This document provides a description of the definitions, data sources, and analysis used in the report on State Health Care Spending on Medicaid.

A.1 Definitions

The following are definitions of terms used in this report.

**Disproportionate Share Hospital, or DSH, Payments:** Lump sum payments from the Medicaid program intended to provide additional reimbursement to hospitals that have qualified by serving a large number of Medicaid enrollees and uninsured individuals.¹

**Enrollees:** Individuals who are enrolled in Medicaid over the course of the fiscal year, regardless of whether they use services. Enrollees are presumed to be unduplicated (each person is only counted once).²

**Enrollment group:**

- **Children:** Generally nondisabled Medicaid enrollees ages 18 and younger.³
- **Elderly:** Medicaid enrollees ages 65 and older, regardless of their disability status.⁴† Elderly Medicaid enrollees may also be covered under Medicare.⁵

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• **Parents:** Generally nondisabled Medicaid enrollees ages 19-64, most of whom are parents, caretakers of a child, or pregnant women.6,*

• **People with disabilities:** Medicaid enrollees under age 65 who are reported as eligible for the program due to a disability.

**Payments for services:** Total state and federal expenditures for Medicaid services delivered to enrollees.7 Medicaid Statistical Information System, or MSIS, data exclude DSH payments to hospitals and administrative expenditures.8

**Reporting year:**

• **Federal fiscal year (FY):** Oct. 1 of the prior year through Sept. 30.

• **State fiscal year (SFY):** July 1 of the prior year through June 30. States with different fiscal years are Alabama and Michigan (Oct. 1 through Sept. 30), New York (April 1 through March 31), and Texas (Sept. 1 through Aug. 31).9

• **Calendar year (CY):** Jan. 1 through Dec. 31.

**State:** The 50 states and the District of Columbia. U.S. territories were excluded from this analysis because the federal financing structures for their Medicaid programs differ from those of the 50 states and the district.10

**State own-source revenue:** Funds that states raise primarily through taxes and fees. These funds do not include any federal revenue, such as matching dollars or grants. State revenue from localities is included in own-source revenue.11

**State share of Medicaid spending:** All state-funded spending for Medicaid as reported in the CMS-64 Quarterly Expense reports, which include expenditures on payments for services to recipients, administrative expenses, and DSH payments. In a handful of states, local funding is a substantial part of the state share of Medicaid spending.12

**Total Medicaid spending:** All state and federal spending for Medicaid as reported in the CMS-64 Quarterly Expense reports, which include payments for services, administrative expenses, and DSH payments.

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A.2 Data and sources for spending and enrollment

Spending

**National Health Expenditures.** Data from the National Health Expenditure Accounts from the Centers for Medicare & Medicaid Services include annual U.S. expenditures for health care goods and services, public health activities, government administration, investment related to health care, and the net cost of health insurance. This includes private health insurance, Medicare, Medicaid, the Children’s Health Insurance Program, the Department of Defense, and the Department of Veterans Affairs expenditures, as well as individuals’ out-of-pocket costs.13

**Payments for services and payments for services per enrollee by enrollment group.** Data on (1) total Medicaid payments for services and (2) payments for services per enrollee by enrollment group are from analyses by the Kaiser Commission on Medicaid and the Uninsured and the Urban Institute, or KCMU/UI, of CMS data from Medicaid Statistical Information System and the CMS-64 Quarterly Expense reports. Payments for services include both state and federal spending for services to Medicaid enrollees, but do not include DSH payments. The per-enrollee figures represent the average (mean) level of payments for services for Medicaid enrollees in each enrollment group.14

**State own-source revenue.** The U.S. Census Bureau’s Annual Survey of State Government Finances provides a comprehensive summary of annual survey findings for state governments, including revenue by source and state fiscal year.15

**State share and total Medicaid spending.** State share and total Medicaid spending data are from the Centers for Medicare & Medicaid Services’ CMS-64 Quarterly Expense reports.16 This dataset includes state and federal Medicaid expenditures by expenditure type for each fiscal year.

