



# medicaid and the uninsured

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# Where Does the Burden Lie? Medicaid and Medicare Spending for Dual Eligible Beneficiaries

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Approximately 8.8 million Medicaid beneficiaries are simultaneously enrolled in Medicare.<sup>1</sup> Otherwise known as "dual eligibles," these individuals are among the nation's most vulnerable of populations – seniors and non-elderly people with disabilities. Most are low-income, in poor health and have considerable health care needs. Given these needs, duals are a costly population to care for. Dual eligibles rely on Medicaid to pay Medicare premiums and cost-sharing and to cover critical benefits Medicare does not cover, such as long-term care. Between Medicaid and Medicare, \$196.3 billion was spent on duals in 2005, making them one of the most costly populations covered by public health programs<sup>2</sup> and of great interest to the state and federal governments that finance and manage the programs. Despite their importance, there is scant information about patterns of service use and spending for duals under *both* Medicare and Medicaid.

The purpose of this brief is to begin to fill this gap in information by presenting findings based on an analysis of linked Medicare and Medicaid data from the national dual population in 2003. Our analysis uses descriptive statistics to analyze the demographic and health characteristics of the dual eligible population and their patterns of service utilization and spending under both the Medicare and Medicaid programs.

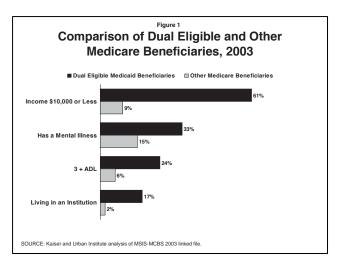
**Data Sources:** For this study, we relied on two data sources: the 2003 Medicare Current Beneficiary Survey (MCBS) and the 2003 Medicaid Statistical Information System (MSIS) Summary File. Using the MCBS as the base file, we linked it to the MSIS to derive our sample of 3,527 individuals enrolled in both Medicare and Medicaid in 2003. This analysis excludes Medicare beneficiaries who died during the year. For a more detailed explanation of the data please see the Appendix.

# **Findings:**

# Who Are the Duals?

**Compared to other Medicare beneficiaries, dual eligibles who have Medicaid and Medicare coverage are poorer and sicker.** Dual eligibles have substantially lower incomes than non-duals. Sixty-one percent of duals have incomes less than \$10,000 annually, compared to just 9 percent of

other Medicare beneficiaries (Table 1 and Figure 1). Duals are more likely to need assistance with multiple ADLs (activities of daily living) compared to non-duals. Among the elderly, dual eligibles are in worse health than non-duals on all chronic disease and disability measures examined (Table 2). Elderly duals were more likely to have a diagnosis of diabetes, heart disease, and lung disease as well as mental illness and Alzheimers disease. Among the non-elderly, however, duals are slightly less likely to have physical illnesses such as diabetes and heart disease, but substantially more likely to have mental illness and mental retardation, compared to the non-dual

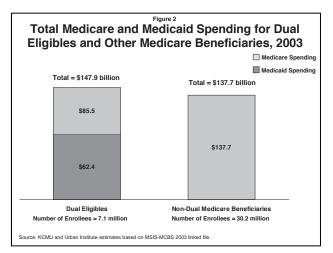


disabled population. Duals are also more likely than non-duals to be living in an institutional setting.

# Service Use and Spending Patterns for Duals Compared to Other Medicare Beneficiaries

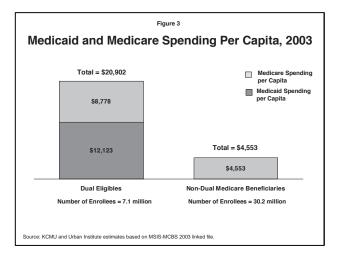
**Duals are more likely than other Medicare beneficiaries to have any utilization in each of the major categories of service use examined (Table 3).** These differences are particularly large in both inpatient and outpatient hospital care, and in institutional long-term care. Duals had higher use of outpatient hospital services and emergency rooms. Among duals, the patterns of utilization, paid for by Medicaid and Medicare, are similar for elderly and non-elderly beneficiaries, except that elderly duals are more likely than non-elderly duals to use institutional long term care and slightly less likely to use emergency room care.

