



132 Main Street, P.O. Box 1356, Montpelier, VT 05601  
Phone: 802.229.2152 | Fax: 802.229.5098  
Email: mail@vpqhc.org

## CHRONIC CONDITIONS IN VERMONT'S MEDICARE POPULATION: 2007

### Highlights

- Of Medicare beneficiaries over age 65 in 2007, 72% received care for at least one chronic condition and 46% received care for multiple chronic conditions.
- Of Medicare beneficiaries over age 65 in 2007, 28% did not receive care for any chronic conditions.
- Ischemic heart disease (commonly known as coronary artery disease) was the most common chronic condition for Medicare beneficiaries over age 65 in 2007. About 24% of these beneficiaries received care related to this condition.
- The prevalence of chronic conditions varies with age. In younger age groups, conditions such as diabetes are the most prevalent. In older age groups, dementia and arthritis are more common.

### Introduction

Over half of all inpatient stays in Vermont include a diagnosis for at least one chronic condition. For patients over 65 years, this jumps to 84% of all hospitalizations. Furthermore, hospital stays among adults diagnosed with a chronic condition are more costly and resource intensive than hospitalizations that do not involve a chronic illness<sup>1</sup>. It is therefore important to understand the prevalence of chronic conditions in Vermont, particularly in the older population.

The Vermont Program for Quality in Health Care (VPQHC) has obtained comprehensive 2007 Vermont Medicare claims data for this research. This data includes Part A and Part B information as well as durable medical equipment and assessment files (files that contain the functional and health status of beneficiaries). All files are linked by a unique and anonymous beneficiary identification code.

The analysis in this report makes use of the Beneficiary and Chronic Condition summary files. These datasets provide a record for all Medicare beneficiaries in Vermont in 2007. In addition to base

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<sup>1</sup> Vermont Program for Quality in Health Care (VPQHC) 2009 Quality Report: Chronic conditions are defined using the 21 cohorts of chronic illness established by the Chronic Condition Data Warehouse. A detailed description of the 21 chronic conditions defined by the Chronic Condition Data Warehouse, and the associated ICD-9-CM diagnosis codes, can be obtained from: [www.ccwdata.org](http://www.ccwdata.org).



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demographic information, the datasets indicate type of insurance coverage and whether the beneficiary had any of 21 predefined chronic conditions.

This report provides an overview of the prevalence of chronic illness among Vermont's Medicare population in 2007. The number of conditions experienced by beneficiaries, most common conditions, and profiles by age and gender are included.

### *Medicare*

Medicare is the government health insurance program administered by the Centers for Medicare & Medicaid Services (CMS). Medicare is the largest health insurance service in the country, with around 40 million Americans participating. Individuals are typically eligible for Medicare services if they meet one of the following requirements: are 65 years of age or older, are less than 65 years of age but have certain disabilities, or have End-Stage Renal Disease (kidney failure that requires a transplant or dialysis).

## **Findings**

### *Number of Conditions*

In 2007, the Vermont Medicare population was composed of 106,791 beneficiaries, 88,337 (83%) of which were over 65 years of age. Of the over 65 year population, 72% used Medicare services related to at least one chronic condition. Furthermore, 46% of beneficiaries over 65 years sought health care for multiple conditions. A distribution of the number of conditions experienced by Vermont Medicare beneficiaries in 2007 is shown in Figure 1.

Table 1 shows the profile of the number of chronic conditions by gender for four progressive age groups. There is not a significant difference between genders in the number of chronic conditions experienced. As the age of the beneficiary increases, there is a corresponding increase in the number of beneficiaries seeking care for at least one chronic condition and multiple chronic conditions.

### *Types of Conditions*

In the over 65 year population in 2007, the chronic condition with the greatest prevalence was ischemic heart disease (commonly known as coronary artery disease). About 24% of beneficiaries over the age of 65 years received care related to ischemic heart disease. Claims related to cataracts and diabetes were the next most common, with 21% and 20% of beneficiaries receiving care for these conditions, respectively. Table 2 lists the five conditions with the greatest number of Medicare claims in 2007.

