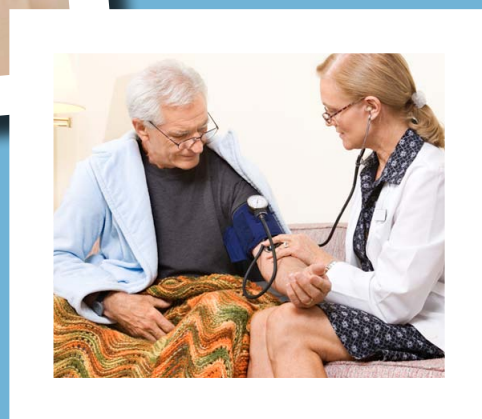


# CHRONIC CONDITIONS

AMONG MEDICARE BENEFICIARIES



*Chartbook: 2012 Edition*



# TABLE OF CONTENTS

<i>List of Figures</i>	<b>3</b>
<i>Introduction</i>	<b>5</b>
<i>Section 1: Demographics and Prevalence</i>	<b>6</b>
<i>Section 2: Medicare Service Utilization</i>	<b>15</b>
<i>Section 3: Medicare Spending</i>	<b>22</b>
<i>Section 4: Chronic Condition Co-morbidity</i>	<b>26</b>
<i>Methodology and Data Source</i>	<b>29</b>

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## **Suggested citation**

Centers for Medicare and Medicaid Services. Chronic Conditions among Medicare Beneficiaries, Chartbook, 2012 Edition. Baltimore, MD. 2012.

U.S. Department of Health and Human Services  
Kathleen Sebelius, *Secretary*

## **Centers for Medicare & Medicaid Services**

Marilyn Tavenner, *CMS Administrator (Acting)*

## **CMS, Office of Information Products and Data Analysis**

Niall Brennan, *Director*

## **Acknowledgements**

*This chartbook was prepared by the Centers for Medicare & Medicaid Services. The content was developed by Kimberly Lochner, under the direction of Christine Cox, with data and technical assistance provided by Stephanie Bartee, Gloria Wheatcroft and James Krometis.*

# LIST OF FIGURES

## Section 1: Demographics and Prevalence

### Figures 1.1

- 1.1a Percentage of Medicare FFS Beneficiaries with the 15 Selected Chronic Conditions: 2010
- 1.1b Percentage of Medicare FFS Beneficiaries with the 15 Selected Chronic Conditions by Age: 2010
- 1.1c Percentage of Medicare FFS Beneficiaries with the 15 Selected Chronic Conditions by Sex: 2010
- 1.1d Percentage of Medicare FFS Beneficiaries with the 15 Selected Chronic Conditions by Dual Eligibility Status: 2010

### Figures 1.2

- 1.2a Percentage of Medicare FFS Beneficiaries by Number of Chronic Conditions: 2010
- 1.2b Percentage of Medicare FFS Beneficiaries by Number of Chronic Conditions and Age: 2010
- 1.2c Percentage of Medicare FFS Beneficiaries by Number of Chronic Conditions and Sex: 2010
- 1.2d Percentage of Medicare FFS Beneficiaries by Number of Chronic Conditions and Race/Ethnicity: 2010
- 1.2e Percentage of Medicare FFS Beneficiaries by Number of Chronic Conditions and Dual Eligibility Status: 2010

## Section 2: Medicare Service Utilization

**Figure 2.1** Percentage of Medicare FFS Beneficiaries by Number of Inpatient Admissions and Number of Chronic Conditions: 2010

**Figure 2.2** Percentage of Medicare FFS Beneficiaries with at Least One Post Acute Care (PAC) Visit by Number of Chronic Conditions: 2010

**Figure 2.3** Percentage of Medicare FFS Beneficiaries by Number of Home Health Visits and Number of Chronic Conditions: 2010

**Figure 2.4** Percentage of Medicare FFS Beneficiaries by Number of Physician Office Visits and Number of Chronic Conditions: 2010

**Figure 2.5** Percentage of Medicare FFS Beneficiaries by Number of Emergency Room Visits and Number of Chronic Conditions: 2010

### Figure 2.6

2.6a Percentage of Hospital Admissions with a Readmission within 30 days by Number of Chronic Conditions and Age: 2010

2.6b Percentage of Hospital Admissions with a Readmission within 30 days by Number of Chronic Conditions and Sex: 2010

2.6c Percentage of Hospital Admissions with a Readmission within 30 days by Number of Chronic Conditions and Dual Eligibility Status: 2010

### Figure 2.7

Distribution of Medicare FFS Beneficiaries by Number of Chronic Conditions and Total Medicare Hospital Readmissions: 2010

### Section 3: Medicare Spending

**Figure 3.1**

- 3.1a Per Capita Medicare Spending for Medicare FFS Beneficiaries by Number of Chronic Conditions: 2010
- 3.1b Per Capita Medicare Spending for Medicare FFS Beneficiaries by Number of Chronic Conditions and Age: 2010
- 3.1c Per Capita Medicare Spending for Medicare FFS Beneficiaries by Number of Chronic Conditions and Sex: 2010
- 3.1d Per Capita Medicare Spending for Medicare FFS Beneficiaries by Number of Chronic Conditions and Dual Eligibility Status: 2010

**Figure 3.2**

Distribution of Medicare FFS Beneficiaries by Number of Chronic Conditions and Total Medicare Spending: 2010

**Figure 3.3**

Spending on Medicare Services as a Percentage of Total Medicare Spending among Medicare FFS Beneficiaries by Number of Chronic Conditions: 2010

### Section 4: Chronic Condition Co-morbidity

**Figure 4.1**

Co-morbidity among Chronic Conditions for Medicare FFS Beneficiaries: 2010

**Figure 4.3**

Top Five Triad Chronic Condition Combinations among Medicare FFS Beneficiaries with at Least Three Chronic Conditions: Prevalence and Per Capita Medicare Spending: 2010

**Figure 4.2**

Top Five Dyad Chronic Condition Combinations among Medicare FFS Beneficiaries with at Least Two Chronic Conditions: Prevalence and Per Capita Medicare Spending: 2010

## INTRODUCTION

Chronic Conditions among Medicare Beneficiaries is a chartbook prepared by the Centers for Medicare and Medicaid Services (CMS) to provide an overview of chronic conditions among Medicare beneficiaries. The chartbook highlights the prevalence of chronic conditions among Medicare beneficiaries and the impact of chronic conditions on Medicare service utilization and spending. The prevalence and costs of chronic health conditions among Medicare beneficiaries have far-reaching implications for the health care system. Not only are conditions such as high blood pressure, high cholesterol, heart disease and diabetes highly prevalent among Medicare beneficiaries, but most beneficiaries have multiple chronic conditions, defined as two or more chronic conditions by the U.S. Department of Health and Human Services Strategic Framework on Multiple Chronic Conditions<sup>1</sup>. Multiple chronic conditions increase the risks for poor outcomes such as mortality and functional limitations as well as the risk of high cost services such as hospitalizations and emergency room visits. CMS is committed to providing its beneficiaries with access to high-quality, coordinated care in order to maintain health and functioning, while at the same time controlling health care costs. In order to meet this challenge, understanding chronic conditions among the Medicare population is extremely important.

In addition to showing the prevalence of chronic conditions among Medicare beneficiaries, this report examines several major Medicare service types, including inpatient hospitalizations, post acute care (PAC) services, home health visits, physician office visits, emergency room visits and

30-day hospital readmissions. Increases in the number of chronic conditions resulted in increased utilization, which translated into higher Medicare spending. The information available from this report is intended to provide health policymakers and the public health research community a better understanding of the burden of chronic conditions among the Medicare fee for service (FFS) population and provide preliminary insights into the targeting of prevention and management strategies that will improve care and reduce costs for those with chronic conditions.

We selected 15 common chronic conditions that are available in the CMS Chronic Condition Warehouse (CCW) research files that also correspond with the list of chronic conditions used to define multiple chronic conditions by the Department of Health and Human Services Strategic Framework on Multiple Chronic Conditions<sup>2</sup>. Chronic conditions were examined for 31 million Medicare beneficiaries, who were continuously enrolled in the Medicare fee for service program in 2010. A complete description of the selection of chronic conditions and inclusion criteria for the study population can be found in the Methodology and Data Source section.

This chartbook updates a previous edition published in December 2011<sup>3</sup>. This 2012 edition of the chartbook updates the information with 2010 data and includes additional charts on co-morbidity. The information in this chartbook is available for use and reproduction without charge; permission from the authors to use the charts is not necessary.

1 HHS Initiative on Multiple Chronic Conditions. <http://www.hhs.gov/ash/initiatives/mcc/>. Accessed May 29, 2012.

2 Goodman RA, Posner S, Huang ES, Parekh A and Koh HK. Defining and Measuring Chronic Conditions: Imperatives for Research, Policy, Program, and Practice. Preventing Chronic Disease (Submitted).

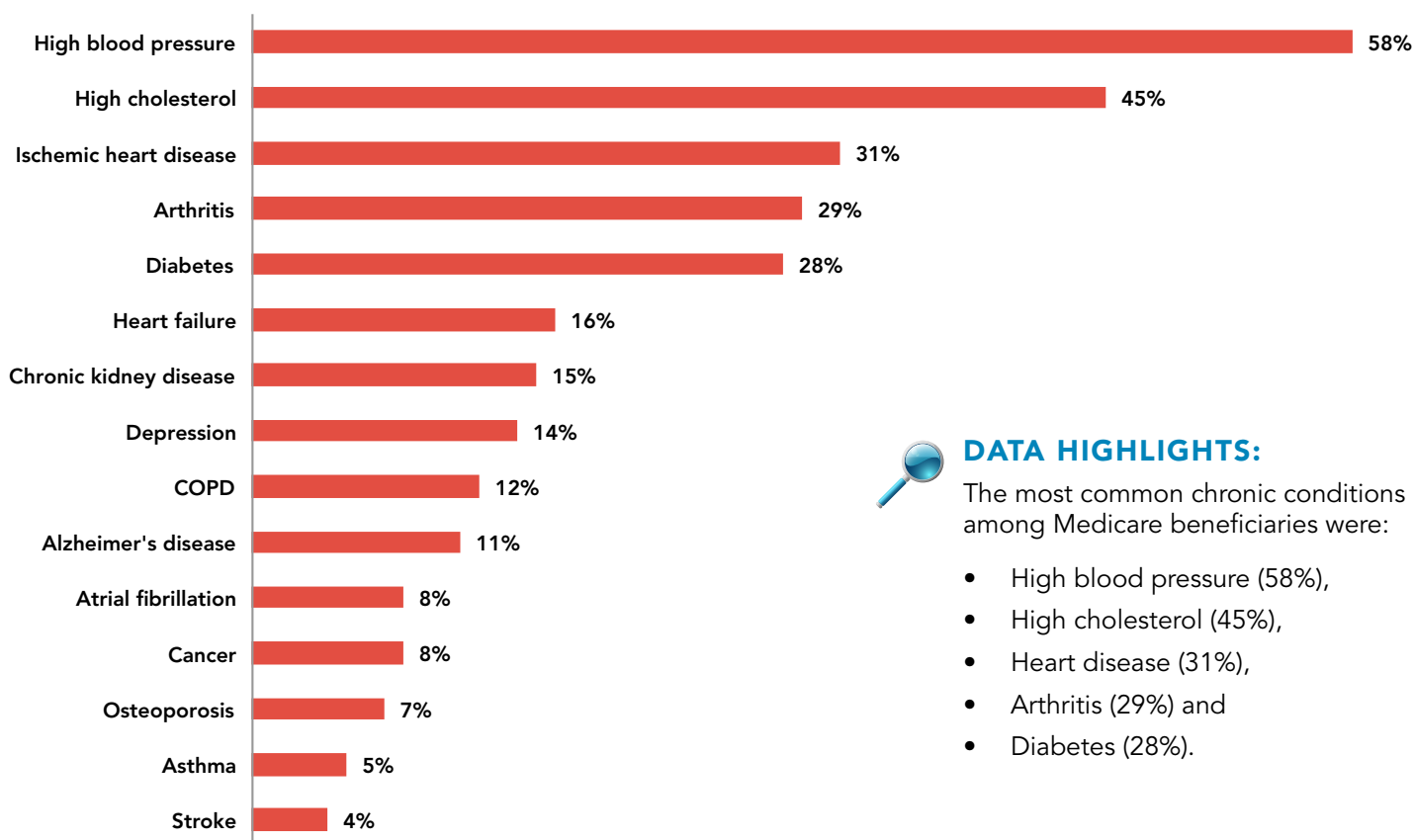
3 Chronic Conditions Among Medicare Beneficiaries: 2011 Edition. <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/2011ChartBook.html>.

## SECTION 1: DEMOGRAPHICS AND PREVALENCE

In 2010, among our study population of Medicare beneficiaries, conditions such as high blood pressure, high cholesterol, heart disease and diabetes were highly prevalent. In addition, more than two-thirds, or 21.4 million beneficiaries, had at least two or more chronic conditions. Given the high prevalence of co-morbidities, focusing on multiple chronic conditions is essential towards furthering our understanding of the scope of the problem, identifying research gaps and targeting interventions. In addition, we must also understand the variation in both specific chronic conditions as well as multiple chronic conditions across demographic groups. For example, as women live longer than men the prevalence of specific and multiple chronic conditions will be higher for them. Similarly, chronic conditions tend to be more prevalent among beneficiaries eligible for Medicare and Medicaid benefits, known as the dual eligible beneficiaries, who tend to be a vulnerable population comprised of beneficiaries who are disabled or 85 years of age and older.