Enrollment

**Health insurance coverage data.** The U.S. Census Bureau’s Current Population Survey Annual Social and Economic Supplements, or CPS ASEC, includes survey data on national survey data on national and state-by-state health insurance coverage.17 Percentages by coverage type do not add up to 100 percent because some residents have multiple sources of health insurance coverage.18 Health insurance coverage numbers are calendar year data estimated using a survey instrument in the year following the reporting year.19

**Population estimates.** Population data used in this study are mid-year point-in-time estimates from the U.S. Census Bureau. Analyses for 2000-10 are taken from the Intercensal Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico for analyses of 2000-10 data.20 Analyses for 2011 and 2012 use Census Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico because the Intercensal Estimates for after 2010 are not yet available.21

**Total Medicaid enrollment and enrollment by group.** Enrollment data are from the Kaiser Commission on Medicaid and the Uninsured and the Urban Institute, or KCMU/UI, analyses of CMS MSIS data and represent the number of individuals enrolled over the course of the fiscal year, not at a particular point in time. The enrollment estimates differ slightly from similar estimates posted by the Centers for Medicare & Medicaid Services because adjustments to the data have been made for several states in which some individuals appeared to be categorized incorrectly. The most common adjustment KCMU/UI made was to shift people age 65 and older to the elderly category who were previously categorized as disabled, and the second most common adjustment was to shift individuals under age 65 out of the elderly category and into the category for persons with disabilities.22
A. 3 Methodologies by figure

Figure 2: Total Medicaid spending CAGR, inflation adjusted, 2000-12

Pew used the total computable total net expenditures for the medical assistance program and administration components of the CMS-64 data to calculate the total Medicaid spending CAGR for FY 2000-12. Expenditures were adjusted to 2012 dollars using the Bureau of Economic Analysis' 2012 Gross Domestic Product implicit price deflator.23

Figure 3: Total Medicaid spending and national health expenditures, inflation-adjusted growth, 2000-12

Pew calculated cumulative growth in total Medicaid spending for FY 2000-12. Total Medicaid spending was the total computable total net expenditures for the medical assistance program and administration components of the CMS-64 data. Pew also calculated cumulative growth in total national health expenditures for CY 2000-12 from CMS' National Health Expenditure Accounts data. All expenditures were adjusted to 2012 dollars using the Bureau of Economic Analysis' 2012 Gross Domestic Product implicit price deflator.24

Figure 4: Percent of residents enrolled in Medicaid over the course of the year, 2010

Pew calculated the percent of residents enrolled in Medicaid for FY 2010 from total Medicaid enrollment from MSIS data reported by KCMU/UI and Census population estimates for 2010. Pew calculated the percent of uninsured residents in 2010 based on the number of residents not covered by health insurance in CY 2010 from CPS ASEC and Census population estimates for 2010.

Data notes:

- Because 2010 MSIS enrollment data were unavailable, KCMU/UI used 2009 data for Colorado, Idaho, Missouri, North Carolina, and West Virginia.25
- Due to data quality issues, Medicaid enrollees with disabilities in Maine who were enrolled only in the fourth quarter of FY 2010 are not included in KCMU/UI data on state or national totals.26

Figure 5: Health insurance coverage by source as a percent of the population, 2000-12

Pew calculated the percent of residents enrolled in Medicaid for FY 2000-10 based on Medicaid enrollment data from MSIS reported by KCMU/UI and Census population estimates for 2000-10. Due to lags in reporting, Medicaid enrollment data are not available from KCMU/UI to calculate the number of residents enrolled in Medicaid in FY 2011 and FY 2012.

