



2012 Health Care Cost and Utilization Report

September 2013

www.healthcostinstitute.org

Letter from the Executive Director

The Health Care Cost Institute (HCCI) is pleased to present its annual report examining the factors driving U.S. health care spending for the privately insured. The *2012 Health Care Cost and Utilization Report* is the third report HCCI has released summarizing national health care spending trends among individuals younger than age 65 who were covered by employer-sponsored health insurance. The report tracks spending from 2009 to 2012 and highlights the slowdown in health care costs observed over the past several years. It also examines how the price and use of services influenced U.S. health care expenditures.

For two years, HCCI has been tracking the ongoing slowdown in health care expenditure growth. In 2012, HCCI found that per capita spending remained historically low with little change in the growth rate of health care expenditures from the prior year. Per capita spending for those younger than age 65 with employer-sponsored health insurance grew 4.0 percent to \$4,701, a 0.1 percent slower rate of growth than in 2011. This report sheds light on the various factors influencing this slowdown, including an ongoing shift away from hospital care and an increasing reliance on outpatient services, as well as the move away from brand name drugs to generic ones.

As a non-profit, HCCI has a multifaceted public mission. In addition to issuing annual reports on health care trends, HCCI also leverages its unique and large repository of claims data to produce issue briefs throughout the year on key subjects, including mental health and substance use, prescription drugs, and children. Going forward, HCCI will be releasing reports examining spending trends among men and women and among young adults. We also plan to look at spending on chronic conditions such as diabetes.

HCCI has begun to license its data to independent academic researchers. Using HCCI data, the Society of Actuaries sponsored *Health Care Costs from Birth to Death*, a report by Dale Yamamoto, an independent actuary.¹ Moreover, institutional licenses have been granted to Yale University, Northwestern University, and the University of Minnesota. Reports and studies should be appearing from these research teams in 2014. We expect to accelerate our data licensing activities over the next twelve months to spur additional independent research based on HCCI data.

In 2013, HCCI began working with state all-payer claims datasets (APCDs). HCCI is now collaborating with Vermont to standardize methods and benchmark its data against HCCI's national dataset. These find-

ings will be released by the end of 2013. HCCI is eager to assist more states in the future as we believe that state APCDs can achieve significant economies of scale and greater value from standardizing their data collection, methods, and reporting.

Finally, HCCI is committed to becoming a national repository for health care data. We anticipate announcing soon a significant expansion of our data holdings.

HCCI believes a better understanding of the forces driving health care cost growth will help policy makers, stakeholders, and consumers make better decisions that will lead to more accessible and affordable care. To that end, we look forward to working with those who have an interest in improving the quality and delivery of health care services in the U.S. We encourage interested individuals and organizations to learn more about HCCI's research and activities by visiting our website at www.healthcostinstitute.org and subscribing to our regular email updates.

David Newman
Executive Director, HCCI

Executive Summary

This report, *2012 Health Care Cost and Utilization*, is the third in a series of annual reports by the Health Care Cost Institute (HCCI) on the health care activity of individuals younger than age 65 and covered by employer-sponsored health insurance (ESI).^{2,3} This report is the first comprehensive national reporting on health expenditures for the privately insured in 2012.

The findings presented here are based on the fee-for-service health care claims of over 40 million insureds per year from 2007 through 2012.^{3,4} In 2013, HCCI received additional and revised data from its data contributors, resulting in changes to membership, expenditures, utilization, and prices in all years. This is an unavoidable consequence of updating the dataset over time. For this reason, some of the trends reported in the 2012 report vary from those in the 2011 report.⁵

Expenditures rose and growth kept pace with 2011

In 2012, per capita health care expenditures were \$4,701. The growth of per capita expenditures for this population slowed slightly from 4.1 percent in 2011 to 4.0 percent in 2012, an increase of \$181. Expenditure growth in 2012

was faster than in 2010 (2.9%), yet slower than in 2009 (6.3%).

New trends emerged for younger insureds and women

For this report, HCCI reported on health expenditures by five age cohorts (ages 0-18, 19-25, 26-44, 45-54, and 55-64). In the data for 2010 and 2011, HCCI found that health care expenditures for children (ages 0-18) and young adults (ages 19-25) grew faster than for all other age groups. In 2012, young adults had the highest expenditures growth rate, while the growth rate for children fell to below the growth rate for adults ages 26-44. However, compared with 2011, growth for children slowed in 2012, falling by 3.6 percentage points to 4.2 percent growth for children, and declining 2.9 percentage points to 5.4 percent growth for young adults. Expenditures on children rose by nearly \$100 between 2011 and 2012 to \$2,437, while expenditures on young adults rose by \$130 to \$2,548.

Also for the first time, HCCI has reported on trends by gender. During the years covered in this report (2010-2012), per capita expenditures for women were higher than for men. In 2012, expenditures for women (\$5,246 per

BY THE NUMBERS

\$4,701

Health care expenditures per insured younger than 65 and covered by ESI in 2012.

4.0%

The increase in health care spending per insured in 2012.

\$1,315 & 6.5%

The expenditures per insured (2012) and the growth of those expenditures (2011-2012) for outpatient facility claims.

\$817 & 3.8%

The expenditures per insured (2012) and the growth of those expenditures (2011-2012) for prescription claims.

25.4% AND -20.7%

Change in average prices and utilization for brand prescriptions (2011-2012).

5.3% AND 7.7%

Change in average prices and utilization for generic prescriptions (2011-2012).

\$768 AND 4.8%

The out-of-pocket dollars spent per insured (2012) and the growth of those expenditures (2011-2012).

capita) were \$1,121 more than expenditures for men (\$4,125 per capita). In 2012, the growth rate of per capita expenditures for women was higher than the growth rate for men (4.2% and 3.7%, respectively), for the first time since 2008. As a result, the health care expenditures gap between men and women widened faster in 2012 than in any year since 2008.

Rising prices main driver of expenditures for facility services



In prior reports, HCCI categorized claims by services and subservices.^{2,3}

Of the four main service categories, two are facility service categories (inpatient facility and outpatient facility). In this report, HCCI has expanded reporting by including three facility subservice categories: inpatient facility subset, excluding skilled nursing facilities, hospice care, and ungroupable claims; outpatient facility visits; and outpatient facility other services.⁴

Between 2011 and 2012, inpatient expenditures rose by \$22 per capita, from \$950 to \$972. This 2.4 percent increase was the slowest growth rate observed for the service categories and was 1.6 percentage points lower than the rate in 2011 (4.0%). Inpatient expenditures growth was restrained by declining admissions (-2.9%) which offset a 5.4 percent increase in prices paid.

