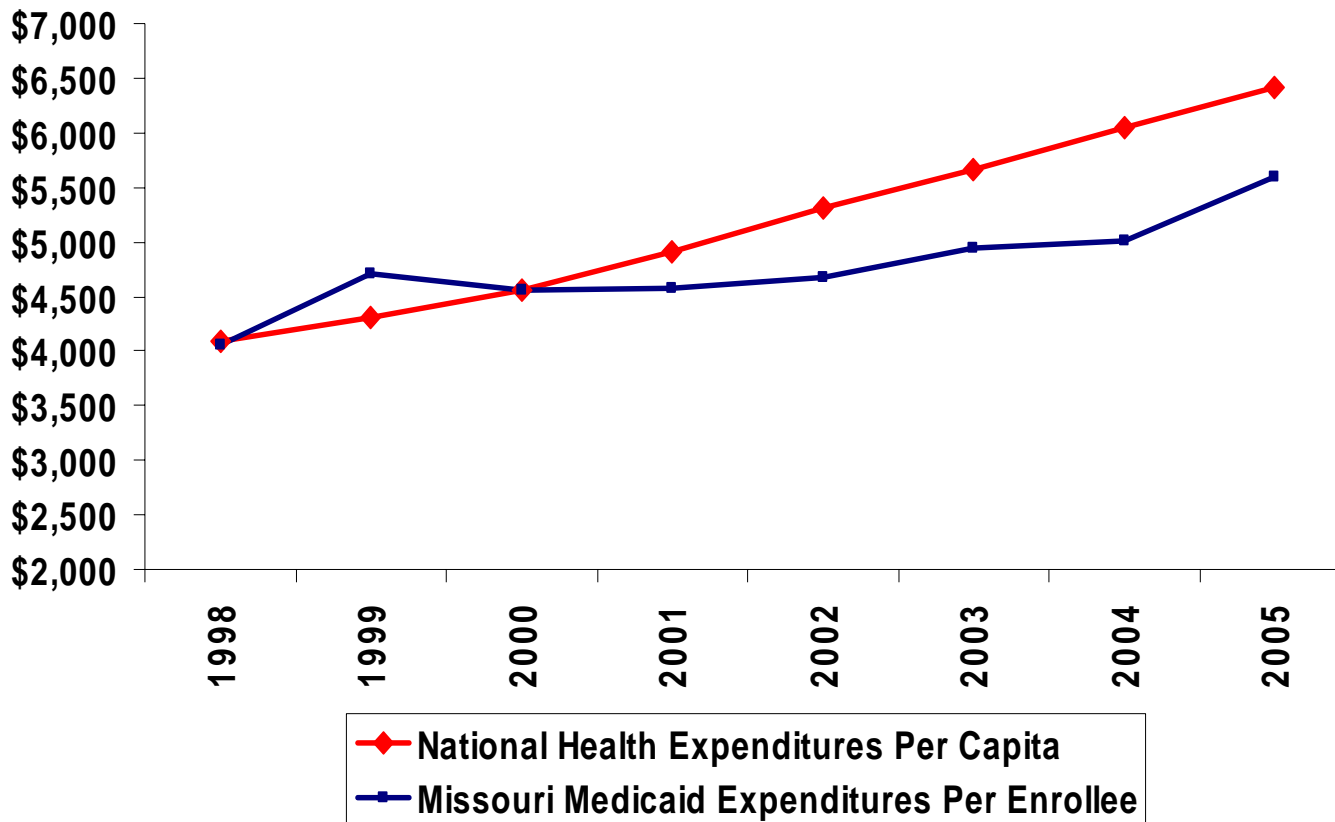
The number of Medicaid enrollees increased to nearly one million Missourians in 2005

Medicaid Enrollees by Enrollment Group, FY1998 – FY2005

Between 2000 and 2005, there was little change in the relative mix of Missouri Medicaid enrollees by eligibility category



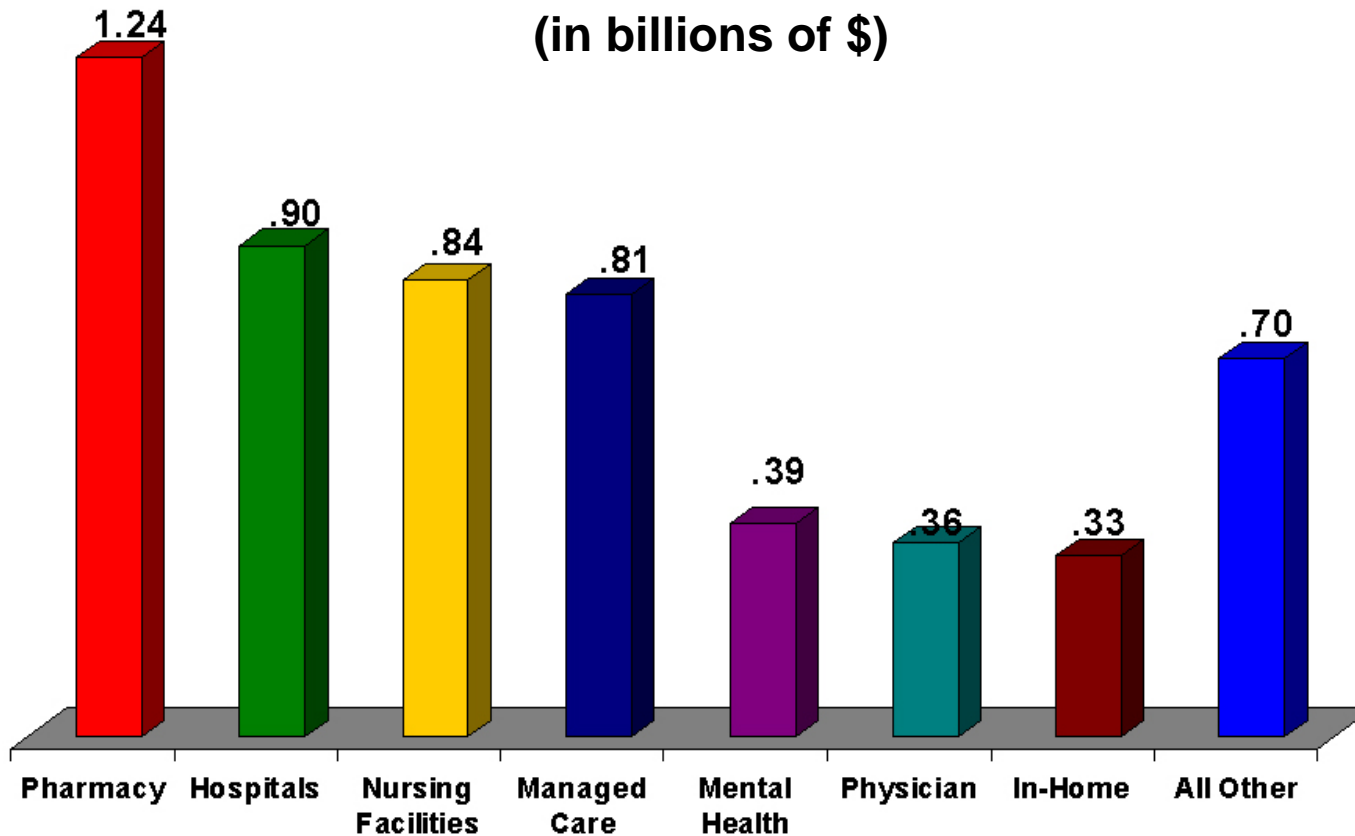
National Health & State Medicaid Expenditure Trends 1998 - 2005



National health expenditures were \$6,423 per person (over \$1.9 trillion) and Missouri Medicaid expenditures were \$5,599 per enrollee

Source: Centers for Medicare & Medicaid Services, Office of the Actuary and MoDSS Summary Table 5, FY98-05, US Census.

Missouri Medicaid Expenditures by Type of Service, FY2005

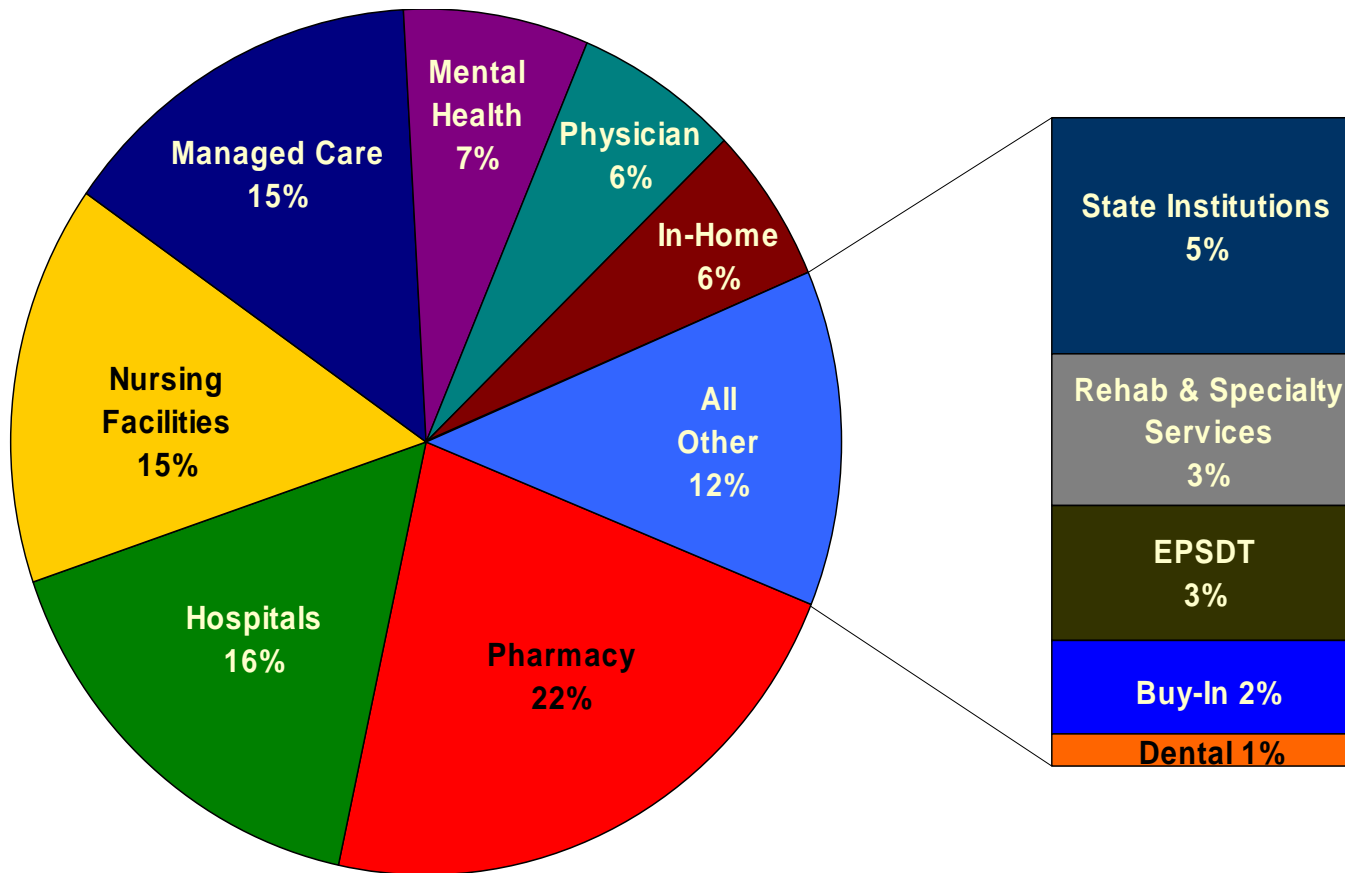


Pharmacy is the largest category of costs to Missouri Medicaid

Note: All other includes rehabilitation & specialty care, EPSDT, buy-in premiums, and dental services.

Source: MoDSS Summary Table 5, FY2005.

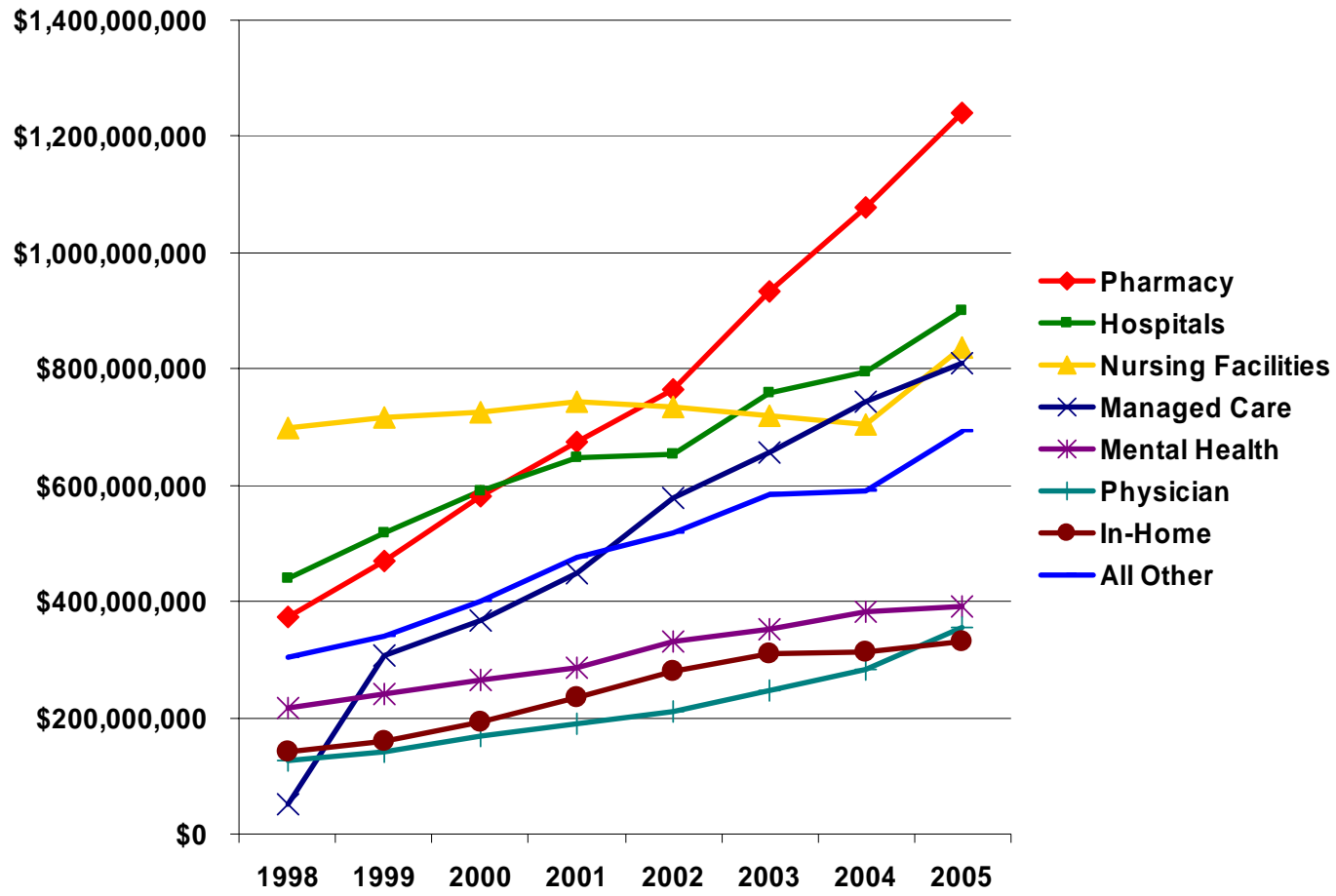
Percentage of Missouri Medicaid Expenditures by Type of Service, FY2005



Managed care includes payments to hospitals, physicians, and additional health services

Source: MoDSS Summary Table 5, FY2005.