Pew also analyzed data from the CPS ASEC on health insurance enrollment for CY 2000-12 and Census population estimates for 2000-12 to calculate the percent of uninsured residents and the percent of residents enrolled in employer-sponsored insurance, direct purchase non-group insurance, and Medicare for 2000-12. Pew used actual Medicaid enrollment data from MSIS reported by KCMU/UI as opposed to survey data from the CPS ASEC 1) in order to maintain consistency with other analyses in our report, 2) because CPS ASEC survey data are prone to under-count all insurance sources, and 3) because CPS ASEC Medicaid enrollment includes Children's Health Insurance Program enrollees.27

Data notes:

- KCMU/UI rounded Medicaid enrollment estimates for FY 2000 to the nearest 100.28
• Because Hawaii did not provide Medicaid enrollment data for FY 2000, KCMU/UI used FY 1999 data.29
• Medicaid enrollment data were not available for Georgia in 2002 and are not included in KCMU/UI data on state or national totals.30
• Because 2003 Medicaid enrollment data were unavailable for Maryland, KCMU/UI used 2002 enrollment data.31
• Because of a limitation in the FY 2003 and FY 2004 West Virginia MSIS data, a select number of Medicaid enrollees may have been omitted from the West Virginia enrollment numbers.32
• Beginning in 2004, Census revised their estimates of the number of employer-sponsored insurance enrollees and the number of uninsured based on improvements to the algorithm that assigned coverage to dependents.33
• Because 2009 Medicaid enrollment data were unavailable for Pennsylvania, Utah, and Wisconsin, KCMU/UI used 2008 enrollment data.34
• For 2010, 2011, and 2012, Census amended the methods used to calculate estimates of the number of uninsured and the number of employer-sponsored insurance, Medicare, and direct purchase non-group insurance enrollees to include Census 2010-based population controls.35
• Because 2010 enrollment data were unavailable for Colorado, Idaho, Missouri, North Carolina, and West Virginia, KCMU/UI used 2009 MSIS data.36
• Due to data quality issues, Medicaid enrollees with disabilities in Maine who were enrolled only in the fourth quarter of FY 2010 are not included in KCMU/UI data on state or national totals.37

Figure 6: Total Medicaid spending per enrollee versus National Health Expenditure Accounts per U.S. resident, inflation adjusted, 2000-10

Pew analyzed CMS-64 data and MSIS data reported by KCMU/UI on Medicaid enrollment to calculate total Medicaid spending per enrollee for FY 2000-10. Pew calculated national health expenditures per U.S. resident for CY 2000-10 based on total national health expenditures and U.S. population from CMS’ National Health Expenditure Accounts data. Medicaid spending data and national health expenditures are adjusted for inflation to 2012 dollars using the Bureau of Economic Analysis’ 2012 Gross Domestic Product implicit price deflator.38

Data notes:
• KCMU/UI rounded Medicaid enrollment estimates for FY 2000 to the nearest 100.39
• Because Hawaii did not provide enrollment data for FY 2000, KCMU/UI used data for FY 1999.40
• Medicaid enrollment data were not available for Georgia in 2002 and are not included in KCMU/UI data on state or national totals.41
• Because of a limitation in the FY 2003 and FY 2004 West Virginia MSIS data, a select number of Medicaid enrollees may have been omitted from the West Virginia enrollment numbers.42
• Because 2003 Medicaid enrollment data were unavailable for Maryland, KCMU/UI used 2002 enrollment data.43
• Because 2009 Medicaid enrollment data were unavailable for Pennsylvania, Utah, and Wisconsin, KCMU/UI used 2008 enrollment data.44
• Because 2010 enrollment data were unavailable for Colorado, Idaho, Missouri, North Carolina, and West Virginia, KCMU/UI used 2009 enrollment data.45
Due to data quality issues, Medicaid enrollees with disabilities in Maine who were enrolled only in the fourth quarter of FY 2010 are not included in KCMU/UI data on state or national totals.46

Figure 7: Distribution of Medicaid enrollment and payments for services by enrollment group, 2010

Pew analyzed MSIS data reported by KCMU/UI to show distribution of enrollment and payments by enrollment group. Pew also used data from MSIS reported by KCMU/UI on total enrollment, total Medicaid payments for services, and payments for services per enrollee by enrollment group within this analysis. Payments for services and payments for services per enrollee are not adjusted for inflation, since data are only presented for 2010, the most recent year of data available from this source.