**Total Medicaid and Medicare spending on the duals exceeded spending on the entire non-dual Medicare population.** Despite the fact that the number of dual enrollees is less than one quarter of non-duals (7.1 million versus 30.2 million), the duals are a more expensive population to care for. Total Medicaid and Medicare spending on the duals was \$147.9 billion in 2003 compared to \$137.7 billion on non-dual Medicare beneficiaries (Figure 2). Major categories of spending include inpatient hospital, ambulatory care, prescription drugs and hospice as well as institutional and community-based long-term care services.



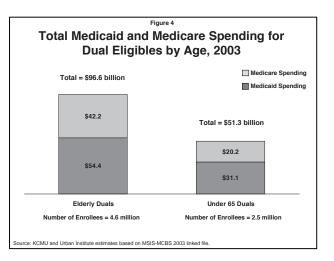
**Medicaid finances nearly 60 percent of combined Medicare and Medicaid spending on the duals.** The share of spending by Medicaid was only slightly higher for non-elderly duals than for the elderly duals (61 percent versus 56 percent) (Table 3).<sup>3</sup> It is important to note that the study year is 2003, which is before Medicare implemented its prescription drug benefit so spending on prescription drugs for duals was financed by Medicaid at the time.

On a per capita basis, dual-eligibles have nearly five times the per capita spending of non-duals (\$20,902 versus \$4,553) (Figure 3). Younger duals have a slightly lower total per capita spending than older duals, \$20,668 versus \$21,028 (Table 3). Younger duals have higher per capita Medicaid spending, whereas older duals have higher Medicare spending per capita.



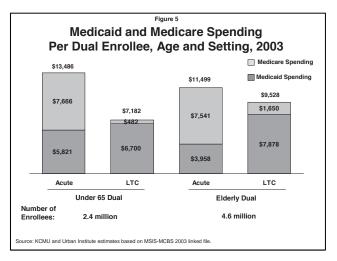
# Service Use and Spending Patterns Among Dual Eligibles

Within the dual population, total Medicaid and Medicare spending was higher for individuals over age 65 than for younger duals (\$96.6 billion versus \$51.3 billion) (Figure 4). On a per capita basis, the cost burden between Medicare and Medicaid and the spending per capita are comparable for non-elderly and elderly duals (\$20,668 versus \$21,028) (Table 4). An important fundamental difference between the under 65 duals and the elderly duals is that non-elderly duals are, by definition, poor *and* disabled, whereas elderly duals are poor but they may or may not be disabled. This basic difference

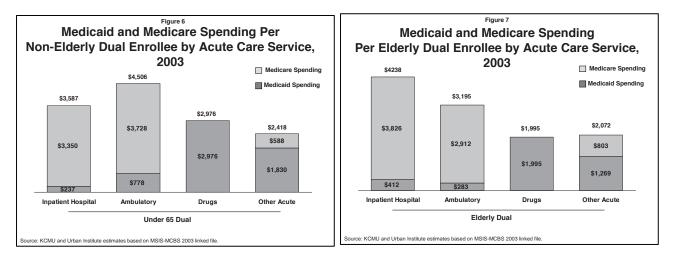


has important implications for how the two groups use health care services.

Younger and elderly duals spend roughly equal shares on acute care and long-term care; however, there is a distinct difference between the two groups and in the burden of financing between Medicaid and Medicare when we look within the broad service categories. For acute care services overall, Medicaid pays for a greater share (43 percent versus 34 percent) and spends more per capita (\$5,821 versus \$3,958) on younger duals than it does for elderly duals (Figure 5). Medicaid's acute care spending for younger duals was 80 percent of Medicare's spending on the group (\$5,821 versus \$7,666). For older duals, by contrast, Medicaid's spending was only about half of Medicare's spending (\$3,958 versus \$7,541). Among the individual acute care services examined, Medicaid's spending per capita for younger duals was higher than that for the elderly on

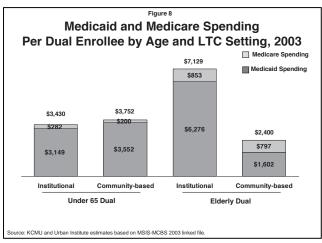


all services except for inpatient care (Figures 6 and 7).