For the first time, HCCI has also reported on inpatient expenditures associated with major diagnostic categories (MDCs). The five MDCs with the highest expenditures per capita were the musculoskeletal system, circulatory system, pregnancy and childbirth, digestive system, and nervous system.



Outpatient per capita expenditures rose by \$81 from \$1,234 in 2011 to \$1,315 in 2012.

Among the service categories, outpatient services had the highest growth in expenditures per capita. Outpatient visits (emergency room, observation, and outpatient surgery) expenditures grew by 7.4 percent to \$809. In 2012, visits increased by 1.4 percent and prices for those visits rose 6.0 percent, while expenditures on outpatient other facility claims (tests, imaging, or ancillary services) increased by 5.1 percent to \$506. Utilization of outpatient other services increased by 0.8 percent, whereas prices for these services rose by 4.2 percent. HCCI found that resource intensity declined between 2011 and 2012, resulting in higher intensity-adjusted prices growth for both outpatient subservice categories. As a result, the relatively high growth of outpatient expenditures came in part from rising utilization and more from rising prices.

Professional procedure expenditures increased, mainly driven by utilization



As in prior years, HCCI analyzed claims paid to health professionals for procedures

(the professional procedure service category), and these claims accounted for the most dollars spent per capita (\$1,596) — \$47 more than in 2011. However, professional procedure expenditure growth slowed in 2012 (3.1%) compared to 2011 (3.8%). Growth in expenditures generally came from rising utilization (1.9%) rather than price growth (1.1%). Professional procedure intensity declined 1.0 percent in 2012. Intensity-adjusted prices grew 2.1 percent in 2012, which was higher than the growth in utilization rates.

Prescription expenditures increased, driven mainly by trend reversals in generic drugs



The HCCI data included a service category for prescription claims from mail order, specialty, and retail pharmacies. HCCI

also included two subservice prescription categories: brand and generic.⁶ Overall, per capita expenditures on prescription drugs were \$30 higher in 2012 (\$817) than in 2011 (\$787). Prescription expenditures growth broke with a three-year trend of declining rates, and spending for this cate-

gory grew by 3.8 percent in 2012.

The increased expenditures on prescriptions were due to increases in the dollars spent on generic prescriptions. Between 2011 and 2012, per capita expenditures for generic drugs increased by \$33 to \$277 (a 13.5% increase). Rising generic expenditures were driven by a 7.7 percent increase in filled days and a 5.3 percent increase in the price per filled day.

The 2012 rise in expenditures on generic drugs offset the decline in brand drug expenditures (-0.6%) for 2012. Prices per filled day for brand prescriptions increased 25.4 percent to \$10 per day in 2012, a \$2 increase over 2011. However, price growth did not offset the 20.7 percent decline in brand prescription filled days.

Out-of-pocket expenditures grew faster than payer expenditures

Out-of-pocket expenditures have been growing at a faster rate than payer expenditures since 2010, and 2012 was no exception. The

growth rate of out-of-pocket per capita expenditures rose by 0.2 percentage points to 4.8 percent, increasing \$35 to \$768. The growth rate for payer expenditures declined 0.2 percentage points from 2011 to 3.8 percent, resulting in payer expenditures per capita of \$3,932 (an increase of \$145 from 2011).

The largest subservice category increases in out-of-pocket and payer growth rates were for generic prescriptions. Generic out-of-pocket expenditures grew 10.9 percent, increasing by \$10 to \$103 per capita. Between 2011 and 2012, payer expenditures grew 15.1 percent rising from \$151 to \$174.

Summary

For the past three years, ESI health care expenditures grew slowly relative to historical trends. In 2012, expenditures grew by 4.0 percent, a rate similar to that in 2011, but for very different reasons. Several new health care trends emerged in 2012. The

growth rate in health care expenditures for children and young adults slowed. Expenditures on women grew faster than per capita expenditures on men. Increases in outpatient expenditures accounted for over 45 percent of the total increase in per capita expenditures. Outpatient expenditures also accounted for 28 percent of out-of-pocket expenditures. Unlike 2010 and 2011, utilization grew faster than prices paid for professional procedures and generic prescriptions. Finally, the previous trend of declining generic prescription expenditures was abruptly reversed in 2012, resulting in the fastest prescription growth rate observed since 2009.

At this time, HCCI is planning a number of issue briefs to explore these new trends in detail, and intends to release an updated *Children's Health Care Spending Report*. HCCI will continue to report on how changes in care provision, prices, and utilization influence the health care cost curve for the privately insured.

Annual Health Care Expenditures Per Capita

HCCI found that per capita expenditures for people age 64 or younger with ESI were \$4,701 in 2012 (Table 1). Per capita expenditures grew by 4.0 percent, nearly the same rate as 2011. For all of the subpopulations examined – region of the country, age group, and gender – health expenditures increased in 2012. However, expenditure growth slowed in the Midwest, the West, children, young adults, pre-Medicare adults, and for men.

HCCI also sought to understand which health care services helped keep expenditure growth low. In 2012, rising expenditures for outpatient services and prescription drugs offset slower expenditure growth for inpatient and professional procedures. Outpatient facility claims accounted for over 45

percent of the increase in overall expenditures.

Expenditures per capita increased by \$181

Between 2011 and 2012, per capita expenditures rose by \$181 from \$4,520 to \$4,701. The 4.0 percent increase in per capita expenditures during this period is 0.1 percentage points lower than the growth rate observed for the previous period (Figure 1).

Highest per capita expenditures and fastest expenditures growth were in the Northeast

As seen in Table 1 and Figure 2, the Northeast had the highest expenditures per capita (\$4,868) and the fastest rate of regional

KEY FINDINGS

HEALTH CARE COST GROWTH REMAINED HISTORICALLY LOW

Expenditures grew slower in 2012 (4.0%) than in 2011 (4.1%). Rising outpatient and prescription expenditures offset slower expenditure growth for inpatient and professional procedures.

\$4,701

Health care expenditures per insured younger than 65 and covered by ESI in 2012.

\$181

Difference in health care expenditures between 2011 and 2012.

45%

About \$82 of the \$181 increase in per capita spending came from rising outpatient facility expenditures.