*“High blood pressure was the most common chronic condition and this was true across age groups, for men and women as well as dual-eligibles”*

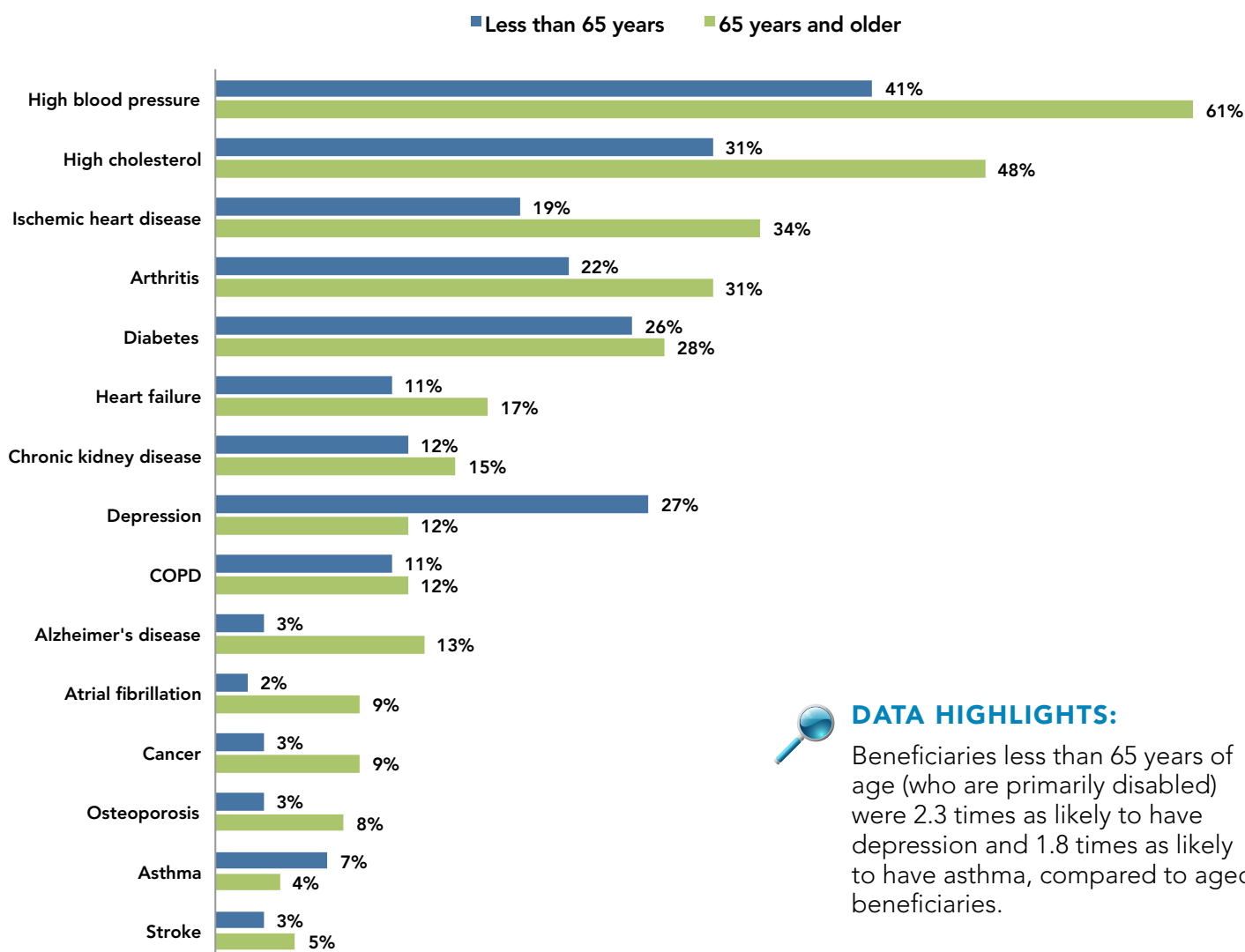
**Figure 1.1a** Percentage of Medicare FFS Beneficiaries with the 15 Selected Chronic Conditions: 2010



*“Chronic conditions were more prevalent among aged beneficiaries but depression was more common for disabled beneficiaries”*



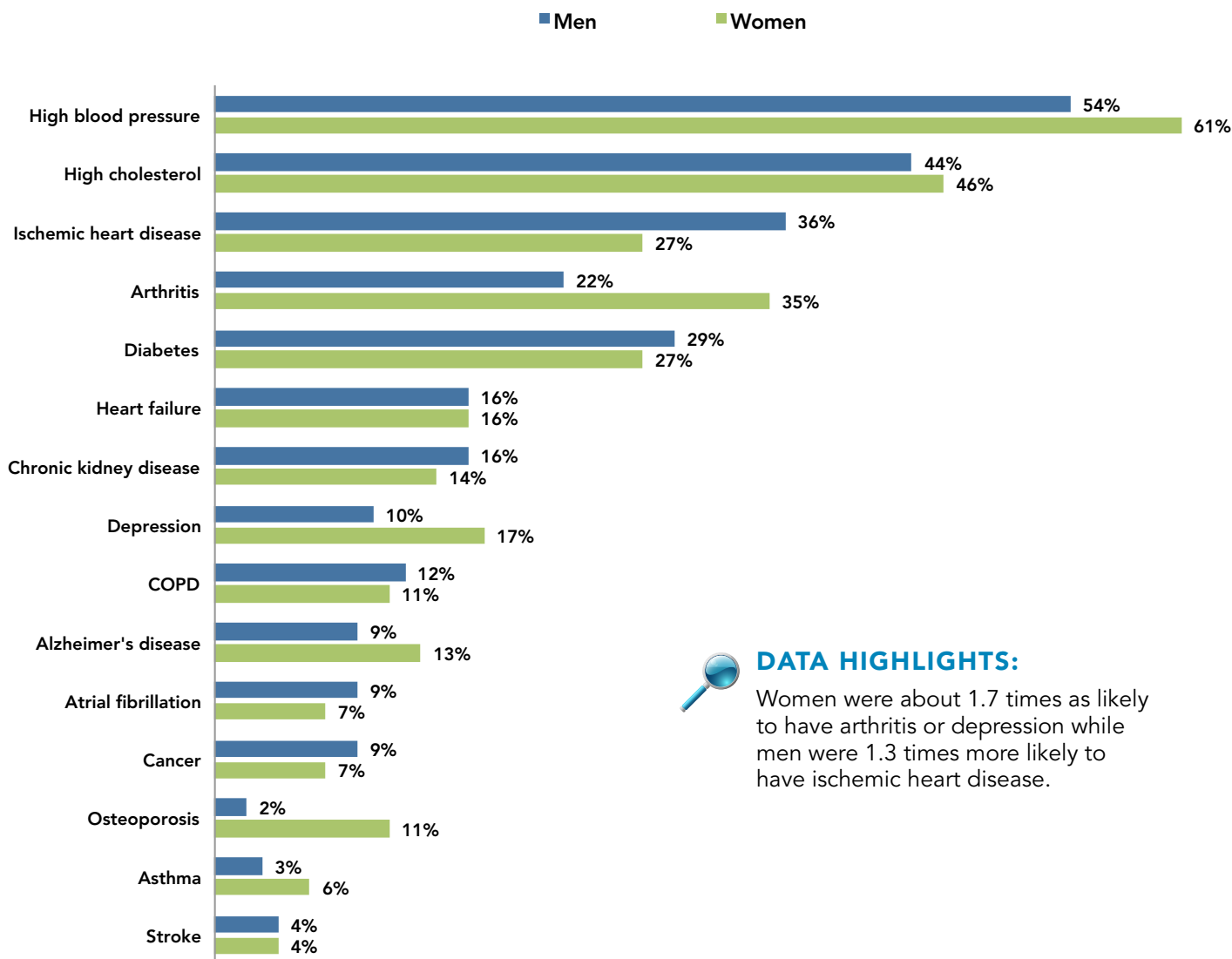
**Figure 1.1b** Percentage of Medicare FFS Beneficiaries with the 15 Selected Chronic Conditions by Age: 2010





## “Chronic conditions varied by sex”

**Figure 1.1c** Percentage of Medicare FFS Beneficiaries with the 15 Selected Chronic Conditions by Sex: 2010



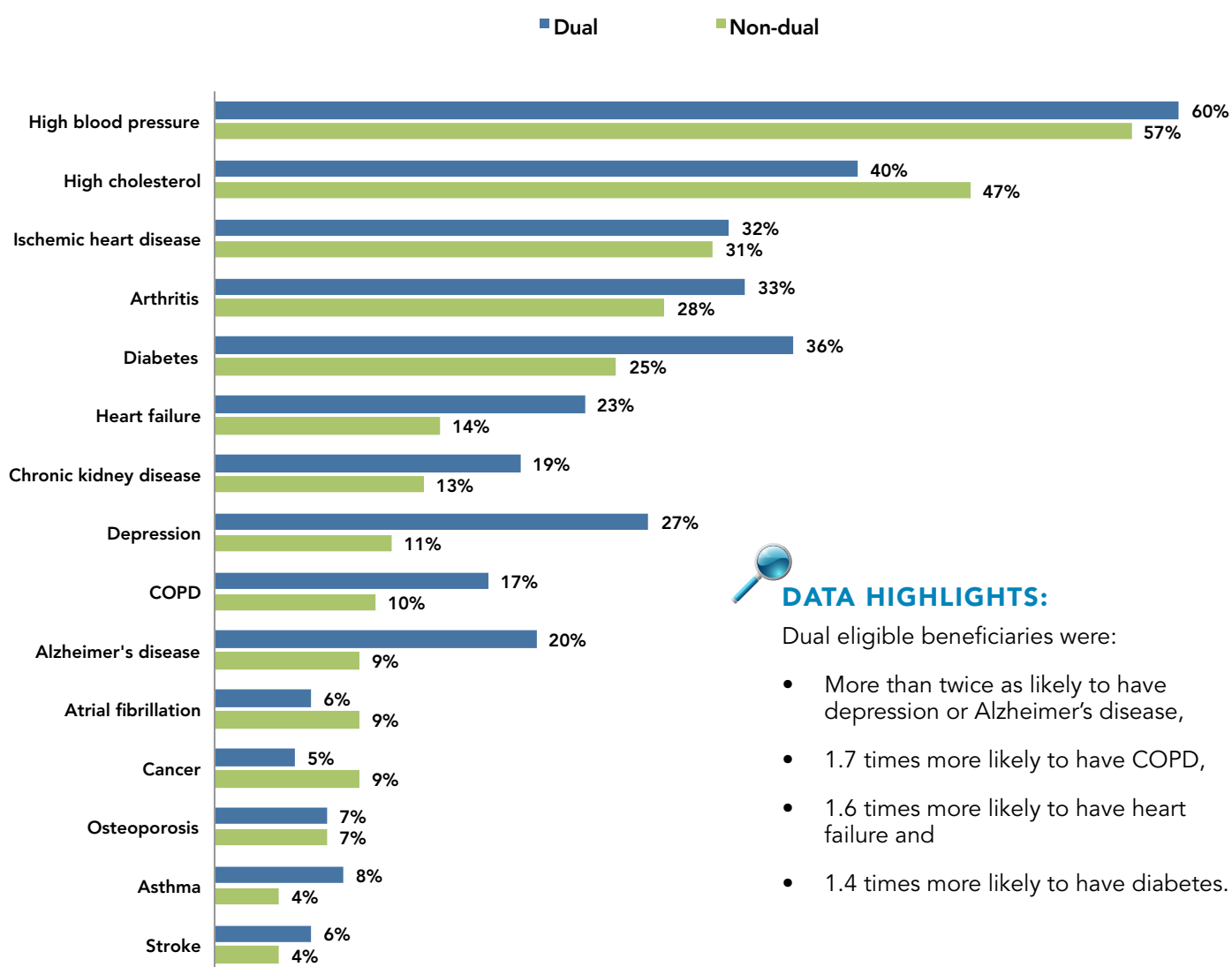
### DATA HIGHLIGHTS:

Women were about 1.7 times as likely to have arthritis or depression while men were 1.3 times more likely to have ischemic heart disease.



