Medicare-Medicaid Enrollee State Profile

North Carolina - 2008

Centers for Medicare & Medicaid Services

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I. Introduction

This report focuses on the State of North Carolina and is based on Medicare-Medicaid enrollee data from 2008.

In 2008, more than 60 million people in the U.S. were covered by Medicaid or the Children's Health Insurance Program (CHIP).¹ Medicaid is a state-administered program with shared funding and oversight from the federal government (Title XIX of Social Security Act). Each state must provide the minimum federally mandated services and coverage for federally mandated eligibility groups; however, states may also cover a wide range of optional benefits across different benefit designs and optional eligibility groups that vary from state to state. Depending on each state, these may include coverage for long term services and supports (LTSS), behavioral health, dental services and/or vision services. Many groups of people are covered by Medicaid, depending on the state's requirements (e.g., age; whether pregnant, disabled, blind, or age 65+; income level and resources; U.S. citizenship or lawful immigration status).

Medicare is the primary health insurance program for individuals age 65 and older, people under age 65 with disabilities, and persons of all ages with end-stage renal disease (ESRD).² Medicare is comprised of Parts A, B, C, and D types of coverage. Nearly all individuals enrolled in Medicare have Part A coverage, which includes inpatient hospital care, skilled nursing facility stays, home health services, and hospice care. The majority of Medicare-enrollees also have Part B fee-for-service (FFS) coverage of physician services, hospital outpatient care, durable medical equipment (DME) and some home health care. Alternatively, those Medicare enrollees who are not enrolled in fee-for-service Part B are typically enrolled in a Medicare Part C managed care plan, called "Medicare Advantage." Lastly, as of 2006, the Medicare Part D program made available federally-sponsored prescription drug coverage to Medicare enrollees, including Medicare-Medicaid enrollees who have transitioned under this program.

At the national level, approximately 9 million qualified for both programs at the same time. These Medicare-Medicaid enrollees (dual eligibles) are the core of the study. This report provides details basic counts and demographic information on the approximately 310,000 Medicare-Medicaid enrollees in the State of North Carolina. In addition, for a smaller FFS sample of Medicare-Medicaid enrollees in North Carolina, this report also provides information on physical, mental, and disability-related health condition prevalence rates as well as Medicare and Medicaid services utilization and associated expenditures. The Medicare-Medicaid enrollees include three main segments: Full Benefit (Qualified Medicare Beneficiary-Plus (QMB-Plus), Specified Low-Income Medicare Beneficiaries Plus (SLMB-Plus) and Other Full Benefit), QMB-only and Partial Benefit (Specified Low-Income Medicare Beneficiaries (SLMB-only), Qualified Disabled Working Individuals (QDWI), and Qualifying Individuals (QI)). The study adds a new focus on those under 65 versus 65 and over, to illuminate areas in which their experiences differ, and compares them, respectively, to persons enrolled in Medicare but not Medicaid (i.e., "Medicare-only"), as well as those enrolled in Medicaid, qualifying due to disability, but not Medicare (i.e., "Medicaid-only").

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¹ http://www.ccwdata.org/web/guest/medicare-tables-reports

² Ibid.

II. Results

A. Population Overview

Table 1 shows the number of Medicare-Medicaid enrollees and the proportion by type of Medicare-Medicaid eligibility, in 2008. Full Benefit enrollees represent the largest segment in North Carolina (approximately 80%), a higher proportion than at the national level (77%). Partial Benefit enrollees (19%) also make up a higher proportion of the total Medicare-Medicaid enrollees in North Carolina than at the national level (12%) while QMB-only enrollees represent under 1%, significantly lower than at the national level (11%).

Table 1: Overview of Medicare-Medicaid Eligibility Type in North Carolina as Compared to the Nation as a Whole: Number and Relative Distribution of Medicare-Medicaid Enrollees, CY 2008

| | State o | f North Carolina | | National |
|--|---|--|---|--|
| | Number of Enrollees (In State) | Relative Distribution of Medicare-Medicaid enrollee types | Number of Enrollees (National) | Relative Distribution of Medicare-Medicaid enrollee types |
| Full Benefit Medicare-Medicaid Enrollee | 249,673 | 80.3% | 6,984,789 | 76.8% |
| QMB-only Medicare-Medicaid Enrollee | 1,778 | 0.6% | 984,558 | 10.8% |
| Partial Benefit Medicare-Medicaid Enrollee | 59,357 | 19.1% | 1,126,647 | 12.4% |
| TOTAL Medicare-Medicaid Dual Enrollees | 310,808 | 100% | 9,095,994 | 100% |

Source: CY 2008 MMLEADS data

Note: While "QMB-only" Medicare-Medicaid enrollees are technically considered "Partial Benefit," in this Report QMB-only is presented separately from "Partial Benefit," with the latter referring only to all *other* types of Partial Benefit Medicare-Medicaid enrollees: Specified Low-income Medicare Beneficiaries (i.e., "SLMB-only"), Qualified Disabled Working Individuals (i.e., "QDWI"), and Qualifying Individuals (i.e., "QI").

The focus of the analysis is within the different segments of the Medicare-Medicaid enrollee population. As mentioned, the study also provides, when appropriate, comparisons of the Medicare-Medicaid enrollees to Medicaid-only enrollees with disabilities and the Medicare-only enrollees

B. Demographic Characteristics

Age and race characteristics were examined within the study cohorts. An analysis of age patterns shows that the Medicare-Medicaid enrollees are predominantly in the 40-64 and 65-84 age groups (75% to 88% of the cohorts' populations), although we also find that the Full Benefit have over 10% of the population in the under 40 segment. As expected, the majority of Medicare-only enrollees are 65 and over, while Medicaid-only enrollees with disabilities are nearly all under 65. **Figure 1** shows the age distribution by the study groups.

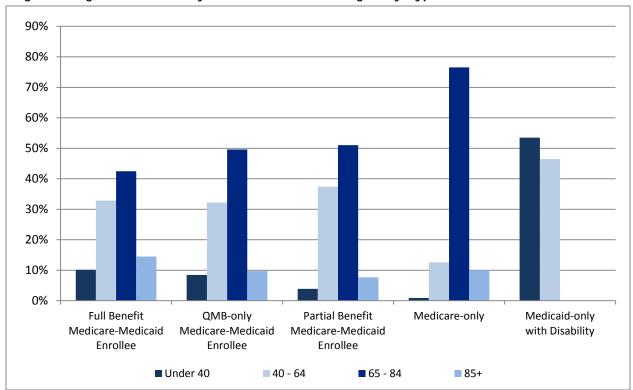


Figure 1: Age Distribution by Medicare-Medicaid Eligibility Type in North Carolina, CY 2008

Source: CY 2008 MMLEADS data

Note: While "QMB-only" Medicare-Medicaid enrollees are technically considered "Partial Benefit," in this Report QMB-only is presented separately from "Partial Benefit," with the latter referring only to all *other* types of Partial Benefit Medicare-Medicaid enrollees: Specified Low-income Medicare Beneficiaries (i.e., "SLMB-only"), Qualified Disabled Working Individuals (i.e., "QDWI"), and Qualifying Individuals (i.e., "QI").