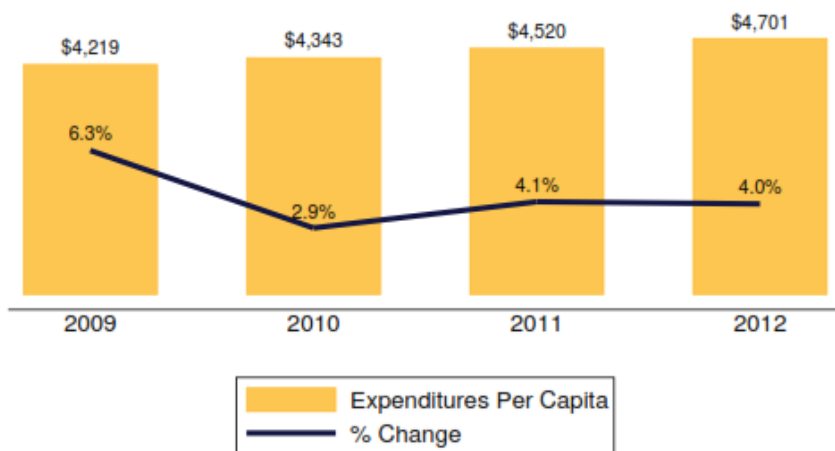
\$1,315 AND 6.5%

The expenditures per insured (2012) and the growth of those expenditures (2011-2012) on outpatient facility claims.

3.8%

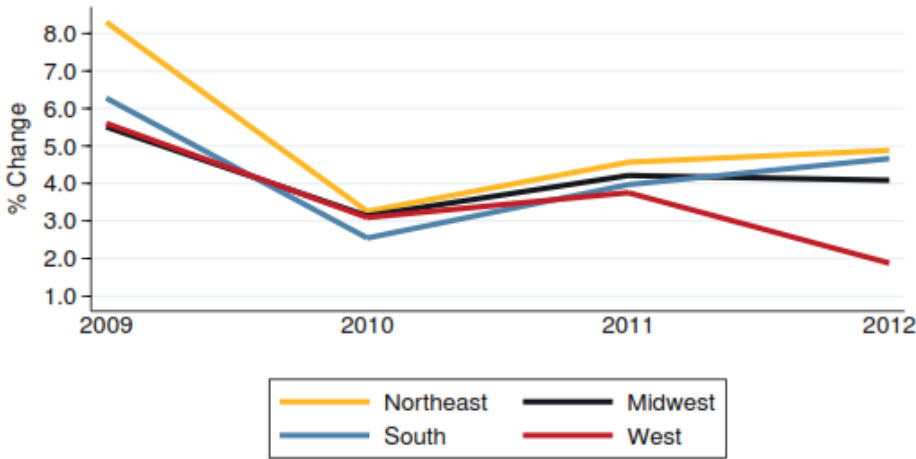
The one-year change in prescription expenditure growth in 2012, reversing the slower growth seen in 2010 and 2011.

Figure 1
ESI Expenditures Per Capita on Insureds Younger than Age 65: 2009-2012



Source: HCCI, 2013.
Notes: All data weighted to reflect the national, younger than 65 ESI population. Data from 2011 and 2012 adjusted using actuarial completion.

Figure 2
Annual Percentage Changes in Expenditures Per Capita by Region: 2009-2012



Source: HCCI, 2013.
Notes: All data weighted to reflect the national, younger than 65 ESI population. Data from 2011 and 2012 adjusted using actuarial completion.

expenditures growth (4.9%). The West continued to have the lowest expenditures per capita (\$4,382) and the slowest regional expenditures growth (1.9%), nearly 2 percentage points slower than the growth rate between 2010 and 2011 (3.8%). Expenditures in the South increased by \$213 between 2011 and 2012 to \$4,790 (4.7%), whereas expenditures in the Midwest increased by \$186 to \$4,735 (4.1%). The expenditures gap between the Northeast and the West continued to widen, from \$339 in 2011 to \$486 to 2012.

Young adults experienced fastest expenditures growth in 2011 and 2012

HCCI also found differences in per capita expenditures by age group (Table 1 and Figure 3). In 2012, individuals ages 55-64 had the highest expenditures per capita (\$8,920). However, during the 2010-2012 period this age group

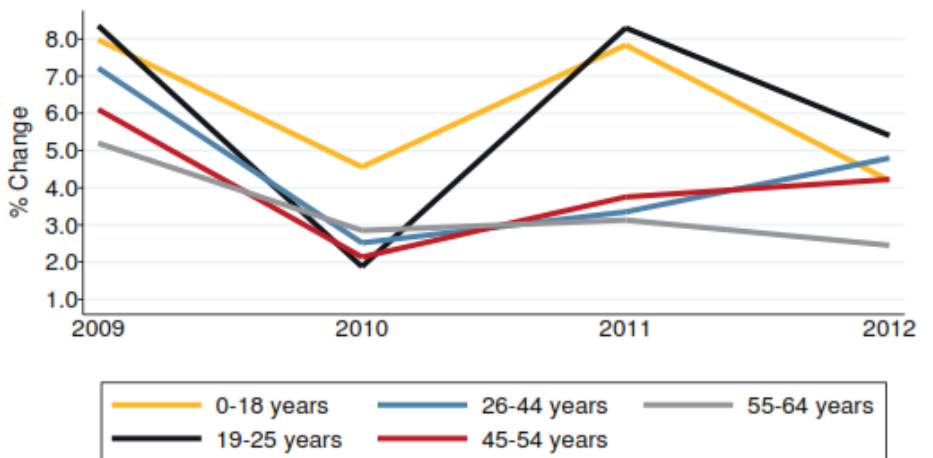
experienced the slowest growth in per capita expenditures relative to other age groups (3.1% from 2010 to 2011 and 2.5% from 2011 to 2012). The growth rate in expenditures per capita for the youngest age groups (children ages 0-18, and young adults ages 19-25)

slowed to 4.2 percent and 5.4 percent, respectively, after a sharp increase in 2011. However, the two youngest age groups continued to have the lowest expenditures per capita (\$2,437 and \$2,548). In 2012, expenditures per capita grew faster than in 2011 for the 26-44 and 45-54 age groups (4.8% and 4.2%), rising to \$4,123 and \$6,112, respectively.