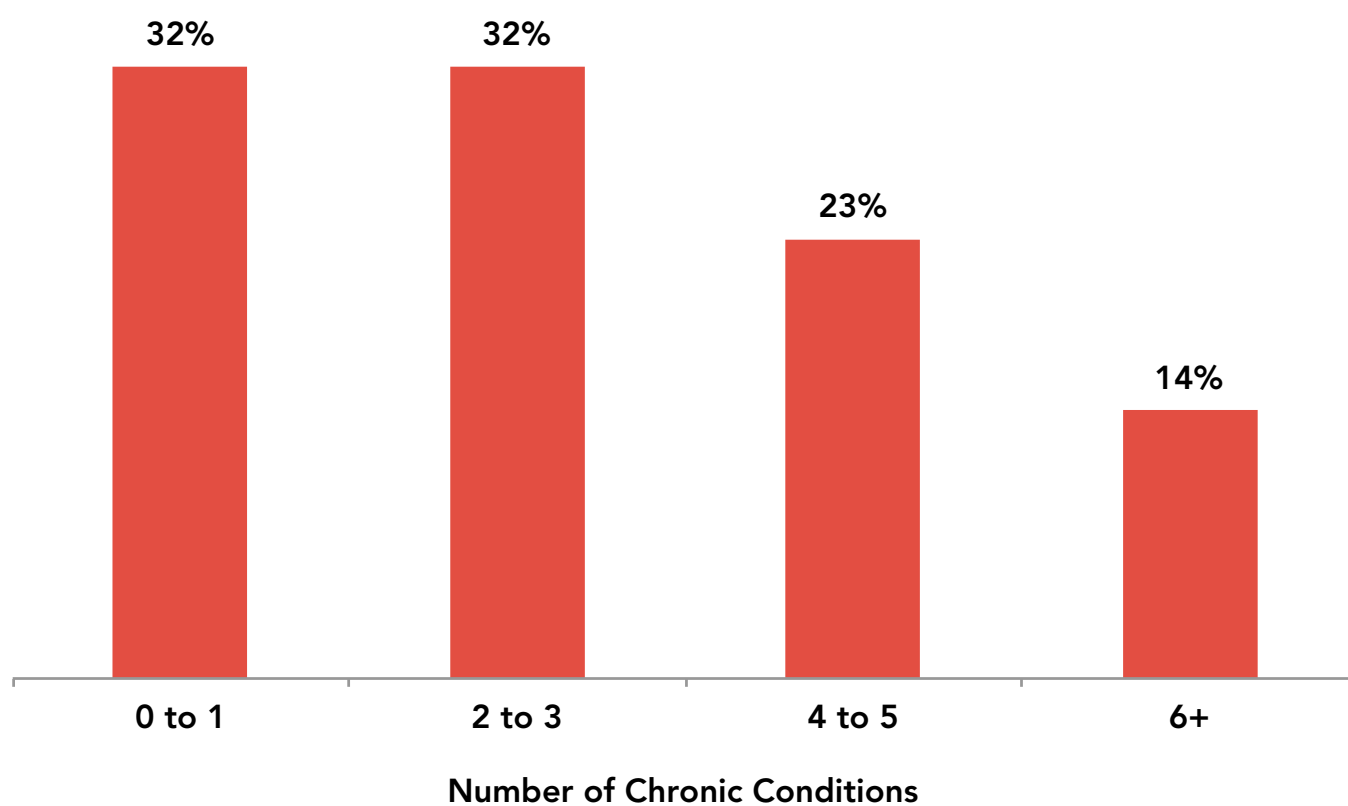
*“Most chronic conditions were more prevalent for dual-eligible beneficiaries”*

**Figure 1.1d** Percentage of Medicare FFS Beneficiaries with the 15 Selected Chronic Conditions by Dual Eligibility Status: 2010



*“Two-thirds of Medicare beneficiaries had multiple chronic conditions”*

**Figure 1.2a** Percentage of Medicare FFS Beneficiaries by Number of Chronic Conditions: 2010

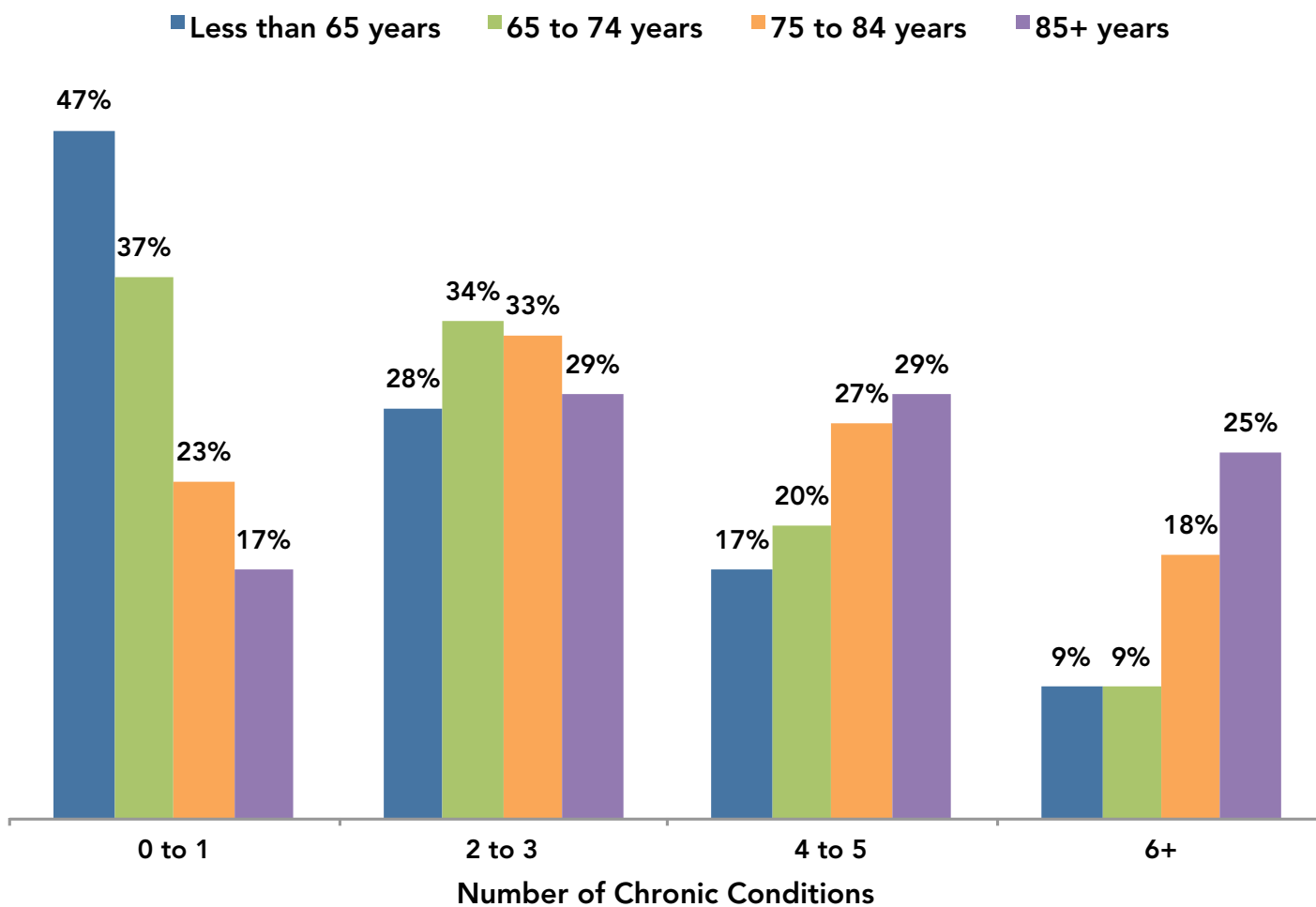


**DATA HIGHLIGHTS:**

Among the 15 chronic conditions examined, the prevalence of multiple chronic conditions was high, with over two-thirds of beneficiaries having two or more chronic conditions and 14% having 6 or more chronic conditions.

## “Multiple chronic conditions increased with age”

**Figure 1.2b** Percentage of Medicare FFS Beneficiaries by Number of Chronic Conditions and Age: 2010



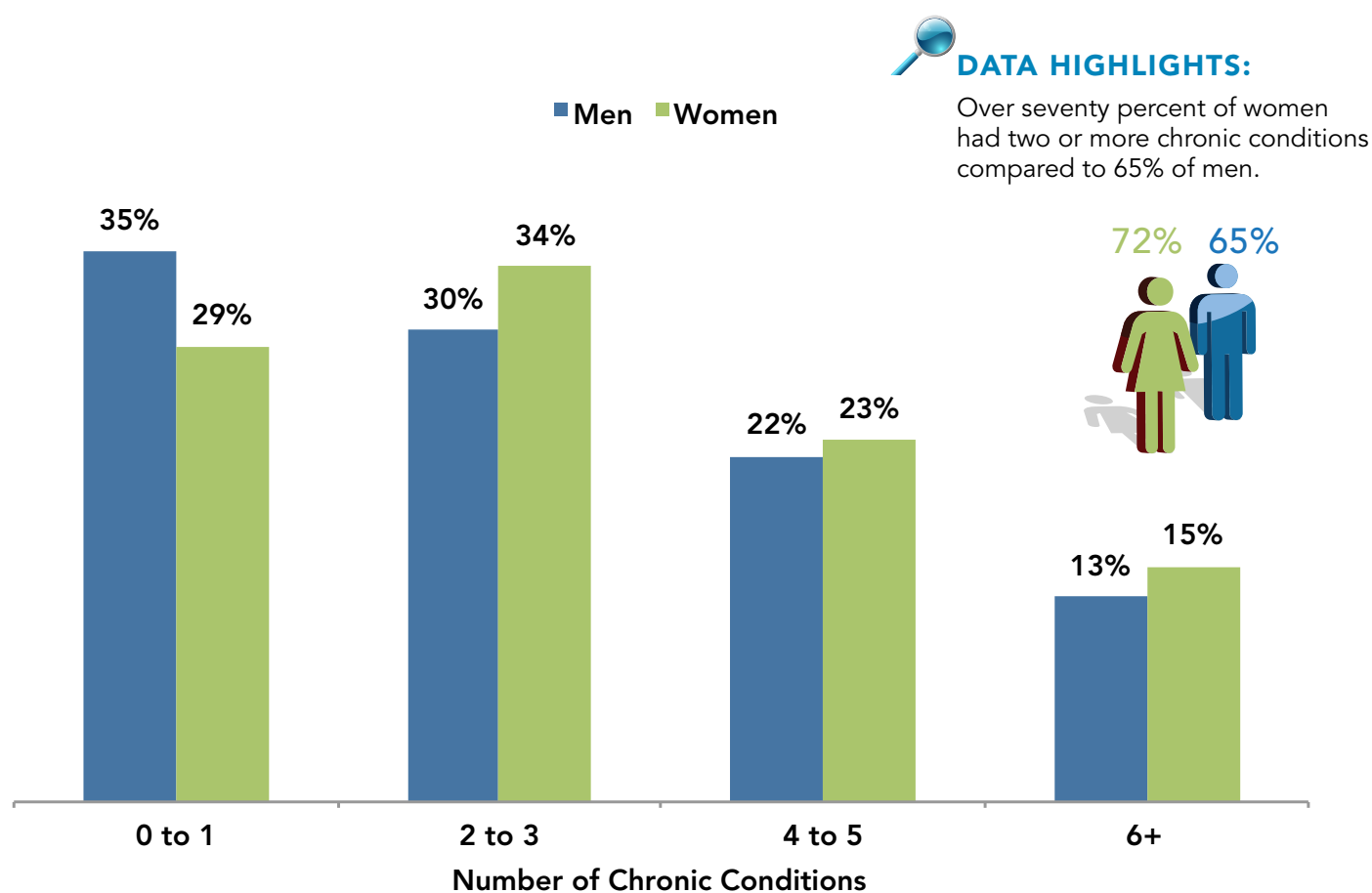
### DATA HIGHLIGHTS:

Over one half of beneficiaries less than 65 years had two or more chronic conditions compared to:

- Sixty-three percent of those 65-74 years,
- Seventy-eight percent of those 75-84 years and,
- Eighty-three percent of beneficiaries 85 years and older.

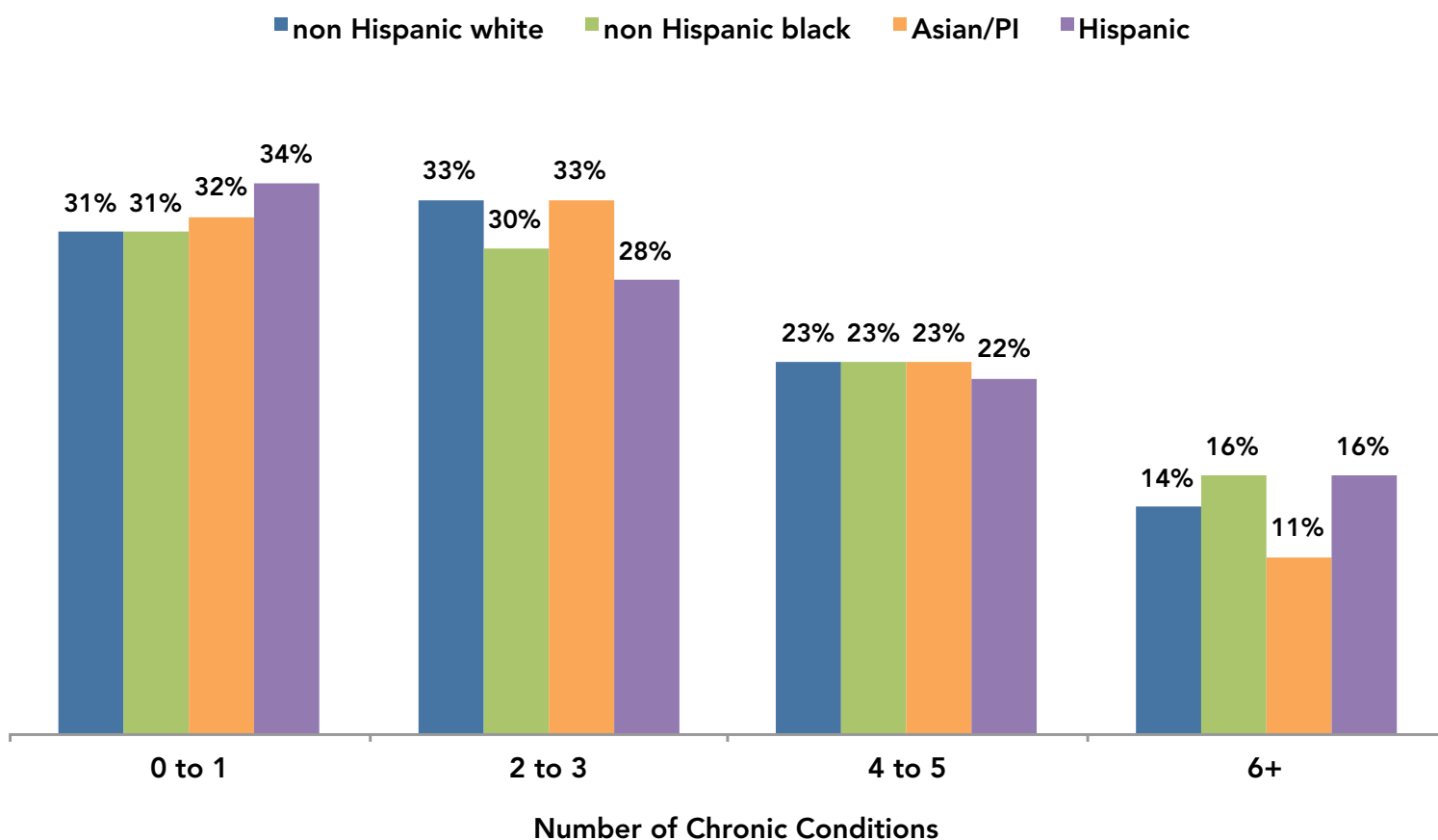
*“Women were more likely than men to have multiple chronic conditions”*