An analysis of ethnicity and race shows that White beneficiaries comprise the largest group (**Figure 2**) followed by African American beneficiaries, across all Medicare-Medicaid eligibility groups. Across all Medicare-Medicaid dually enrolled groups, African American enrollees represent a larger percentage (34% to 39%) when compared to the Medicare-only population where they represent less than 14%. Among Medicaid-only enrollees with disability, White and African American beneficiaries are nearly equally represented (near 40%).

90% 80% 70% 60% 50% 40% 30% 20% 10% 0% Full Benefit Medicare- QMB-only Medicare-Partial Benefit Medicare-only Medicaid-only with Medicaid Enrollee Medicaid Enrollee Medicare-Medicaid Disability Enrollee ■ Non-Hispanic White ■ American Indian / Alaskan Native ■ Asian / Pacific Islander Other / Unknown African American Hispanic

Figure 2: Ethnicity/Race Distribution by Medicare-Medicaid Eligibility Type in North Carolina, CY 2008

Source: CY 2008 MMLEADS data

Note: While "QMB-only" Medicare-Medicaid enrollees are technically considered "Partial Benefit," in this Report QMB-only is presented separately from "Partial Benefit," with the latter referring only to all *other* types of Partial Benefit Medicare-Medicaid enrollees: Specified Low-income Medicare Beneficiaries (i.e., "SLMB-only"), Qualified Disabled Working Individuals (i.e., "QDWI"), and Qualifying Individuals (i.e., "QI").

C. Physical, Mental Health and Disability Related Conditions among Fee-for-Service Enrollees

This section analyzes enrollees in each cohort along a number of selected chronic conditions.

For analyses in all subsequent sections, in order to ensure complete claims data, the study only includes individuals enrolled in Medicare FFS and/or Medicaid FFS during the entire calendar year. Readers should also note that the Medicaid-only enrollees with disability (under 65) cohort in this state includes only 17% of the cohort's population (see **Appendix A**). This is important because this FFS study population may differ from the managed care population in important ways, such as health status and institutional status. Therefore, because the study sample may not be a true representation of all FFS and managed care enrollees in the state, this report provides information for this low-FFS subgroup in the tables and figures but refrains from providing conclusions in the text. See **Appendix A** for an analysis of representativeness of the study population.

Conditions Prevalence:

This section presents the prevalence of certain conditions for FFS enrollees across each Medicare-Medicaid enrollee eligibility/age subgroup.

To determine the health status of the study population, we utilized the Chronic Conditions Data Warehouse (CCW) which includes a series of algorithms that generate indicators for select physical, mental and disability related conditions. **Appendix B** details the wider set of conditions that were examined individually to determine prevalence in the study population as well as a smaller subset that were utilized in analysis of condition counts.

We analyzed the physical, mental and disability related conditions among the different cohorts to identify prevailing conditions as well as differences between the groups. We also looked at both the number of enrollees with specific conditions and the number of comorbidities.

As shown in **Figure 3**, our analysis indicates that a significant percentage of Medicare-Medicaid enrollees present with at least one condition, ranging from 64% for Partial Benefit enrollees 65 and over to 89% of Full Benefit enrollees 65 and over.

Among Medicare-Medicaid enrollees under 65, the Full Benefit Medicare-Medicaid enrollees and QMB-only enrollees have similar levels of enrollees with at least three conditions (36% and 35%, respectively) compared to approximately 27% for Partial Benefit enrollees under 65. Full Benefit enrollees under 65 have the higher rates of five or more conditions (11%), followed by QMB-only enrollees (10%) and Partial Benefit enrollees (6%).

Among Medicare-Medicaid enrollees 65 and over, Full Benefit enrollees have a different pattern than the other cohorts, with over 19% presenting with five or more conditions and 52% with three or more conditions. Full Benefit beneficiaries have rates of five or more conditions that are almost three times as high as the rates for the QMB-only enrollees and Partial Benefit enrollees (7%), and over four times higher rates than Medicare-only enrollees (over 4%). When considering three or more conditions, Full Benefit enrollees 65 and over have rates almost twice as high as the other Medicare-Medicaid enrollees over 65 and 2.4 times those of the Medicare-only beneficiaries.

60% 50% 40% 30% 20% 10% 0% Full Benefit QMB-only (<65) Partial Benefit Medicaid-only Full Benefit QMB-only (65+) Partial Benefit Medicare-only (<65) (<65) (65+)(65+)(<65)(65+)■ 1-2 Conditions ■ 3-4 Conditions

Figure 3: Number of Physical and Mental Health Conditions among Fee-for-Service Enrollees by Medicare-Medicaid Eligibility Type and Age in North Carolina, CY 2008

Source: CY 2008 MMLEADS data for FFS enrollees in Medicare and/or Medicaid

Note: While "QMB-only" Medicare-Medicaid enrollees are technically considered "Partial Benefit," in this Report QMB-only is presented separately from "Partial Benefit," with the latter referring only to all *other* types of Partial Benefit Medicare-Medicaid enrollees: Specified Low-income Medicare Beneficiaries (i.e., "SLMB-only"), Qualified Disabled Working Individuals (i.e., "QDWI"), and Qualifying Individuals (i.e., "QI").

 $\underline{\text{Note}}$: No conclusions are made based on the Medicaid-only enrollees with disability cohort as it includes only 17% of the cohort's population.

Table 2 shows prevalence rates for a wider set of physical, mental health, and disability related conditions among enrollees by eligibility type. In general, we find higher prevalence rates for mental health conditions (except Alzheimer's) among beneficiaries under age 65 and higher prevalence of Alzheimer's and physical health conditions among those age 65 and older.

Overall, hypertension is the most prevalent condition across cohorts, with important differences between the under 65 and 65 and older groups. This condition has significantly higher prevalence among Full Benefit enrollees 65 and older (70%) than any other age/enrollee cohort, though over 50% of individuals in every segment 65 and over have a hypertension diagnosis. Beyond hypertension, there are a number of conditions that affect at least 25% of individuals in a given segment. These include anxiety and tobacco use (QMB-only under 65), cataract (Medicare-only), depression (QMB-only under 65, Full Benefit under 65), diabetes and hyperlipidemia (all Medicare-Medicaid cohorts, Medicare-only), and ischemic heart disease (all 65 and over cohorts). Several conditions are particularly prevalent in the Full Benefit 65 and older cohort, including Alzheimer's and related disorders, anemia, chronic kidney disease, and heart failure among others.