Health care expenditures for women high and rising

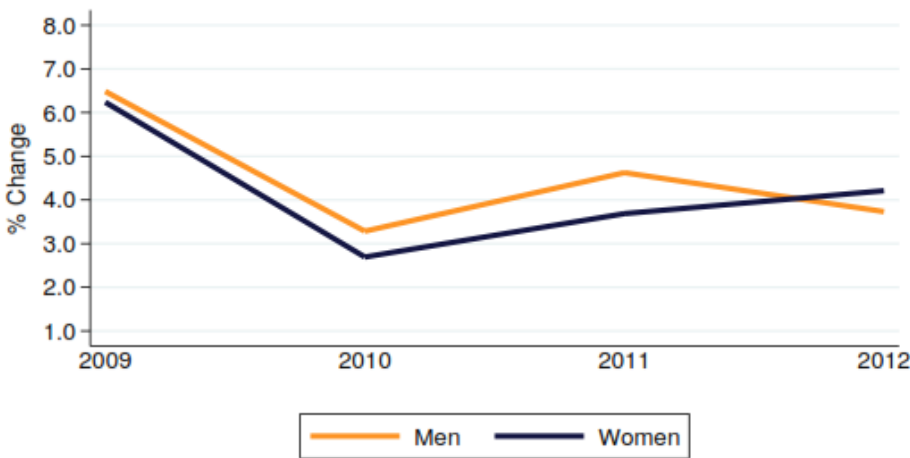
As shown in Table 1, expenditures per capita were higher for women than men in 2012 (\$5,246 and \$4,125). This gap in per capita expenditures between men and women continued to widen, increasing \$64 from \$1,057 in 2011 to \$1,121 in 2012. For the first time since 2008, however, expenditures for women grew at a faster rate than expenditures for men (4.2% and 3.7%, respectively) in 2012 (Figure 4). Expenditures for women rose by 0.5 per-

Figure 3
Annual Percentage Changes in Expenditures Per Capita by Age Group: 2009-2012



Source: HCCI, 2013.
Notes: All data weighted to reflect the national, younger than 65 ESI population. Data from 2011 and 2012 adjusted using actuarial completion.

Figure 4
Annual Percentage Changes in Expenditures Per Capita by Gender: 2009-2012



Source: HCCI, 2013.
Notes: All data weighted to reflect the national, younger than 65 ESI population. Data from 2011 and 2012 adjusted using actuarial completion.

centage points from 2011 to 2012, an increase of \$212. For men, growth in expenditures declined by 0.9 percentage points, resulting in a \$148 increase in expenditures between the two years.

Expenditures rose for all service categories; outpatient expenditures grew 6.5 percent

For all four service categories (inpatient, outpatient, professional procedures, and prescriptions), expenditures increased in 2012 (Table 1). However, for the branded prescriptions subservice category, expenditures fell 0.6 percent.

Inpatient admissions remained about 20.7 percent of the total expenditures (Table 1 and Figure 5). Growth in inpatient expenditures slowed between 2011 and 2012 from 4.0 percent to 2.4 percent. For the inpatient subset subservice category growth slowed from 4.6 percent in 2011 to 2.4 percent in 2012.³ Between 2009

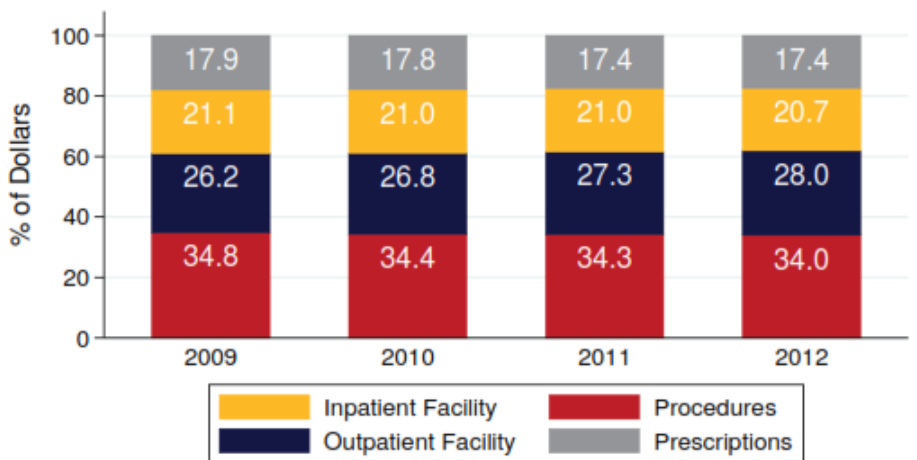
and 2012, expenditures for the inpatient subset grew at an average annual rate of 3.1 percent.

Outpatient services growth rates remained below 2009 levels, but have been accelerating. As a result, outpatient expenditures accounted for 28 percent of health

care dollars spent per capita (Figure 5). For both outpatient subservice categories (outpatient other and outpatient visits), expenditures continued to grow faster than in prior years, resulting in an overall outpatient average annual growth rate of 5.9 percent (2010-2012), which was the highest growth rate of any service category (Table 1). Growth rates for outpatient visits increased by 0.7 percentage points to 7.4 percent. Growth rates for outpatient other facility claims remained steady at 5.1 percent.

Expenditures growth for professional procedures also remained below 2009 rates for 2010-2012 (Table 1), although 34 percent of per capita health care dollars (\$1,596) were spent on professional procedures (Figure 5). Growth in expenditures for professional procedures slowed by 0.7 percentage points between 2011 and 2012, from 3.8 percent to 3.1 percent.

Figure 5
Share of Expenditures Per Capita by Service Category: 2009-2012



Source: HCCI, 2013.
Notes: All data weighted to reflect the national, younger than 65 ESI population. Data from 2011 and 2012 adjusted using actuarial completion.

Prescription expenditures growth slowed between 2009 and 2011; however, in 2012, growth rebounded and expenditures increased by 3.8 percent (Table 1). In both 2011 and 2012, about 17.4 percent of health care dollars per capita were spent on prescriptions (Figure 5). Expenditures on brand prescriptions had been growing at 7.3 percent (2010) and 4.0 percent (2011) in the prior two years; in 2012, growth declined by 0.6 percent. Expenditures on generic prescriptions declined in 2010 (-5.7%) and 2011 (-3.2%), but grew by 13.5 percent in 2012. The dollars spent per capita on generics remained about half of those spent on brand prescriptions (\$277 and \$540 respectively).

Summary

ESI cost growth remained low for the third year in a row, rising only 4.0 percent. Overall, per capita health care expenditures continued to rise in 2012, across all regions, age groups, and genders. The Northeast continued to have the highest expenditures per capita and the fastest expenditures growth. The West continued to have the lowest expenditures and the slowest growth rate compared to 2011. Continuing a trend from 2011, young adults experienced the highest expenditures growth of any age group. Unlike in 2010 and 2011, expenditures on children in 2012 did not grow faster than those for adults ages 26-54. Women had higher and faster growing per capita expenditures than did men.