For sub-acute and long term care services, Medicaid's spending for duals far exceeds that of Medicare's regardless of age. Medicaid accounts for 93.3 percent of spending for these services among younger duals, and 82.7 percent for elderly duals (Table 4). In contrast with acute care spending, per capita spending on sub-acute and long-term care is lower for younger duals than for elderly duals (\$7,128 versus \$9,528). Younger duals rely more on Medicaid home and community-based services than older duals, whereas older duals are more likely to use institutional services such as a nursing home.

Among elderly duals, on a per capita basis, spending is heavily concentrated on institutional long-term services, – nearly three times that of community-based services (\$7,129 compared to \$2,400) (Figure 8). Younger duals long-term care spending is roughly equal between institutional and community-based care services (compare \$3,430 and \$3,752). Other noteworthy distinctions within longterm care services are the significantly higher per capita spending on Medicaid home and community based services for



younger duals compared to elderly duals (\$3,036 versus \$612) but higher per capita spending on elderly duals for Medicare home health, Medicare skilled nursing care and Medicaid personal care (Table 4).

# Conclusion

Dual eligibles are among the sickest and poorest individuals covered by either Medicaid or Medicare. This brief has demonstrated that differences exist among duals and other Medicare beneficiaries across a wide range of demographic characteristics and across Medicare and Medicaid spending and utilization patterns. Duals were more likely than non-duals to use all the health care services examined, from physician services to in-patient hospital care to long-term care. On a per capita basis, Medicaid and Medicare spending on duals totaled four times that of non-duals. We found that Medicaid covers nearly 60 percent of total Medicaid and Medicare spending for the dual population. Within the dual population, payment for services is split among the two programs. Medicare pays for the majority of acute care services (62 percent versus 38 percent), while Medicaid pays for the vast majority of long-term care services (86 percent versus 14 percent).

#### Table 1 Characteristics of Medicaid-Medicare Dual Eligibles and Other Medicare Beneficiaries, 2003

|                            | All Medicare                |                        | Dual Eligible      | S                  | Non-Dual Medicare Beneficiaries |                    |                    |
|----------------------------|-----------------------------|------------------------|--------------------|--------------------|---------------------------------|--------------------|--------------------|
|                            | Beneficiaries<br>(column %) | All ages<br>(column %) | < 65<br>(column %) | 65 +<br>(column %) | All ages<br>(column %)          | < 65<br>(column %) | 65 +<br>(column %) |
| Ν                          | 37,319,749                  | 7,076,175              | 2,480,179          | 4,595,996          | 30,243,574                      | 2,735,180          | 27,508,394         |
| Age                        |                             |                        |                    |                    |                                 |                    |                    |
| < 65                       | 14.0                        | 35.0                   | 100.0              | 0.0                | 9.0                             | 100.0              | 0.0                |
| 65 - 79                    | 61.0                        | 41.3                   | 0.0                | 63.6               | 65.6                            | 0.0                | 72.1               |
| 80 +                       | 25.0                        | 23.6                   | 0.0                | 36.4               | 25.4                            | 0.0                | 27.9               |
| Gender                     |                             |                        |                    |                    |                                 |                    |                    |
| Male                       | 43.8                        | 36.6                   | 52.7               | 27.9               | 45.5                            | 54.3               | 44.6               |
| Female                     | 56.2                        | 63.4                   | 47.3               | 72.1               | 54.5                            | 45.7               | 55.4               |
| Ethnicity                  |                             |                        |                    |                    |                                 |                    |                    |
| White non-Hispanic         | 79.9                        | 58.7                   | 62.3               | 56.7               | 84.9                            | 72.2               | 86.1               |
| Black non-Hispanic         | 9.4                         | 21.0                   | 23.7               | 19.6               | 6.6                             | 14.5               | 5.8                |
| Hispanic                   | 6.2                         | 11.7                   | 7.8                | 13.7               | 4.9                             | 7.9                | 4.6                |
| Other                      | 4.5                         | 8.7                    | 6.2                | 10.0               | 3.6                             | 5.3                | 3.4                |
| Geography                  |                             |                        |                    |                    |                                 |                    |                    |
| Rural                      | 18.7                        | 21.2                   | 20.6               | 21.5               | 18.2                            | 20.1               | 18.0               |
| Urban                      | 81.3                        | 78.8                   | 79.4               | 78.5               | 81.8                            | 79.9               | 82.0               |
| Family Structure           |                             |                        |                    |                    |                                 |                    |                    |
| Single (never married)     | 6.6                         | 18.7                   | 40.7               | 6.9                | 3.8                             | 14.6               | 2.7                |
| Married                    | 51.5                        | 21.4                   | 15.8               | 24.5               | 58.5                            | 57.6               | 58.6               |
| Divorced/Separated/Widowed | 41.7                        | 59.2                   | 43.1               | 67.9               | 37.6                            | 27.8               | 38.6               |
| Living Arrangement         |                             |                        |                    |                    |                                 |                    |                    |
| Community                  | 95.3                        | 83.5                   | 89.1               | 80.5               | 98.1                            | 99.2               | 98.0               |
| Institution                | 4.7                         | 16.5                   | 10.9               | 19.5               | 1.9                             | 0.8                | 2.0                |
| Income                     |                             |                        |                    |                    |                                 |                    |                    |
| < \$5K                     | 3.4                         | 8.7                    | 8.8                | 8.7                | 2.2                             | 3.6*               | 2.1                |
| \$5 - 10K                  | 15.5                        | 52.4                   | 57.5               | 49.6               | 6.9                             | 10.7               | 6.5                |
| \$10 - 20K                 | 25.3                        | 26.5                   | 25.2               | 27.3               | 25.0                            | 30.6               | 24.5               |
| > \$20K                    | 49.3                        | 4.0                    | 3.4                | 4.3                | 59.9                            | 49.3               | 61.0               |
| Dual Status                |                             |                        |                    |                    |                                 |                    |                    |
| Full Medicaid benefits     | 14.7                        | 77.6                   | 82.2               | 75.0               | n.a.                            | n.a.               | n.a.               |
| Medicare Savings Plan      | 2.9                         | 15.3                   | 14.9               | 15.6               | n.a.                            | n.a.               | n.a.               |
| Unknown                    | 1.3                         | 7.1                    | 2.9*               | 9.4                | n.a.                            | n.a.               | n.a.               |
| Non-Dual                   | 81.0                        | n.a.                   | n.a.               | n.a.               | 100.0                           | 100.0              | 100.0              |