Annual Medicaid Expenditures by Service Type, FY1998 – FY2005

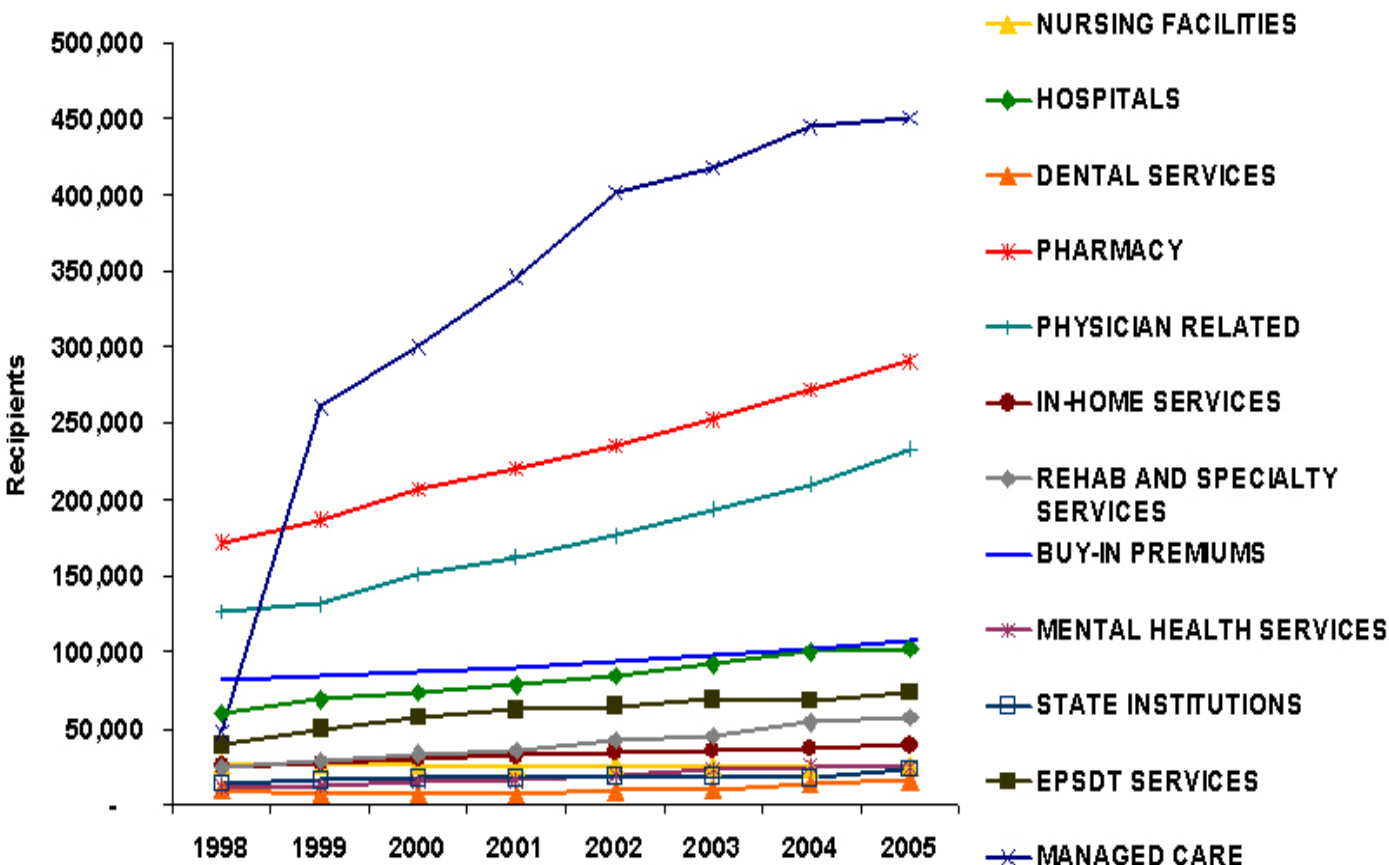


Pharmacy expenditures increased 232% between 1998 and 2005

Source: MoDSS Summary Table 5, FY1998 - FY2005.

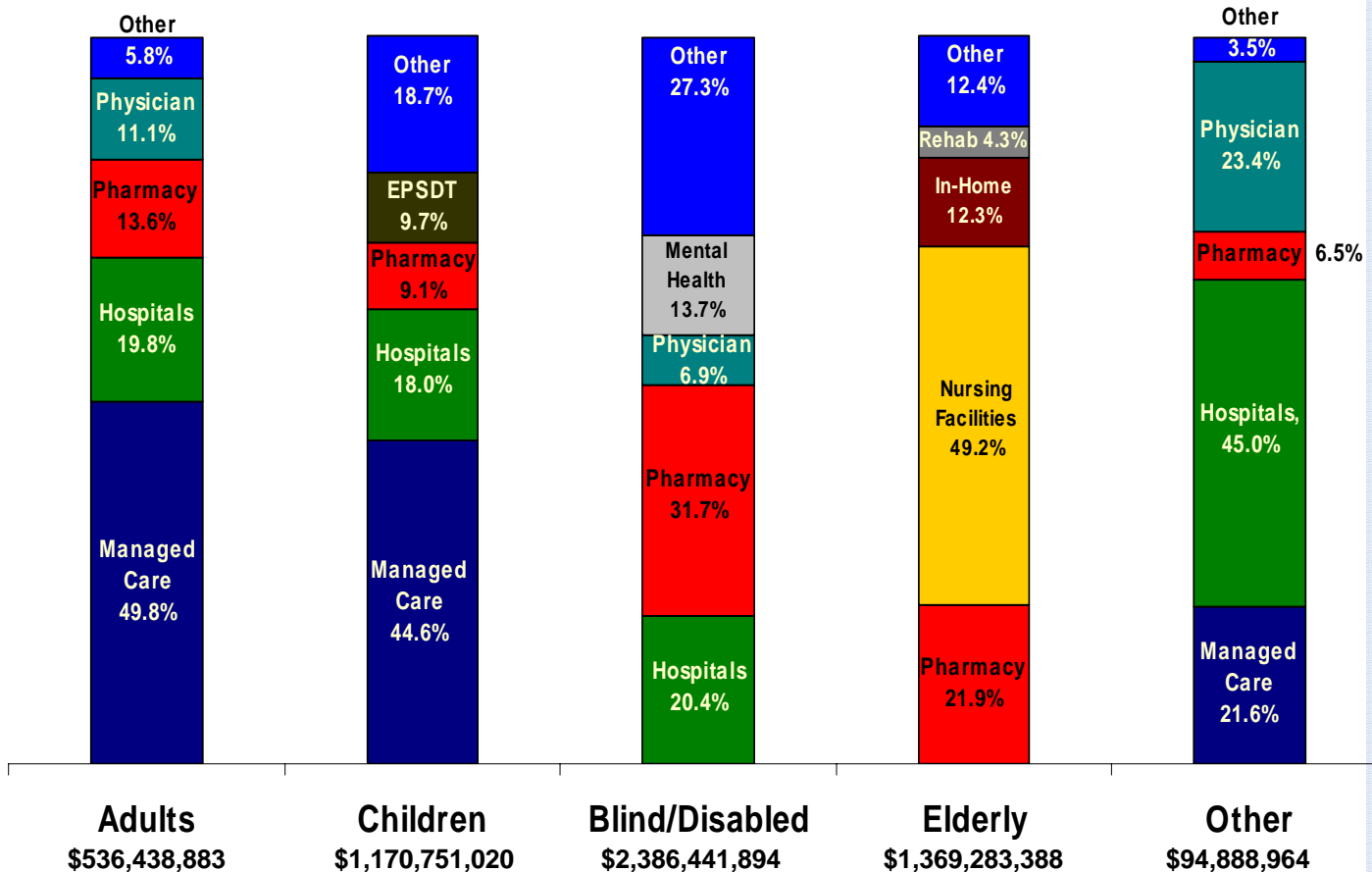
Average Monthly Recipients by Service Type, FY1998–FY2005

The increase in managed care reflects a shift from fee-for-service



Source: MoDSS Summary Table 5, FY1998 - 2005.

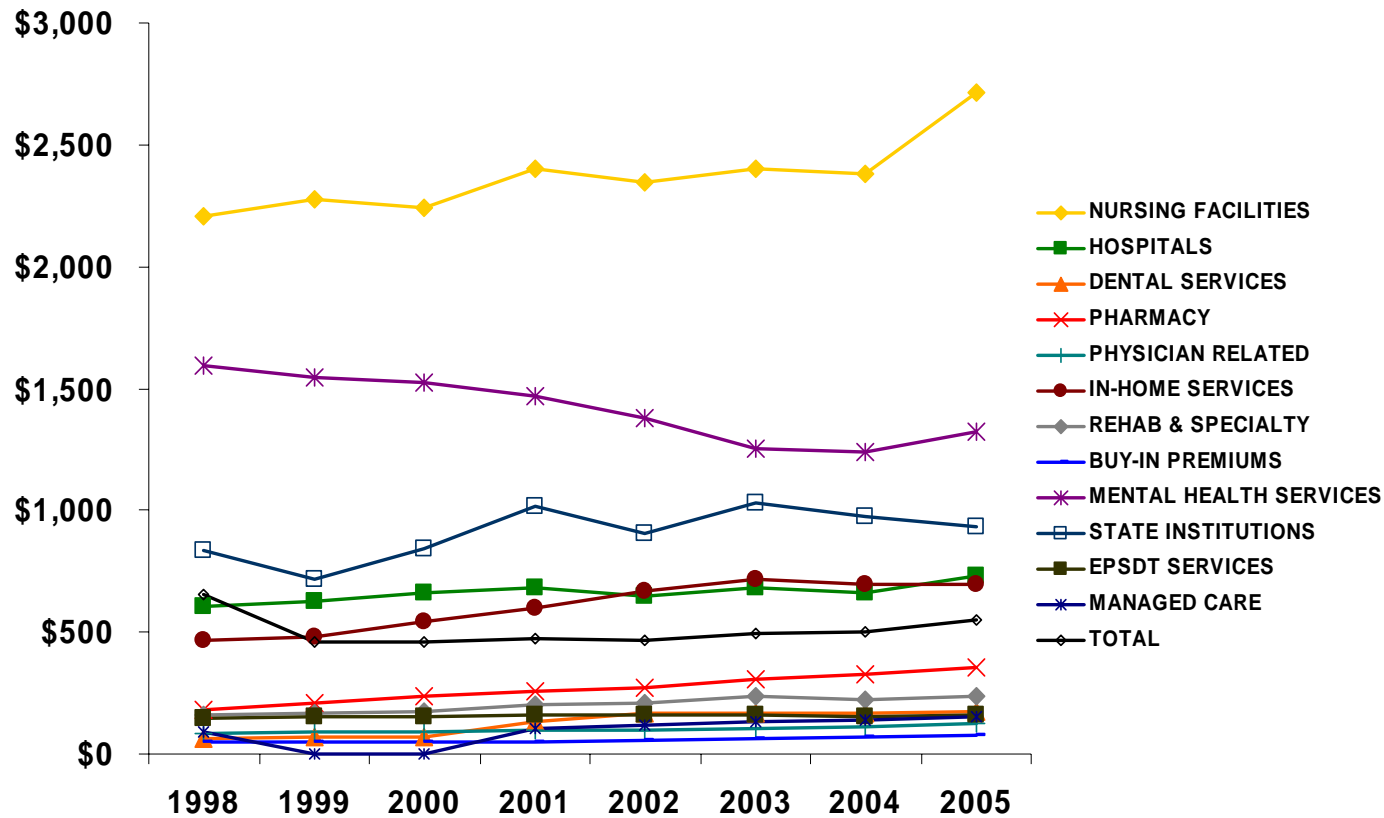
Top Medicaid Expenditures by Service Type and Enrollment Group, FY 2005



The mix of service expenditures differs by enrollment group

Source: MoDSS Summary Table 5, FY2005.