HCCI found changes in trends by service category for 2012 not seen in 2010 or 2011. As expected, professional procedures had the highest dollar per capita expenditures but the second lowest rate of expenditures growth. Outpatient services experienced the fastest growth in per capita expenditures for both outpatient visits and outpatient other. However, the inpatient expenditures growth rate abruptly slowed, and prescription expenditures accelerated to 3.8 percent. As a result, lower inpatient and professional procedure expenditures growth helped slow overall expenditures growth, but relatively fast prescription growth and the third year of steadily rising outpatient expenditures meant that 2012 expenditures rates kept pace with 2011 rates.

WHAT ARE EXPENDITURES PER CAPITA?

Per capita health expenditures in this report are the estimate of total expenditures paid divided by the insured population.

WHAT ARE INPATIENT FACILITY CLAIMS?

An inpatient facility is a medical setting, such as hospitals, hospices, and skilled nursing facilities, where patients are kept overnight for treatment. An inpatient facility claim is the facility fee associated with an admission.

HCCI developed an inpatient sub-service category. This inpatient

subset excluded skilled nursing facility (SNF), hospice, and ungroupable claims due to the lack of information about the intensity and unit prices of those services at the time of analysis.

WHAT ARE OUTPATIENT VISITS AND OUTPATIENT OTHER SERVICES?

HCCI categorized outpatient facility claims from emergency rooms, ambulatory surgery centers, and observation as outpatient visits. Imaging, radiology, and ancillary claims pertaining to services performed at an outpatient facility were categorized as outpatient other.⁴

WHAT ARE PROFESSIONAL PROCEDURES?

A claim filed by a health care professional for medical services rendered. It includes claims for professional procedures as opposed to facility claims, including office visits, lab tests, and immunizations.

WHAT ARE PRESCRIPTIONS?

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

Table 1: Annual Expenditures Per Capita (2010–2012)

	2010	2011	2012	Percent Change 2009 / 2010	Percent Change 2010 / 2011	Percent Change 2011 / 2012
Per Capita	\$4,343	\$4,520	\$4,701	2.9%	4.1%	4.0%
Per Capita by Region						
Northeast	\$4,438	\$4,641	\$4,868	3.3%	4.6%	4.9%
Midwest	\$4,365	\$4,549	\$4,735	3.1%	4.2%	4.1%
South	\$4,402	\$4,577	\$4,790	2.5%	4.0%	4.7%
West	\$4,146	\$4,302	\$4,382	3.1%	3.8%	1.9%
Per Capita by Age						
18 and Younger	\$2,169	\$2,339	\$2,437	4.6%	7.8%	4.2%
19-25	\$2,232	\$2,418	\$2,548	1.9%	8.3%	5.4%
26-44	\$3,807	\$3,934	\$4,123	2.5%	3.3%	4.8%
45-54	\$5,653	\$5,865	\$6,112	2.1%	3.8%	4.2%
55-64	\$8,442	\$8,707	\$8,920	2.9%	3.1%	2.5%
Per Capita by Gender						
Men	\$3,801	\$3,977	\$4,125	3.3%	4.6%	3.7%
Women	\$4,855	\$5,034	\$5,246	2.7%	3.7%	4.2%
Per Capita by Service Category						
Inpatient	\$913	\$950	\$972	2.7%	4.0%	2.4%
Inpatient Subset ¹	\$897	\$938	\$961	2.3%	4.6%	2.4%
Outpatient	\$1,163	\$1,234	\$1,315	5.1%	6.1%	6.5%
Visits	\$705	\$753	\$809	6.7%	6.7%	7.4%
Other	\$458	\$482	\$506	2.8%	5.1%	5.1%
Professional Procedures	\$1,492	\$1,549	\$1,596	1.6%	3.8%	3.1%
Prescriptions ²	\$774	\$787	\$817	2.6%	1.7%	3.8%
Brand	\$522	\$543	\$540	7.3%	4.0%	-0.6%
Generics	\$252	\$244	\$277	-5.7%	-3.2%	13.5%

Source: HCCI, 2013.

Notes: All data to represent the total population of insureds younger than 65 and covered by ESI. Actuarial completion was performed on data from 2011 and 2012. All per capita dollars calculated from allowed costs. All figures rounded.

1. Skilled nursing facility (SNF), hospice, and ungroupable claims were excluded from analysis of inpatient expenditure trends due to the lack of information about the intensity and unit prices of those services at the time of analysis.
2. Prescriptions uncategorizable as brand or generic were also analyzed, but they are not included in the tables due to very low dollar amounts.

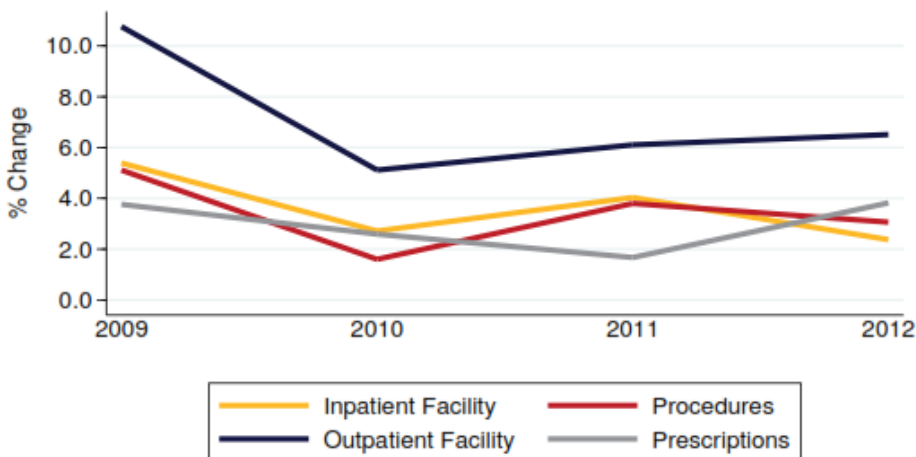
Components of Spending

Health care cost growth is the result of changes in the number of services provided (“utilization”) and the actual prices paid for those services (“allowed costs”). Because changes in prices or utilization might reflect changes in how care is delivered, HCCI considered a third factor – changes in the resources used to provide care (“intensity”). Resource intensity can be used to adjust utilization metrics (see page 12), or to adjust prices paid into a base price that all patients would pay for a given service (“intensity-adjusted price”).⁷ HCCI used intensity-adjusted prices to determine whether prices changed due to changes in the resources used to treat patients or changes in factors other than service intensity. HCCI reported utilization and prices

paid as the two main components of expenditures, and intensity and intensity-adjusted prices as components of the prices paid.