Table 2: Rate of Physical and Mental Health Conditions, and Conditions Related to Intellectual, Development and Physical Disabilities among Fee-for-Service Enrollees by Medicare-Medicaid Eligibility Type and Age in North Carolina, CY 2008

| Condition | Full Benefit (<65) | QMB- only (<65) | Partial Benefit (<65) | Medicaid- only (<65) | Full Benefit (65+) | QMB- only (65+) | Partial Benefit (65+) | Medicare- only (65+) |
|--|--------------------------|-----------------------|-----------------------------|----------------------------|--------------------------|-----------------------|-----------------------------|----------------------------|
| Acquired hypothyroidism | 6.4% | 6.2% | 4.6% | 2.8% | 10.8% | 6.8% | 6.2% | 7.7% |
| Acute myocardial infarction | 0.6% | 1.0% | 0.8% | 0.3% | 1.6% | 1.2% | 1.2% | 1.0% |
| Alzheimer's disease and Alzheimer's related disorders | 4.3% | 1.6% | 2.0% | 2.3% | 33.6% | 11.0% | 8.5% | 8.7% |
| Anemia | 21.0% | 21.9% | 17.2% | 10.6% | 38.2% | 21.8% | 21.3% | 20.2% |
| Anxiety | 21.2% | 26.2% | 15.9% | 11.8% | 11.4% | 6.4% | 6.8% | 5.2% |
| Asthma | 9.3% | 11.3% | 6.2% | 6.5% | 5.2% | 4.1% | 3.8% | 3.2% |
| Atrial fibrillation | 1.5% | 1.6% | 1.7% | 0.7% | 8.9% | 5.2% | 6.2% | 8.2% |
| Attention deficit hyperactivity disorder (ADHD) | 3.4% | 2.1% | 1.0% | 15.0% | 0.6% | 0.0% | 0.1% | 0.1% |
| Autism | 1.2% | 0.6% | 0.1% | 5.4% | 0.0% | 0.0% | 0.0% | 0.0% |
| Benign prostatic hyperplasia | 1.1% | 1.0% | 1.1% | 0.4% | 2.8% | 1.9% | 2.3% | 5.1% |
| Bipolar disorder | 13.6% | 17.5% | 8.7% | 10.7% | 2.3% | 0.5% | 0.8% | 0.6% |
| Brain injury | 0.9% | 0.5% | 0.4% | 0.7% | 0.4% | 0.2% | 0.2% | 0.2% |
| Breast cancer (Female) | 0.4% | 0.8% | 0.8% | 1.6% | 0.7% | 0.8% | 1.0% | 2.7% |
| Breast cancer (Male) | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Cataract | 7.3% | 4.8% | 5.1% | 2.0% | 20.6% | 20.8% | 13.8% | 27.3% |
| Cerebral palsy | 2.4% | 0.6% | 0.4% | 5.8% | 0.3% | 0.0% | 0.0% | 0.0% |
| Chronic kidney disease | 12.4% | 14.6% | 12.4% | 6.0% | 23.7% | 14.6% | 14.6% | 11.3% |
| Chronic obstructive pulmonary disease (COPD) | 13.2% | 14.6% | 12.2% | 6.3% | 18.9% | 13.0% | 13.6% | 9.6% |
| Colorectal cancer (Female) | 0.1% | 0.1% | 0.2% | 0.4% | 0.2% | 0.2% | 0.4% | 0.6% |
| Colorectal cancer (Male) | 0.1% | 0.3% | 0.2% | 0.4% | 0.3% | 0.3% | 0.5% | 0.8% |

| Condition | Full Benefit (<65) | QMB- only (<65) | Partial Benefit (<65) | Medicaid- only (<65) | Full Benefit (65+) | QMB- only (65+) | Partial Benefit (65+) | Medicare- only (65+) |
|---------------------------------------|--------------------------|-----------------------|-----------------------------|----------------------------|--------------------------|-----------------------|-----------------------------|----------------------------|
| Cystic fibrosis | 0.5% | 0.2% | 0.3% | 0.5% | 0.5% | 0.5% | 0.2% | 0.3% |
| Deafness or hearing impairment | 1.9% | 2.0% | 1.0% | 2.2% | 2.7% | 1.6% | 1.7% | 3.0% |
| Depression | 28.0% | 31.4% | 22.8% | 10.3% | 17.9% | 9.1% | 8.2% | 8.3% |
| Diabetes | 28.6% | 26.5% | 29.9% | 12.0% | 40.1% | 27.4% | 30.0% | 25.2% |
| Endometrial cancer (Female) | 0.0% | 0.1% | 0.0% | 0.2% | 0.0% | 0.1% | 0.1% | 0.2% |
| Epilepsy | 8.1% | 5.4% | 3.6% | 8.2% | 3.2% | 0.6% | 1.1% | 0.8% |
| Glaucoma | 5.9% | 4.4% | 3.7% | 2.3% | 11.4% | 10.2% | 7.3% | 11.2% |
| Heart failure | 11.3% | 13.1% | 12.1% | 4.6% | 28.7% | 16.1% | 17.6% | 13.0% |
| Hip fracture | 0.3% | 0.3% | 0.2% | 0.2% | 2.8% | 1.1% | 0.8% | 0.8% |
| Hyperlipidemia | 29.8% | 32.1% | 29.5% | 7.9% | 36.7% | 36.8% | 32.3% | 45.8% |
| Hypertension | 45.1% | 45.7% | 43.9% | 17.6% | 70.2% | 59.6% | 50.4% | 57.6% |
| Intellectual disability | 11.7% | 2.0% | 1.3% | 15.4% | 1.7% | 0.4% | 0.1% | 0.0% |
| Ischemic heart disease | 16.8% | 20.0% | 19.7% | 6.4% | 34.9% | 27.4% | 28.0% | 27.6% |
| Learning disability | 0.3% | 0.0% | 0.0% | 9.8% | 0.1% | 0.0% | 0.0% | 0.0% |
| Lung cancer (Female) | 0.1% | 0.2% | 0.2% | 0.6% | 0.2% | 0.3% | 0.3% | 0.5% |
| Lung cancer (Male) | 0.1% | 0.1% | 0.2% | 0.7% | 0.4% | 0.1% | 0.6% | 0.7% |
| Mobility disability | 5.0% | 3.8% | 3.0% | 3.6% | 6.6% | 2.0% | 2.2% | 1.5% |
| Multiple sclerosis | 1.2% | 1.8% | 1.2% | 0.5% | 0.3% | 0.2% | 0.2% | 0.2% |
| Muscular dystrophy | 0.2% | 0.0% | 0.1% | 0.3% | 0.0% | 0.0% | 0.0% | 0.0% |
| Osteoporosis | 2.2% | 2.0% | 1.6% | 0.5% | 8.8% | 5.3% | 4.6% | 7.1% |
| Other developmental disorder | 0.3% | 0.0% | 0.0% | 5.3% | 0.0% | 0.0% | 0.0% | 0.0% |
| Personality disorder | 3.8% | 4.6% | 2.4% | 2.2% | 0.4% | 0.1% | 0.1% | 0.1% |
| Post-traumatic stress disorder (PTSD) | 3.1% | 4.6% | 1.9% | 3.6% | 0.2% | 0.1% | 0.1% | 0.1% |
| Prostate cancer (Male) | 0.2% | 0.1% | 0.4% | 0.3% | 1.6% | 1.7% | 2.1% | 4.6% |
| Rheumatoid osteo-arthritis | 20.4% | 23.6% | 19.1% | 5.6% | 31.4% | 25.1% | 20.9% | 24.5% |
| Schizophrenia | 15.5% | 12.0% | 6.7% | 9.0% | 8.6% | 2.6% | 1.6% | 1.4% |
| Spina bifida | 0.8% | 0.5% | 0.2% | 2.0% | 0.2% | 0.0% | 0.1% | 0.1% |
| Spinal injury | 0.7% | 0.6% | 0.5% | 0.5% | 0.3% | 0.2% | 0.1% | 0.1% |
| Stroke | 3.0% | 3.9% | 2.3% | 1.8% | 7.9% | 3.4% | 3.7% | 3.6% |
| Tobacco use | 21.9% | 25.7% | 18.8% | 8.0% | 6.8% | 6.1% | 6.4% | 3.6% |
| Visual impairment | 0.9% | 1.0% | 0.4% | 0.5% | 1.2% | 0.5% | 0.4% | 0.3% |

Source: CY 2008 MMLEADS data for FFS enrollees in Medicare and/or Medicaid

Note: While "QMB-only" Medicare-Medicaid enrollees are technically considered "Partial Benefit," in this Report QMB-only is presented separately from "Partial Benefit," with the latter referring only to all *other* types of Partial Benefit Medicare-Medicaid enrollees: Specified Low-income Medicare Beneficiaries (i.e., "SLMB-only"), Qualified Disabled Working Individuals (i.e., "QDWI"), and Qualifying Individuals (i.e., "QI").