Average Monthly Cost per Service Recipient by Service Type, 1998-2005

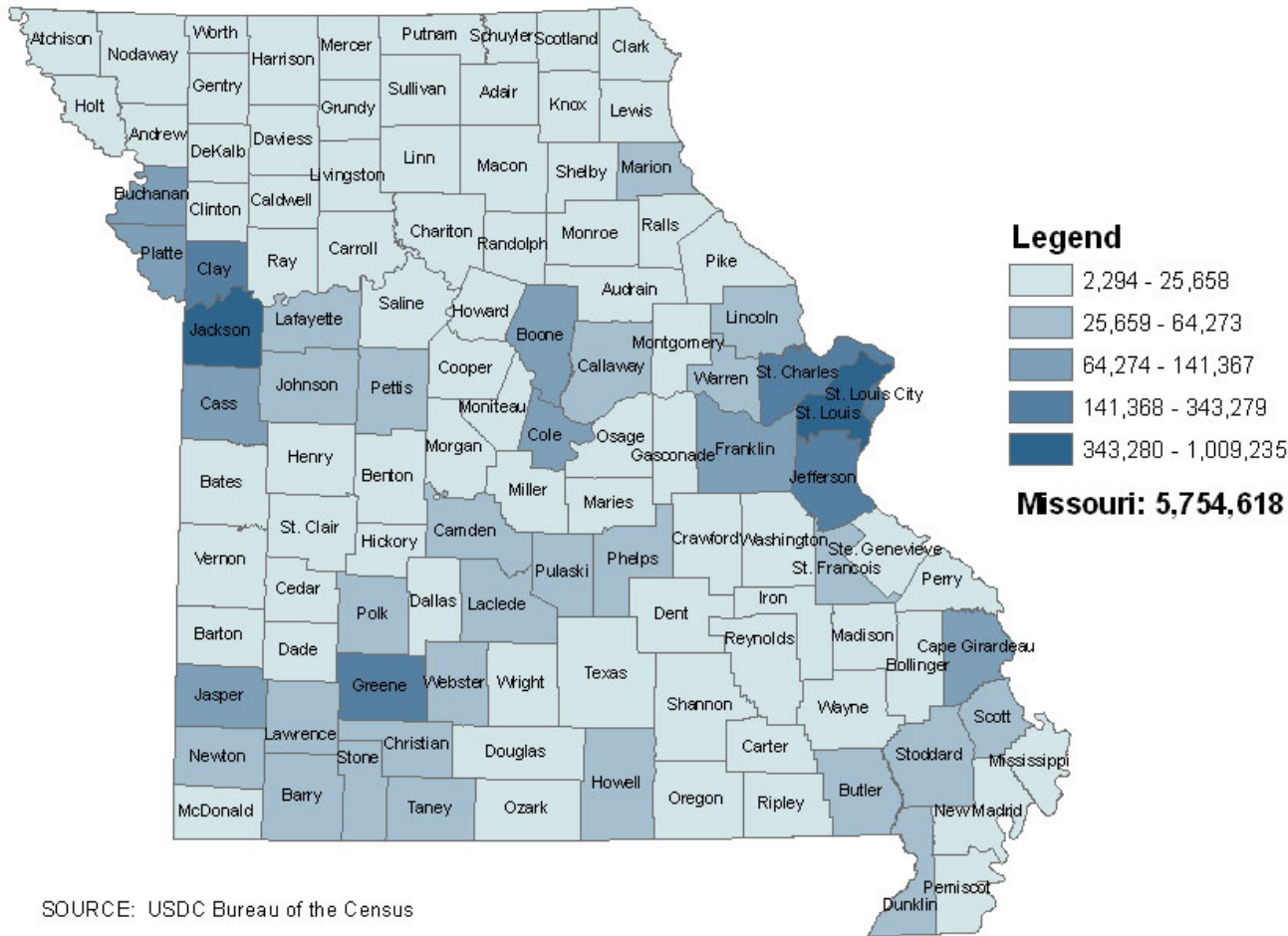


Nursing facilities cost about \$2,716 a month in Missouri

Source: MoDSS Summary Table 5, FY1998 - FY2005.

Missouri Maps

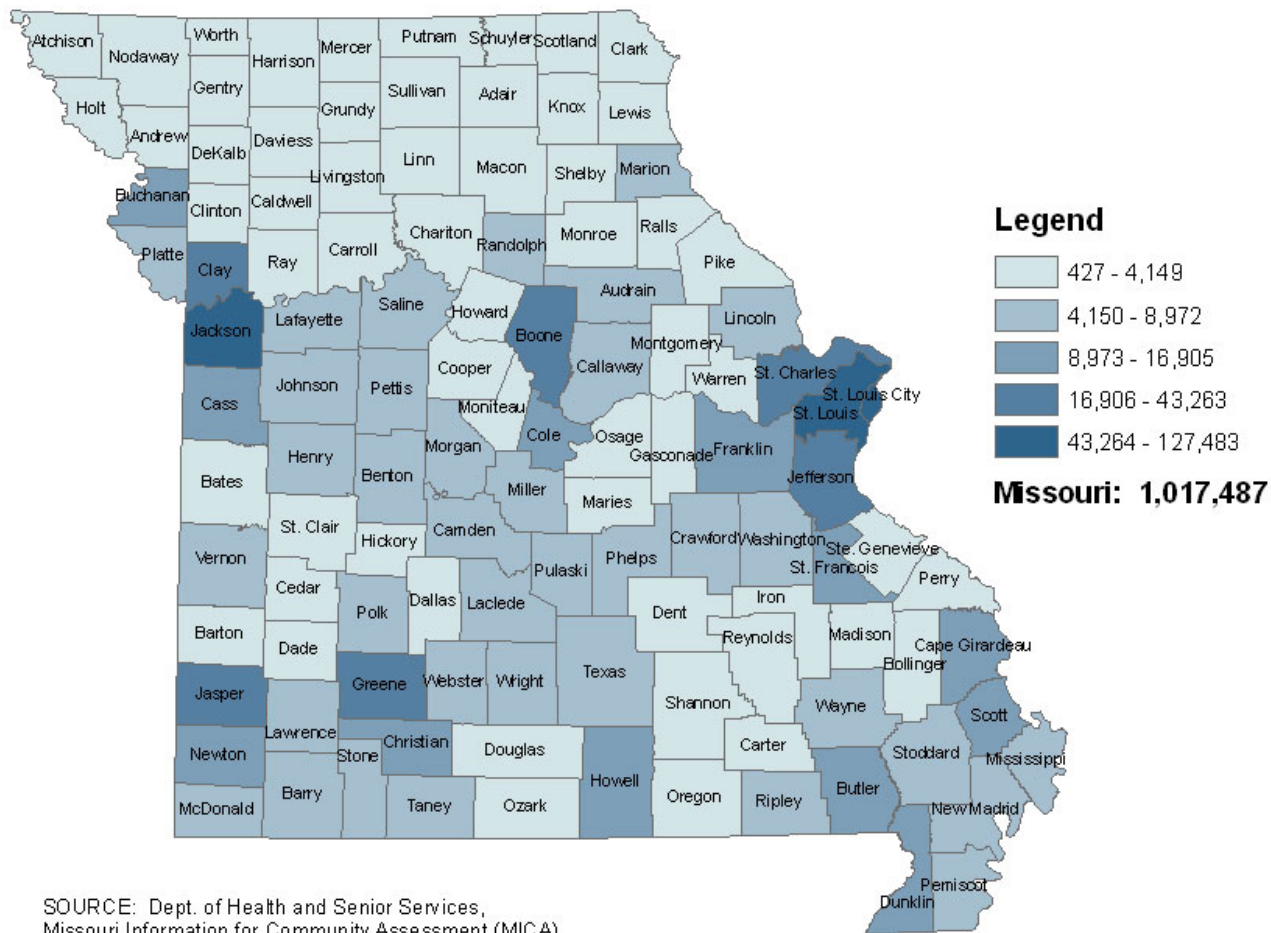
Missouri Population Estimates, 2004



Missouri counties vary widely in population, ranging from 2,270 to more than a million

SOURCE: USDC Bureau of the Census

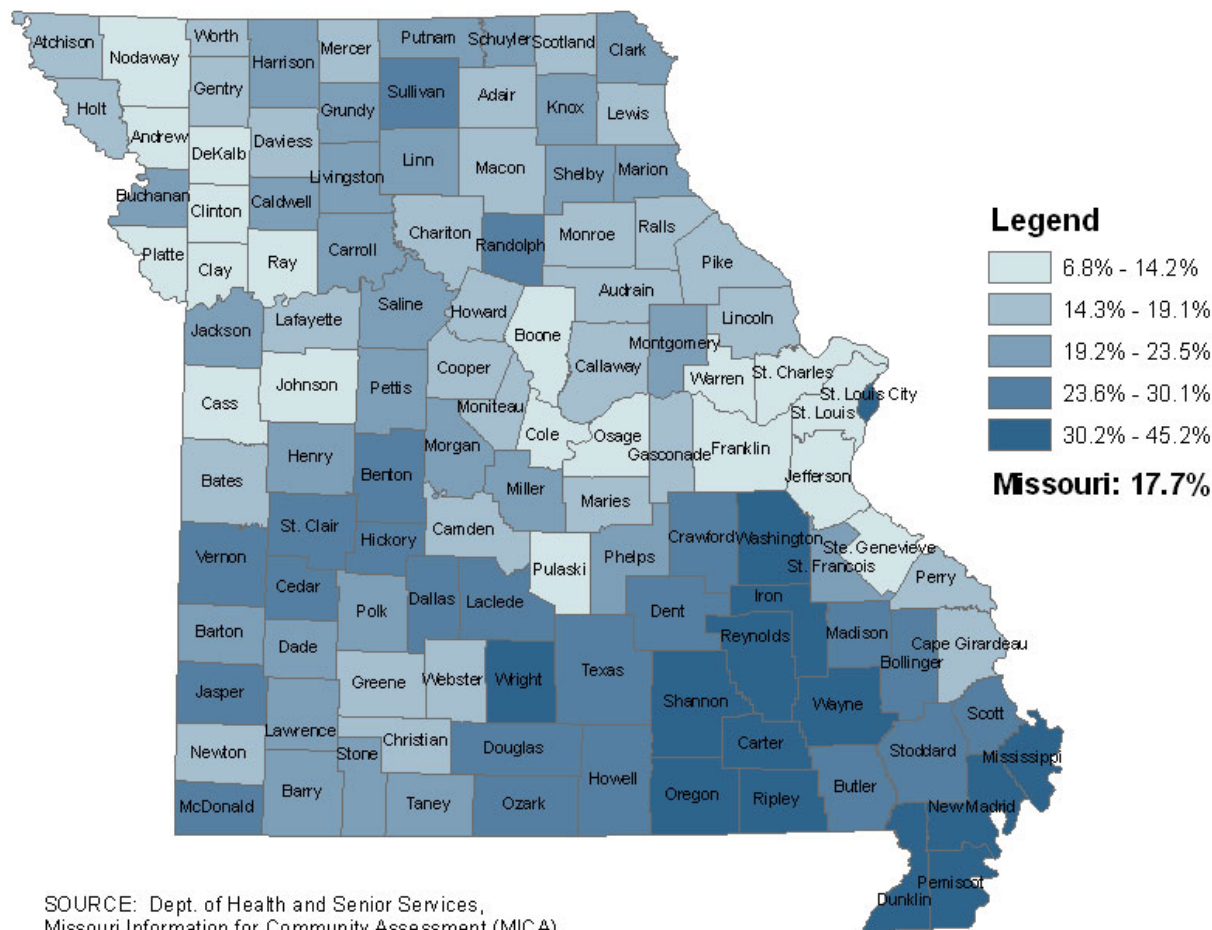
Missouri Medicaid Enrollees by County, Feb 2005



The highest concentrations of Medicaid recipients in Missouri are in the most populated areas

SOURCE: Dept. of Health and Senior Services, Missouri Information for Community Assessment (MICA) USDC, Bureau of the Census

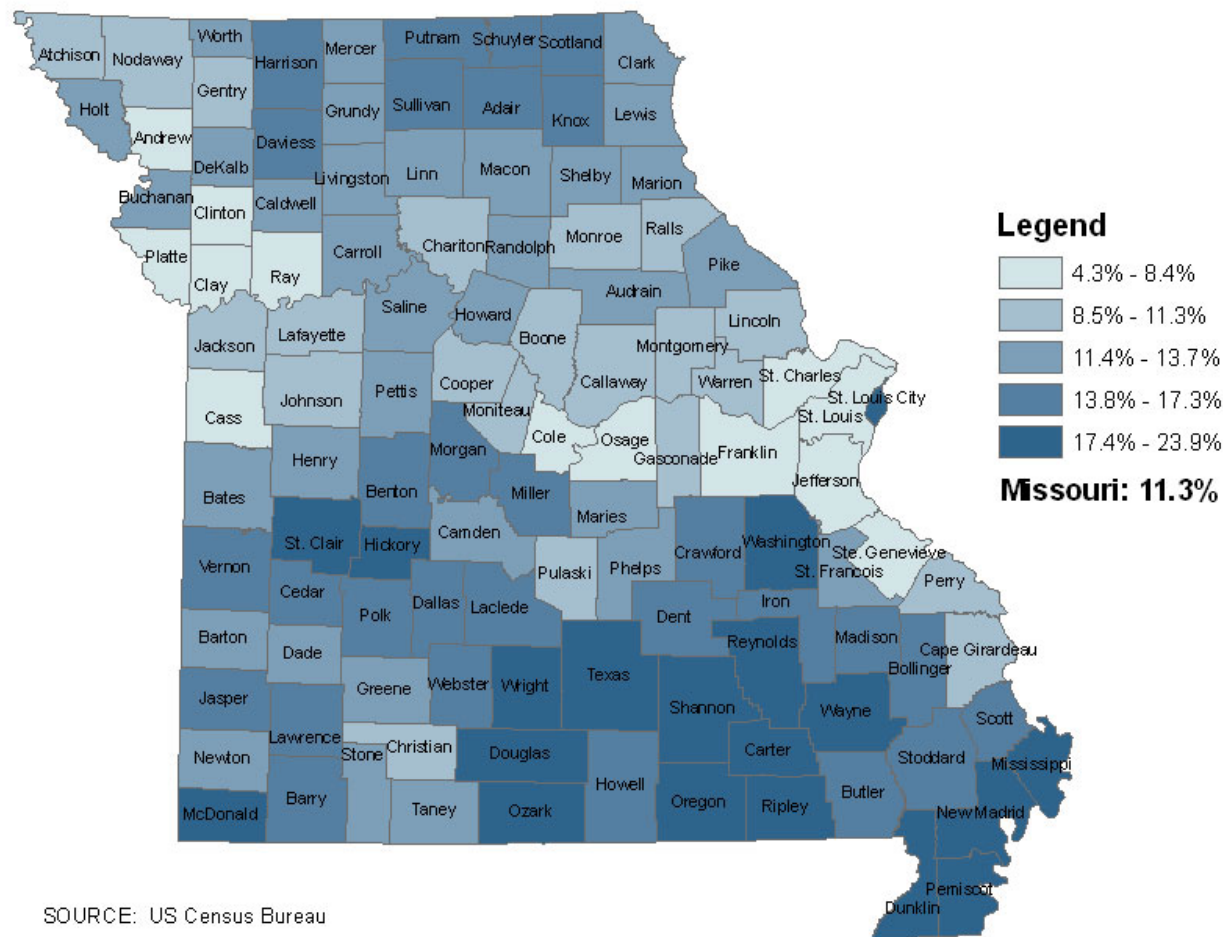
Medicaid Enrollees as Percentage of Total Population by County, Feb 2005