Source: MSIS-MCBS 2003 linked file.

Weighted. Column percents may not add to 100% because we do not display missing values. Shaded cells indicate that unweighted sample is less than 50 cases.

#### Table 2 Health and Access Information for Dual Eligibles and Other Medicare Beneficiaries, 2003

|                    |           | Dual Eligibles |           |            | Non-Dual Medicare Beneficiaries |            |  |  |
|--------------------|-----------|----------------|-----------|------------|---------------------------------|------------|--|--|
|                    | All ages  | < 65           | 65 +      | All ages   | < 65                            | 65 +       |  |  |
| Ν                  | 7,076,175 | 2,480,179      | 4,595,996 | 30,243,574 | 2,735,180                       | 27,508,394 |  |  |
|                    | %         | %              | %         | %          | %                               | %          |  |  |
| Diagnoses          |           |                |           |            |                                 |            |  |  |
| Diabetes           | 27.9      | 21.7           | 31.3      | 18.4       | 23.6                            | 17.9       |  |  |
| Heart Disease      | 27.9      | 20.9           | 31.7      | 25.9       | 26.1                            | 25.8       |  |  |
| COPD/Lung disease  | 19.9      | 21.3           | 19.1      | 13.7       | 21.6                            | 12.9       |  |  |
| Mental Illness     | 33.1      | 56.9           | 20.2      | 14.9       | 47.3                            | 11.7       |  |  |
| Alzheimers         | 5.7       | 0.8*           | 8.4       | 2.9        | 0.9*                            | 3.1        |  |  |
| Mental Retardation | 5.3       | 12.8           | 1.2*      | 0.5        | 4.1                             | 0.1*       |  |  |
| Functional Status  |           |                |           |            |                                 |            |  |  |
| 1-2 ADL            | 19.5      | 18.2           | 20.2      | 12.2       | 21.7                            | 11.3       |  |  |
| 3 + ADL            | 23.7      | 17.1           | 27.2      | 6.4        | 15.3                            | 5.6        |  |  |
|                    |           |                |           |            |                                 |            |  |  |

Source: MSIS-MCBS 2003 linked file.

