

# Spending on Prescriptions in 2011

## Findings from HCCI's *Health Care Cost and Utilization Report: 2011*

This issue brief highlights and expands on findings on prescriptions from the Health Care Cost Institute's (HCCI) *Health Care Cost and Utilization Report: 2011*. The report tracks changes in expenditure and utilization of health care services for beneficiaries younger than age 65 and covered by employer-sponsored private health insurance (ESI).

This issue brief describes changes in per capita spending, out-of-pocket costs, prices, and utilization for prescriptions in 2011. HCCI analyzed metrics about drugs and medical devices

that were dispensed by non-hospital pharmacies. Between 2010 and 2011, HCCI found that growth in per capita expenditure on prescriptions slowed from 2.4 percent to 1.0 percent. Expenditure on prescriptions grew as a result of brand prescription spending, despite declines in overall prescription utilization.

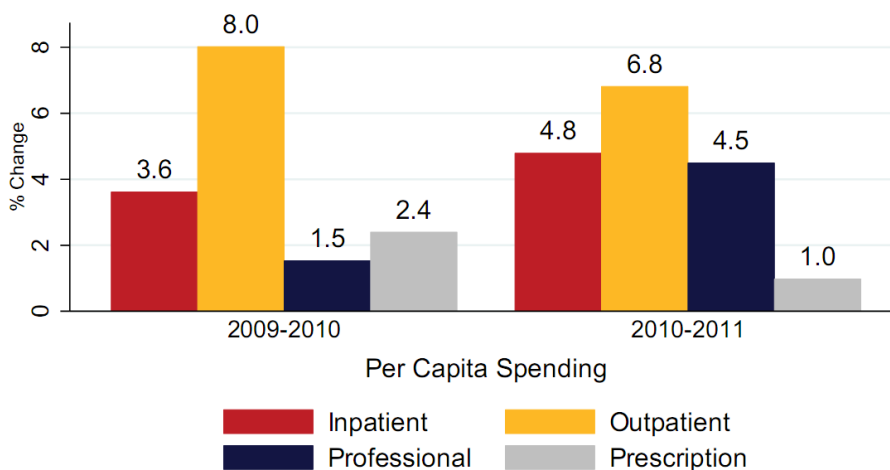
### Prescription Spending Slowed

Between 2010 and 2011, per capita spending on prescriptions rose 1.0 percent from \$766 to \$773 (Table 1). Although per capita prescription spending

## KEY FINDINGS

- ◆ Overall prescription spending rose 1.0% to \$773 per capita (2010—2011).
- ◆ Per capita spending on prescriptions in 2011 was highest for central nervous system agents (\$170), those ages 55-64 (\$1,711), and those in the South (\$838).
- ◆ Prescriptions made up 17.0% of total per capita spending in 2011 and 25.4% of out-of-pocket per capita spending.
- ◆ For 2011, average price for a brand prescription rose by 17.7% to \$268 and average price for a generic prescription decreased by 7.2% to \$33.
- ◆ Utilization of prescriptions in 2011 rose 3.4% for generics and declined 12.9% for brands.

**Figure 1**  
**Change in Per Capita Spending by Major Service Category: 2009-2011**



Note: All data weighted to reflect the national, younger than 65 ESI population.

increased in 2011, the rate at which it increased was slower than 2010 (2.4%) and slower than all other major health service categories tracked by HCCI (Figure 1). Prescriptions accounted for 17.0 percent of total per capita health care expenditure in 2011, down from 17.6 percent of total per capita health care expenditure in 2010 (Table 2). For 2011, prescription spending totaled \$120.6 billion, an increase of 0.6 percent from \$119.9 billion in 2010 (Table 1).

Central nervous system agents had the highest per capita expenditure of all

## Definitions

**Prescription:** An order from a health care professional given to a patient in order to obtain drugs or medical devices that cannot be purchased over the counter.