Counties with the highest percentages of population enrolled in Medicaid are in the southeast region and the City of St. Louis

SOURCE: Dept. of Health and Senior Services,
Missouri Information for Community Assessment (MICA)
USDC, Bureau of the Census

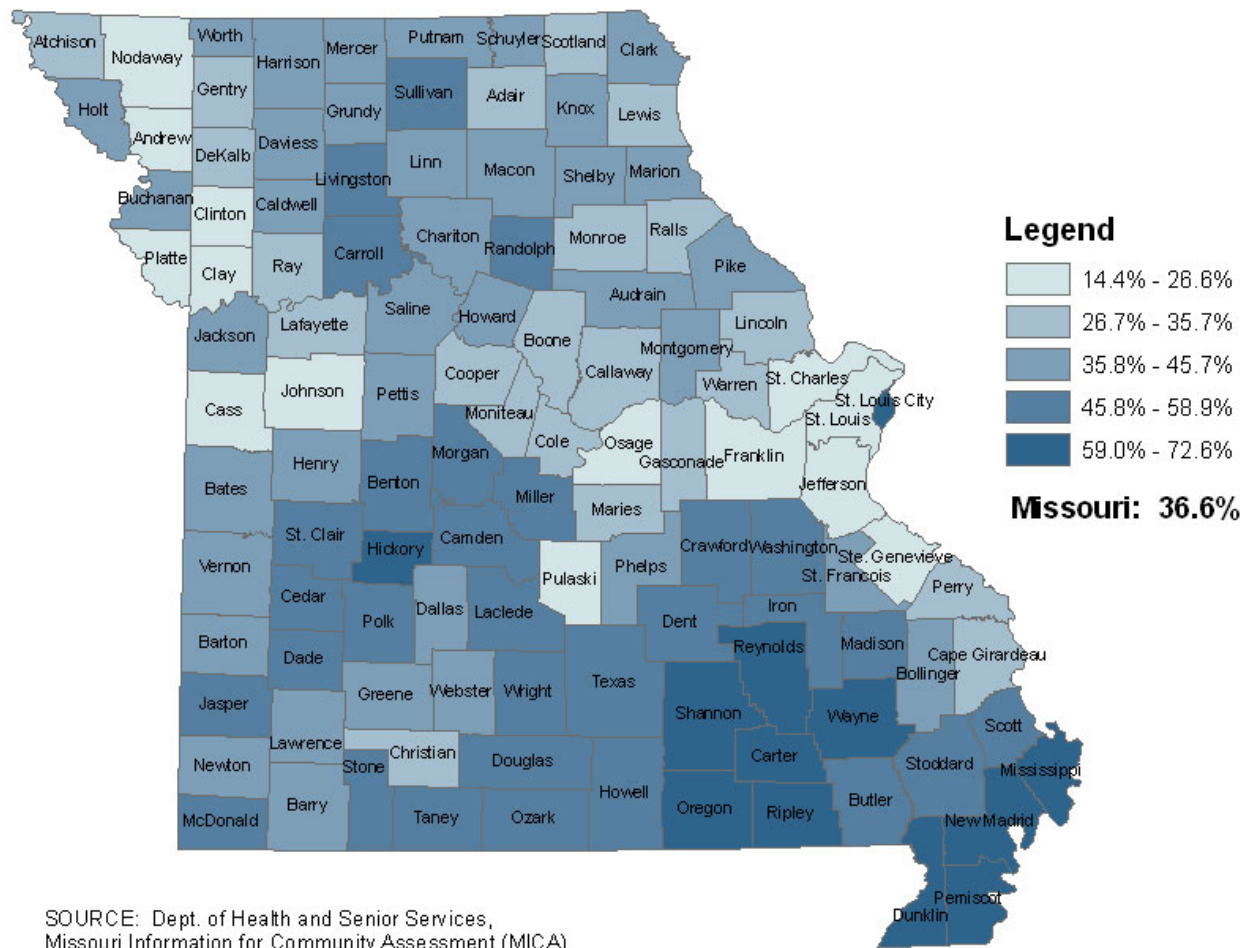
Percentage of Missouri Population in Poverty, 2002



SOURCE: US Census Bureau

Poverty is concentrated in the southeast, south central, northeast regions of the state and in St. Louis City

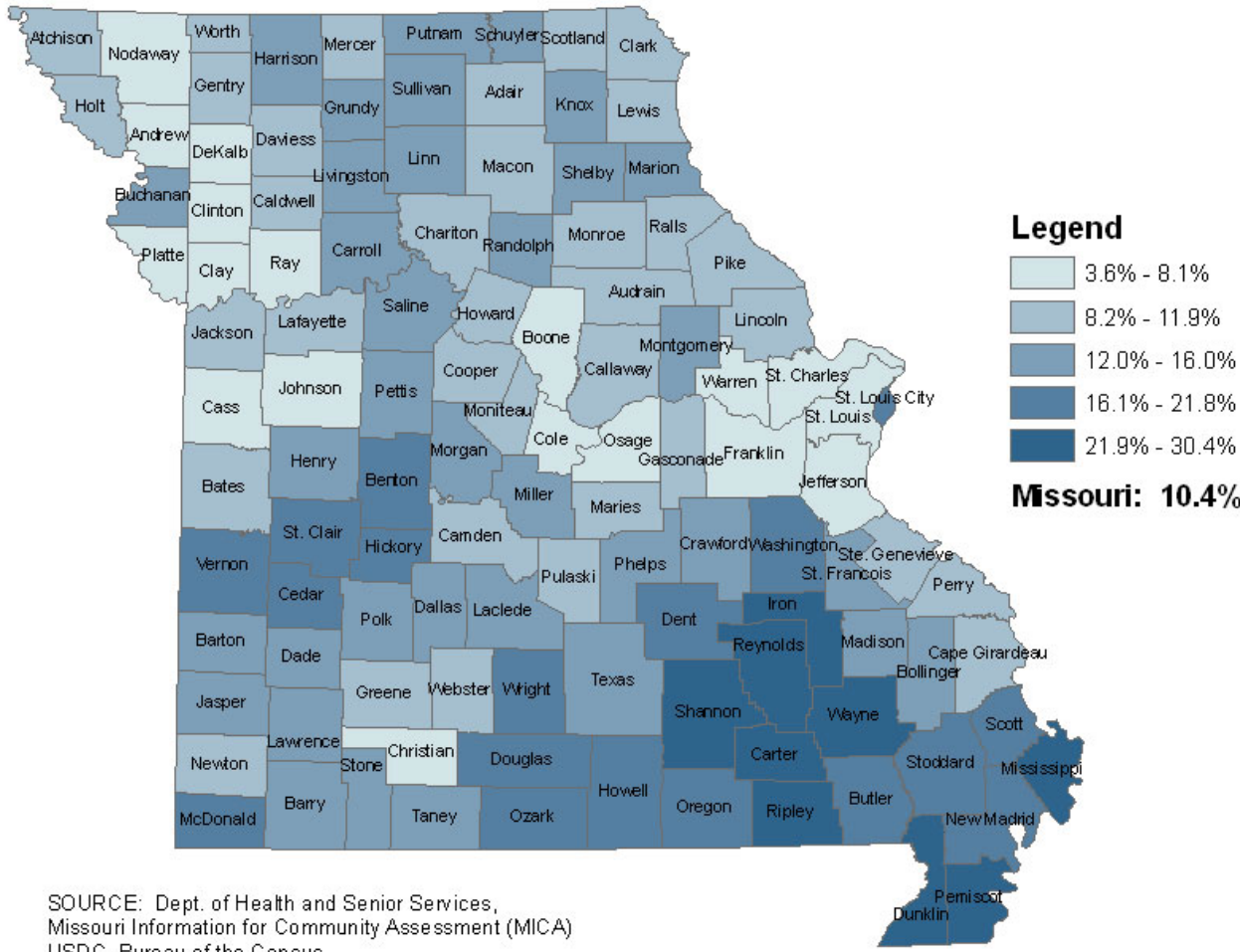
Percentage of Children Eligible for Medicaid Benefits, Feb 2005



More than one-third of children are eligible for Medicaid benefits

SOURCE: Dept. of Health and Senior Services, Missouri Information for Community Assessment (MICA) USDC, Bureau of the Census

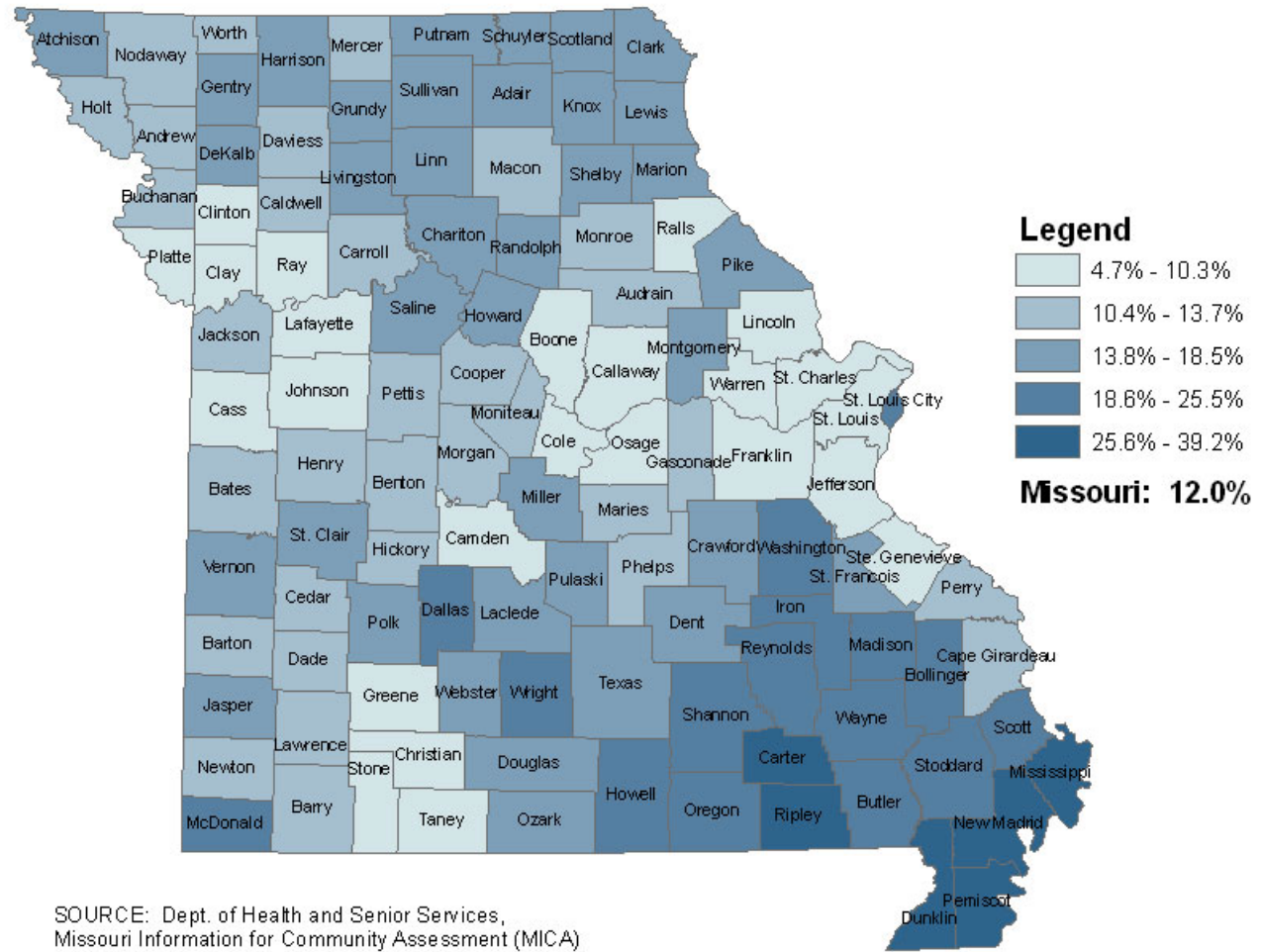
Percentage of Adults Eligible for Medicaid Benefits, Feb 2005



Just over 10% of adults (age 20-64) are eligible for Medicaid

SOURCE: Dept. of Health and Senior Services, Missouri Information for Community Assessment (MICA) USDC, Bureau of the Census