Note: No conclusions are made based on the Medicaid-only enrollees with disability cohort as it includes only 17% of the cohort's population.

Note: Sex-specific cancer prevalence rates are presented.

D. Utilization of Services among Fee-For-Service Enrollees

Figure 4 shows the relative distribution of FFS service utilization among those Medicare-Medicaid enrollees under age 65. Medicare-Medicaid enrollees under 65 tend to have similar utilization levels across most of the highly utilized categories with QMB-only enrollees slightly higher for hospital outpatient encounters and emergency room visits.

Nursing Facility Claim Personal Care Service **Hospital Outpatient** Encounter Physician Visit **Skilled Nursing Facility** Medicaid Prescription Fill Part D Prescription Fill Home Health Inpatient **Emergency Room Visit** 0% 20% 40% 60% 80% 100% ■ QMB-only Medicare-Medicaid Enrollee (<65) ■ Full Benefit Medicare-Medicaid Enrollee (<65) ■ Partial Benefit Medicare-Medicaid Enrollee (<65) Medicaid-only with Disability (<65)</p>

Figure 4: Fee-for-Service Utilization Rates by Medicare-Medicaid Eligibility Type and Age (<65) in North Carolina, CY 2008

Source: CY 2008 MMLEADS data for FFS enrollees in Medicare and/or Medicaid

Note: While "QMB-only" Medicare-Medicaid enrollees are technically considered "Partial Benefit," in this Report QMB-only is presented separately from "Partial Benefit," with the latter referring only to all *other* types of Partial Benefit Medicare-Medicaid enrollees: Specified Low-income Medicare Beneficiaries (i.e., "SLMB-only"), Qualified Disabled Working Individuals (i.e., "QDWI"), and Qualifying Individuals (i.e., "QI").

Note: No conclusions are made based on the Medicaid-only enrollees with disability cohort as it includes only 17% of the cohort's population.

As shown in **Figure 5**, Medicare-Medicaid enrollees in the 65 and over cohort utilize services at higher rates than Medicare-only beneficiaries, with the exception of physician visits. Among Medicare-Medicaid enrollee cohorts, Full Benefit enrollees have higher utilization rates across all categories.

Nursing Facility Claim Personal Care Service **Hospital Outpatient** Encounter Physician Visit **Skilled Nursing Facility** Medicaid Prescription Fill Part D Prescription Fill Home Health Inpatient **Emergency Room Visit** 20% 60% 80% 100% 0% 40% ■ Full Benefit Medicare-Medicaid Enrollee (65+) ■ QMB-only Medicare-Medicaid Enrollee (65+) ■ Partial Benefit Medicare-Medicaid Enrollee (65+) ■ Medicare-only (65+)

Figure 5: Fee-for-Service Utilization Rates by Medicare-Medicaid Eligibility Type and Age (65+) in North Carolina, CY 2008

Source: CY 2008 MMLEADS data for FFS enrollees in Medicare and/or Medicaid Note: While "QMB-only" Medicare-Medicaid enrollees are technically considered "Partial Benefit," in this Report QMB-only is presented separately from "Partial Benefit," with the latter referring only to all *other* types of Partial Benefit Medicare-Medicaid enrollees: Specified Low-income Medicare Beneficiaries (i.e., "SLMB-only"), Qualified Disabled Working Individuals (i.e., "QDWI"), and Qualifying Individuals (i.e., "QI").

E. Medicare and Medicaid Expenditures among Fee-for-Service Enrollees

Table 3 and **Figure 6** show the per capita expenditures for each of the eligibility/age subgroups. Full-Benefit Medicare-Medicaid enrollees 65 and over incur close to \$29,000 in per capita expenditures, close to three times the per capita expenditures of QMB-only enrollees 65 and over and Partial Benefits beneficiaries 65 and over (approximately \$10,000 each cohort). These Full Benefit enrollee expenditures are also over 3.5 times higher than those of Medicare-only beneficiaries (approximately \$8,000). Combined Medicare and Medicaid per capita expenditures for Full Benefit Medicare-Medicaid enrollees under 65 are also significantly higher (\$26,000) than the other groups under 65, 1.6 times the per capita expenditures of QMB-only enrollees (\$16,000) and almost twice those of Partial Benefit enrollees (approximately \$14,000).

Table 3: Total Fee-for-Service Medicaid and Medicare Expenditures by Medicare-Medicaid Eligibility Type and Age Category in North Carolina, CY 2008

| | Number of Medicare FFS Enrollees | Medicare Per Capita Expenditures | Number of Medicaid FFS Enrollees | Medicaid Per Capita Expenditures | Total Per Capita Expenditures |
|-------------------------------------|--|--|--|--|-------------------------------------|
| Full Benefit (<65) | 91,867 | \$15,670 | 60,242 | \$10,618 | \$26,288 |
| QMB-only (<65) | 586 | \$14,633 | 163 | \$1,602 | \$16,235 |
| Partial Benefit (<65) | 17,716 | \$13,076 | 18,190 | \$527 | \$13,603 |
| Medicaid-only with disability (<65) | | | 29,153 | \$25,168 | \$25,168 |
| Full Benefit (65+) | 116,139 | \$16,352 | 101,427 | \$12,403 | \$28,755 |
| QMB-only (65+) | 683 | \$9,289 | 533 | \$1,196 | \$10,484 |
| Partial Benefit (65+) | 21,387 | \$10,000 | 28,709 | \$227 | \$10,228 |
| Medicare-only (65+) | 736,939 | \$7,550 | | | \$7,550 |

Source: CY 2008 MMLEADS data for FFS enrollees in Medicare and/or Medicaid

Note: While "QMB-only" Medicare-Medicaid enrollees are technically considered "Partial Benefit," in this Report QMB-only is presented separately from "Partial Benefit," with the latter referring only to all *other* types of Partial Benefit Medicare-Medicaid enrollees: Specified Low-income Medicare Beneficiaries (i.e., "SLMB-only"), Qualified Disabled Working Individuals (i.e., "QDWI"), and Qualifying Individuals (i.e., "QI").

<u>Note</u>: No conclusions are made based on the Medicaid-only enrollees with disability cohort as it includes only 17% of the cohort's population.

Figure 6 shows total per capita expenditures among FFS enrollees by eligibility type and age category. Full Benefit enrollees have significantly higher expenditures than all other Medicare-Medicaid cohorts with Medicare expenditures responsible for close to 60% of the total.