Weighted. \* indicates that unweighted sample is less than 50 cases.

# Table 3 Summary Utilization and Spending for Dual Eligibles and Other Medicare Beneficiaries, 2003

|  | Dual Eligibles |               |               | Non-Dual Medicare Beneficiaries |               |               |  |
|--|----------------|---------------|---------------|---------------------------------|---------------|---------------|--|
|  | All ages       | < 65          | 65 +          | All ages                        | < 65          | 65 +          |  |
| Service Use Paid for by Medicaid or Medicare |                |               |               |                                 |               |               |  |
| Share Using                                  |                |               |               |                                 |               |               |  |
| Physician Visit                              | 72.5           | 72.6          | 72.4          | 71.3                            | 60.2          | 72.4          |  |
| Outpatient Hospital                          | 71.5           | 71.1          | 71.6          | 57.1                            | 53.9          | 57.4          |  |
| Inpatient Hospital                           | 25.6           | 23.8          | 26.6          | 15.9                            | 18.4          | 15.6          |  |
| Emergency Room                               | 9.9            | 12.6          | 8.5           | 6.9                             | 13.0          | 6.3           |  |
| Skilled Nursing Facility                     | 6.6            | 2.3*          | 9.0           | 2.6                             | 1.0*          | 2.8           |  |
| Institutional Long-Term Care                 | 13.4           | 6.0           | 17.4          | 0.0                             | 0.0           | 0.0           |  |
| Spending                                     | (\$ millions)  | (\$ millions) | (\$ millions) | (\$ millions)                   | (\$ millions) | (\$ millions) |  |
| Total Medicare and Medicaid Spending         | 147,904        | 51,261        | 96,643        | 137,701                         | 12,394        | 125,306       |  |
| Medicaid Spending                            | 85,453         | 31,054        | 54,400        | N/A                             | N/A           | N/A           |  |
| Medicare Spending                            | 62,451         | 20,208        | 42,243        | 137,701                         | 12,394        | 125,306       |  |
| Total Spending per Enrollee                  | \$20,902       | \$20,668      | \$21,028      | \$4,553                         | \$4,531       | \$4,555       |  |
| Share Spending by Medicaid                   | 58%            | 61%           | 56%           | N/A                             | N/A           | N/A           |  |
| Medicaid Spending per Enrollee               | \$12,123       | \$12,607      | \$11,775      | N/A                             | N/A           | N/A           |  |
| Medicare Spending per Enrollee               | \$8,778        | \$8,060       | \$9,252       | \$4,553                         | \$4,531       | \$4,555       |  |
|  |                |               |               |                                 |               |               |  |

Source: MSIS-MCBS 2003 linked file.

Weighted.

\* indicates that unweighted sample is less than 50 cases.