Data notes:

• Because 2010 spending and enrollment data were unavailable for Colorado, Idaho, Missouri, North Carolina, and West Virginia, KCMU/UI used 2009 MSIS data. KCMU/UI then adjusted 2009 spending data to 2010 CMS-64 spending levels.47

• Due to data quality issues, Medicaid enrollees with disabilities in Maine who were enrolled only in the fourth quarter of FY 2010 are not included in KCMU/UI payments for services, enrollment counts, or payments per enrollee calculations.48

• Because 2010 MSIS data underreports spending for people in New Mexico in the Coordination of Long-Term Services waiver program, KCMU/UI did not report payments for services for the elderly in this state. However, these payments were included in state and national totals.49

Figure 8: Elderly and/or disabled enrollees as a percent of total Medicaid enrollment, 2010

Pew analyzed MSIS data reported by KCMU/UI on Medicaid enrollment by enrollment group to calculate the percent of Medicaid enrollees who were elderly and/or disabled in FY 2010 and the percent of Medicaid enrollees who were parents and/or children in FY 2010.

Data notes:

• Because 2010 enrollment data were unavailable for Colorado, Idaho, Missouri, North Carolina, and West Virginia, KCMU/UI used 2009 data.50

• Due to data quality issues, Medicaid enrollees with disabilities in Maine who were enrolled only in the fourth quarter of FY 2010 are not included in KCMU/UI data on state or national totals.51

Figure 9: Total Medicaid payments per elderly and/or disabled enrollee, 2010

Pew calculated total Medicaid payments for services per elderly and/or disabled enrollee and per parent and/or child in FY 2010 using MSIS data reported by KCMU/UI on Medicaid enrollment by enrollment group and the distribution of Medicaid payments for services by enrollment group. Payments for services per elderly and/or disabled enrollee and per parent and/or child enrollee are not adjusted for inflation because data are only presented for 2010, the most recent year of data available from this source.

Data notes:

• Because 2010 spending and enrollment data were unavailable for Colorado, Idaho, Missouri, North Carolina, and West Virginia, KCMU/UI used 2009 MSIS data and adjusted them to 2010 CMS-64 spending levels.52
• Due to data quality issues, Medicaid enrollees with disabilities in Maine who were enrolled only in the fourth quarter of FY 2010 are not included in KCMU/UI data on state or national totals.53

• Because 2010 MSIS data underreports spending for people in New Mexico in the Coordination of Long-Term Services waiver program, KCMU/UI did not report payments for services for the elderly in this state. However, these payments were included in state and national totals.54

Figure 10: State-funded Medicaid expenditures as a percent of state own-source revenue, 2012

Pew analyzed FY 2012 CMS-64 data and SFY 2012 Annual Survey of State Government Finances data to calculate total Medicaid spending, state share of Medicaid spending, and state share of Medicaid spending as a percent of state own-source revenue. Pew calculated state own-source revenue as state general revenue data less federal intergovernmental transfers.

Figure 11: State-funded Medicaid expenditure as a percent of state own-source revenue, 2000-12

Pew analyzed FY 2000-12 CMS-64 data and SFY 2000-12 data from the Annual Survey of State Government Finances to calculate state share of Medicaid spending as a percent of state own-source revenue and the percentage point change from 2000 to 2012. Pew calculated state own-source revenue as state general revenue data less federal intergovernmental transfers.
Endnotes


6 Ibid.; Kaiser Family Foundation, email communication to The Pew Charitable Trusts, “2001-2009 Enrollment, Payments, and PPE.”


46 Ibid.


48 Ibid.


51 Ibid.


53 Ibid.


For further information, please visit:
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