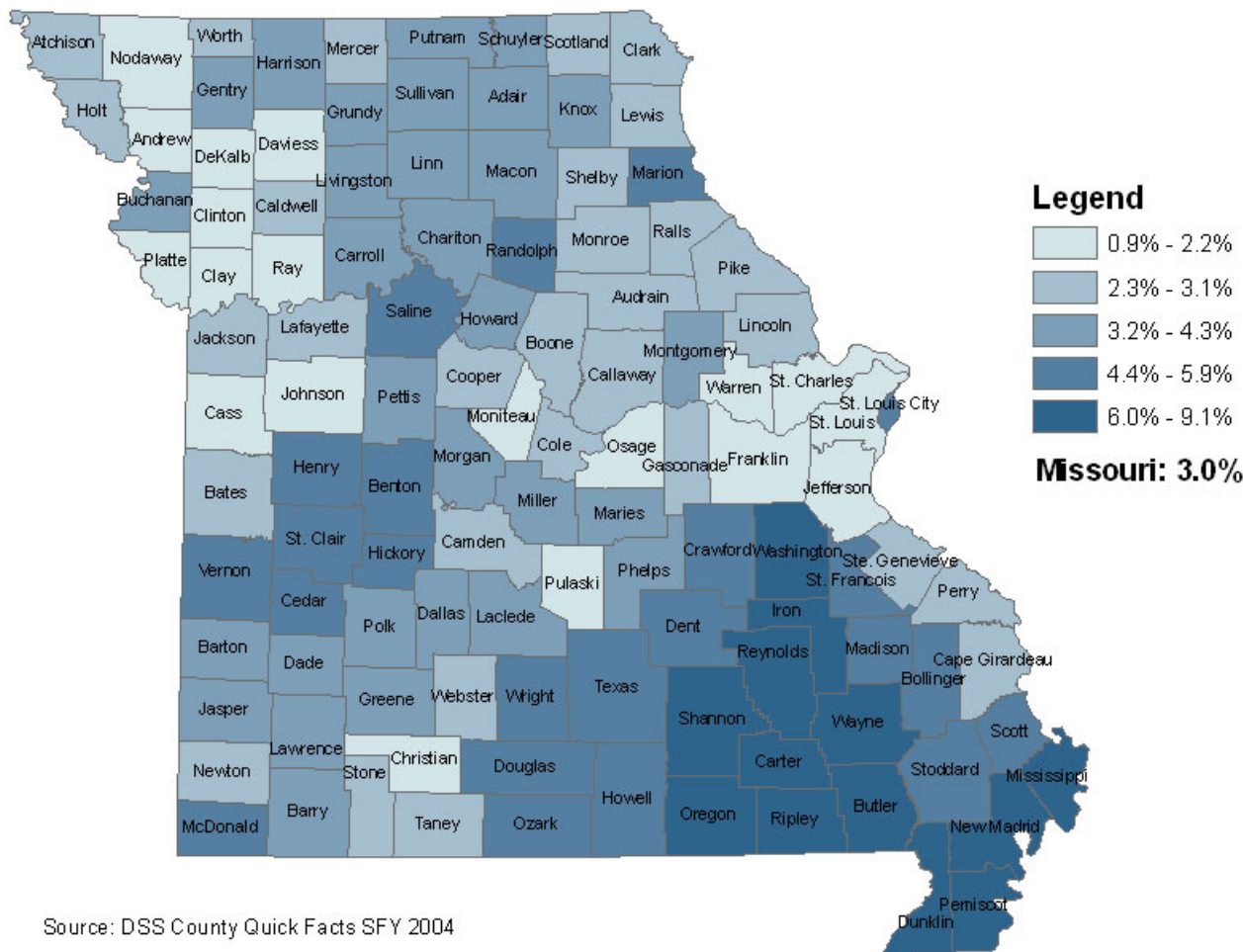
Percentage of the Elderly Eligible for Medicaid Benefits, Feb 2005



Medicaid covered slightly more than 12% of the elderly population

SOURCE: Dept. of Health and Senior Services, Missouri Information for Community Assessment (MICA) USDC, Bureau of the Census

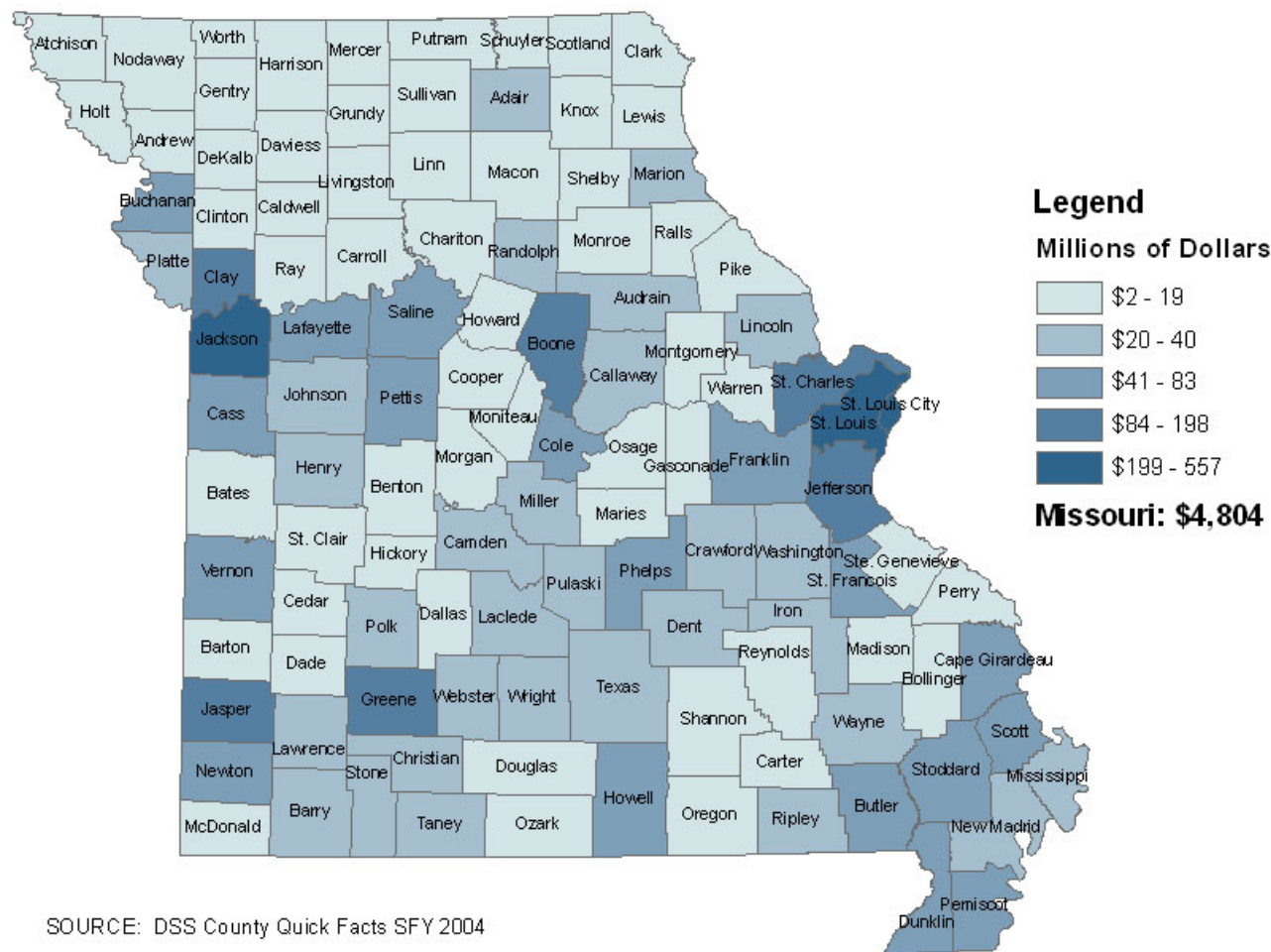
Percentage of Total Population Eligible for Blind/Disabled Medicaid Benefits, FY2004



Only 3% of the population is eligible for blind/disabled Medicaid benefits

Source: DSS County Quick Facts SFY 2004

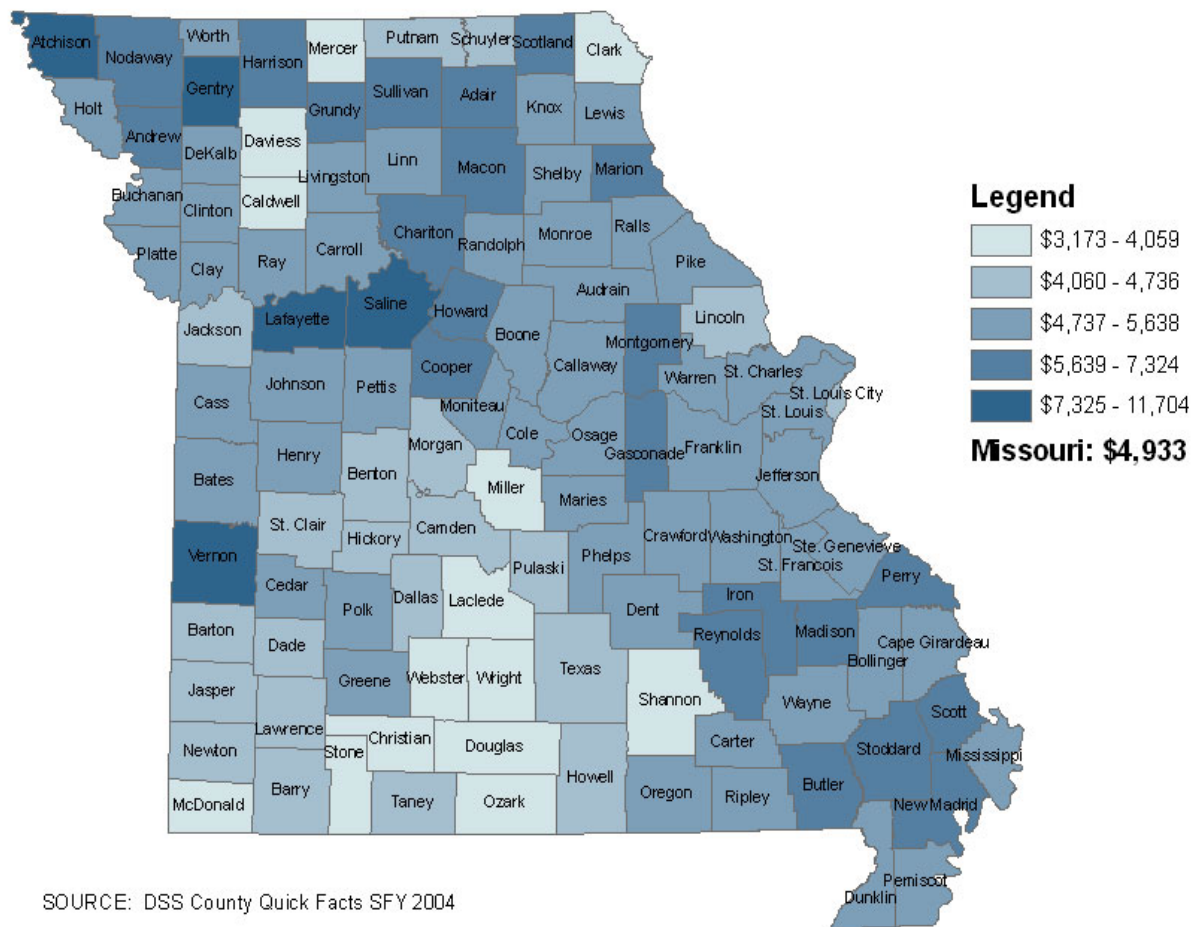
Total Medicaid Expenditures by County, FY2004



Total expenditures were \$4.8 billion in 2004

SOURCE: DSS County Quick Facts SFY 2004

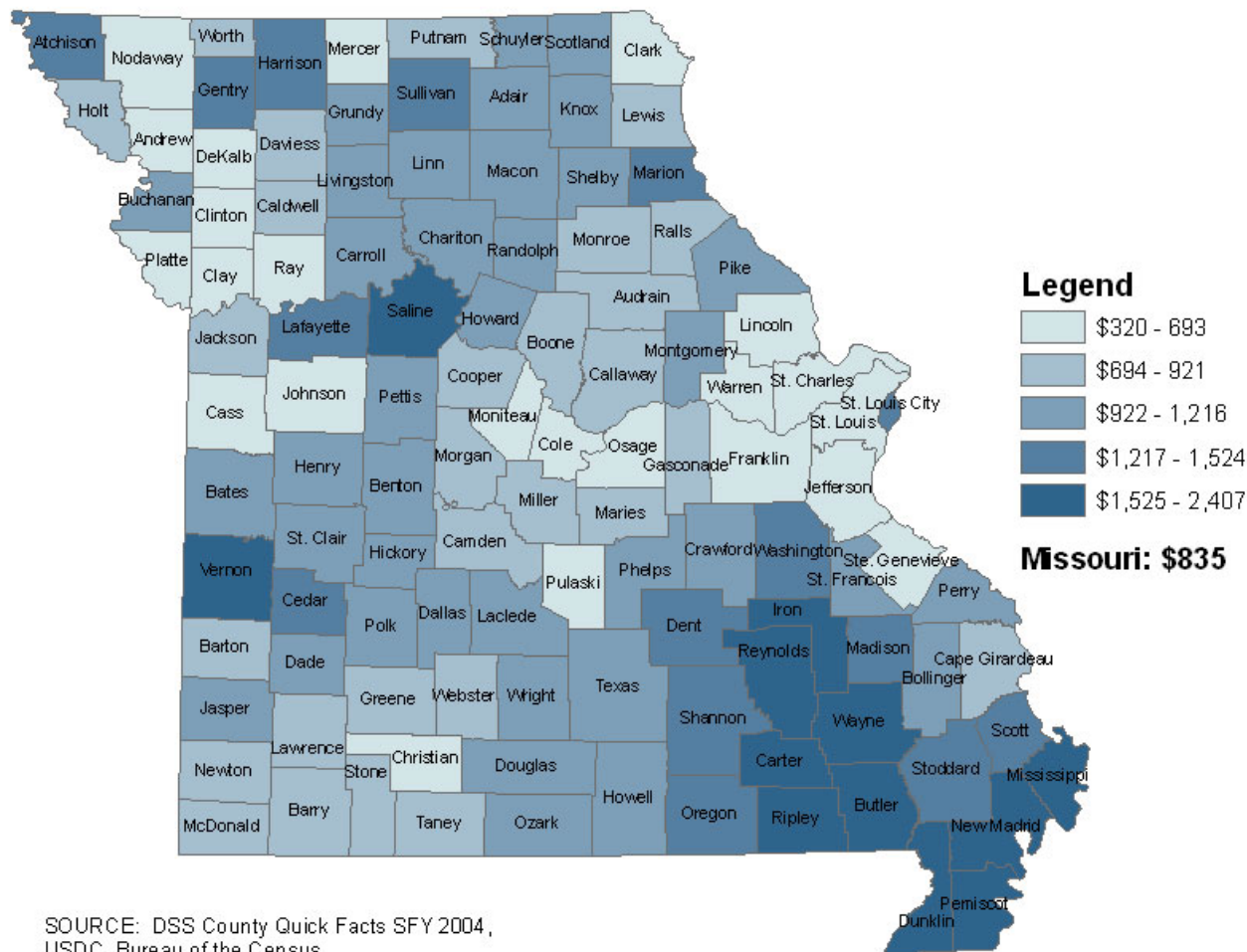
Total Medicaid Expenditures per Enrollee by County, FY2004