# Table 4 Service Use and Spending Patterns by Dual Eligibles, 2003

|   | Under Age 65 (N = 2,480,179)    |                             |                                  | Age 65 + (N = 4,595,996)        |                             |                                  | All Dual Eligibles              |
|---|---------------------------------|-----------------------------|----------------------------------|---------------------------------|-----------------------------|----------------------------------|---------------------------------|
|   | Total Spending<br>(\$ millions) | % Using<br>(%)              | Spend Per<br>Capita<br>(\$)      | Total Spending<br>(\$ millions) | % Using<br>(%)              | Spend Per<br>Capita<br>(\$)      | Total Spending<br>(\$ millions) |
| Total Spending<br>Medicaid<br>Medicare                          | <b>51.3</b><br>60.6%<br>39.4%   | <b>95.5</b><br>86.7<br>87.7 | <b>20,668</b><br>12,521<br>8,148 | <b>96,643</b><br>56.3%<br>43.7% | <b>94.7</b><br>78.2<br>88.9 | <b>21,028</b><br>11,836<br>9,191 | <b>147,904</b><br>58%<br>42%    |
| Acute Care<br>Medicaid<br>Medicare                              | <b>33,448</b><br>43.2%<br>56.8% | 95.4<br>-<br>-              | <b>13,486</b><br>5,821<br>7,666  | <b>52,851</b><br>34.4%<br>65.6% | 94.5<br>-<br>-              | <b>11,499</b><br>3,958<br>7,541  | <b>86,299</b><br>38%<br>62%     |
| Inpatient Total<br>Medicaid<br>Medicare                         | 8,896<br>6.6%<br>93.4%          | 27.7<br>13.9<br>23.8        | 3,587<br>237<br>3,350            | 19,476<br>9.7%<br>90.3%         | 31.1<br>13.1<br>26.6        | 4,238<br>412<br>3,826            | 28,372<br>9%<br>91%             |
| Ambulatory Total<br>Medicaid<br>Medicare                        | 11,177<br>17.3%<br>82.7%        | 91.1<br>66.8<br>86.9        | 4,506<br>778<br>3,728            | 14,685<br>8.9%<br>91.1%         | 89.9<br>54.9<br>88.4        | 3,195<br>283<br>2,912            | 25,862<br>12.5%<br>87.5%        |
| Drugs Total<br>Medicaid   | 7,381                           | 69.9                        | 2,976                            | 9,168                           | 66.2                        | 1,995                            | 16,548                          |
| Hospice Total<br>Medicaid<br>Medicare                           | 177<br>40.5%<br>59.5%           | 0.3*<br>0.1*<br>0.3*        | 72<br>29<br>43                   | 1,194<br>17.6%<br>82.4%         | 1.6*<br>0.3*<br>1.6*        | 260<br>46<br>214                 | 1,372*<br>20.6%*<br>79.4%*      |
| Other Acute Total (includes capitation)<br>Medicaid<br>Medicare | 5,817<br>76.8%<br>23.2%         | 95.4<br>69.0<br>26.9        | 2,346<br>1,801<br>545            | 8,328<br>67.5%<br>32.5%         | 94.5<br>58.4<br>35.9        | 1,812<br>1,223<br>589            | 14,146<br>71.3%<br>28.7%        |
| Sub-Acute/Long-Term Care<br>Medicaid<br>Medicare                | <b>17,813</b><br>93.3%<br>6.7%  | 24.9                        | <b>7,182</b><br>6,700<br>482     | <b>43,792</b><br>82.7%<br>17.3% | 40.2                        | <b>9,528</b><br>7,878<br>1,650   | <b>61,605</b><br>86%<br>14%     |
| Institutional   | 8,508                           | 6.0                         | 3,430                            | 32,763                          | 17.4                        | 7,129                            | 41,271                          |
| Nursing Facility / ICF-MR / IMD<br>Medicaid                     | 7,809                           | 6.3                         | 3,149                            | 28,844                          | 17.7                        | 6,276                            | 36,653                          |
| Skilled Nursing Facility<br>Medicare                            | 699                             | 2.3*                        | 282                              | 3,919                           | 9.0                         | 853                              | 4,617                           |
| Community-Based   | 9,305                           | 20.1                        | 3,752                            | 11,029                          | 25.6                        | 2,400                            | 20,334                          |
| Home Health<br>Medicaid<br>Medicare                             | 860<br>42.3%<br>57.7%           | 10.4<br>4.5<br>6.3          | 347<br>147<br>200                | 4,860<br>24.6%<br>75.4%         | 18.4<br>6.0<br>14.4         | 1,057<br>260<br>797              | 5,720<br>27.3%<br>72.7%         |
| Personal Care<br>Medicaid                                       | 915                             | 4.8                         | 369                              | 3,354                           | 9.6                         | 730                              | 4,269                           |
| Home and Community-Based Services<br>Medicaid                   | 7,530                           | 9.8                         | 3,036                            | 2,815                           | 7.0                         | 612                              | 10,345                          |

Source: MSIS-MCBS 2003 linked file.

Weighted.

Medicare Savings Plan enrollees and Full Medicaid Benefits Enrollees do not add to total enrollees due to unknown dual types.

Medicare ambulatory services include Medicare physician and outpatient services. Medicaid ambulatory services includes clinic, midwife, nurse practitioner, other practitioner (chiroprators, podiatrists, psychologist, optometrists), outpatient, and physician services.