**Figure 1.2c** Percentage of Medicare FFS Beneficiaries by Number of Chronic Conditions and Sex: 2010



*“Multiple chronic conditions varied little across race and ethnic groups”*

**Figure 1.2d** Percentage of Medicare FFS Beneficiaries by Number of Chronic Conditions and Race/Ethnicity: 2010



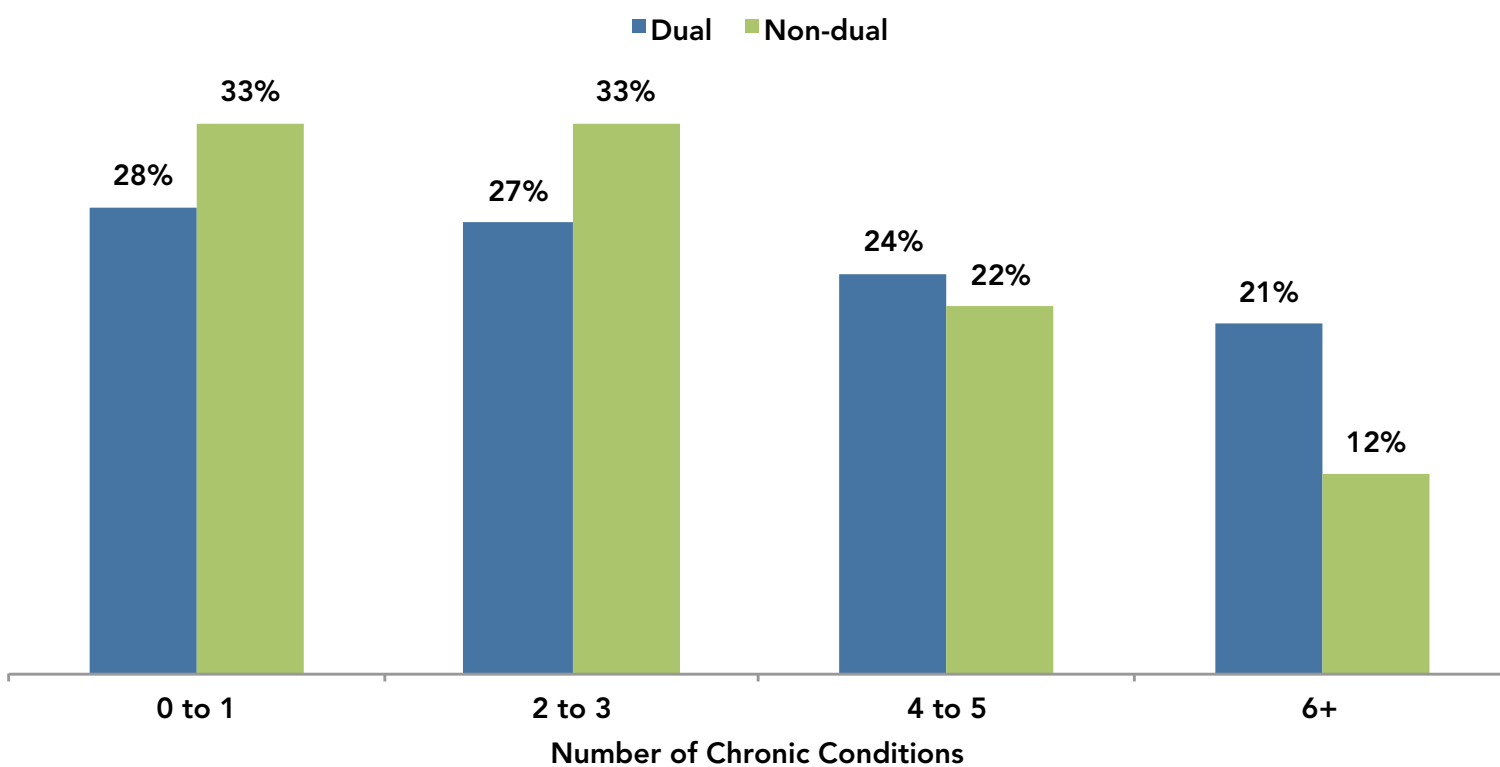
**DATA HIGHLIGHTS:**

In general, there was little variation between race and ethnicity groups in the percentage of beneficiaries with multiple chronic conditions.

Non Hispanic Black and Hispanic beneficiaries had the highest prevalence of 6 or more chronic conditions.

*“Dual-eligible beneficiaries were more likely to have multiple chronic conditions”*

**Figure 1.2e** Percentage of Medicare FFS Beneficiaries by Number of Chronic Conditions and Dual Eligibility Status: 2010



#### DATA HIGHLIGHTS:

- Seventy-two percent of dual-eligible beneficiaries had two or more conditions compared to 67% of non duals.
- Dual-eligible beneficiaries were 1.7 times as likely to have 6 or more chronic conditions.

## SECTION 2: MEDICARE SERVICE UTILIZATION

Medicare beneficiaries with multiple chronic conditions are the heaviest users of health care services. As the number of chronic conditions increases, so do utilization of health care services and health care costs. For example, hospitalizations are an important driver of health care costs, thus it is critical to know the impact chronic conditions have on inpatient admissions. In 2010, for our study population, about one in five Medicare beneficiaries were admitted to a hospital, resulting in costs over 100 billion dollars. However, among the 14% of beneficiaries with 6 or more chronic conditions, over 60% were hospitalized, which accounted for 55% of total Medicare spending on hospitalizations. In addition, Medicare spending for post-acute care (PAC)<sup>1</sup> has increased over the last decade<sup>2</sup>. Fourteen percent of beneficiaries received post-acute care during the year, resulting in costs of 54.7 billion dollars. Beneficiaries with 6 or more chronic conditions accounted for 63% of these PAC costs. Beneficiaries with 6 or more chronic conditions also had hospital readmissions that were approximately 30% higher than the national readmission rate for FFS beneficiaries. The 30-day all-cause readmission rate for FFS beneficiaries was 19% compared to a rate of 25% for beneficiaries with 6 or more chronic conditions.

*“Beneficiaries with multiple chronic conditions were more likely to be hospitalized and had more hospitalizations during the year”*

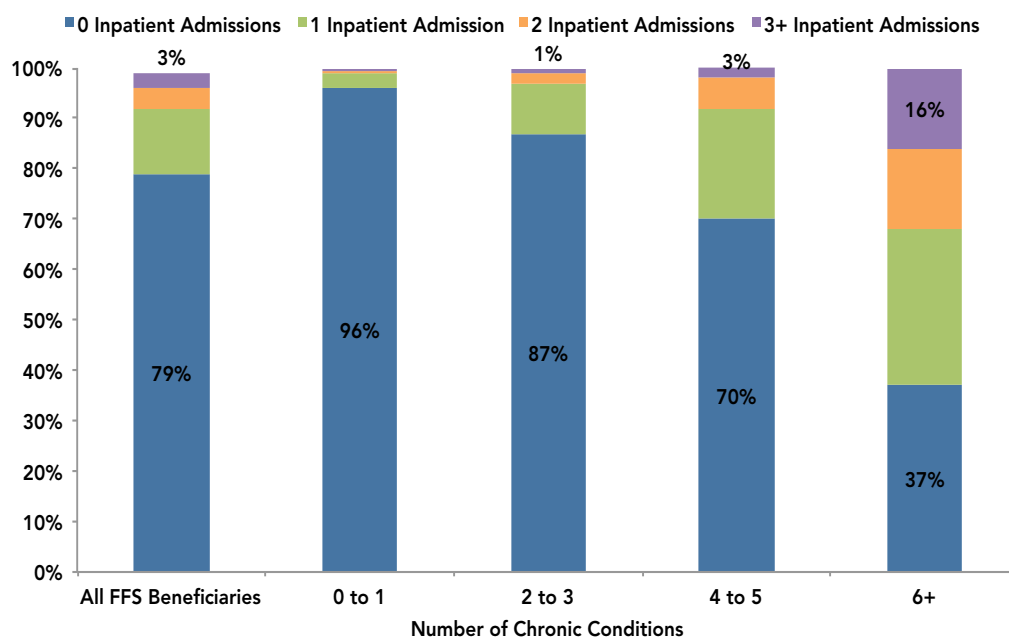
**Figure 2.1** Percentage of Medicare FFS Beneficiaries by Number of Inpatient Admissions and Number of Chronic Conditions: 2010



### DATA HIGHLIGHTS:

As the number of chronic conditions increased so did hospitalizations:

- Only 4% of beneficiaries with 0 or 1 chronic condition were hospitalized and less than 1% were hospitalized 3 or more times during the year.
- Almost two-thirds of beneficiaries with 6 or more chronic conditions were hospitalized and 16% had 3 or more hospitalizations during the year.

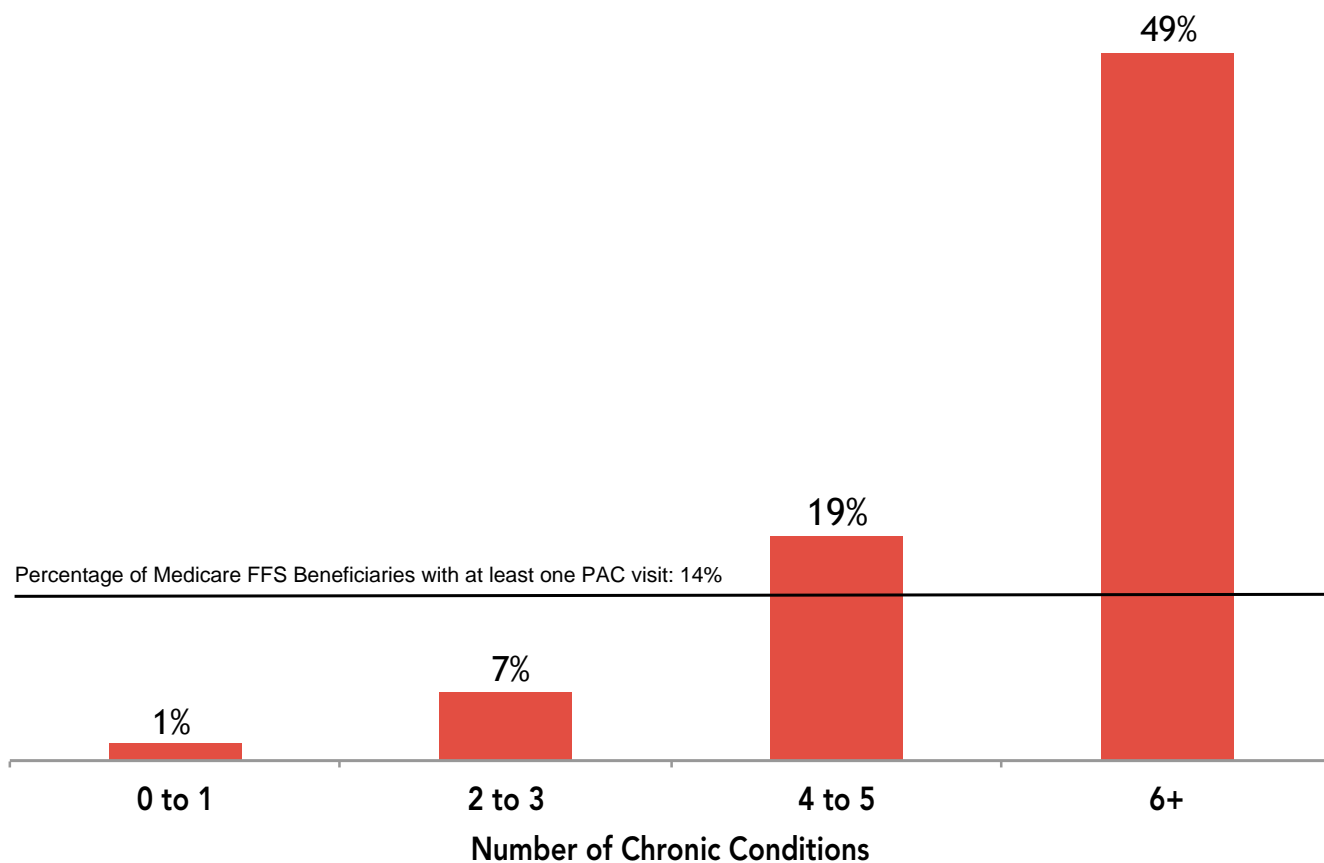


<sup>1</sup> Post-acute care services are provided in four settings - skilled nursing facilities, long-term care hospitals, inpatient rehabilitation facilities and the home (i.e. home health visits). Post-acute care services are received after discharge from an acute care hospitalization.