In this section of the report, HCCI analyzed how the different components of spending affected per capita expenditures for each of the service categories and subservice categories.⁸ For 2012, HCCI found that growth of prices paid outpaced growth in utilization for most services. However, shifts in utilization reveal that while the expenditures growth rate in 2012 was very similar to that in 2011, the 2012 trends varied from those observed in 2010 and 2011.

Figure 6
Annual Percentage Changes in Expenditures Per Capita by Service Category: 2009-2012



Source: HCCI, 2013.
Notes: All data weighted to reflect the national, younger than 65 ESI population.
Data from 2011 and 2012 adjusted using actuarial completion.

KEY FINDINGS

PRICES DRIVE MOST, BUT NOT ALL, SPENDING GROWTH

For most service categories, prices rose faster than utilization. For generic prescriptions, utilization grew faster than prices in 2012.

8.9% AND 1.4%

Change in average intensity-adjusted prices and utilization for outpatient visits (2011-2012).

3.3% AND 0.8%

Change in average intensity-adjusted prices and utilization for outpatient other facility claims (2011-2012).

2.1% AND 1.9%

Change in average intensity-adjusted prices and utilization for professional procedures (2011-2012).

25.4% AND -20.7%

Change in average prices and utilization for brand prescriptions (2011-2012).

5.3% AND 7.7%

Change in average prices and utilization for generic prescriptions (2011-2012).

Expenditures grew fastest for outpatient and prescriptions

Since 2009, the growth rate of expenditures on outpatient services had outpaced all other service categories, and 2012 was no exception (Figure 6, Table 1, and Table 3). Expenditures grew fastest for outpatient visits and outpatient other facility claims (7.4% and 5.1%, respectively). Prescription expenditures rose by 3.8 percent, about 2.1 percentage points higher than in 2011. This was due largely to rising generic expenditures (13.5% growth), and despite declining brand expenditures (-0.6%). Between 2011 and 2012, growth slowed for professional procedures and inpatient facility claims (3.1% and 2.4%, respectively).

Inpatient admissions continued to decline

As has occurred for the last four years, inpatient utilization declined in 2012, falling by 2.9 percent (Table 2 and Figure 7). For the inpatient subset, for which utilization metrics were unavailable, utilization levels fell by 3.1 percentage points, resulting in an average of 2 fewer inpatient admissions per 1,000 insureds in 2012 than in 2011.

Outpatient facility use increased, but more slowly than in 2011

Outpatient visits rose by 4 visits per 1,000 insureds between 2011 and 2012 (1.4%), increasing to 329 visits per 1,000 insureds (Table 2 and Figure 7). Outpatient other facility uses grew to 2,631 outpatient facility claims in 2012,

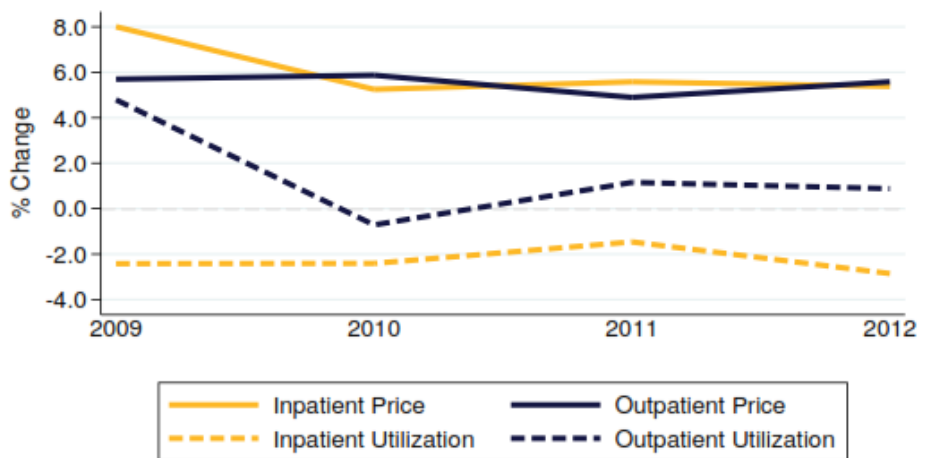
a 0.8 percent increase in utilization. The rate of increase for visits and other facility uses was somewhat lower than in 2011.

Professional procedures outpaced facility utilization

In 2012, professional procedure

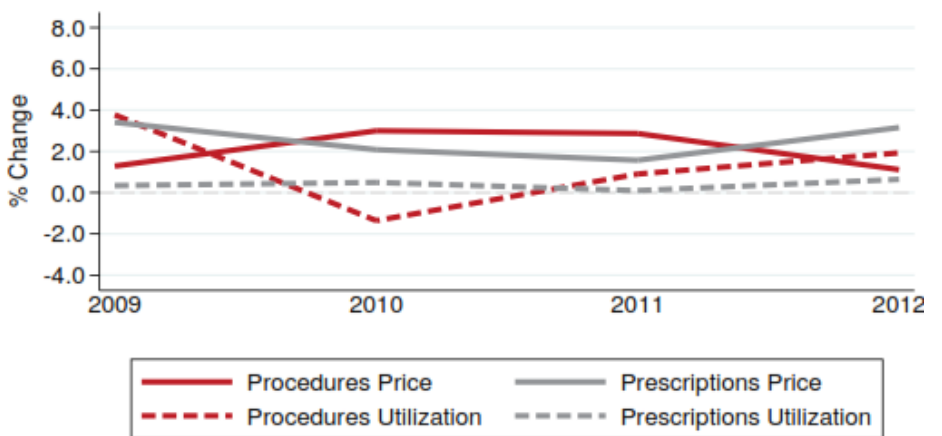
utilization increased by 1.9 percent, nearly a percentage point higher than 2011, and 3.3 percentage points higher than 2010 (Table 2 and Figure 8). The number of procedures per 1,000 insureds rose by 310 resulting in 16,390 procedures per 1,000 insureds, or 16.4 procedures per

Figure 7
Annual Percentage Changes in Facility Utilization per 1,000 Insureds and Average Prices: 2009-2012



Source: HCCI, 2013.
Notes: All data weighted to reflect the national, younger than 65 ESI population. Data from 2011 and 2012 adjusted using actuarial completion.