Expenditures per Medicaid eligible enrollee ranged from \$3,173 to \$11,704 in counties, reflecting both relative need and the location of specialized services

SOURCE: DSS County Quick Facts SFY 2004

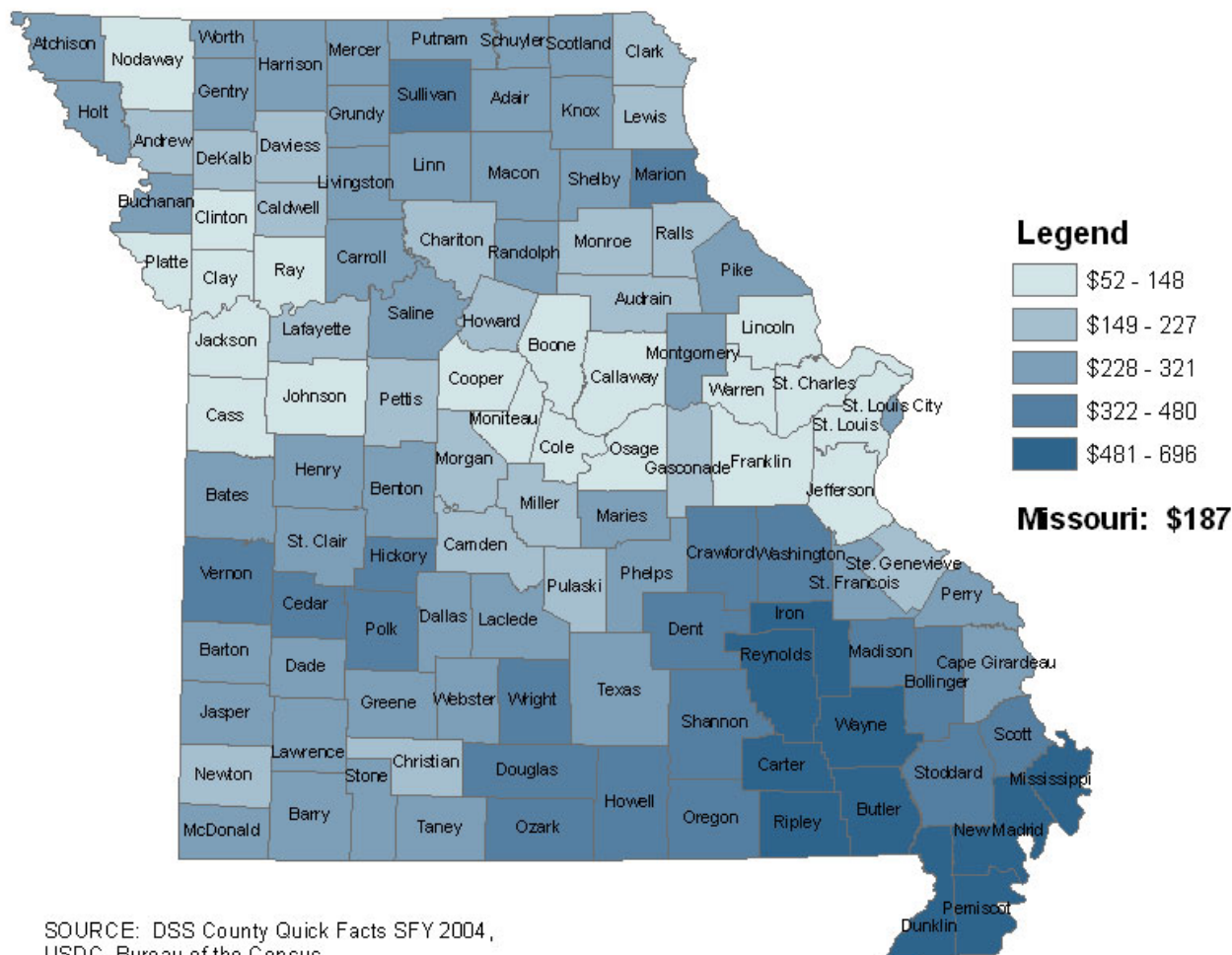
Medicaid Expenditures per Capita by County, FY2004



Per capita expenditures ranged from \$326 to \$2,425, reflecting the relative need of the population

SOURCE: DSS County Quick Facts SFY 2004, USDC, Bureau of the Census

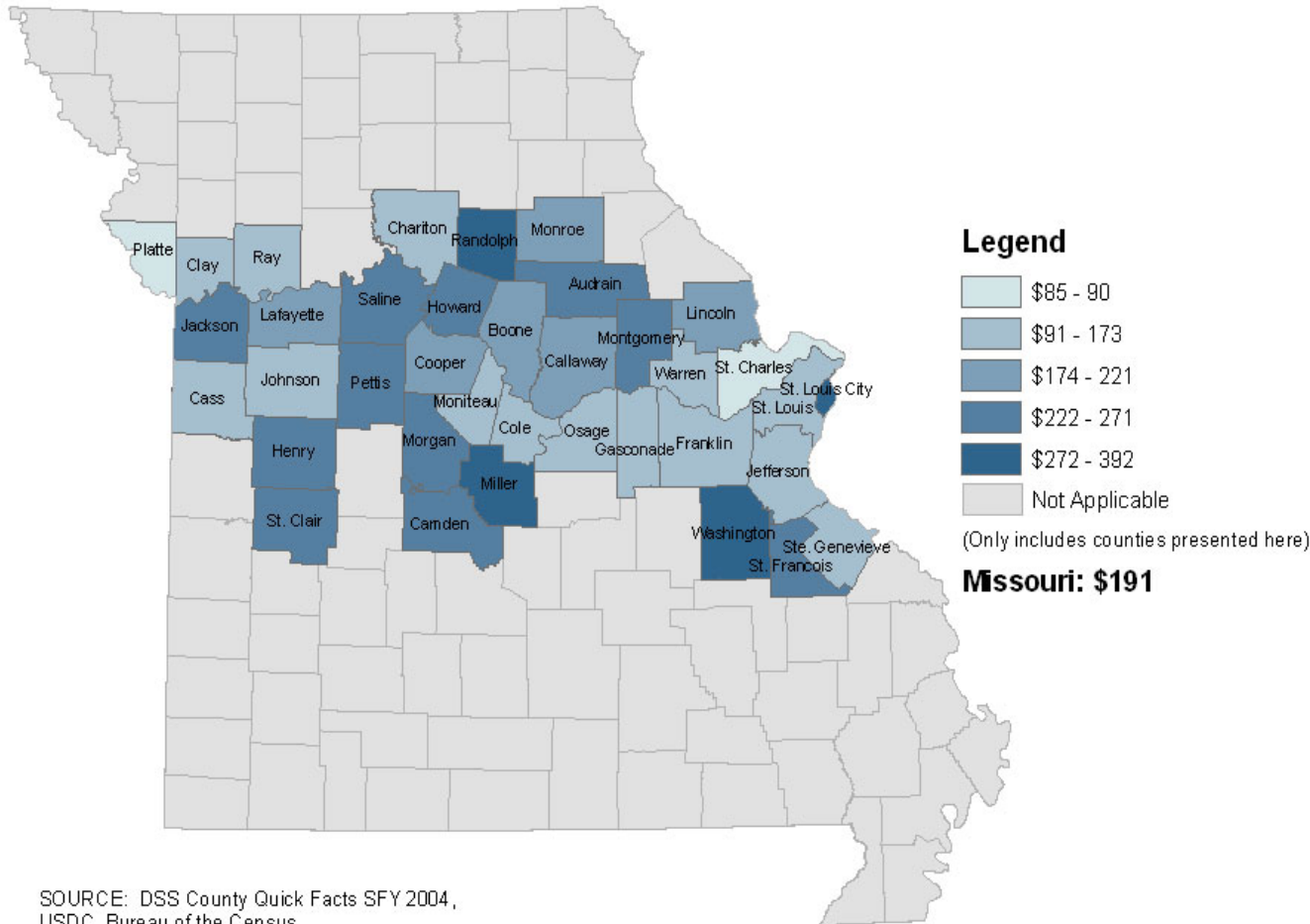
Pharmacy Medicaid Expenditures per Capita by County, FY2004



The average pharmacy expenditure per capita was \$190, ranging from \$53 to \$692

SOURCE: DSS County Quick Facts SFY 2004, USDC, Bureau of the Census

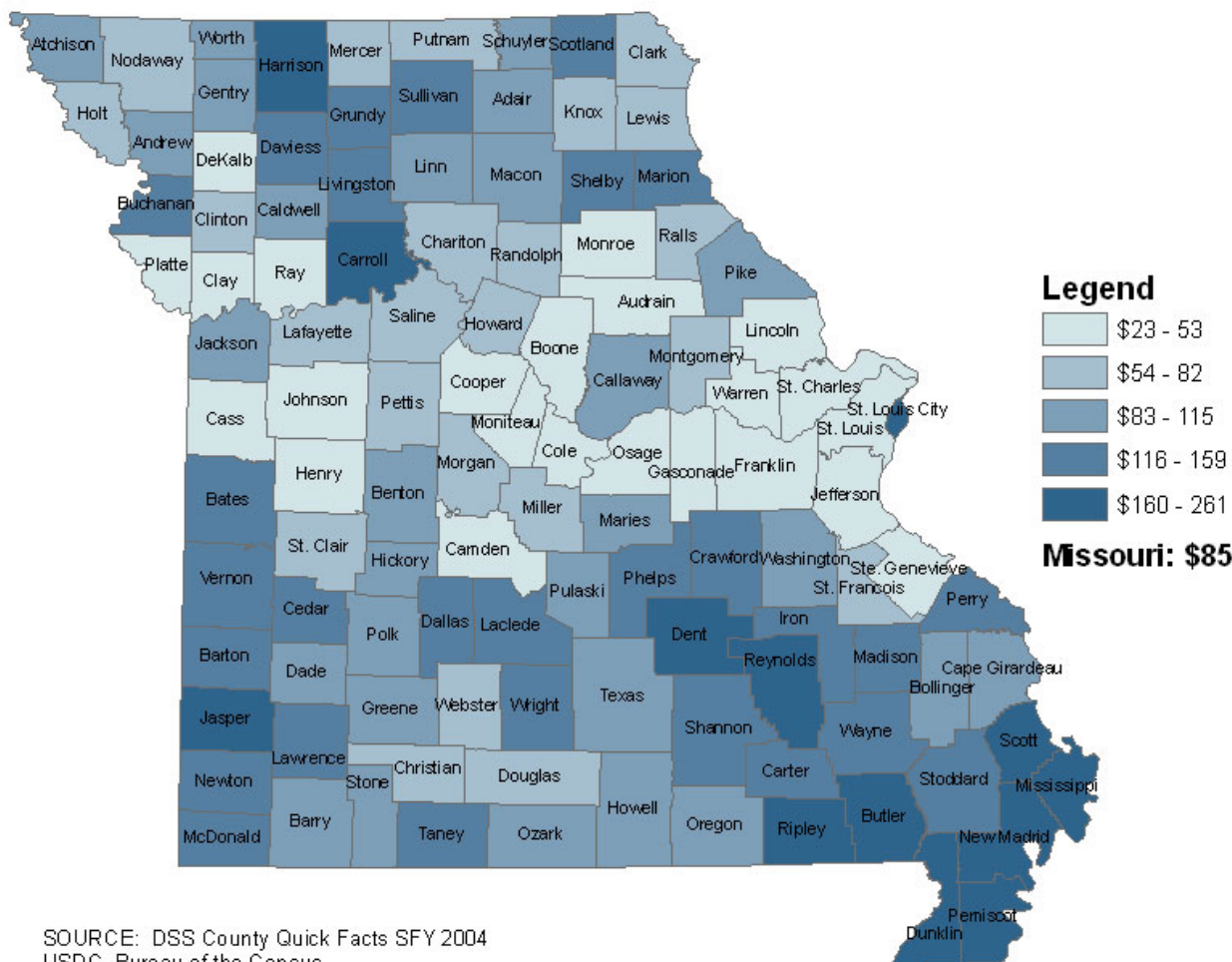
Medicaid Managed Care Expenditures per Capita by County, FY2004



Where managed care is available, per capita Medicaid expenditures ranged from \$88 to \$405