Medicare other acute services includes durable medical equipment and capitation payments. Medicaid other acute services includes transportation, therapy (speech/language, occupations, physical), targeted case management, religious non-medical, rehabilitation, private-duty nursing, primcary care case management, pre-

paid health plans, lab/x-ray, HMO, dental, abortion and other services (prothetics, eyeglasses, home and community-based spending).

Institutions for mental disease (IMD) includes Medicaid inpatient mental health services for those above age 65 and below age 21.

 $\ensuremath{\textit{ICF-MR}}$  is intermediate care facility for persons with mental retardation.

 $^{\ast}$  indicates that unweighted sample is less than 50 cases.

## **Appendix: Data and Methods**

# <u>Data</u>

For this study, we relied on two data sources—the 2003 Medicare Current Beneficiary Survey (MCBS) and the 2003 Medicaid Statistical Information System (MSIS) Summary File.

*MCBS.* The MCBS is a survey of a nationally representative sample of Medicare beneficiaries. It is conducted annually by the Centers for Medicare & Medicaid Services  $(CMS)^4$  and collects a wealth of information, including expenditures and sources of payment for all services used by Medicare beneficiaries, as well as the types of health insurance coverage beneficiaries had over the course of the year. The survey also tracks changes in health status and spending down to Medicaid eligibility.

For this analysis we used the 2003 MCBS Access to Care (AC) file, which provides information on Medicare beneficiaries who were continuously enrolled in the program during a calendar year. The AC file contains a wide variety of information on health status, social and demographic characteristics as well as data on access to care, satisfaction with care and usual source of care. In addition, the AC file contains summary medical claims data on the use and program cost of Medicare services for each calendar year. Since the file is for beneficiaries enrolled for an entire calendar year, it does not include beneficiaries who die during the year, a period which tends to be associated with exceptionally high health care costs.<sup>5</sup> Excluding beneficiaries who die during the year explains why spending estimates presented below are lower than those reported for the overall Medicare population (as found in the MCBS Cost and Use File). For this study, we used several data elements from the 2003 AC file, including demographics, living arrangement, income, functional status, and Medicare spending.

*MSIS.* For Medicaid information we relied on the 2003 Medicaid Statistical Information System (MSIS) Summary File. Under federal Medicaid law, all 50 states and the District of Columbia are required to submit Medicaid eligibility and claims data to the Centers for Medicare and Medicaid Services (CMS) on a quarterly basis. Once received by the CMS, the data are subject to quality assurance edits and validity checks. For each federal fiscal year, the MSIS Summary File contains individual level data with aggregate measures of Medicaid expenditures for 30 service categories, including ambulatory, acute and institutional services, for all persons who received Medicaid services nationwide.

Important to this analysis, expenditures reported in MSIS include payments made to providers on behalf of dual enrollees for Medicare cost-sharing but they do not include payments to Medicare for premiums. Additionally, for dual enrollees enrolled in managed care, the MSIS only includes capitation payments. No information on spending by type of service is available for duals in capitated managed care. While a limitation, less than 9 percent of duals were in enrolled in capitated managed care arrangements in 2004, which is the first year CMS reported separate managed care enrollment statistics for duals.<sup>6</sup>

In addition to expenditure data, the MSIS Summary File contains information on the personal characteristics of Medicaid beneficiaries such as date of birth, sex, and race/ethnicity, as well as state and county of residence. MSIS also includes eligibility information that specifies why an

individual is enrolled in Medicaid. We know, for example, if dual individuals are enrolled because they are disabled or aged.

To identify the type of dual (for example, full benefit or MSP beneficiary) an individual was, we used the MSIS variable that describes a beneficiary's most recent or "last-best" monthly eligibility code. We used MSIS for Medicaid spending information. Although the MCBS contains data on Medicaid spending, it does not provide accurate spending information for home and community-based waiver programs, an important expenditure item for the dual population. For this reason we relied exclusively on MSIS for Medicaid spending information for the study.

*Linking the MCBS with the MSIS.* Using the MCBS as the base file, we linked it to the MSIS to derive our sample of individuals enrolled in both Medicare and Medicaid in 2003. We used a crosswalk of unique identifiers in each of the two datasets that was provided to us by CMS. Specifically, we used the MCBS BaseID, the MSIS\_ID, date of birth, and gender for the match. Of the 16,003 Medicare beneficiaries in the 2003 MCBS AC file, 3,667 were also found in the MSIS using the crosswalk provided to us by CMS.