Figure 8
Annual Percentage Changes in Professional Procedures and Prescription Filled Days Utilization per 1,000 Insureds and Average Prices: 2009-2012



Source: HCCI, 2013.
Notes: All data weighted to reflect the national, younger than 65 ESI population. Data from 2011 and 2012 adjusted using actuarial completion.

capita for 2012. Utilization rose the fastest for pathology and lab procedures (up 4.5%, or 201 procedures per 1,000 insured) and preventive visits to primary care providers (up 3.6%, or 12 preventive visits per 1,000 insureds).

Generic prescription filled days rose as brand utilization fell by over 20 percent

Prescriptions can be counted by the number of scripts filled or by the number of days filled. Since scripts may be for different lengths of time, capturing scripts might obscure changes in prescription utilization. Therefore, HCCI analyzed prescriptions by filled days. As was the trend in 2010 and 2011, the number of generic filled days was higher than the number of brand filled days (Table 2 and Figure 8). Between 2011 and 2012, the gap in days between brand and generic use widened due to a 20.7 decrease in brand prescription use and a 7.7 percent increase in generic prescription use. Generic days filled rose to 226,362 days per 1,000 insureds (about 226 days per capita), while brand prescription days fell to 55,470 filled days per 1,000 insureds (about 55 days per capita) in 2012.

Price growth slowed for inpatient admissions and professional procedures

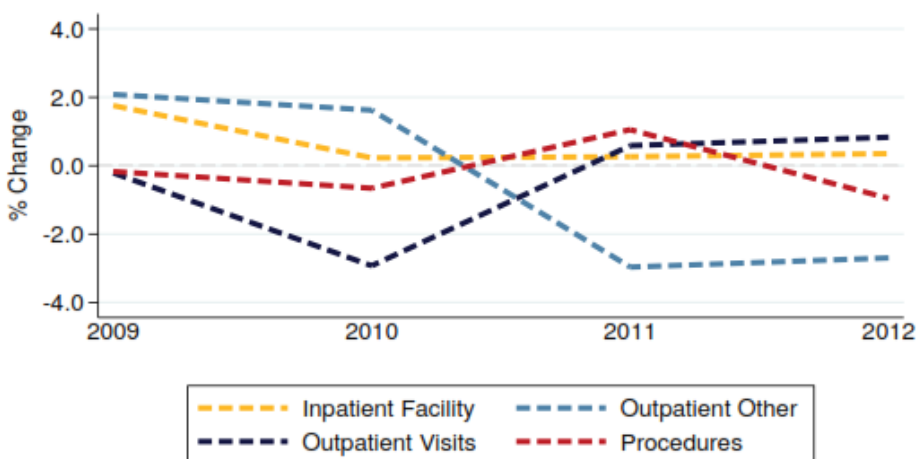
Price growth for inpatient admissions slowed by 0.2 percentage points from 5.6 percent in 2011 to 5.4 percent in 2012 (Table 2 and Figure 7). Average price growth for inpatient subset claims fell 0.5 percentage points to 5.7 percent

in 2012. The average admission price was \$16,421 in 2012; the average admissions price for the inpatient subset was higher at \$17,044.

Professional procedure price growth had slowed by 0.1 percentage points between 2010 and 2011, but in 2012 dropped 1.8

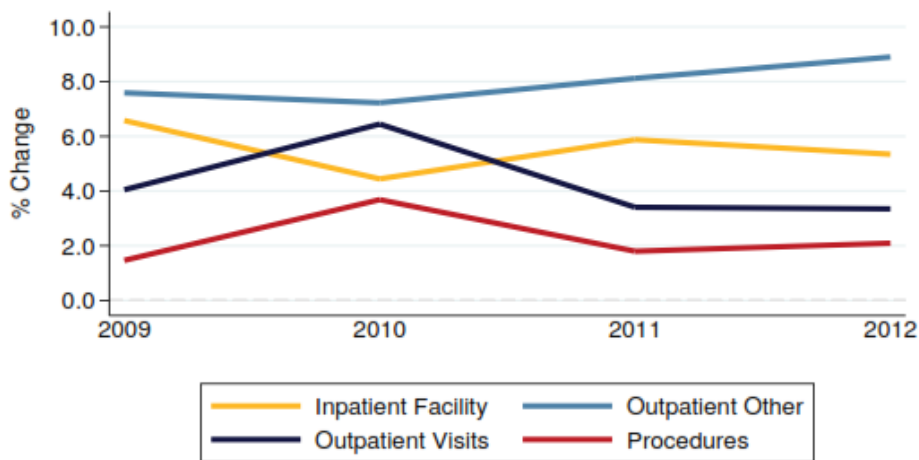
percentage points to a 1.1 percent growth rate (Table 2 and Figure 8). The average professional procedure price rose from \$96 in 2011 to \$97 in 2012.

Figure 9
Annual Percentage Changes in Average Intensity by Service Category: 2009-2012



Source: HCCI, 2013.
Notes: All data weighted to reflect the national, younger than 65 ESI population. Data from 2011 and 2012 adjusted using actuarial completion.

Figure 10
Annual Percentage Changes in Average Intensity-Adjusted Prices by Service Category: 2009-2012



Source: HCCI, 2013.
Notes: All data weighted to reflect the national, younger than 65 ESI population. Data from 2011 and 2012 adjusted using actuarial completion.

Prices grew faster in 2012 for outpatient care, prescriptions

Price increases accelerated for outpatient facility claims and prescriptions per filled day in 2012 (Table 2 and Figure 7). Price growth for an average outpatient visit rose from \$2,319 in 2011 to \$2,457 in 2012, an increase of 6.0 percent. The average price for outpatient other services rose from \$185 in 2011 to \$192 in 2012, an increase of 4.2 percent. The price for a filled day grew by 3.2 percent between 2011 and 2012 (Table 2 and Figure 8). Prices for generics per filled day had declined in 2010 and 2011, but rose by 5.3 percent in 2012, however the cost of a generic filled day remained about \$1 (2010-2012). Prices for brand per filled day rose 10.3 percent in between 2009 and 2010, another 18.2 percent between 2010 and 2011, and by 25.4 percent more in 2012. As a result, the average cost of brand prescriptions grew by \$3 per day between 2010 and 2012, to an average price per day of \$10 in 2012 (Table 2).

Service intensity trend generally flat for all service categories in 2012

Using intensity weights designed by CMS and adjusted for commercial claims, HCCI calculated average service intensity for the inpatient subset, outpatient visits, outpatient other, and professional procedures (Table 2 and Figure 9). Intensity weights were not calculated for prescriptions.

Intensity for outpatient other services and inpatient facility services increased slightly for the second year in a row, rising by 0.8

percent and 0.4 percent, respectively. Outpatient visit intensity declined 2.7 percent between 2011 and 2012. Professional procedure intensity fell by 1.0 percent, yet the growth rate for average service intensity levels for professional procedures remained higher in 2012 than in 2010.