**Brand Prescription:** A prescription marketed under a trade name held by a specific company.

**Generic Prescription:** A Food and Drug Administration (FDA) approved prescription that is of the same quality and chemical composition as a brand prescription.

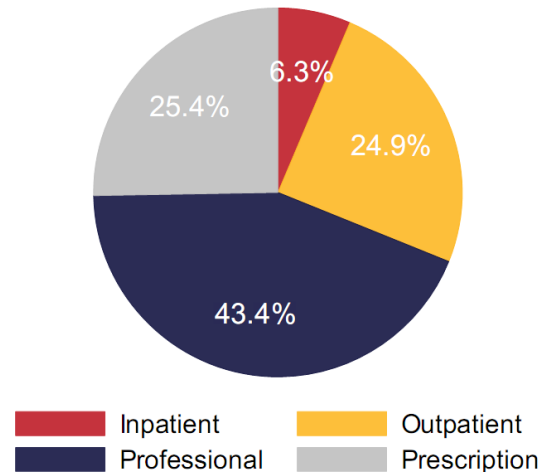
**Therapeutic Class:** Classification of a drug or medical device based on function and use.

## Administered Drugs

Administered drugs are delivered by a health professional during an office visit or facility visit. Because a patient does not obtain them at the pharmacy, administered drugs are classified as a professional procedure. For 2011, per capita expenditure for administered drugs rose 11.0 percent to \$152. Prices for administered drugs rose 11.1 percent to \$396. Intensity of treatment increased by 5.0 percent and unit prices rose by 5.8 percent. Utilization remained relatively flat with a decline of 0.1 percent, indicating that prices and intensity were the key drivers of expenditure growth for administered drugs (Table 4).

Figure 2

### Share of Total Per Capita Expenditure Out of Pocket by Major Service Category: 2011



Note: All data weighted to reflect the national, younger than 65 ESI population.

therapeutic classes in 2011 (\$170). Gastrointestinal drugs had the largest decline in per capita expenditure growth (-14.7%), whereas hormones and synthetic substitutes had the largest increase in per capita expenditure growth (14.4%). Per capita expenditure on brand prescriptions rose 2.5 percent to \$523 and per capita expenditure on generic prescriptions declined 4.0 percent to \$237 (Table 1).

For 2011, prescription spending varied by age group and region. Per capita expenditure on prescriptions ranged from \$309 for children (ages 18 and younger) to \$1,711 for ages 55-64 (Table 1). Regionally, per capita spending on prescriptions was the highest in the South (\$838) and the lowest in the West (\$653). Between 2010 and 2011, the dollar gap between the highest and lowest spending regions widened from \$177 to \$185 (Table 1).

Despite prescriptions accounting for 17.0 percent of all privately insured health care per capita expenditure in

2011, prescriptions accounted for 25.4 percent of out-of-pocket per capita spending (Figure 2 and Table 2). However, compared to 2010 spending levels, out-of-pocket spending on prescriptions declined 2.8 percent to \$187. For 2011, payers paid \$587 per capita for prescriptions, covering 75.9 percent of total per capita prescription expenditure (Table 3).

### Prescription Prices Rose

Overall prescription price growth declined from 3.3 percent in 2010 to 1.2 percent in 2011, however, prices were the primary driver of prescription spending growth. For 2011, the average price per prescription increased by \$1 from \$83 to \$84 (Table 5). The average price for a brand prescription increased 17.7 percent to \$268, whereas the average price for a generic prescription declined 7.2 percent to \$33 (Figure 4).

Prices grew the fastest for hormones and synthetic substitutes, a 12.3 percent increase from \$78 to \$88, whereas pric-

es declined fastest for gastrointestinal drugs, a 16.3 percent decline from \$131 to \$109 in 2011 (Figure 3 and Table 5). Average prices for cardiovascular drugs and central nervous system agents dropped by \$2, and average prices increased by \$1 for anti-infective agents.