SOURCE: DSS County Quick Facts SFY 2004, USDC, Bureau of the Census

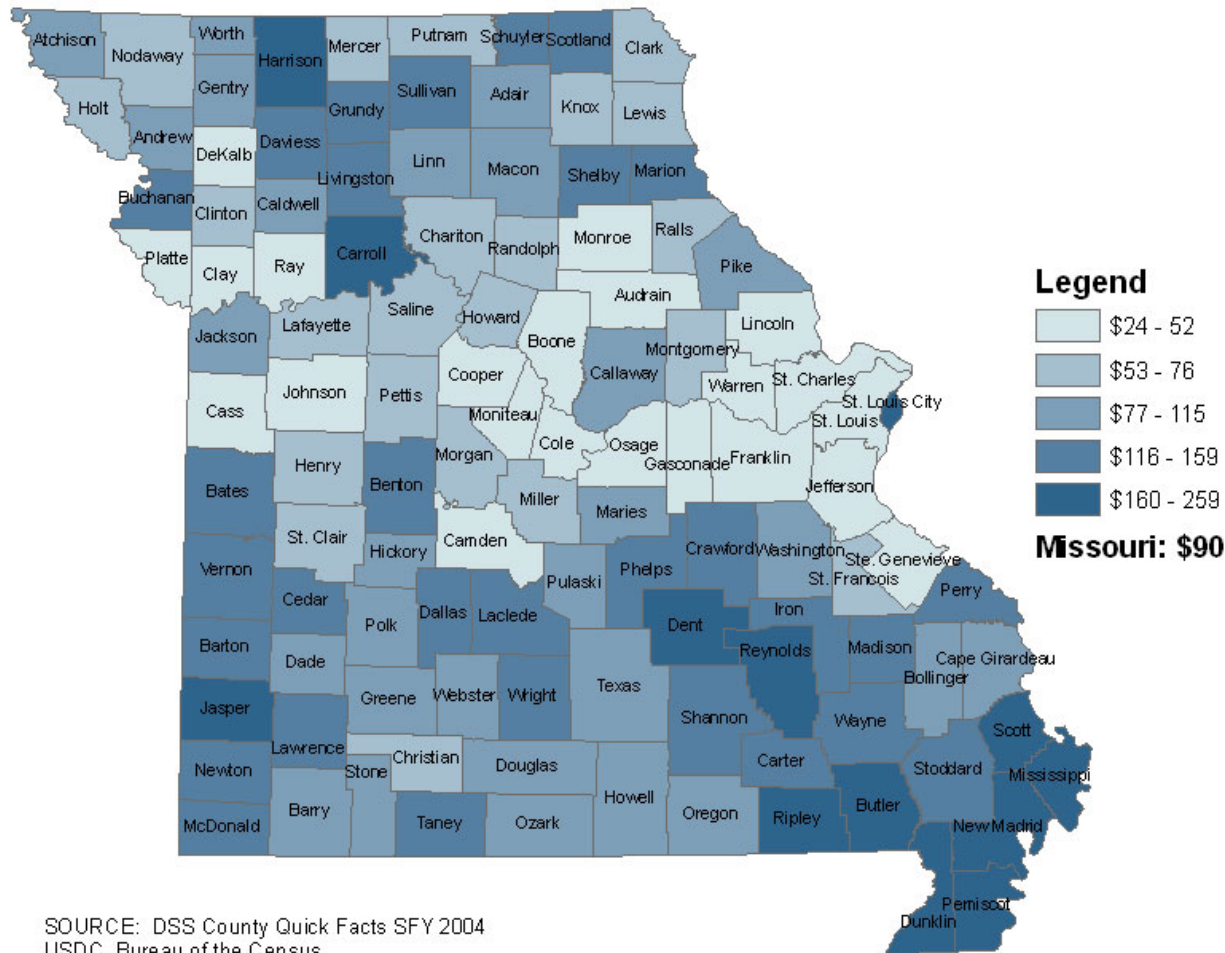
Physician Medicaid Expenditures per Capita by County, FY2004



The lower physician expenditures across central Missouri reflect the availability of managed care, which covers physician services separately

SOURCE: DSS County Quick Facts SFY 2004
USDC, Bureau of the Census

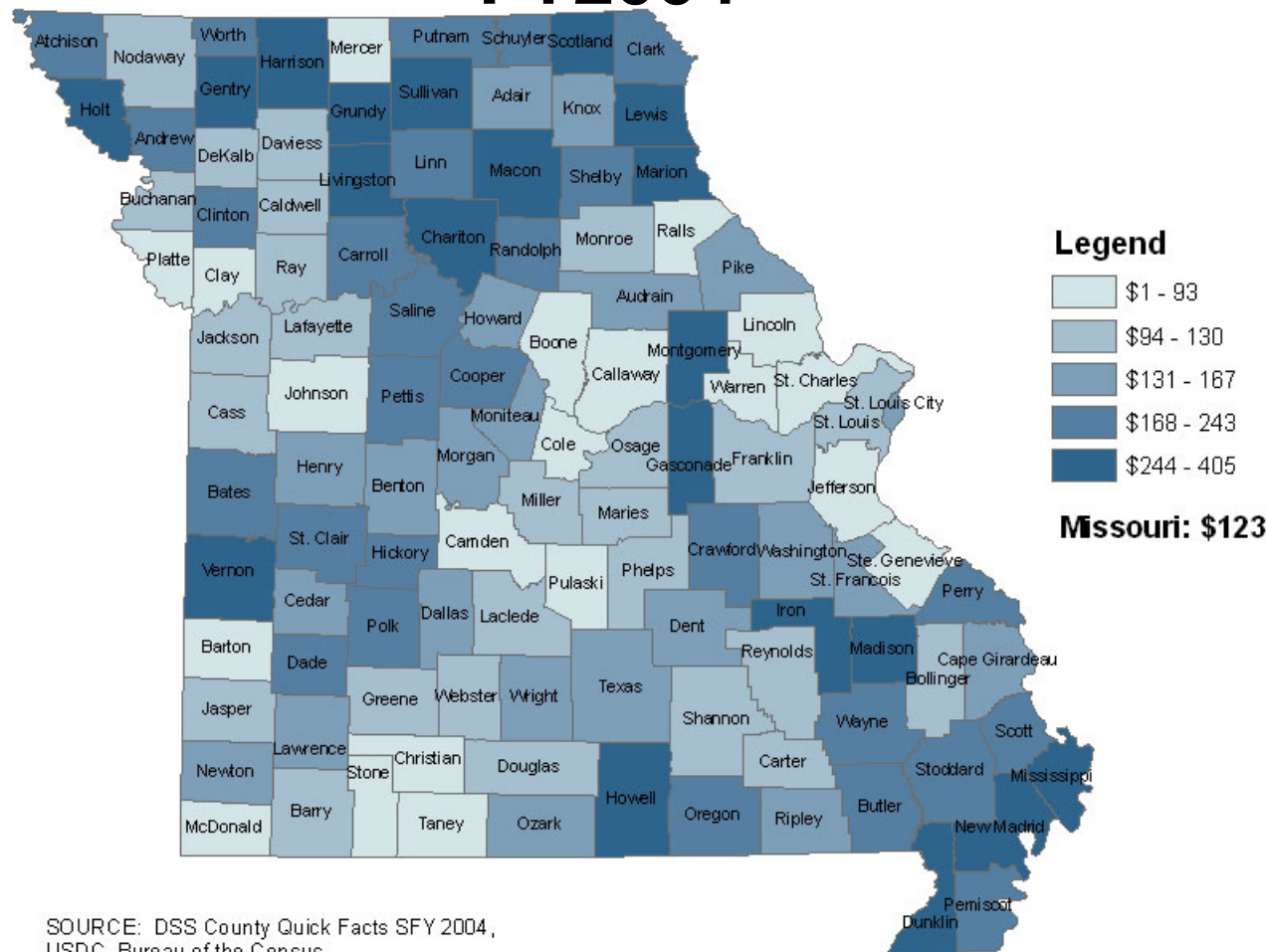
Inpatient Medicaid Expenditures per Capita by County, FY2004



The lower hospital expenditures across central Missouri reflect the availability of managed care, which covers hospital services separately

SOURCE: DSS County Quick Facts SFY 2004
USDC, Bureau of the Census

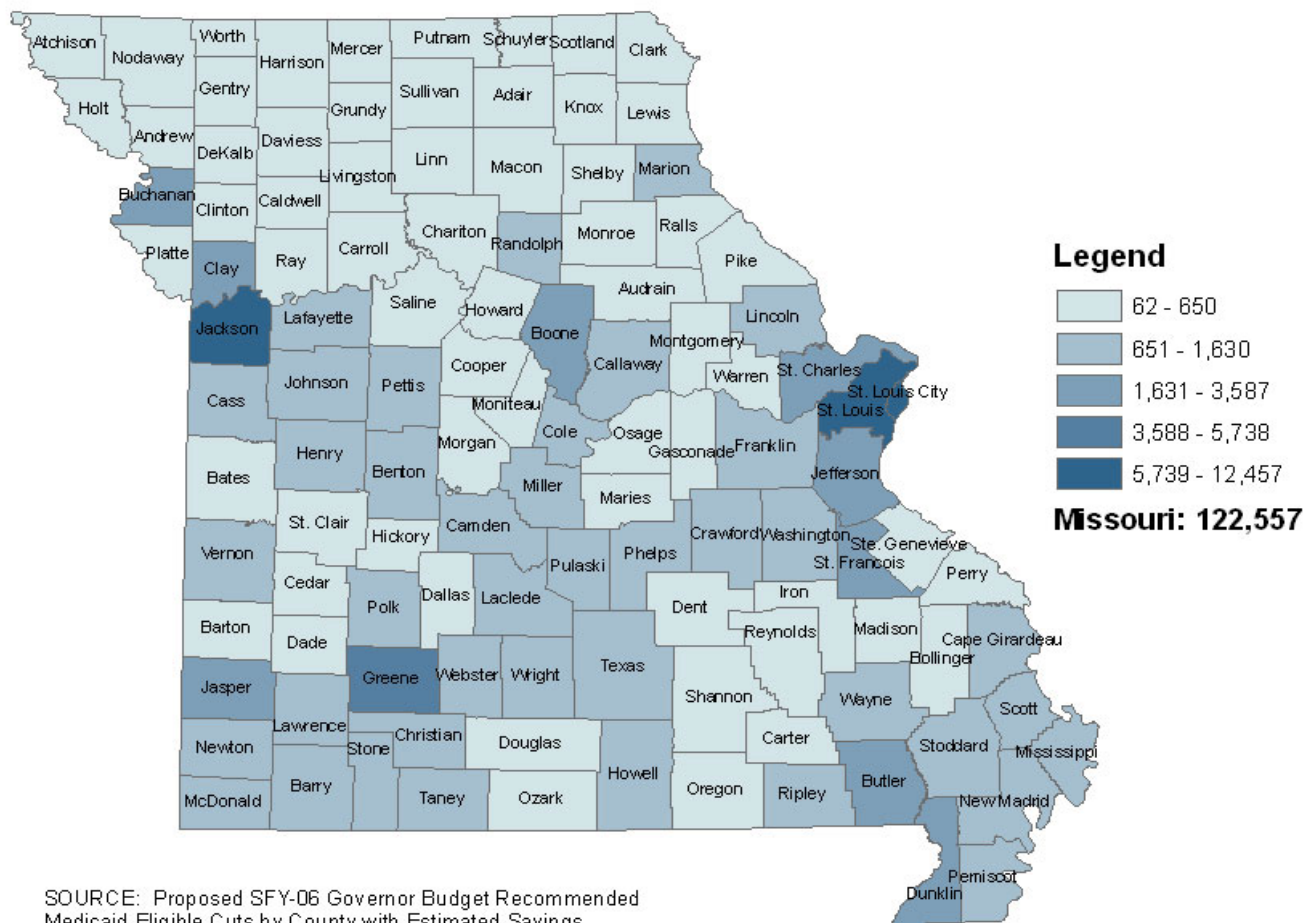
Nursing Home Medicaid Expenditures per Capita by County, FY2004



Per capita expenditures for nursing facilities averaged \$125 per capita

SOURCE: DSS County Quick Facts SFY 2004, USDC, Bureau of the Census

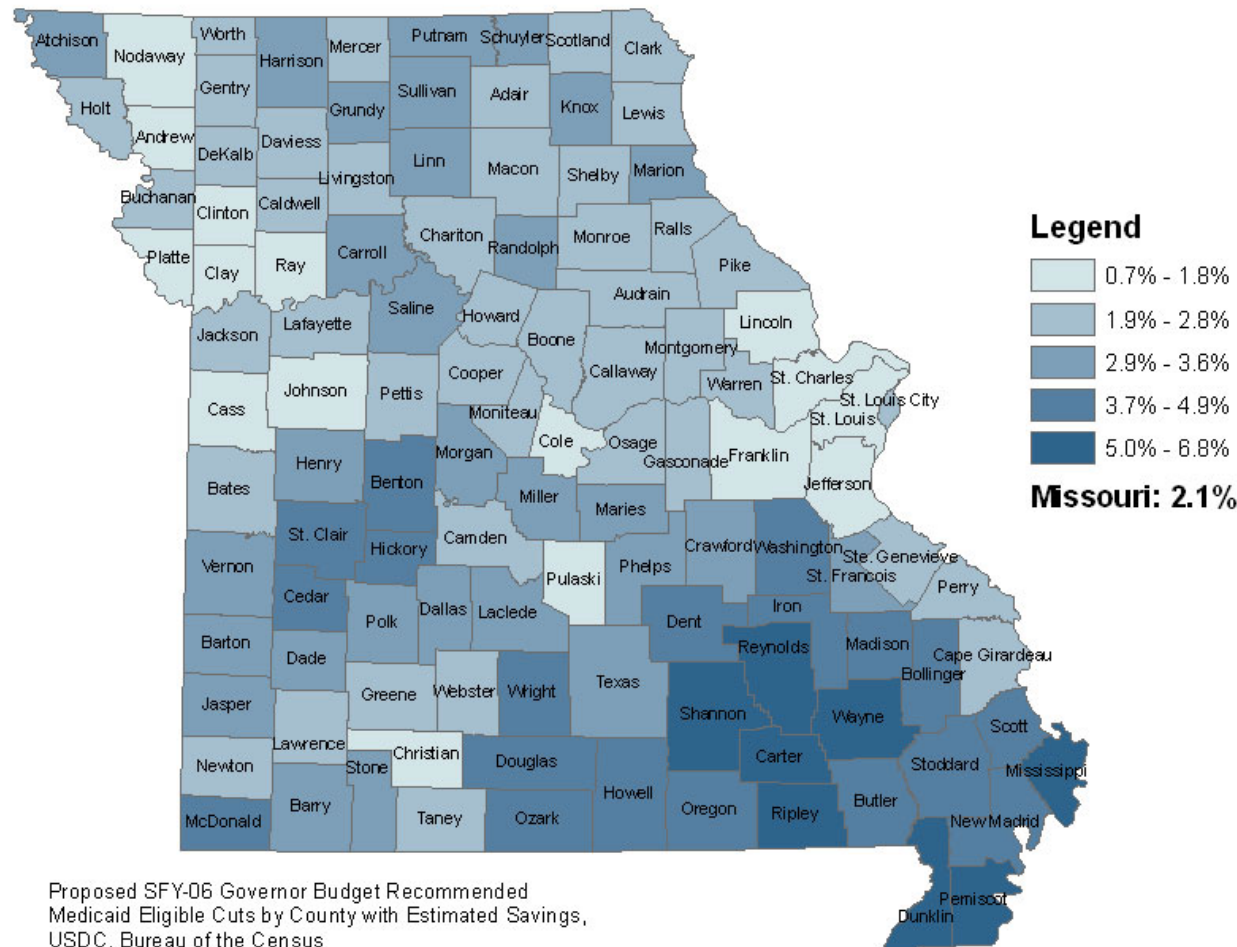
Number of Persons Affected by Changes in Medicaid Provisions, FY2006