<sup>2</sup> Medicare Payment Advisory Commission (MedPAC), A Data Book: Healthcare Spending and the Medicare Program, June 2011, available at <http://www.medpac.gov/documents/Jun11DataBookEntireReport.pdf>.

*“There was a steady increase in post-acute care services as the number of chronic conditions increased”*

**Figure 2.2** Percentage of Medicare FFS Beneficiaries with at Least One Post-Acute Care (PAC) Visit by Number of Chronic Conditions: 2010



#### DATA HIGHLIGHTS:

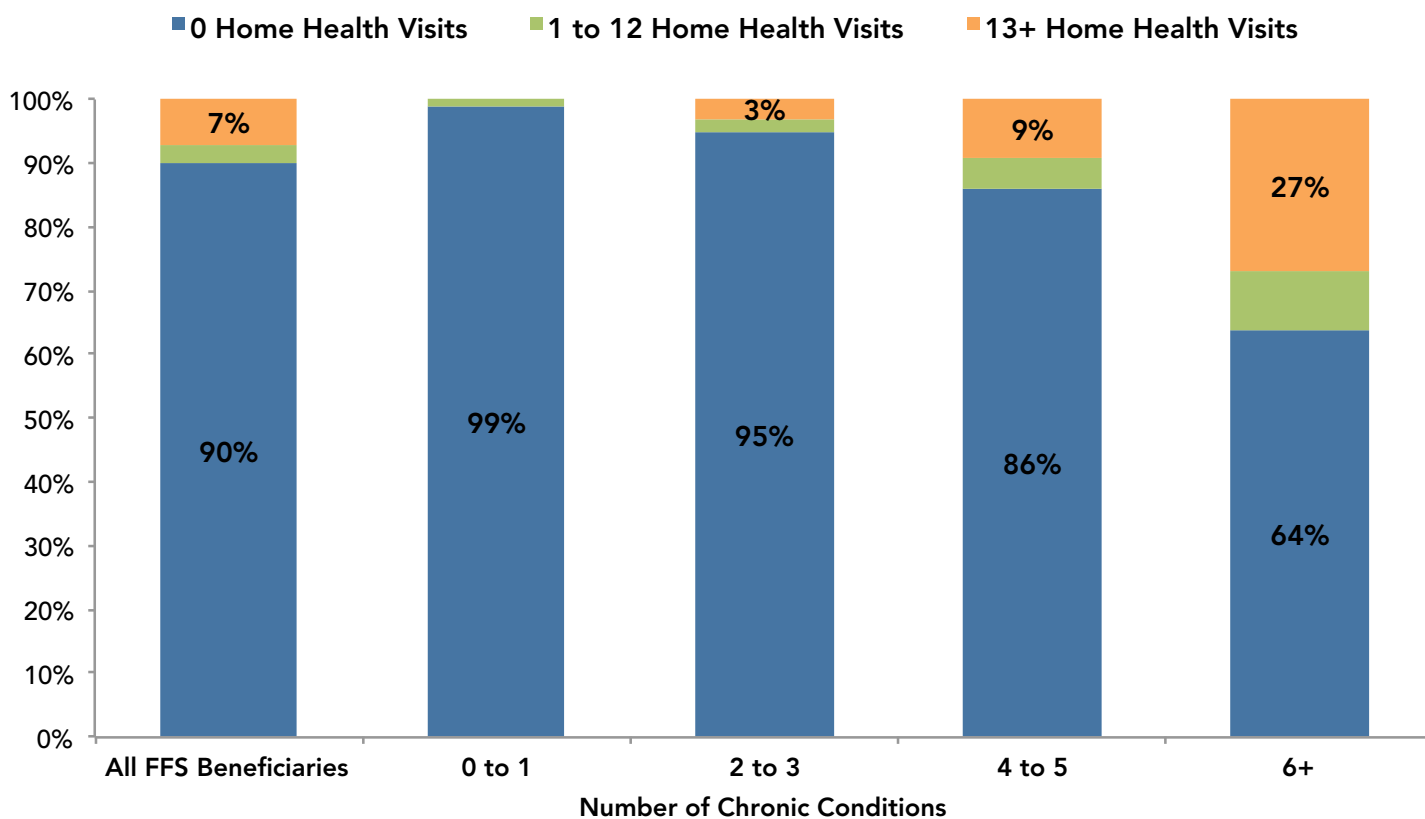
Only 1% of beneficiaries with 0 or 1 chronic condition received care in a post-acute care setting compared to:

- Seven percent of beneficiaries with 2 or 3 chronic conditions,
- Nineteen percent of beneficiaries with 4 or 5 chronic conditions and
- Forty-nine percent of beneficiaries with 6 or more chronic conditions.



*“Beneficiaries with multiple chronic conditions were high users of home health visits”*

**Figure 2.3** Percentage of Medicare FFS Beneficiaries by Number of Home Health Visits and Number of Chronic Conditions: 2010

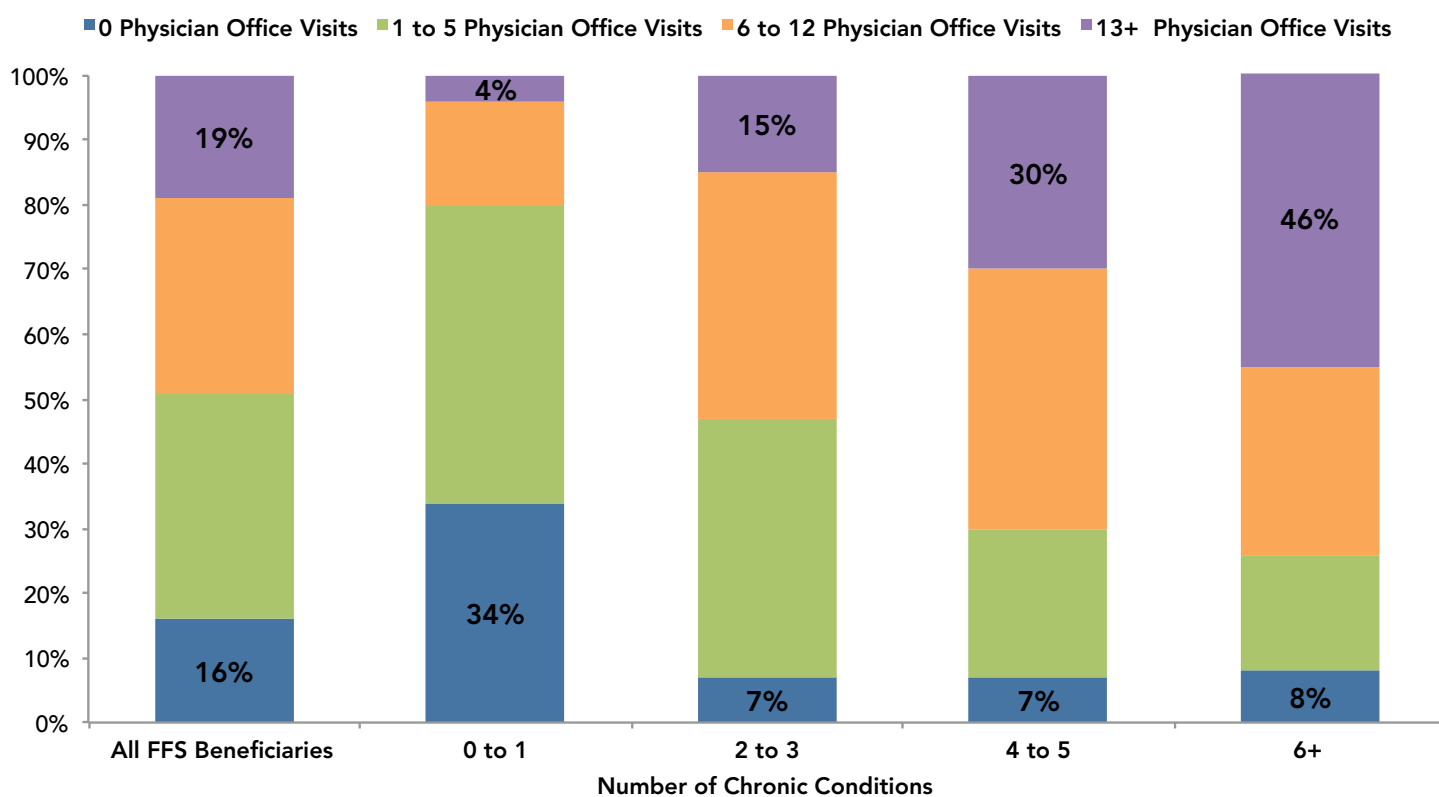


**DATA HIGHLIGHTS:**

In 2010, 3.1 million beneficiaries (approximately 10%) received at least one home health visit during the year and 7% received 13 or more home health visits during the year (more than 1 per month on average). In contrast, over one-quarter of beneficiaries with 6 or more chronic conditions received 13 or more visits during the year.

*“Most Medicare beneficiaries (84%) visited their doctor at least once during the year, but beneficiaries with multiple chronic conditions had more doctor visits”*

**Figure 2.4** Percentage of Medicare FFS Beneficiaries by Number of Physician Office Visits and Number of Chronic Conditions: 2010



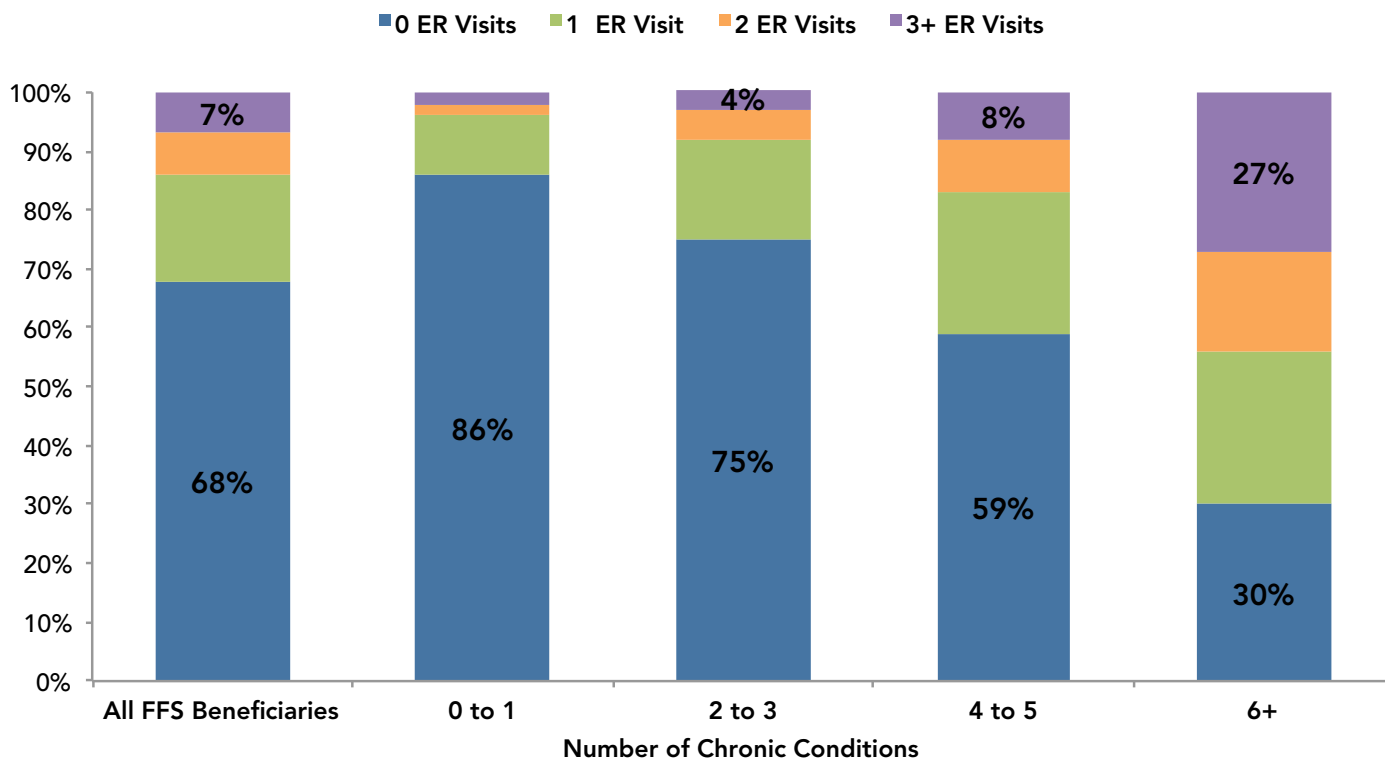
#### DATA HIGHLIGHTS:

Sixty-six percent of beneficiaries with 0 or 1 chronic condition had a doctor visit during the year but only 4% had 13 or more doctor visits (more than one per month on average).

In contrast, ninety-two percent of beneficiaries with 6 or more chronic conditions had a doctor visit during the year and almost half (46%) had 13 or more visits.