**Prescription Utilization Declined**

Between 2010 and 2011, prescription utilization decreased by 0.2 percent and continued to shift away from brand prescriptions to generic prescriptions (Table 6). Brand prescription utilization declined 12.9 percent, while generic prescription utilization increased 3.4

percent. Of the 9,246 prescriptions per 1,000 insureds in 2011, 7,197 were for generic prescriptions and 1,950 were for brand prescriptions (Figure 5). Although generic prescriptions comprised 77.8 percent of prescription utilization, they accounted for only 30.7 percent of prescription spending.

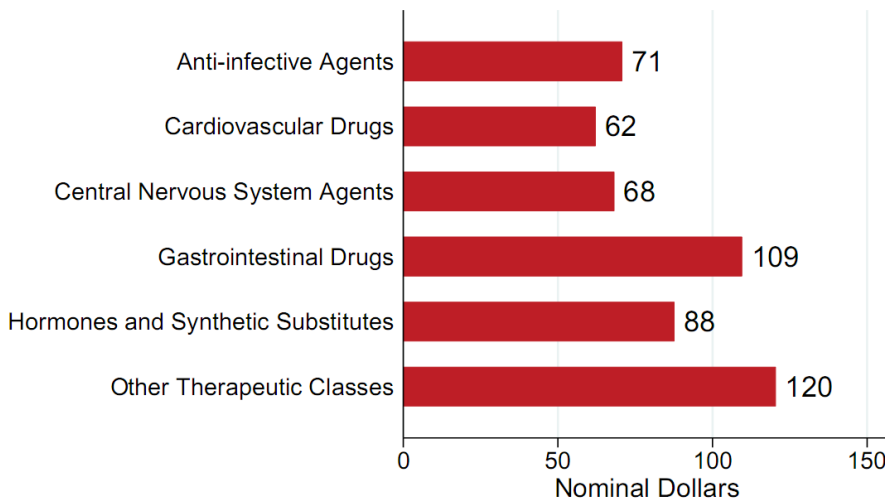
Across all therapeutic classes, utilization was highest for central nervous system agents, which accounted for 2,495 prescriptions per 1,000 insureds, or 27.0 percent of all prescriptions. Utilization of anti-infective agents, central nervous system agents, gastrointestinal drugs, and hormones and synthetic substitutes grew by less than 2.0 percent. Cardiovascular drug utilization declined by 1.3 percent (Table 6).

**Conclusions**

For 2011, prescription spending continued to increase, but at a slower rate than all other major service categories. Spending on prescriptions rose with age. Prescription spending levels were lowest in the West and highest in the South. Although prescriptions accounted for 17.0 percent of total per capita health care spending in 2011, prescriptions accounted for the second largest percentage of out-of-pocket per capita expenditure, 25.4 percent.

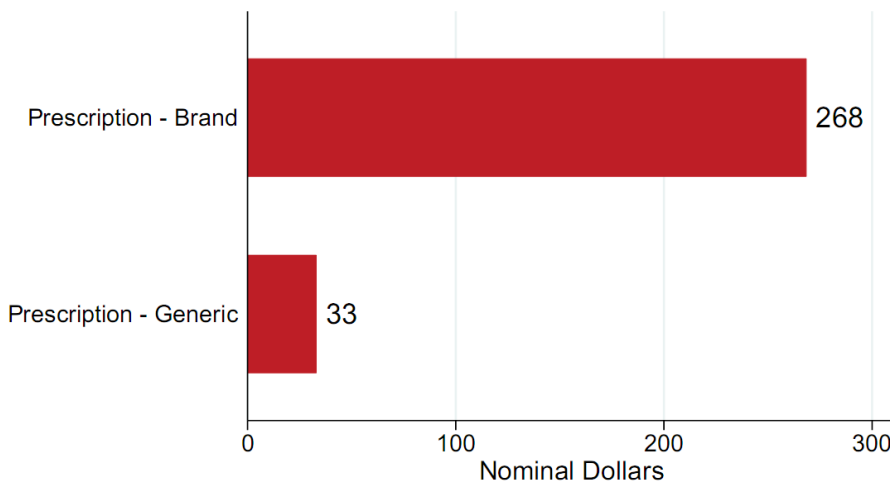
For brand prescriptions, prices rose while utilization decreased. In contrast, prices for generic prescriptions declined while utilization rose. Overall, spending on brand prescriptions outpaced spending on generic prescriptions. For 2011, higher utilization of less expensive generic prescriptions moderated the spending growth resulting from brand prescription price increases.