Table 2 also shows the prevalence of the most common conditions by gender. Males are significantly more likely to have received care for ischemic heart disease and diabetes. In comparison, females are significantly more likely to have received care for cataracts and arthritis. There was not a significant difference in gender for care received for congestive heart failure.

The prevalence of the most common chronic conditions varies by age. Conditions such as diabetes and cataracts impact a large percentage of younger beneficiaries, but are not as common in claims for older



Vermont Program for Quality in Health Care, Inc.

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age groups. In comparison, conditions such as Alzheimer’s disease, dementia, and congestive heart failure are more common in the older age groups. The most common chronic condition, ischemic heart disease, impacts a large percentage of beneficiaries in all age groups. Figure 2 shows the difference in prevalence by age group for six of the most common chronic conditions.

### Appendix

Table 1: Percent of age group seeking care for a given number of chronic conditions, by gender

Number of Conditions	Age 65+		Age 65 – 74		Age 75 – 84		Age 85 – 94		Age 95+	
	Male n=38,750	Female n=49,537	Male n=21,833	Female n=23,145	Male n=12,647	Female n=17,215	Male n=4,001	Female n=8,101	Male n=269	Female n=1,126
0	32%	25%	43%	37%	20%	16%	13%	11%	19%	19%
1	25%	26%	27%	30%	24%	25%	17%	20%	15%	18%
2	18%	20%	15%	17%	21%	24%	19%	22%	18%	21%
3	11%	13%	8%	8%	15%	16%	19%	18%	17%	17%
4+	14%	16%	7%	8%	20%	19%	32%	29%	31%	25%

Table 2: Comparison of the prevalence of common chronic conditions by gender, age 65+

	Number of Beneficiaries	Percent of Beneficiaries	Odds Ratio for Females (95% CI) <sup>a</sup>
Ischemic Heart Disease	21,446	24.3	
Male	11,702	30.2	
Female	9,744	19.6	0.56 (0.55, 0.58) <sup>b</sup>
Cataract	18,542	21.0	
Male	7,158	18.5	
Female	11,384	23.0	1.31 (1.27, 1.36) <sup>b</sup>
Diabetes	17,520	19.8	
Male	8,235	21.3	
Female	9,285	18.7	0.85 (0.83, 0.88) <sup>b</sup>
Rheumatoid- / Osteo- arthritis	14,050	15.9	
Male	4,401	11.4	
Female	9,649	19.5	1.89 (1.81, 1.96) <sup>b</sup>
Congestive Heart Failure	11,054	12.5	
Male	4,893	12.6	
Female	6,161	12.4	0.98 (0.94, 1.02)

<sup>a</sup> Odds ratios indicate the likelihood of a female receiving care for a condition compared to a male. For example, a female is 1.31 times more likely to receive care for cataracts than a male (this could be as low as 1.27 times or as high as 1.36 times more likely, with 95% confidence).

<sup>b</sup> Significant difference between genders.

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Figure 1: Distribution of the number of chronic conditions experienced by Vermont Medicare beneficiaries in 2007