*“Beneficiaries with multiple chronic conditions were more likely visit the emergency room and had more ER visits during the year”*

**Figure 2.5** Percentage of Medicare FFS Beneficiaries by Number of Emergency Room Visits and Number of Chronic Conditions: 2010

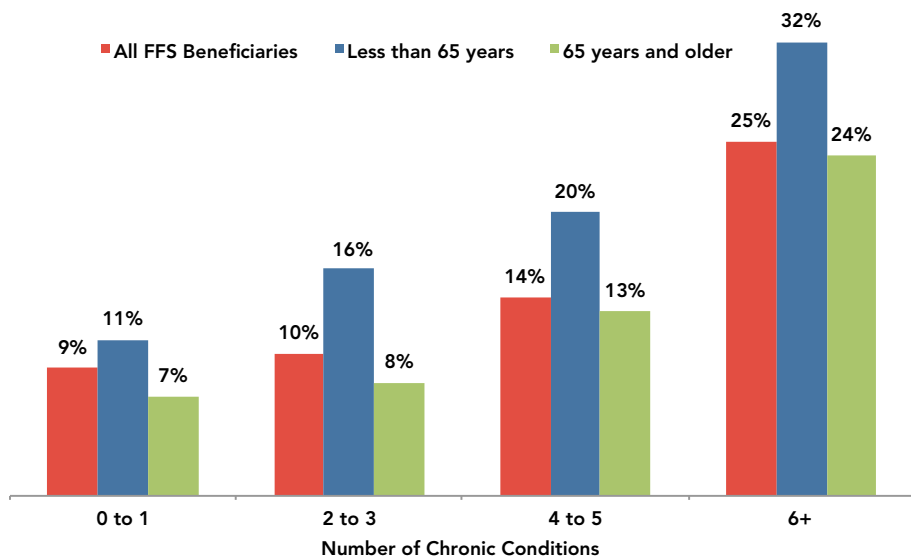


#### DATA HIGHLIGHTS:

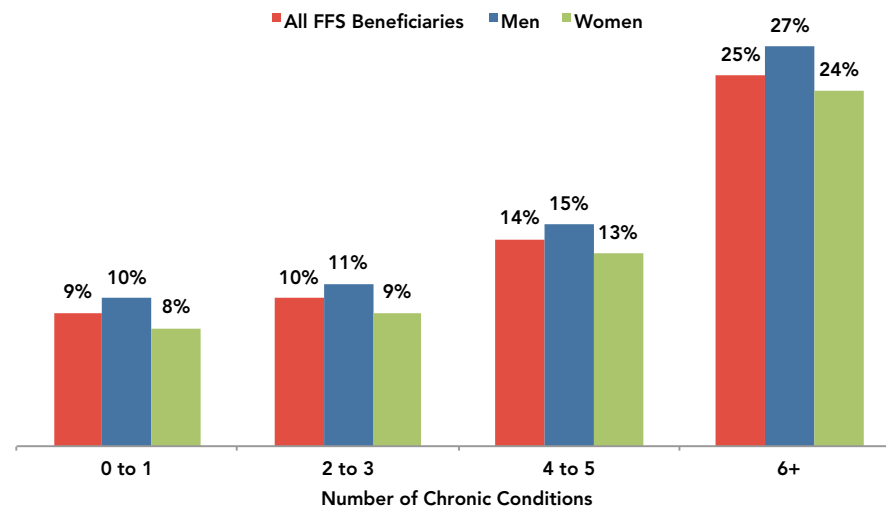
Fourteen percent of beneficiaries with 0 or 1 chronic condition had an ER visit and only 2% had three or more ER visits during the year.

In contrast, seventy percent of beneficiaries with 6 or more chronic conditions had an ER visit and over one-quarter had three or more visits.

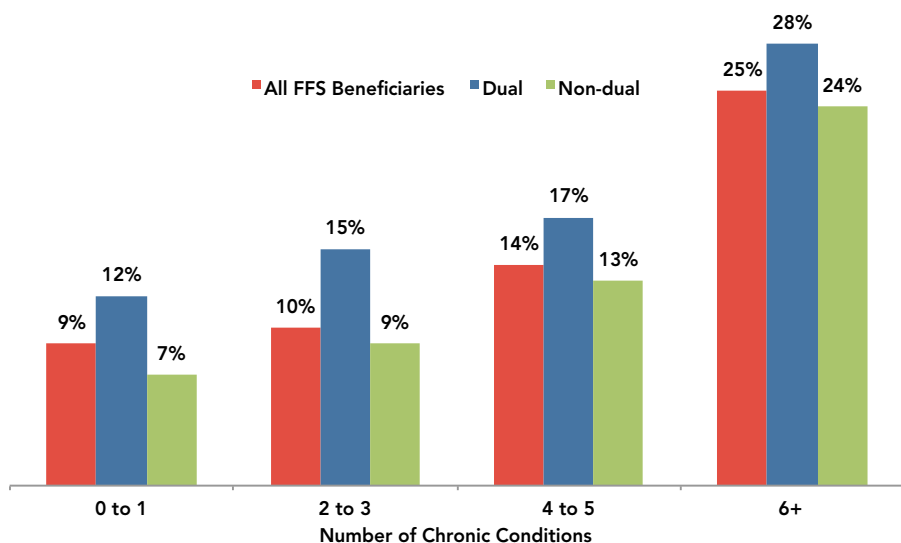
**Figure 2.6a** Percentage of Hospital Admissions with a Readmission within 30 days by Number of Chronic Conditions and Age: 2010



**Figure 2.6b** Percentage of Hospital Admissions with a Readmission within 30 days by Number of Chronic Conditions and Sex: 2010



**Figure 2.6c** Percentage of Hospital Admissions with a Readmission within 30 days by Number of Chronic Conditions and Dual Eligibility Status: 2010

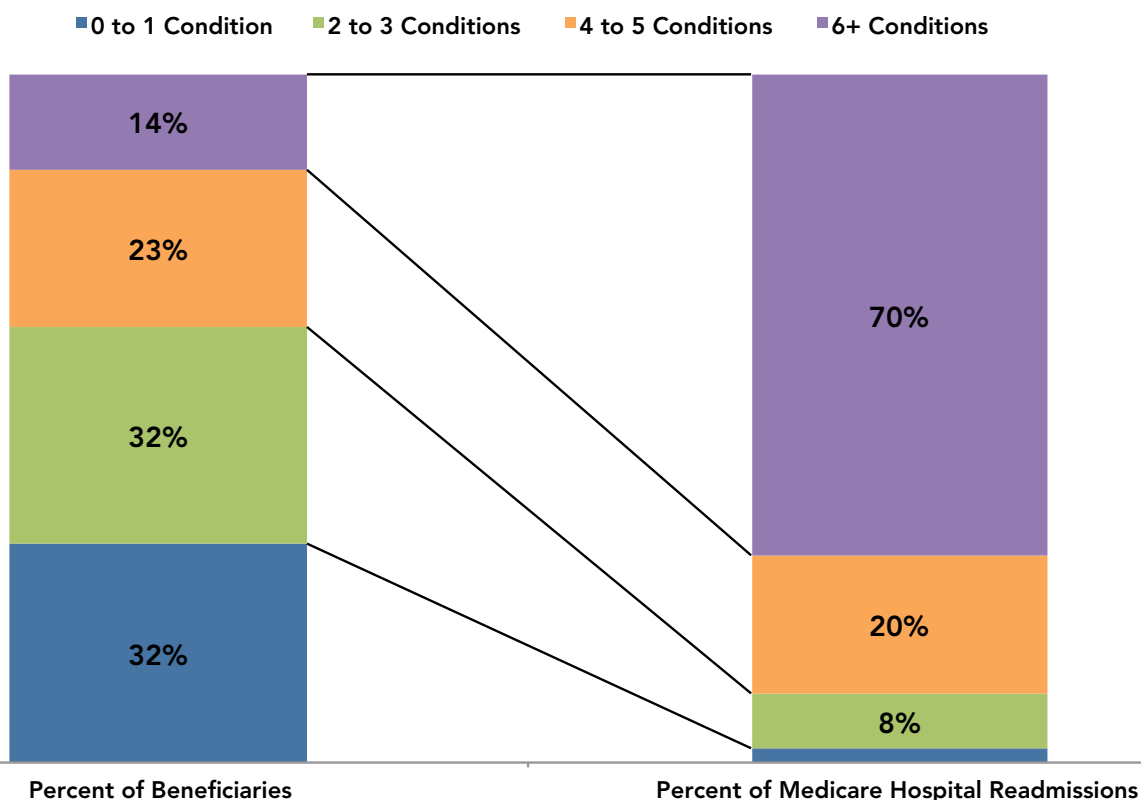


*“In 2010, the average readmission rate for Medicare FFS beneficiaries was 19%”*

*“For all socio-demographic groups, hospital readmissions increased with the number of chronic conditions”*

*“Beneficiaries with multiple chronic conditions accounted for almost all Medicare hospital readmissions”*

**Figure 2.7** Distribution of Medicare FFS Beneficiaries by Number of Chronic Conditions and Total Medicare Hospital Readmissions: 2010



**DATA HIGHLIGHTS:**

There were 1.9 million Medicare hospital readmissions in 2010. Medicare beneficiaries with two or more chronic conditions accounted for almost all (98%) of these readmissions.

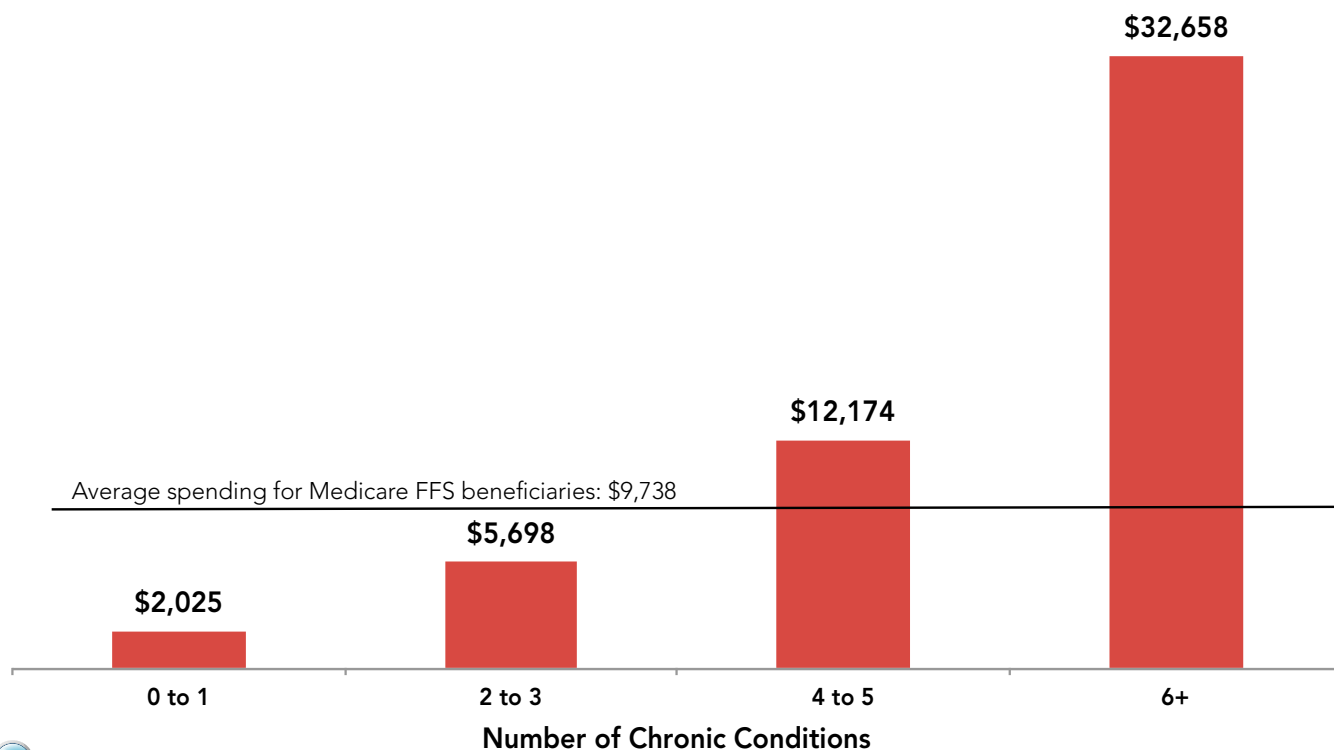
Beneficiaries with 6 or more chronic conditions accounted for a disproportionate share of these readmissions, with the 14% of these beneficiaries accounting for 70% of all Medicare readmissions.

## SECTION 3: MEDICARE SPENDING

The costs of chronic health conditions among Medicare beneficiaries have far-reaching implications for the health care system. In 2010, for our study population, Medicare spending was over 300 billion dollars. Per capita Medicare spending for beneficiaries with 6 or more chronic conditions was three times higher than for the average beneficiary. One-third of Medicare beneficiaries without multiple chronic conditions (0 or 1 chronic condition) had Medicare costs totaling 20 billion, whereas, those with 6 or more chronic conditions (roughly 14% of FFS beneficiaries) had Medicare costs of over 140 billion dollars.