**Figure 3**  
**Average Prices for Prescriptions: 2011**



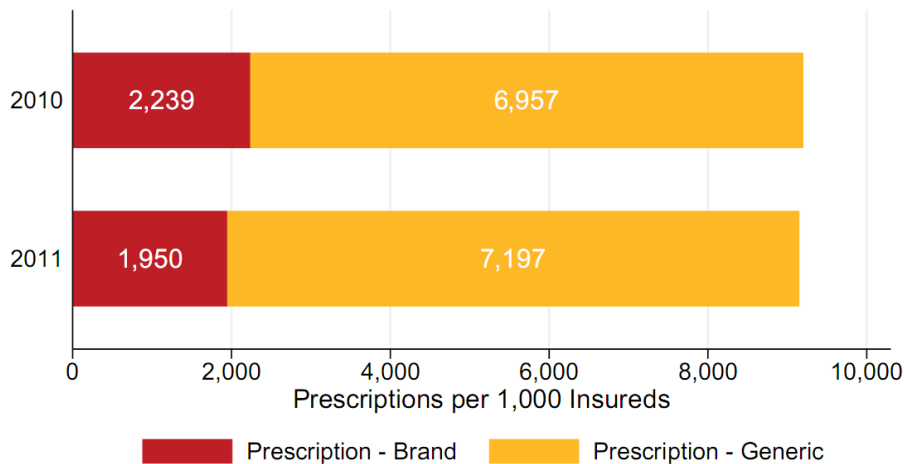
Note: All data weighted to reflect the national, younger than 65 ESI population.

**Figure 4**  
**Average Prices for Prescriptions: 2011**



Note: All data weighted to reflect the national, younger than 65 ESI population. Data does not include uncategorizable prescriptions.

**Figure 5**  
**Prescriptions per 1,000 Insureds: 2010-2011**



Note: All data weighted to reflect the national, younger than 65 ESI population. Data does not include uncategorizable prescriptions.

## Data and Methods

HCCI has access to roughly 6 billion health insurance claims, of which about 4.5 billion were used for the report and issue briefs. The report and issue brief data reflect the health care spending of more than 40 million individuals covered by ESI from 2007 to 2011 (including both fully insured and self-funded benefit programs). These data were contributed to HCCI by a set of large health insurers who collectively represent almost 40 percent of the U.S. private health insurance market. From the data contributors HCCI received de-identified, Health Insurance Portability and Accountability Act (HIPAA) compliant information that included the allowed cost, or actual prices paid to providers for services. The numbers in the report and issue briefs reflect the actual expenditure on health care by payers and beneficiaries who had ESI coverage.

## Changes to 2010 Estimates

In May 2012, HCCI released its first report on health care spending by the commercially insured. Since the release of that report, HCCI has made two enhancements to its analysis. First, HCCI acquired information on the health care spending of an additional 7 million Americans younger than 65 and covered by ESI. In addition, for *Health Care Cost and Utilization Report: 2011*, HCCI used an actuarial method called completion to estimate the spending on claims that were still outstanding when the data was collected. The numbers in the report and issue briefs reflect the new estimates.

HCCI provides a description of methods, data dictionary, and glossary at [www.healthcostinstitute.org/methodology](http://www.healthcostinstitute.org/methodology).