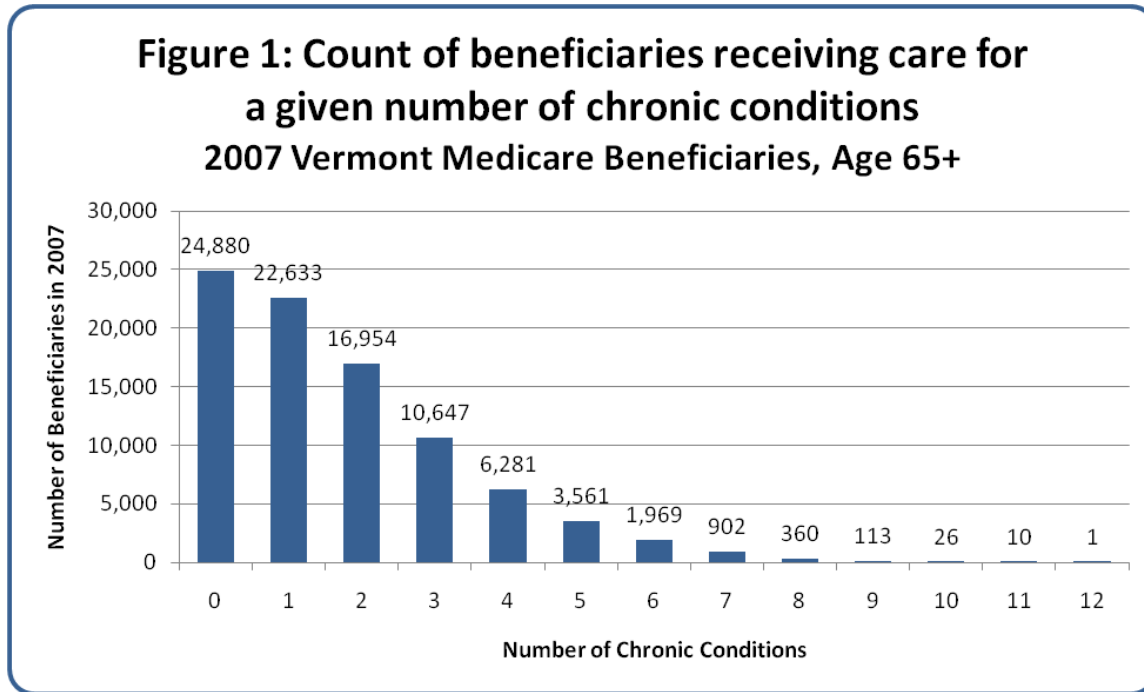
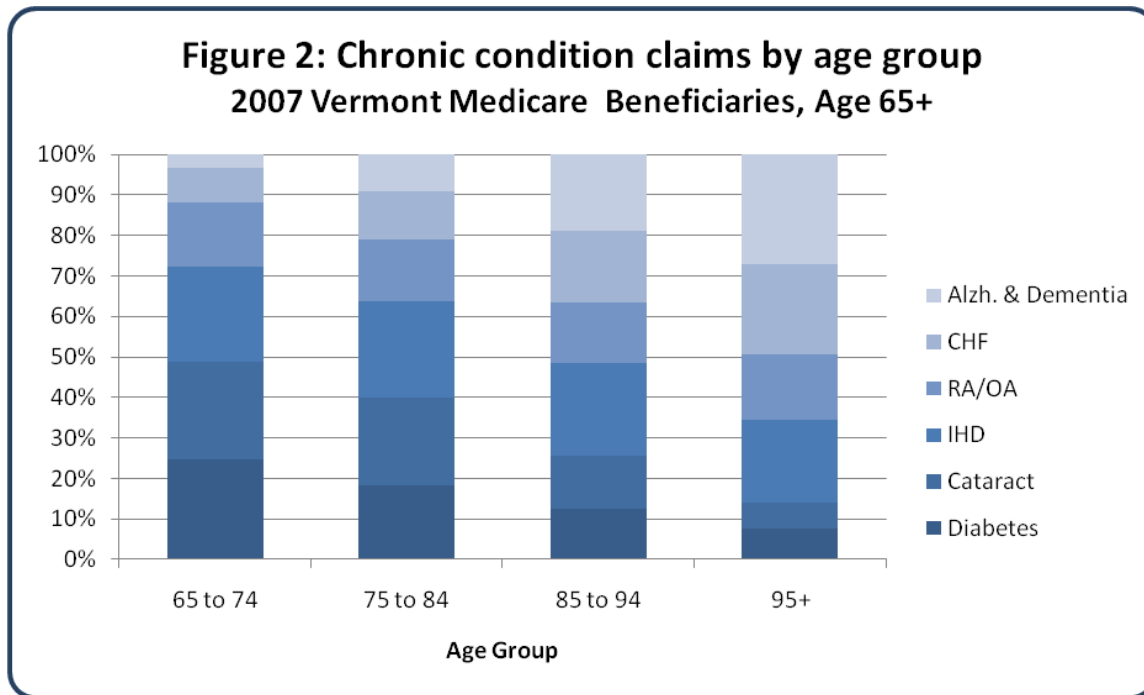


Figure 2: Prevalence by age group of six of the most common chronic conditions



A significantly higher proportion of patients received care for Alzheimer’s & dementia and congestive heart failure in the oldest age group than the youngest age group. A significantly lower proportion of patients received care for cataracts and diabetes in the oldest age group than the youngest age group (level of significance: 0.05).