\$35,000 \$30,000 \$25,000 \$20,000 \$15,000 \$10,000 \$5,000 \$-Full Benefit QMB-only (<65) Partial Benefit Full Benefit QMB-only (65+) Partial Benefit Medicare-only Medicaid-only (<65)(<65)with Disability (65+)(65+)(65+)(<65) ■ Medicaid Medicare

Figure 6: Per Capita Annual Expenditures among Fee-for-Service Enrollees by Medicare-Medicaid Eligibility Type and Age in North Carolina, CY 2008

Source: CY 2008 MMLEADS data for FFS enrollees in Medicare and/or Medicaid

Note: While "QMB-only" Medicare-Medicaid enrollees are technically considered "Partial Benefit," in this Report QMB-only is presented separately from "Partial Benefit," with the latter referring only to all *other* types of Partial Benefit Medicare-Medicaid enrollees: Specified Low-income Medicare Beneficiaries (i.e., "SLMB-only"), Qualified Disabled Working Individuals (i.e., "QDWI"), and Qualifying Individuals (i.e., "QI").

Note: No conclusions are made based on the Medicaid-only enrollees with disability cohort as it includes only 17% of the cohort's population.

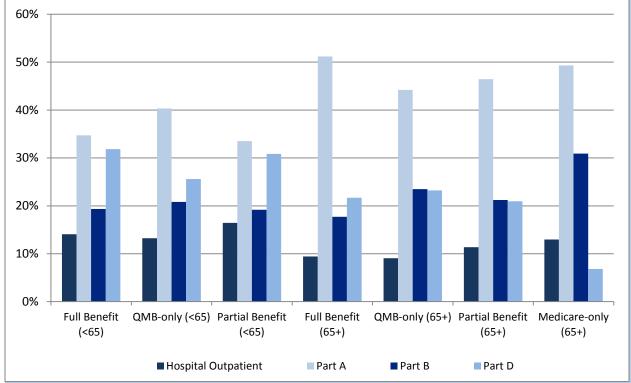
1. Medicare Expenditures

Total Medicare expenditures among FFS Medicare enrollees were examined by setting of care (Figure 7). The numbers of enrollees by eligibility type and age category are found in **Appendix** E. Examples of Medicare service types are found in **Appendix** C.

Medicare-Medicaid enrollees that are 65 and over have a higher percentage of their total Medicare expenditures that are comprised of Part A claims (44% to 51%) than those under 65 (34% to 40%). In the under 65 segment, Part D makes up a higher proportion of total Medicare expenditures (26% to 32%) compared to Medicare-Medicaid enrollees 65 and over (21% to 23%).

Among Medicare-Medicaid enrollees 65 and over, Part B comprises a significantly lower proportion of Medicare expenditures, particularly for Full Benefit enrollees where this category is 18% of total expenditures, much lower than those of Medicare-only beneficiaries (approximately 31%). By contrast, Medicare Part D expenditures account for a higher proportion of the Medicare-Medicaid enrollees 65 and over expenditures (21% to 23%) compared to Part D expenditures for Medicare-only enrollees which represent just under 7%.

Figure 7: Medicare Expenditure Distribution among Fee-for-Service Enrollees by Medicare-Medicaid Eligibility Type and Age in North Carolina, CY 2008 60%



Source: CY 2008 MMLEADS data for FFS enrollees in Medicare

Note: While "QMB-only" Medicare-Medicaid enrollees are technically considered "Partial Benefit," in this Report QMB-only is presented separately from "Partial Benefit," with the latter referring only to all other types of Partial Benefit Medicare-Medicaid enrollees: Specified Low-income Medicare Beneficiaries (i.e., "SLMB-only"), Qualified Disabled Working Individuals (i.e., "QDWI"), and Qualifying Individuals (i.e., "QI").

2. Medicaid Expenditures

The distribution of Medicaid expenditures by service type was examined among FFS enrollees (**Figure 8**). The numbers of enrollees examined for each eligibility type and age category are found in **Appendix F**. The Medicaid service types and examples are found in **Appendix D**.

Among Full Benefit enrollees 65 and over, the majority of Medicaid expenditures are for long-term institutional care settings (61%), while acute services account for the greatest proportion of Medicaid expenditures among QMB-only enrollees (45%) and Partial Benefit enrollees 65 and over (57%).

For the under 65 cohorts, Full Benefit enrollees have the most of their expenditures under long-term institutional care which account for over approximately 45% of Medicaid spending with acute services closely behind with 37%. QMB-only enrollees and Partial Benefit enrollees spend mostly on acute services (55% and 75% respectively).

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% QMB-only (<65) Partial Benefit **Full Benefit** Medicaid-only Full Benefit QMB-only (65+) Partial Benefit (<65)(<65)(65+)(<65)(65+)Drug ■ Acute ■ Long Term Institutional ■ Long Term Non-Institutional

Figure 8: Medicaid Expenditure Distribution among Fee-for-Service Enrollees by Medicare-Medicaid Eligibility Type and Age in North Carolina, CY 2008

Source: CY 2008 MMLEADS data for FFS enrollees in Medicaid

Note: While "QMB-only" Medicare-Medicaid enrollees are technically considered "Partial Benefit," in this Report QMB-only is presented separately from "Partial Benefit," with the latter referring only to all *other* types of Partial Benefit Medicare-Medicaid enrollees: Specified Low-income Medicare Beneficiaries (i.e., "SLMB-only"), Qualified Disabled Working Individuals (i.e., "QDWI"), and Qualifying Individuals (i.e., "QI").

Note: No conclusions are made based on the Medicaid-only enrollees with disability cohort as it includes only 17% of the cohort's population.

III. Acronym List

| Acronym | Definition |
|---------|--|
| ADHD | Attention Deficit hyperactivity Disorder |
| AMI | Acute Myocardial Infarction |
| ASC | Ambulatory Surgery Center |
| CCW | Chronic Condition Data Warehouse |
| CMS | Centers for Medicare & Medicaid Services |
| COPD | Chronic Obstructive Pulmonary Disease |
| DME | Durable Medical Equipment |
| ESRD | End-Stage Renal Disease |
| FFS | Fee-for-Service |
| НН | Home Health |
| НМО | Health Maintenance Organization |
| MAX | Medicaid Analytic Extract |
| MDS | Minimum Data Set |
| MMLEADS | Medicare-Medicaid Linked Enrollee Analytic Data Source |
| PTSD | Post-Traumatic Stress Disorder |
| QMB | Qualified Medicare Beneficiary |