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**Table 1 – Annual Expenditure on Prescriptions: 2009–2011**

	2009	2010	2011	Percent Change 2009 / 2010	Percent Change 2010 / 2011
<b>Per Capita by Class and Type</b>					
<b>All Classes</b>	<b>\$ 748</b>	<b>\$ 766</b>	<b>\$ 773</b>	<b>2.4%</b>	<b>1.0%</b>
Anti-infective Agents	\$ 73	\$ 71	\$ 73	-3.0%	2.5%
Cardiovascular Drugs	\$ 115	\$ 117	\$ 113	2.2%	-3.9%
Central Nervous System Agents	\$ 174	\$ 174	\$ 170	-0.3%	-2.1%
Gastrointestinal Drugs	\$ 51	\$ 47	\$ 40	-9.6%	-14.7%
Hormones and Synthetic Substitutes	\$ 105	\$ 113	\$ 130	8.3%	14.4%
Other Therapeutic Classes <sup>1</sup>	\$ 229	\$ 244	\$ 248	6.3%	1.9%
<b>All Types</b>	<b>\$ 748</b>	<b>\$ 766</b>	<b>\$ 773</b>	<b>2.4%</b>	<b>1.0%</b>
Brand	\$ 478	\$ 511	\$ 523	6.9%	2.5%
Generic	\$ 262	\$ 247	\$ 237	-5.4%	-4.0%
Other <sup>2</sup>	\$ 9	\$ 8	\$ 13	-10.9%	61.4%
<b>Per Capita by Age</b>					
18 and Under	\$ 282	\$ 296	\$ 309	4.8%	4.4%
19-44	\$ 533	\$ 543	\$ 539	1.9%	-0.8%
45-54	\$ 1,083	\$ 1,101	\$ 1,114	1.7%	1.2%
55-64	\$ 1,667	\$ 1,700	\$ 1,711	2.0%	0.6%
<b>Per Capita by Geographic Region</b>					
Midwest	\$ 699	\$ 734	\$ 745	5.0%	1.5%
Northeast	\$ 801	\$ 820	\$ 836	2.4%	1.9%
South	\$ 815	\$ 831	\$ 838	2.0%	0.9%
West	\$ 650	\$ 654	\$ 653	0.6%	-0.2%
<b>National Aggregate</b>					
Estimated Total Expenditure (\$Billions per year)	\$ 118.0	\$ 119.9	\$ 120.6	1.6%	0.6%

Note: All data weighted and completed to represent the total population of beneficiaries younger than 65 and covered by ESI. All per capita dollars calculated from allowed costs. All figures rounded. Rounding may lead some percentage totals to not equal 100 percent.

1. Other Therapeutic Classes include but are not limited to blood derivatives, cellular therapy, contraceptives, dental agents, disinfectants, gold compounds, oxytocics, radioactive agents, and local anesthetics.
2. Other contains prescriptions that cannot be mapped because they did not have an NDC code or they have an invalid NDC code.

**Table 2 – Share of Overall Expenditure by Major Service Category: 2010–2011**

Major Service Category	Share of Overall Expenditure (2010)	Share of Overall Expenditure (2011)	Share of Out-of-Pocket Expenditure (2010)	Share of Out-of-Pocket Expenditure (2011)
Inpatient	21.1%	21.2%	6.2%	6.3%
Outpatient	26.8%	27.4%	23.8%	24.9%
Professional	34.5%	34.4%	42.7%	43.4%
Prescriptions	17.6%	17.0%	27.4%	25.4%

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**Table 3 – Out-of-Pocket Expenditure on Prescriptions: 2010–2011**

	2010	2011	Percent Change 2010 / 2011
<b>Per Capita</b>			
Insured Out-of-Pocket	\$ 192	\$ 187	-2.8%
Payer	\$ 574	\$ 587	2.3%
<b>Percentage of Prescription Expenditure</b>			
Insured Out-of-Pocket	25.1%	24.1%	N/A
Payer	74.9%	75.9%	N/A

Note: All data weighted and completed to represent the total population of beneficiaries younger than 65 and covered by ESI. All per capita dollars calculated from allowed costs. All figures rounded. Rounding may lead some percentage totals to not equal 100 percent.