The urban areas of Missouri will have the largest number of people affected by the recent changes in Medicaid provisions

SOURCE: Proposed SFY-06 Governor Budget Recommended Medicaid Eligible Cuts by County with Estimated Savings

Percent of County Population Affected by Changes in Medicaid Provisions, FY2006

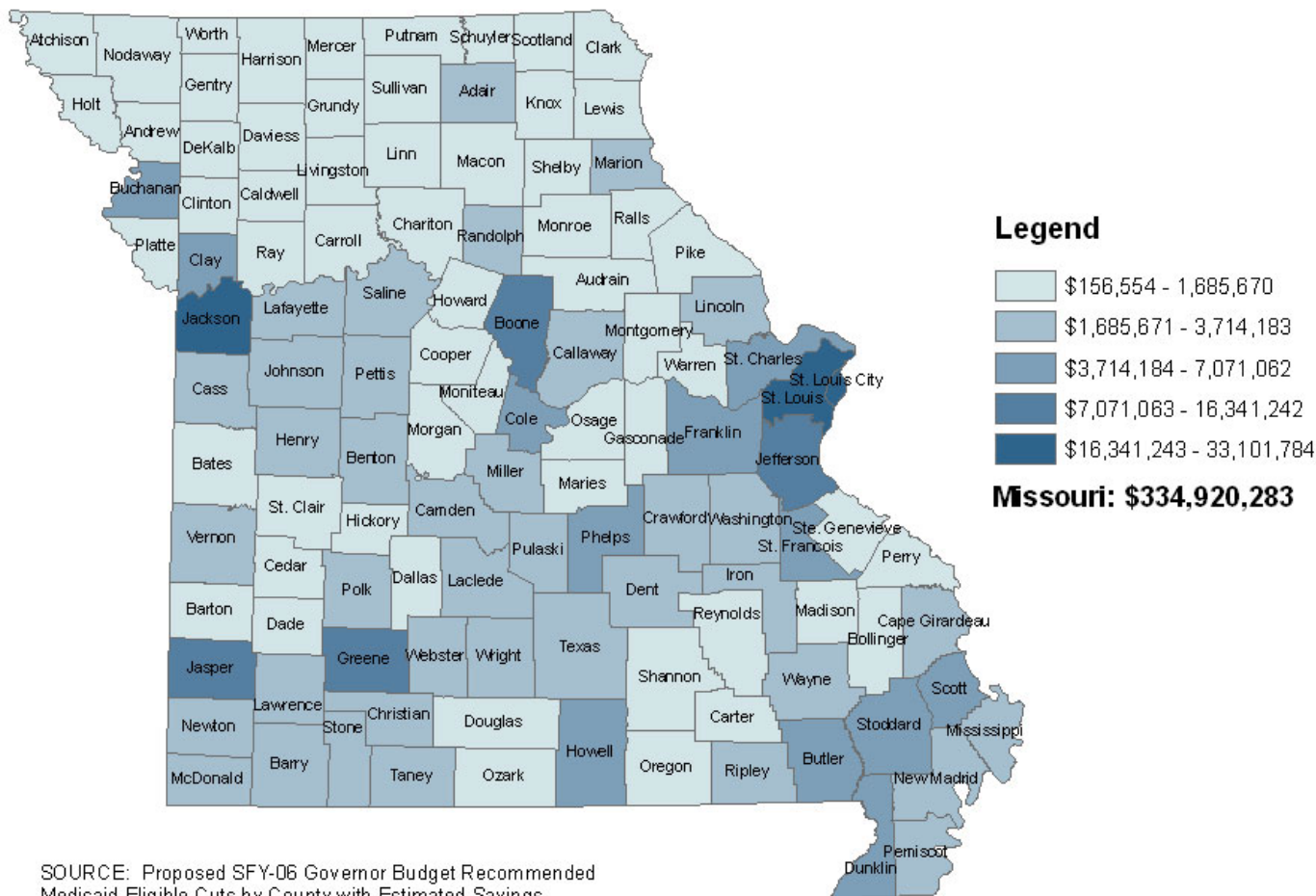


Proposed SFY-06 Governor Budget Recommended Medicaid Eligible Cuts by County with Estimated Savings, USDC, Bureau of the Census

Missouri's poorest regions will have the highest percent of population impacted by the recent changes in Medicaid provisions

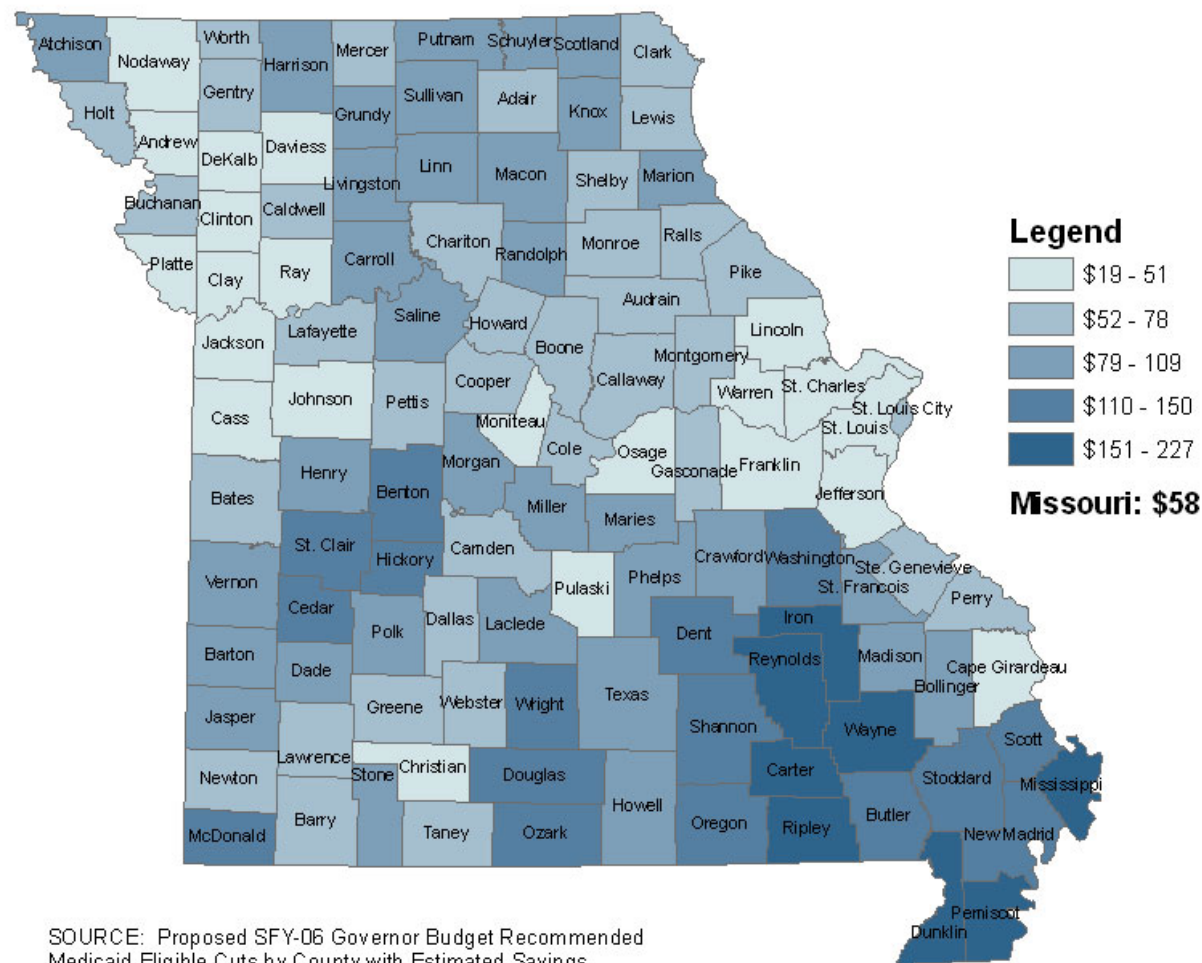
Medicaid expenditures will be reduced by an estimated \$335 million as a result of recent Medicaid provision changes, with the greatest reductions occurring in urban areas

Estimated Medicaid Expenditure Reduction due to Changes in Medicaid Provisions, FY2006



SOURCE: Proposed SFY-06 Governor Budget Recommended Medicaid Eligible Cuts by County with Estimated Savings

Estimated Medicaid Expenditure Reduction per Capita, FY2006



Estimated reductions in per capita Medicaid expenditures by county range from \$19 to \$228

SOURCE: Proposed SFY-06 Governor Budget Recommended Medicaid Eligible Cuts by County with Estimated Savings, USDC, Bureau of the Census

Future Analysis

A more definitive analysis of the interrelationships among Missouri Medicaid participant characteristics, service utilization, and expenditure levels is possible. However, hundreds of millions of claims records need to be organized and summarized before analyses can be completed. The extreme size and complexity of these files inhibits summarization and analysis. Consequently, it is difficult to assess the potential impact of policy or procedural changes to the Medicaid program.

Working with the Department of Social Services, our work group is organizing these Medicaid claims records in order to conduct further analyses of the important interrelationships in the program. For example, do expenditures vary in different parts of the state among categories of participants depending upon the health care that they receive? What participant characteristics are associated with higher service utilization and expenditure patterns? How would changes to eligibility or the mix of services affect expenditures?

Each monthly file of Missouri Medicaid claims includes about one million records. Over ten years of these data are being prepared for additional analyses. We look forward to the opportunity to produce additional public policy research from this important source.

Data Notes

1. The major source for data in National Maps section of the Chart Book was the Henry Kaiser Foundation (www.statefacts.org). The Kaiser reports are based on data from the Centers for Medicare and Medicaid Services (CMS). The Missouri Department of Social Services and the Department of Health and Senior Services are the primary sources for data for the Missouri Charts and Missouri Maps.
2. CMS uses data sources and measurement methodologies that differ from those used by Missouri DSS and Missouri DHSS. So, data in the Missouri Charts and Maps sections are not necessarily directly analogous to the data in the National Maps. Notwithstanding, the UMC Medicaid Work Group determined that the national level data are valuable in terms of understanding how Missouri Medicaid compares to other states. CMS data are considered the most accurately standardized, up-to-date national data for this purpose.
3. The UMC Medicaid Work Group created five broad groups of Missouri Medicaid Enrollees for some of the charts. These five groups are: Adults, Children, Blind and Disabled, Elderly and Other. These group titles are the same as those used by the Kaiser Foundation, but are not the same as those typically used in other reports generated by DSS.

Data Sources

- Department of Social Services, *Quick Facts*, <http://www.dss.mo.gov/mis/cqfacts/> (Accessed July 20, 2005).
- *Missouri Information for Community Assessment: Medicaid Records, February 2002 through May 2005*. Missouri Department of Health and Senior Services. <http://www.health.state.mo.us/MedicaidMICA/medicaid.html> (Accessed July 25, 2005 and August 4, 2005).
- *Program Information on Medicaid & State Children's Health Insurance Program*, Centers for Medicare & Medicaid Services, Office of Research, Development, & Information, 2004 Edition.
- *Table 5, Medicaid Summary Files, FY1998 – FY2005*. Division of Medical Services, Missouri Department of Social Services.
- National maps were reproduced using the “natural breaks” of data obtained from: *The Kaiser Family Foundation, statehealthfacts.org. Medicaid and SCHIP Statistics*. Henry J Kaiser Foundation. <http://www.statehealthfacts.org/cgi-bin/healthfacts.cgi> (Accessed July 20, 2005).
- *SAIPE Population Estimates*, USDC, Bureau of the Census, July 1, 2003.
- *Proposed SFY-06 Governor Budget Recommended Medicaid Eligible Cuts by County with Estimated Savings*. Department of Social Services. Jefferson City: MO, 2005. <http://www.dss.mo.gov/mis/melgct06.pdf> (Accessed July 20, 2005).

Missouri Medicaid Chart Book

The Missouri Medicaid Program:
A Graphical Profile

Medicaid Work Group, University
of Missouri--Columbia

Missouri Medicaid Chartbook



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