Appendix A: Representativeness of Study Population, CY 2008

| | | Conditions Prevalence Analyses | Medicare Expenditure and Utilization Analyses | Medicaid Expenditure and Utilization Analyses |
|-------------------------------------|------------------|--|---|---|
| Managed care exclusion criteria | | Excludes enrollees with Medicare OR Medicaid managed care | Excludes enrollees with Medicare managed care | Excludes enrollees with Medicaid managed care |
| Other exclusion criteria | | Excludes Medicaid-only enrollees eligible due to disability and ages 65+, excludes Medicare-only enrollees under age 65; excludes enrollees only eligible for part of the year | Excludes Medicaid- only enrollees eligible due to disability and ages 65+; excludes enrollees only eligible for part of the year | Excludes Medicare- only enrollees under age 65; excludes enrollees only eligible for part of the year |
| Cohorts | Study Population | on as Percent of all Enrollees b | y Enrollee Type | |
| Full Benefit (<65) | 107,423 | 90.5% | 85.5% | 56.1% |
| QMB-only (<65) | 723 | 84.5% | 81.1% | 22.5% |
| Partial Benefit (<65) | 24,494 | 90.3% | 72.3% | 74.3% |
| Medicaid-only with Disability (<65) | 172,231 | 16.9% | | 16.9% |
| Full Benefit (65+) | 142,250 | 92.3% | 81.6% | 71.3% |
| QMB-only (65+) | 1,055 | 80.5% | 64.7% | 50.5% |
| Partial Benefit (65+) | 34,863 | 92.0% | 61.3% | 82.3% |
| Medicare-only (65+) | 1,006,673 | 73.2% | 73.2% | |

Source: CY 2008 MMLEADS data

Note: While "QMB-only" Medicare-Medicaid enrollees are technically considered "Partial Benefit," in this Report QMB-only is presented separately from "Partial Benefit," with the latter referring only to all *other* types of Partial Benefit Medicare-Medicaid enrollees: Specified Low-income Medicare Beneficiaries (i.e., "SLMB-only"), Qualified Disabled Working Individuals (i.e., "QDWI"), and Qualifying Individuals (i.e., "QI").

Appendix B: Methodology

Data sources

Profiles were created for each state as well as for the nation as a whole using the 2008 CMS Medicare-Medicaid Linked Enrollee Analytic Data Source (MMLEADS). Across five linked files, MMLEADS combines person-level enrollment and claims summary data from Medicare and Medicaid thereby making possible a comprehensive examination of demographic characteristics, condition prevalence, and service-level utilization and payments for dually enrolled Medicare-Medicaid enrollees, as well as Medicare-only enrollees and Medicaid-only enrollees with disabilities. The MMLEADS Medicare Beneficiary File contains enrollment information obtained from the Medicare Enrollment Database (EDB). The MMLEADS Medicaid Beneficiary File consists of demographic information from the Medicaid Analytic eXtract (MAX) Person Summary (PS) file. MMLEADS also contains two service level files specific to Medicare and Medicaid, as well as one aggregated health conditions file.

The percentage of the overall Medicare and Medicaid population comprised of Medicare-Medicaid eligible enrollees (Partial Benefit, QMB-only and Full Benefit Medicare-Medicaid enrollees) was examined by state and compared to national totals.

A listing of all the source data files appears in **Table B-1**.

Data SourceInput to Research FileMMLEADS Medicare Beneficiary File 2008Cohort identification, demographics, and monthly Medicare enrollment for all Medicare-Medicaid enrollees and Medicare-only enrolleesMMLEADS Medicaid Beneficiary File 2008Cohort identification, demographics, and monthly Medicaid enrollment for all Medicare-Medicaid enrollees and Medicaid-only enrollees with disabilityMMLEADS Condition File 2008Prevalence of conditions of interestMMLEADS Medicare Service-level File 2008Medicare setting specific utilization and expenditureMMLEADS Medicaid Service-level File 2008Medicaid setting specific expenditure and utilization

Table B-1: Description of Data Sources

Sample Identification and Data File Construction

1. Demographic characteristics

Because individuals may reside in more than one state in a given year, algorithms were necessary to assign each individual to only one state. Therefore, in our study population, Medicare-Medicaid eligible and Medicaid-only enrollees with disabilities were assigned to states based on state submitted Medicaid Statistical Information System (MSIS) data available in the MAX Personal Summary (PS) file. Medicare-only enrollees were assigned a single state based on the billing address of the individual at the end of 2008 as reported in the Medicare Enrollment Database (EDB).

Age was categorized into four groups: under 40, 40-64, 65-84, and 85+ years. Age category assignments were determined using an enrollee's age as of December 31, 2008 or the age at death if an individual died during 2008. Race/ethnicity characteristics for Medicare-only and Medicare-Medicaid eligible enrollees were from the RTI race code. Race for Medicaid-only with disability

enrollees was based on the state reported race code available in the MAX PS file. The race values for each eligibility group are similar, but the RTI race code available for Medicare enrollees uses additional logic for assignment of race based on surname. The RTI race code was not available for Medicaid enrollees since the MAX file does not contain surname. Race was categorized as Non-Hispanic White, African American, Hispanic, Asian/Pacific Islander, American Indian/Alaskan Native, and Other Races.

2. Exclusion of Managed Care Enrollees

Statistics related to condition prevalence, utilization and annual expenditures were limited to full FFS enrollees. Specifically, analyses of condition prevalence were limited to enrollees with FFS Medicare or Medicaid since complete administrative claims would be available through one program for identification of conditions. Analyses of Medicare payment and utilization statistics were limited to FFS Medicare enrollees, and Medicaid payment and utilization statistics were limited to FFS Medicaid enrollees. Please see **Appendix A** for a detailed analysis of the representativeness of the study populations.

There are multiple reasons for this method of sample identification. The encounter claims for Medicare managed care were not available for 2008 data, as Medicare did not begin collecting them until 2012. In addition, while the CCW data include complete FFS claims for Medicaid and Medicare (as provider reimbursement is conditional upon submission of accurate and complete claims for FFS enrollees), the completeness of Medicaid encounter data is known to vary by state. We chose to structure our analysis in a fashion that would ensure a consistent methodological approach for each state analyzed.

Medicare full FFS enrollees were defined as those with Medicare Part A and Part B coverage and no Medicare Advantage coverage for all months alive during the reference year. Medicaid full FFS enrollees were defined as those without eligible pre-paid plan coverage of comprehensive managed care, long term care managed care, program of all-inclusive care for the elderly (PACE), primary care case management (PCCM), behavioral managed care, or prenatal managed care.

To allow for suitable comparisons, the FFS populations were categorized into eight groups by Medicare-Medicaid eligibility type and age category (<65 or 65+ years) for analyses of condition prevalence, utilization, and expenditures:

- 1. Full Benefit Medicare-Medicaid enrollees (<65)
- 2. QMB-only Medicare-Medicaid enrollees (<65)
- 3. Partial Benefit Medicare-Medicaid enrollees (<65)
- 4. Medicaid-only with a disability (<65) and
- 5. Full Benefit Medicare-Medicaid enrollees (65+)
- 6. QMB-only Medicare-Medicaid enrollees (65+)
- 7. Partial Benefit Medicare-Medicaid enrollees (65+)
- 8. Medicare-only (65+)

3. Health, Mental Health and Disability-related Conditions

Prevalence rates for a wide set of physical, mental health, and disability-related conditions were examined by Medicare-Medicaid eligibility type and age category.

A subset of these conditions, based on algorithms created for analysis of Medicare and/or Medicaid enrollees, were utilized to determine the total count of conditions per individual by Medicare-Medicaid eligibility and age group. **Table B-2** lists conditions evaluated in the study populations and indicates which of these were included in a count of conditions per enrollee. Some conditions were grouped into categories to reduce duplication while others were excluded as they were not accurate indicators of ongoing comorbidities in the population. Details of groupings and logic for inclusion or exclusion are included in **Table B-2**.