**Table 4 – Administered Drugs Per Capita, Price, Utilization, Intensity, and Unit Price: 2009–2011**

	2009	2010	2011	Percent Change 2009 / 2010	Percent Change 2010 / 2011
Per Capita	\$ 130	\$137	\$ 152	5.4%	11.0%
Price	\$ 344	\$ 356	\$ 396	3.6%	11.1%
Utilization per 1,000 Insureds	378	385	385	1.7%	-0.1%
Intensity	1.06	1.02	1.07	-4.0%	5.0%
Unit Price	\$ 323	\$ 349	\$ 369	7.9%	5.8%

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**Table 5 – Average Prices for Prescriptions: 2009–2011**

	2009	2010	2011	Percent Change 2009 / 2010	Percent Change 2010 / 2011
<b>All Classes</b>	<b>\$ 80</b>	<b>\$ 83</b>	<b>\$ 84</b>	<b>3.3%</b>	<b>1.2%</b>
Anti-infective Agents	\$ 69	\$ 70	\$ 71	1.9%	1.0%
Cardiovascular Drugs	\$ 62	\$ 64	\$ 62	3.1%	-2.7%
Central Nervous System Agents	\$ 72	\$ 70	\$ 68	-1.8%	-3.3%
Gastrointestinal Drugs	\$ 141	\$ 131	\$ 109	-7.1%	-16.3%
Hormones and Synthetic Substitutes	\$ 72	\$ 78	\$ 88	9.1%	12.3%
Other Therapeutic Classes <sup>1</sup>	\$ 106	\$ 114	\$ 120	7.6%	5.7%
<b>All Types</b>	<b>\$ 80</b>	<b>\$ 83</b>	<b>\$ 84</b>	<b>3.3%</b>	<b>1.2%</b>
Brand	\$ 202	\$ 228	\$ 268	13.2%	17.7%
Generic	\$ 38	\$ 36	\$ 33	-6.1%	-7.2%
Other <sup>2</sup>	\$ 126	\$ 109	\$ 128	-13.8%	17.3%

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2. Other contains prescriptions that cannot be mapped because they did not have an NDC code or they have an invalid NDC code.

**Table 6 – Prescription Utilization per 1,000 Insureds: 2009–2011**

	2009	2010	2011	Percent Change 2009 / 2010	Percent Change 2010 / 2011
<b>All Classes</b>	<b>9,347</b>	<b>9,268</b>	<b>9,246</b>	<b>-0.8%</b>	<b>-0.2%</b>
Anti-infective Agents	1,067	1,016	1,032	-4.8%	1.5%
Cardiovascular Drugs	1,855	1,838	1,814	-0.9%	-1.3%
Central Nervous System Agents	2,429	2,465	2,495	1.5%	1.2%
Gastrointestinal Drugs	366	356	363	-2.7%	1.9%
Hormones and Synthetic Substitutes	1,464	1,453	1,480	-0.7%	1.8%
Other Therapeutic Classes <sup>1</sup>	2,167	2,140	2,063	-1.2%	-3.6%
<b>All Types</b>	<b>9,347</b>	<b>9,268</b>	<b>9,246</b>	<b>-0.8%</b>	<b>-0.2%</b>
Brand	2,370	2,239	1,950	-5.5%	-12.9%
Generic	6,908	6,957	7,197	0.7%	3.4%
Other <sup>2</sup>	69	72	98	3.4%	37.6%

Note: All data weighted and completed to represent the total population of beneficiaries younger than 65 and covered by ESI. All per capita dollars calculated from allowed costs. All figures rounded. Rounding may lead some percentage totals to not equal 100 percent.

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