*“Medicare spending increased with the number of chronic conditions”*

**Figure 3.1a** Per Capita Medicare Spending for Medicare FFS Beneficiaries by Number of Chronic Conditions: 2010

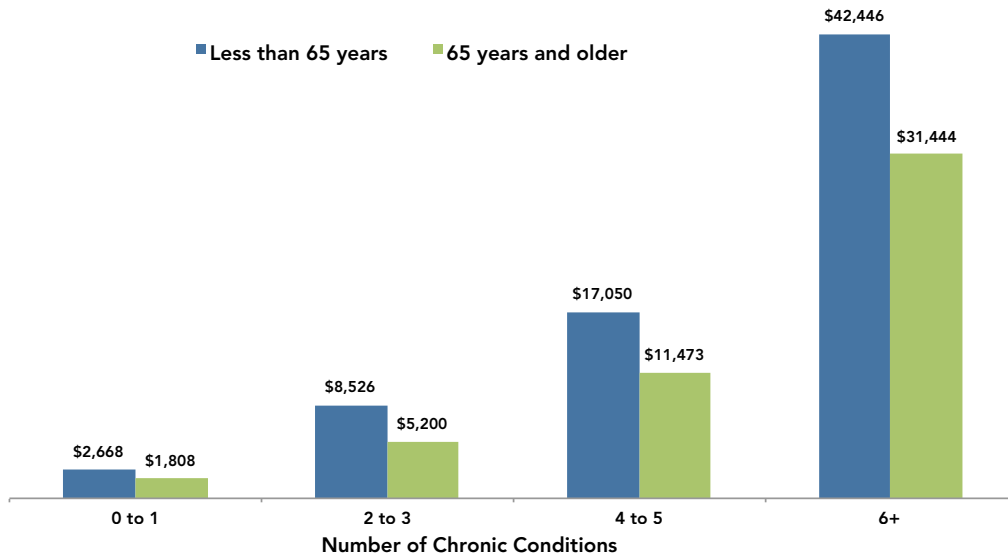


### DATA HIGHLIGHTS:

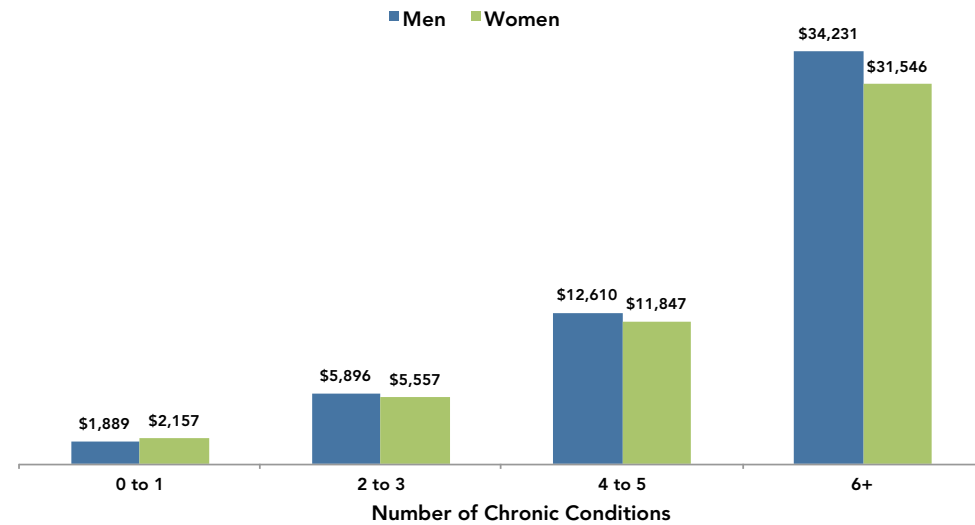
On average, Medicare spent \$9,738 per beneficiary. Beneficiaries with 4 or more chronic conditions had Medicare spending higher than this average.

For beneficiaries with 6 or more chronic conditions, average Medicare spending was over 3 times greater and these beneficiaries were more likely to have heart failure, chronic kidney disease, COPD, atrial fibrillation, and stroke.

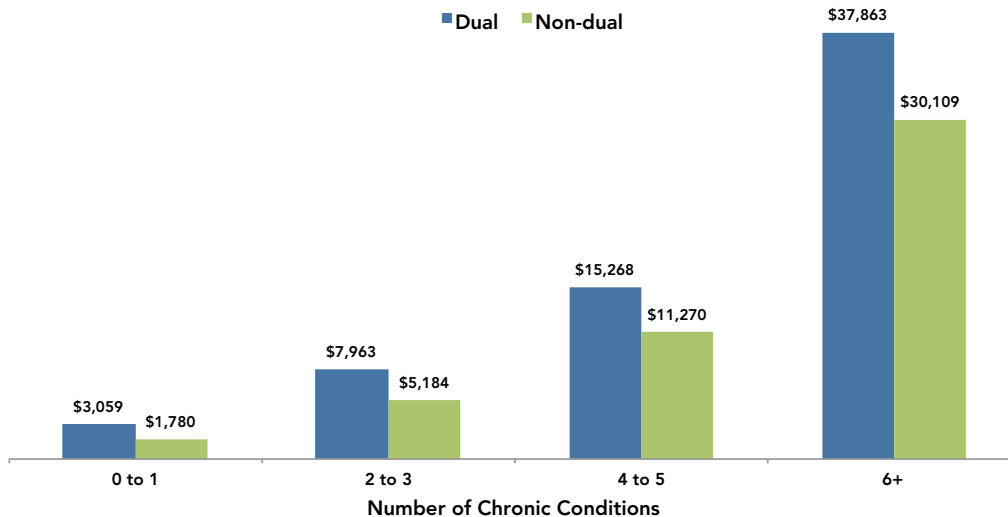
**Figure 3.1b** Per Capita Medicare Spending for Medicare FFS Beneficiaries by Number of Chronic Conditions and Age: 2010



**Figure 3.1c** Per Capita Medicare Spending for Medicare FFS Beneficiaries by Number of Chronic Conditions and Sex: 2010



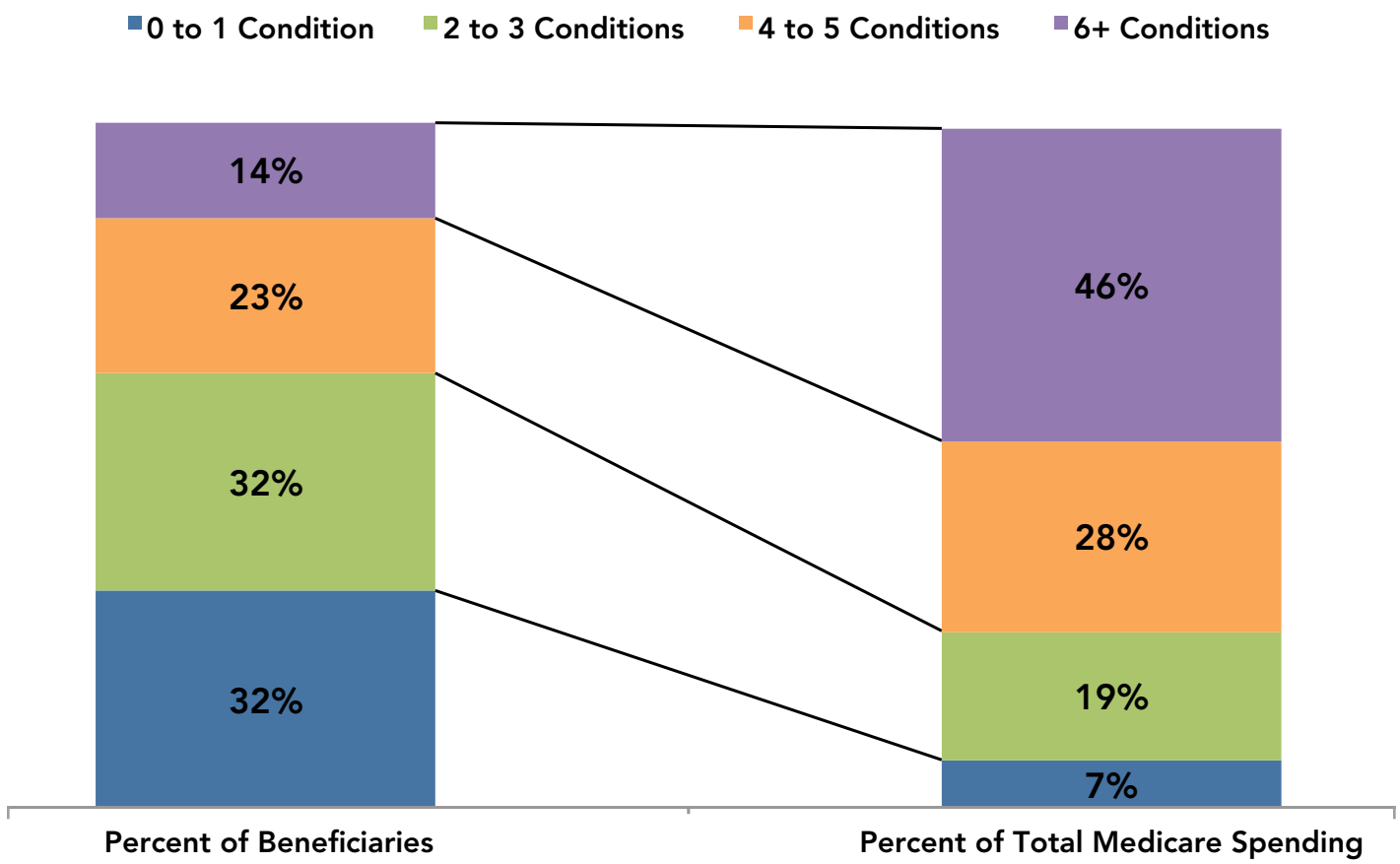
**Figure 3.1d** Per Capita Medicare Spending for Medicare FFS Beneficiaries by Number of Chronic Conditions and Dual Eligibility Status: 2010



*"For all socio-demographic groups, average Medicare spending increased with the number of chronic conditions"*

*“Beneficiaries with multiple chronic conditions accounted for a disproportionate share of Medicare spending”*

**Figure 3.2** Distribution of Medicare FFS Beneficiaries by Number of Chronic Conditions and Total Medicare Spending: 2010



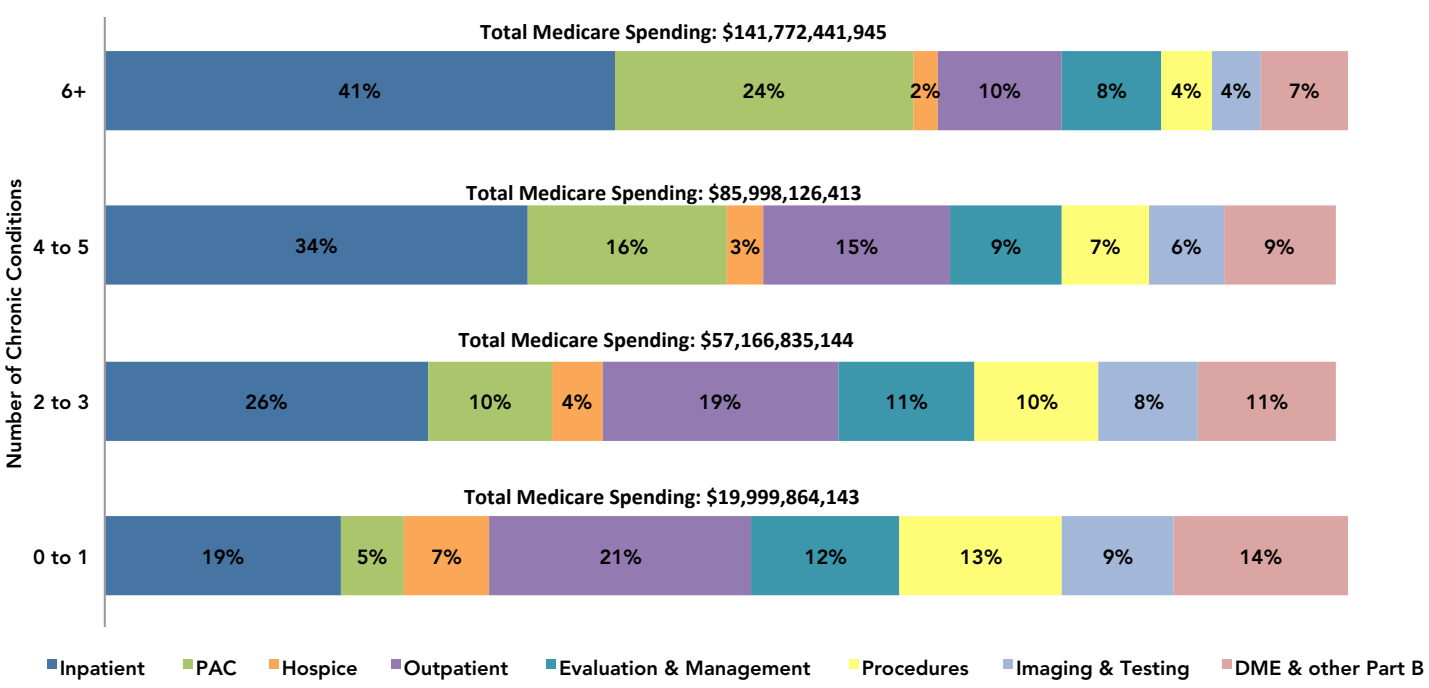
**DATA HIGHLIGHTS:**

The nearly one-third of beneficiaries with 0 or 1 chronic condition accounted for only 7% of Medicare spending, whereas the 14% with 6 or more chronic conditions accounted for 46% of Medicare spending.