Table B-2: Inclusion of Conditions in Condition Count

| Condition | Category used in Condition Count | Comments |
|--|---|---|
| Acquired hypothyroidism | | Excluded since the condition is easily maintained with medication |
| Acute myocardial infarction (AMI) | Heart disease/failure | Counted as part of Heart disease/failure condition including AMI, IHD, and Heart failure |
| Alzheimer's disease and Alzheimer's related disorders | Alzheimer's disease and Alzheimer's related disorders | |
| Anemia | | Excluded as it may be a symptom of another condition |
| Anxiety | Anxiety & PTSD | Counted as part of a condition including anxiety and PTSD |
| Asthma | Asthma & COPD | Counted as part of a condition including COPD and asthma |
| Atrial fibrillation | | Excluded as it may be a symptom of another condition and has low prevalence |
| Attention deficit hyperactivity disorder (ADHD) | | Excluded since it has less relevance for the Medicare- Medicaid population |
| Autism | Intellectual & developmental disabilities | Counted as part of a condition including autism, learning disabilities, intellectual & related disabilities, and other developmental delays |
| Benign prostatic hyperplasia | | Excluded as it is a benign condition, common in men over 50, that is not related to cancer risk |
| Bipolar disorder | Bipolar disorder | |
| Brain injury | Mobility-related impairments & spine/brain injury | Counted as part of a condition including mobility impariments, spinal cord injury, and brain injury |
| Breast cancer (Female) | Cancer | Counted as part of a condition including breast , colorectal, endometrial, lung, and prostate cancers |
| Breast cancer (Male) | Cancer | Counted as part of a condition including breast , colorectal, endometrial, lung, and prostate cancers |
| Cataract | Visual impairment | Counted as part of a visual impairment condition including cataract, glaucoma, and blindness/visual impairment |
| Cerebral palsy | Cerebral palsy | |
| Chronic kidney disease | Chronic kidney disease | |

| Condition | Category used in Condition Count | Comments |
|--|---|---|
| Chronic obstructive pulmonary disease (COPD) | Asthma & COPD | Counted as part of a condition including COPD and asthma |
| Colorectal cancer (Female) | Cancer | Counted as part of a condition including breast , colorectal, endometrial, lung, and prostate cancers |
| Colorectal cancer (Male) | Cancer | Counted as part of a condition including breast , colorectal, endometrial, lung, and prostate cancers |
| Cystic fibrosis | Cystic fibrosis | |
| Deafness or hearing impairment | Deafness & hearing impairment | |
| Depression | Depression | |
| Diabetes | Diabetes | |
| Endometrial cancer (Female) | Cancer | Counted as part of a condition including breast , colorectal, endometrial, lung, and prostate cancers |
| Epilepsy | Epilepsy | |
| Glaucoma | Visual impairment | Counted as part of a visual impairment condition including cataract, glaucoma, and blindness/visual impairment |
| Heart failure | Heart disease/failure | Counted as part of Heart Disease/failure condition including AMI, IHD, and Heart failure |
| Hip fracture | | Excluded as this is a distinct event occuring at one point in time rather than an ongoing condition |
| Hyperlipidemia | - | Excluded as it may be a symptom of a more serious condition |
| Hypertension | | Excluded as it may be a symptom of a more serious condition |
| Intellectual disability | Intellectual & developmental disabilities | Counted as part of a condition including autism, learning disabilities, intellectual & related disabilities, and other developmental delays |
| Ischemic heart disease (IHD) | Heart disease/failure | Counted as part of Heart Disease/failure condition including AMI, IHD, and Heart failure |
| Learning disability | Intellectual & developmental disabilities | Counted as part of a condition including autism, learning disabilities, intellectual & related disabilities, and other developmental delays |
| Lung cancer (Female) | Cancer | Counted as part of a condition including breast , colorectal, endometrial, lung, and prostate cancers |
| Lung cancer (Male) | Cancer | Counted as part of a condition including breast , colorectal, endometrial, lung, and prostate cancers |
| Mobility disability | Mobility-related impairments & spine/brain injury | Counted as part of a condition including mobility impariments, spinal cord injury, and brain injury |
| Multiple sclerosis | Multiple sclerosis | |
| Muscular dystrophy | Muscular dystrophy | |
| Osteoporosis | Osteoporosis | |
| Other developmental disorder | Intellectual & developmental disabilities | Counted as part of a condition including autism, learning disabilities, intellectual & related disabilities, and other developmental delays |
| Personality disorder | Personality disorder | |

| Condition | Category used in Condition Count | Comments |
|---------------------------------------|---|--|
| Post-traumatic stress disorder (PTSD) | Anxiety & PTSD | Counted as part of a condition including anxiety and PTSD |
| Prostate cancer (Male) | Cancer | Counted as part of a condition including breast , colorectal, endometrial, lung, and prostate cancers |
| Rheumatoid osteo-arthritis | Rheumatoid osteo- arthritis | |
| Schizophrenia | Schizophrenia | |
| Spina bifida | Spina bifida | |
| Spinal injury | Mobility-related impairments & spine/brain injury | Counted as part of a condition including mobility impariments, spinal cord injury, and brain injury |
| Stroke | Stroke | |
| Tobacco use | | Excluded since this is a behavior that is a risk factor for developing other conditions |
| Visual impairment | Visual impairment | Counted as part of a visual impairment condition including cataract, glaucoma, and blindness/visual impairment |

Five individual cancer conditions (breast, endometrial, prostate, colorectal, and lung) were combined to create an overall cancer condition, and other similar diagnoses were grouped together and counted once for each condition. The final list of conditions included in the condition count include the following: Alzheimer's disease and Alzheimer's related disorders, asthma & chronic obstructive pulmonary disease (COPD), anxiety & PTSD, bipolar disorder, cancer, cerebral palsy, chronic kidney disease, cystic fibrosis, deafness & hearing impairment, depression, diabetes, epilepsy, heart disease/failure, intellectual & developmental disabilities, mobility-related impairments & spine/brain injury, multiple sclerosis, muscular dystrophy, osteoporosis, personality disorder, rheumatoid osteo-arthritis, schizophrenia, spina bifida, stroke, and visual impairment.

Proportions of Medicare-Medicaid, Medicare-only, and Medicaid-only enrollees with disability populations in the following categories were examined: enrollees with none of the included conditions, one to two conditions, three to four conditions, and five or more conditions.

4. Medicare and Medicaid Utilization

The services covered by Medicare and Medicaid differ. Medicare utilization statistics included the following: hospital outpatient services, skilled nursing facilities (SNF), and Medicare Part D prescription fills. Medicaid utilization statistics included the following: Medicaid drug prescriptions, personal care services, and nursing facility claims. The services covered by Medicare and Medicaid, including emergency room, inpatient stays, and home health visits were examined across programs. Per capita utilization rates of these services were examined for full FFS enrollees.

5. Medicare and Medicaid Expenditures

The percentage of total expenditures by Medicare-Medicaid eligibility type was calculated, including the mean per capita Medicare and Medicaid expenditures and the proportion of Medicare expenditures attributed to Medicare Parts A, Part B (non-institutional), Hospital Outpatient (Part B Institutional) and Part D claims. The distribution of Medicaid expenditures are presented by service type based on circumstances of care. Medicare and Medicaid service types are listed in **Appendix C** and **Appendix D** respectively.