From these 3,667 identified duals, we excluded 48 cases that did not match on the crosswalk variables in both the MCBS and MSIS. Further, some dual beneficiaries had Medicaid records in more than one state in the MSIS. In these cases, we combined a beneficiary's spending across states and applied it to a single record in the state where the beneficiary had the highest total spending. We also excluded 28 cases in Maryland where 2003 Medicaid spending data was unavailable in the MSIS. The final number of dual eligibles from the linked MCBS-MSIS file we used in the analysis was 3,527.

As mentioned, the MCBS captures spending in a particular calendar year whereas MSIS captures spending in a federal fiscal year, which runs October 1 to September 30. Thus while we analyze 12 calendar months worth of spending from each dataset, the timing of spending information between the programs is off by three months. While an admitted shortcoming, the study data still provide relative estimates of Medicare and Medicaid spending for dual beneficiaries over a given time period.

# **Methods**

Sub-acute and long-term care services are divided into institutional and community-based care. Institutional care is provided by nursing facilities, intermediate care facilities for the mentally retarded (ICF-MR) and institutions for mental disease (IMD). Because of the fundamental difference in the nature and duration of these benefits we separate the Medicare and Medicaid covered services in our calculations.<sup>7</sup> Community based care is divided into home health services, covered by both Medicare and Medicare, personal care services (Medicaid only), and long-term care provided under Medicaid's home and community based service (HCBS) waiver programs.

All analyses presented are weighted using the MCBS cross-sectional weight cs1yrwgt. While this weight is intended for use in cross-sectional statistics involving the total (combined) national sample, it also can be used for analyzing representative subgroups. Given the relatively high match rate between the MCBS and the MSIS, we feel the combined data file is a representative sample of the national dual eligible population. One potential bias may exist, however, because of the missing MSIS data for Medicare beneficiaries in Maryland. This cannot be fixed by adjusting the weights, but fortunately the bias should be minimal given that the number of Maryland respondents in the 2003 MCBS data file was small (28 cases) and their characteristics were not significantly different from those of the overall dual population.

This brief was prepared by Teresa Coughlin and Timothy Waidmann of the Urban Institute and Molly O'Malley Watts of the Kaiser Commission on Medicaid and the Uninsured, Kaiser Family Foundation.

### References

<sup>4</sup> For more information on the MCBS see <u>http://www.cms.hhs.gov/LimitedDataSets/11\_MCBS.asp</u>.

<sup>5</sup> Liu, K Wiener JM and MR Niefeld. 2006. "End of Life Medicare and Medicaid Expenditures for Dually Eligible Beneficiaries." *Health Care Financing Review*, 27(4): 95-110.

<sup>6</sup> Centers for Medicare & Medicaid Services (CMS). 2004. 2004 Medicaid Managed Care Enrollment Report. Washington, D.C., June.

<sup>7</sup> Medicare does not cover long term care, but does pay for institutional and community based care after hospital stays. Institutional post-acute care is covered for a limited duration by the Medicare skilled nursing facility benefit while community based care for home-bound individuals is covered by the Medicare home health benefit. Medicaid covers a wider range of long-term care services.

<sup>&</sup>lt;sup>1</sup> Holahan J, D Miller and D. Rousseau. 2009. "Dual Eligibles: Medicaid Enrollment and Spending for Medicare Beneficiaries in 2005." Kaiser Commission on Medicaid and the Uninsured, Washington, D.C., February.

<sup>&</sup>lt;sup>2</sup> Holahan J, D Miller and D. Rousseau. 2009. "Dual Eligibles: Medicaid Enrollment and Spending for Medicare Beneficiaries in 2005." Kaiser Commission on Medicaid and the Uninsured, Washington, D.C., February and Medicare Payment Advisory Commission (MEDPAC). 2008. A Data Book: Healthcare Spending and the Medicare Program. Washington, D.C.: June.

<sup>&</sup>lt;sup>3</sup> In contrast, Liu et al. (2006) found that in the last year of life, when acute care use is particularly high, Medicaid accounted for only 40% of expenditures by duals. Thus, excluding decedents from our analysis probably overstates Medicaid's share of costs for the dual population as a whole.

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