*“Medicare spending on specific services varied considerably by the number of chronic conditions”*

**Figure 3.3** Spending on Medicare Services as a Percentage of Total Medicare Spending Among Medicare FFS Beneficiaries by Number of Chronic Conditions: 2010



**DATA HIGHLIGHTS:**

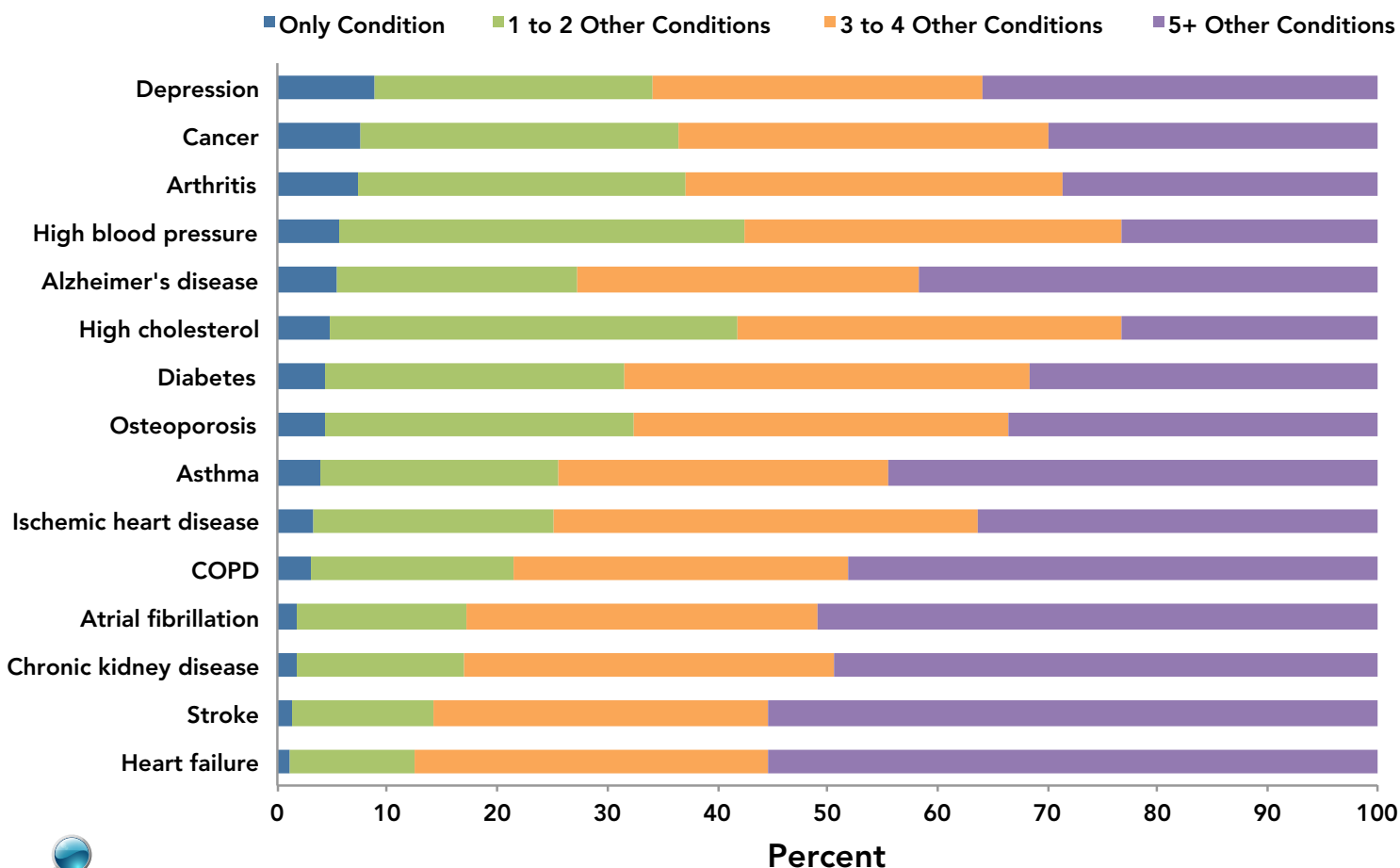
As the number of chronic conditions increased, the share of Medicare spending for inpatient hospitalizations and post-acute care (PAC) services increased, while the share of spending for outpatient and evaluation and management services decreased.

## SECTION 4: CHRONIC CONDITION CO-MORBIDITY

Thus far, we have highlighted the burden of specific chronic conditions as well as multiple chronic conditions among Medicare beneficiaries. However, a complex picture of chronic conditions emerges when co-morbidity among these conditions is examined as some chronic conditions are highly co-morbid while others tend to have lower rates of co-morbidity. These patterns of varying co-morbidity create challenges for delivering effective and efficient treatment and care coordination plans.

*“Co-morbidity among chronic conditions is very common”*

**Figure 4.1** Co-morbidity among Chronic Conditions for Medicare FFS Beneficiaries: 2010



### DATA HIGHLIGHTS:

Six percent of beneficiaries with high blood pressure had no other condition present, while 23% had 5 or more additional conditions.

Stroke and heart failure were highly co-morbid conditions with about 55% of beneficiaries with these conditions having 5 or more additional chronic health conditions.

This pattern of co-morbidity held for men and women, with beneficiaries 65 years and older and dual-eligibles having greater co-morbidity.

**Figure 4.2** Top Five Dyad Chronic Condition Combinations among Medicare FFS Beneficiaries with at Least Two Chronic Conditions (N = 21,437,864): Prevalence and Per Capita Medicare Spending: 2010

#### FIVE MOST PREVALENT DYADS

Dyads	Prevalence (%)	Per Capita (\$)
High cholesterol and High blood pressure	52.9	\$13,825
High cholesterol and Ischemic heart disease	36.2	\$20,529
High cholesterol and Diabetes	32.3	\$18,010
High cholesterol and Arthritis	31.1	\$18,043
Ischemic heart disease and High blood pressure	29.6	\$18,308

#### FIVE MOST COSTLY DYADS

Dyads	Prevalence (%)	Per Capita (\$)
Stroke and Chronic kidney disease	2.0	\$51,715
Stroke and COPD	1.4	\$49,025
Stroke and Heart failure	2.3	\$47,568
Stroke and Asthma	0.4	\$46,913
COPD and Chronic kidney disease	4.9	\$45,011



#### DATA HIGHLIGHTS:

Among beneficiaries with at least two of the chronic conditions, high cholesterol was the most common condition among the most prevalent dyads, whereas stroke was the most common co-occurring condition among the costliest dyads.

- Over 50% had high cholesterol and high blood pressure and one-third had high cholesterol co-occurring with ischemic heart disease or diabetes.
- Those with stroke and chronic kidney disease or stroke and COPD had per capita costs that were approximately 5 times higher than the average spending for Medicare FFS beneficiaries.

**Figure 4.3** *Top Five Triad Chronic Condition Combinations among Medicare FFS Beneficiaries with at Least Three Chronic Conditions (N =16,481,562): Prevalence and Per Capita Medicare Spending: 2010*

#### FIVE MOST PREVALENT TRIADS

Triads	Prevalence (%)	Per Capita (\$)
High cholesterol and High blood pressure and Ischemic heart disease	33.7	\$19,836
High cholesterol and High blood pressure and Diabetes	29.9	\$17,451
High cholesterol and High blood pressure and Arthritis	25.7	\$18,238
High cholesterol and Diabetes and Ischemic heart disease	21.5	\$25,014
High cholesterol and Ischemic heart disease and Arthritis	19.3	\$24,539

#### FIVE MOST COSTLY TRIADS

Triads	Prevalence (%)	Per Capita (\$)
Stroke and Chronic kidney disease and Asthma	0.2	\$69,980
Stroke and Chronic kidney disease and COPD	0.8	\$68,956
Stroke and Chronic kidney disease and Depression	0.8	\$65,143
Stroke and Chronic kidney disease and Heart failure	1.5	\$63,242
Stroke and Heart failure and Asthma	0.3	\$62,819



#### DATA HIGHLIGHTS:

Among beneficiaries with at least three of the chronic conditions, high cholesterol and high blood pressure were the most common conditions among the most prevalent triads along with diabetes and ischemic heart disease whereas stroke and chronic kidney disease were the most common co-occurring conditions among the costliest triads.

- One third had high cholesterol, high blood pressure and ischemic heart disease and over one quarter had high cholesterol and high blood pressure co-occurring with diabetes or arthritis.
- The top five costliest triads had per capita costs of over \$60,000. The costliest triads included stroke, chronic kidney disease and asthma or COPD with per capita costs that were 7 times higher than the average spending for Medicare FFS beneficiaries.

## METHODOLOGY AND DATA SOURCE

The data used in this report come from the 2010 CMS administrative claims data for 100 percent of Medicare beneficiaries enrolled in the fee-for-service (FFS) program, which are available from the CMS Chronic Condition Data Warehouse ([www.ccwdata.org](http://www.ccwdata.org))<sup>1</sup>.

A common definition of chronic illnesses are those conditions that last a year or more and require ongoing medical attention and/or limit activities of daily living<sup>2,3</sup>. For this report, chronic conditions were identified through Medicare administrative claims. Medicare beneficiaries were considered to have a chronic condition if the CMS administrative data had a claim indicating that they were receiving a service or treatment for the specific condition. Detailed information on the identification of chronic conditions in the CCW is available elsewhere<sup>4</sup>. This report examined the following 15 chronic conditions that are available as predefined conditions in the CCW and correspond with the conditions used in the HHS Strategic Framework on Multiple Chronic Conditions<sup>5</sup>:

- Alzheimer's/dementia
- Arthritis (including rheumatoid and osteoarthritis)
- Asthma
- Atrial fibrillation
- Cancer (breast, colorectal, lung, and prostate)
- Chronic kidney disease
- COPD
- Depression
- Diabetes (excluding diabetic conditions related to pregnancy)
- Heart failure
- Hyperlipidemia (High cholesterol)
- Hypertension (High blood pressure)
- Ischemic heart disease
- Osteoporosis
- Stroke/Transient ischemic attack

Please note that these conditions do not include important mental health or developmental conditions, which are prevalent among the Medicare-Medicaid enrollee population (dual eligibles) between the ages of 18 and 64<sup>6</sup>.

Multiple chronic conditions were defined by counting the number of conditions listed above and grouped so that the HHS definition of multiple chronic conditions as two or more conditions could be identified: 0-1, 2-3, 4-5, and 6 or more.

The study population (N = 31,313,344) included Medicare beneficiaries continuously enrolled in Medicare FFS, parts A and B for 2010. Beneficiaries who were enrolled at any point during the year in a Medicare Advantage (MA) plan were excluded as were beneficiaries who first became eligible for Medicare after January of the calendar year. Beneficiaries who died during the year were included up to their date of death if they met the other inclusion criteria. This study population represented approximately 63% of the total Medicare population in 2010. Among this population of Medicare beneficiaries, 17% were less than 65 years of age (disabled and ESRD eligible) and 15% were 85 years and older. The majority were women (56%) and 22% were dual eligible beneficiaries, meaning they also were eligible for Medicaid covered services.

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- 1 CMS launched the Chronic Condition Data Warehouse (CCW), a research database, in response to the Medicare Modernization Act of 2003, section 723, which outlined a plan to improve the quality of care and reduce the cost of care for chronically ill Medicare beneficiaries.
  - 2 Hwang W, Weller W, Ireys H, Anderson G. Out-of-pocket medical spending for care of chronic conditions. *Health Affairs* 2001;20:267-78
  - 3 HCUP, Chronic Condition Indicator <http://www.hcup-us.ahrq.gov/toolsoftware/chronic/chronic.jsp>, accessed September 13, 2011.
  - 4 Chronic Condition Data Warehouse. Available at <http://www.ccwdata.org/chronic-conditions/index.htm>, accessed September 13, 2011.
  - 5 HHS Initiative on Multiple Chronic Conditions. <http://www.hhs.gov/ash/initiatives/mcc/>. Accessed May 29, 2012.
  - 6 CMS is currently vetting a list of proposed additional chronic conditions to better describe the experience of the Medicare-Medicaid enrollee population. These include additional mental health disorders (e.g., bipolar, anxiety, post-traumatic stress syndrome, schizophrenia and other psychotic disorders), intellectual and developmental disabilities, HIV/AIDS, substance abuse, alcohol abuse, and others.

Data tables for each figure as well as power point slides are available for download at <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/2012ChartBook.html>.

## Notes on interpreting the data

These estimates of the prevalence of multiple chronic conditions may vary from other sources as the number of chronic conditions examined will affect estimates of multiple chronic conditions. Figures that present the prevalence for the individual chronic conditions do not mean that the beneficiary has only that condition. Beneficiaries with any of the specific conditions may have any of the other conditions examined or conditions not included in our list. In addition, estimates are not age or sex adjusted. Since women tend to live longer than men, without age adjustment they would be expected to have more chronic conditions. Utilization and Medicare payment information is at the beneficiary level. Utilization and Medicare payment information presented by the number of chronic conditions may include services and expenditures not related to the chronic conditions examined. In addition, some totals will be greater than 100% due to rounding of percentages.

## Definitions

**Dual eligible beneficiary:** People who receive benefits from both Medicaid and Medicare. Medicare beneficiaries are classified as dual eligible if in any month in a given calendar year they were receiving full or partial Medicaid benefits.

**Fee for service (FFS):** Also known as “original Medicare” includes Part A (hospital insurance) and Part B (medical insurance). Beneficiaries have their choice of doctors, hospitals, and other providers, pay deductibles and coinsurance and usually pay a monthly premium for Part B.

**Hospital admissions:** Inpatient admissions include short stay acute care hospitalizations.

**Hospital readmission rate:** The percentage of hospitalizations that resulted in a readmission from all causes within 30-days.

**Medicare:** Medicare is a United States Federal health insurance program for people 65 or older, people under 65 with certain disabilities, and people of any age with End-Stage Renal Disease (ESRD).

**Medicare spending:** Total Medicare payments for all Medicare covered services, with the exception that pass-through per diem amounts, such as direct graduate medical education and bad debt payments are excluded.

**Per capita spending:** Average Medicare spending per beneficiary.

**Physician office visits:** Refers to physician evaluation and management services as defined by the Berenson-Eggers Type of Service (BETOS) classification scheme and included BETOS codes M1A and M1B.

**Post acute care (PAC) services:** Services received in skilled nursing facilities, long-term care hospitals, inpatient rehabilitation facilities or home health visits.