Study Limitations

The condition, utilization, and expenditure analyses necessarily excluded enrollees who received services under Medicare and Medicaid managed care programs since, in 2008, managed care encounter claims were not reported to Medicare and were not reliably reported to Medicaid. As a result, statistics presented may not be entirely generalizable to the entire enrolled populations. This warrants concern given that state Medicaid programs are heading in the direction of managed care programs instead of FFS, and Medicare eligible individuals enrolled in managed care programs may not have as high a rate of chronic conditions as FFS Medicare enrollees.

Approximately thirty percent of the North Carolina cohort in the MMLEADS data did not receive benefits under FFS in either Medicare or Medicaid programs and were excluded from the condition analysis. Refer to **Appendix E** and **Appendix F** for more information about managed care enrollment and population sizes.

Appendix C: Claim Types Included in Medicare Services

| Medicare Service Type | Included Services |
|-----------------------|--|
| | Community Mental Health Center |
| | End Stage Renal Disease |
| | Other Hospital Outpatient |
| Hospital Outpatient | Other Skilled Nursing Facility |
| | Outpatient Clinic |
| | Outpatient Prospective Payment Schedule |
| | Outpatient Therapy |
| | Home Health |
| | Hospice |
| Part A | Inpatient |
| Part A | Other Inpatient (Inpatient Psychiatric Facility) |
| | Other Post Acture Care (Long Term Care, Inpatient Rehabilitation Facility) |
| | Skilled Nursing Facility |
| | Ambulatory Surgical Center |
| | Durable Medical Equipment |
| | Imaging |
| Part B | Laboratory and Testing |
| | Part B Drug |
| | Physician Evaluation and Management |
| | Procedure |
| Part D | Prescription Drug |

Appendix D: Claim Types Included in Medicaid Services

| Medicaid Service Type | Included Services (Medicaid Type of Service) |
|----------------------------------|--|
| | 01 - Inpatient hospital |
| | 11 - Outpatient hospital |
| | 08 - Physician |
| | 15 - Lab X-ray |
| | 09 - Dental |
| | 10 - Other practitioners |
| | 12 - Clinic |
| A 4 | 19 - Other services |
| Acute | 24 - Sterilizations |
| | 25 - Abortions |
| | 34 - PT, OT, Speech, Hearing services |
| | 36 - Nurse midwife services |
| | 37 - Nurse practitioner services |
| | 39 - Religious non-medical health care institutions |
| | 53 - Psychiatric services |
| | 99 - Unknown |
| Drug | 16 - Prescribed drugs |
| | 02 - Mental hospital services for the aged |
| | 04 - Inpatient psychiatric facility for individuals under the age of 21 |
| Long Term Care Institutional | 05 - Intermediate care facility (ICF) for individuals with intellectual disabilities |
| | 07 - Nursing facility services (NFS) - all other |
| | 33 - Rehabilitative services, waiver |
| | 13 - Home health |
| | 35 - Hospice benefits |
| | 51 - Durable medical equipment (DME) and supplies (including emergency response systems and home modifications |
| Long Term Care Non-Institutional | 30 - Personal care services |
| | 52 - Residential care |
| | 54 - Adult day care |
| | 26 - Transportation services |
| | 31 - Targeted case management |
| | 38 - Private duty nursing |
| | 20 - Capitated payments to HMO or HIO plan |
| Managed Care | 21 - Capitated payments to prepaid health plans (PHPs) |
| | 22 - Capitated payments for primary care case management (PCCM) |
| Other | Charges but Type of Service was not populated |

Appendix E: Medicare Fee-for-Service Enrollee Count by Medicare-Medicaid Eligibility Type Examined in the Medicare Expenditure Analysis, North Carolina, CY 2008

| | Medicare Managed Care | | Medicare Fee-for-Service | | Not all Months Alive Medicare Fee-for-Service | | Total Medicare |
|-----------------------|--------------------------|---------|-----------------------------|---------|---|---------|-------------------|
| | Number | Percent | Number | Percent | Number | Percent | Denominator |
| Full Benefit (<65) | 7,792 | 7.3% | 91,867 | 85.5% | 7,764 | 7.2% | 107,423 |
| QMB-only (<65) | 89 | 12.3% | 586 | 81.1% | 48 | 6.6% | 723 |
| Partial Benefit (<65) | 5,506 | 22.5% | 17,716 | 72.3% | 1,272 | 5.2% | 24,494 |
| Full Benefit (65+) | 21,620 | 15.2% | 116,139 | 81.6% | 4,491 | 3.2% | 142,250 |
| QMB-only (65+) | 336 | 31.8% | 683 | 64.7% | 36 | 3.4% | 1,055 |
| Partial Benefit (65+) | 12,916 | 37.0% | 21,387 | 61.3% | 560 | 1.6% | 34,863 |
| Medicare-only (65+) | 180,374 | 17.9% | 736,939 | 73.2% | 89,360 | 8.9% | 1,006,673 |

Note: While "QMB-only" Medicare-Medicaid enrollees are technically considered "Partial Benefit," in this Report QMB-only is presented separately from "Partial Benefit," with the latter referring only to all *other* types of Partial Benefit Medicare-Medicaid enrollees: Specified Low-income Medicare Beneficiaries (i.e., "SLMB-only"), Qualified Disabled Working Individuals (i.e., "QDWI"), and Qualifying Individuals (i.e., "QI").

Appendix F: Medicaid Fee-for-Service Enrollee Count by Medicare-Medicaid Eligibility Type Examined in the Medicaid Expenditure Analysis, North Carolina, CY 2008

| | Medicaid Managed Care | | Medicaid Fee-for-Service | | Not all Months Alive Medicaid Fee-for-Service | | Total Medicaid |
|-------------------------------------|--------------------------|---------|-----------------------------|---------|---|---------|-------------------|
| | Number | Percent | Number | Percent | Number | Percent | Denominator |
| Full Benefit (<65) | 37,526 | 34.9% | 60,242 | 56.1% | 9,655 | 9.0% | 107,423 |
| QMB-only (<65) | 172 | 23.8% | 163 | 22.5% | 388 | 53.7% | 723 |
| Partial Benefit (<65) | 1,476 | 6.0% | 18,190 | 74.3% | 4,828 | 19.7% | 24,494 |
| Medicaid-only with disability (<65) | 120,541 | 70.0% | 29,153 | 16.9% | 22,537 | 13.1% | 172,231 |
| Full Benefit (65+) | 27,863 | 19.6% | 101,427 | 71.3% | 12,960 | 9.1% | 142,250 |
| QMB-only (65+) | 67 | 6.4% | 533 | 50.5% | 455 | 43.1% | 1,055 |
| Partial Benefit (65+) | 379 | 1.1% | 28,709 | 82.3% | 5,775 | 16.6% | 34,863 |

Note: While "QMB-only" Medicare-Medicaid enrollees are technically considered "Partial Benefit," in this Report QMB-only is presented separately from "Partial Benefit," with the latter referring only to all *other* types of Partial Benefit Medicare-Medicaid enrollees: Specified Low-income Medicare Beneficiaries (i.e., "SLMB-only"), Qualified Disabled Working Individuals (i.e., "QDWI"), and Qualifying Individuals (i.e., "QI").