Growth of intensity-adjusted prices continued to accelerate for outpatient services and professional procedures, slowed for inpatient admissions, outpatient other

Prices paid for services can change if the resources used to care for patients change (Table 2 and Figure 10). Therefore, HCCI calculated an average intensity-adjusted price, or “base price”, which would reflect changes in prices due to factors other than resource intensity. Intensity-adjusted prices for outpatient visits rose from \$137 in 2010 to \$161 dollars in 2012, an average annual increase of 8.1 percent. Professional procedure intensity-adjusted prices grew by \$2 in the three-year period, increasing \$1 in 2012. These adjusted prices grew at 2.1 percent in 2012, which was 0.3 percentage points higher than growth in 2011 (1.8%) and 1.6 percentage points lower than growth in 2010 (3.7%).

Rising intensity for inpatient admissions and outpatient other facility claims resulted in growth rates for intensity-adjusted prices that were lower than the growth rates for prices paid. The average intensity-adjusted prices for inpatient admissions subset grew 5.3 percent in 2012, 0.6 percentage points lower than in 2011. Intensi-

ty-adjusted prices for outpatient other facility claims rose from \$143 in 2011 to \$148 in 2012, reflecting adjusted price growth of 3.3 percent in 2012, 0.1 percentage points lower than in 2011.

Price growth remained the primary driver of expenditures growth

The relatively slow growth of utilization compared to intensity-adjusted prices for inpatient, outpatient, and professional procedure services, reflects the ongoing trend in price growth outpacing service use. In 2012, as in the last three years, growth of intensity-adjusted prices paid outpaced growth in utilization (Table 3). Declines in the growth rate of utilization combined with increases in intensity-adjusted prices in 2012 led to a similar growth rate in expenditures for 2011 and 2012.

However, unlike 2011, rising professional procedures utilization outpaced price growth for that service category. Professional procedure prices, on average, grew by 1.1 percent, whereas utilization grew by 1.9 percent. After intensity-adjustments, professional procedure prices grew by 2.1 percent.

Summary

Expenditures growth for inpatient and outpatient facility claims, as well as prescriptions, reflected increases in the prices paid for those services. Inpatient prices, both the prices paid and the intensity-adjusted prices grew faster than utilization or service intensity. Outpatient prices (paid and

intensity-adjusted) for both visits and other facility claims grew faster than utilization or intensity. Brand prescription prices grew while brand prescription utilization declined, helping drive up prescription price growth overall. In contrast, generic prescriptions had faster utilization growth than price growth.

In 2012, professional procedure utilization grew by 1.9 percent, faster than the prior three years. This growth was faster than the rate of change for average prices paid, which suggests that professional procedure prices paid on behalf of the insureds, for the first

time, were not the major driver of professional procedure cost growth. Nevertheless, after adjusting for declining intensity in 2012, intensity-adjusted professional procedure prices outpaced utilization.

For 2012, these changes in trends led to declining growth for brand prescriptions, slower growth for inpatient and professional procedure expenditures, steady growth for outpatient other facility claims, and faster expenditure growth for outpatient visits and generic prescriptions. The direction of overall expenditures and the increasing role of utilization growth suggest

that care in 2012 moved away from more intense and expensive services. HCCI will be reporting more in the future on these care shifts.

HOW DID HCCI CALCULATE UTILIZATION AND WHAT IS AVERAGE PRICE?

Utilization was the average number of uses for a service per 1,000 insureds. For every service use, there was an associated dollar amount paid to providers by both insurers and the insured. Average price was calculated by dividing all the dollars spent on a service category, subservice category, or detailed service category by the associated number of service uses.⁴

WHAT IS INTENSITY?

Intensity refers to the resources used for each medical service. For example, one patient has a simple 15-minute appointment with a physician, while another patient

has a 30-minute visit with the same physician. Intensity of services is greater for the second patient, even though each was counted as a single office visit. HCCI measures intensity by assigning a weight designed by Centers for Medicare & Medicaid Services (CMS) and commercially adjusted to each medical service, when possible. HCCI did not calculate intensity of prescriptions, as the dosage levels and days are fully captured by the price.

WHAT IS AN INTENSITY-ADJUSTED PRICE?

HCCI examined the relative effect of intensity growth on price growth. Isolating the effect of intensity on the price paid per service allows for the calculation of an

intensity-adjusted price. The consumer never sees this price directly. The intensity-adjusted price, or unit price, was calculated by dividing the price paid for the service by the intensity of the service. For example, intensity equal to one would lead to no difference between prices paid and intensity-adjusted prices. Intensity greater than one would lead to intensity-adjusted prices being higher than prices paid; an intensity level less than one would mean that intensity-adjusted prices were less than the prices paid. Using this metric, HCCI is able to determine how much of the change in price growth came from changes in resource use (intensity growth) and how much came from changes in other factors influencing prices (intensity-adjusted price growth).

Table 2: Changes in Utilization, Prices, Intensity, and Intensity-Adjusted Prices by Service Category (2010–2012)

	2010	2011	2012	Percent Change 2009 / 2010	Percent Change 2010 / 2011	Percent Change 2011 / 2012
Utilization per 1,000 insureds by Service Category						
Inpatient	62	61	59	-2.4%	-1.5%	-2.9%
Inpatient Subset ¹	59	58	56	-2.3%	-1.5%	-3.1%
Outpatient	2,901	2,934	2,960	-0.7%	1.2%	0.9%
Visits	319	325	329	-2.1%	1.7%	1.4%
Other	2,582	2,610	2,631	-0.5%	1.1%	0.8%
Professional Procedures	15,936	16,080	16,390	-1.4%	0.9%	1.9%
Prescription - Filled Days ²	279,801	280,077	281,880	0.5%	0.1%	0.6%
Brand	79,459	69,944	55,470	-2.7%	-12.0%	-20.7%
Generics	200,317	210,103	226,362	1.9%	4.9%	7.7%
Average Price Paid per Service by Service Category						
Inpatient	\$14,759	\$15,582	\$16,421	5.2%	5.6%	5.4%
Inpatient Subset ¹	\$15,188	\$16,123	\$17,044	4.7%	6.2%	5.7%
Outpatient	\$401	\$421	\$444	5.9%	4.9%	5.6%
Visits	\$2,210	\$2,319	\$2,457	9.0%	4.9%	6.0%
Other	\$177	\$185	\$192	3.3%	4.0%	4.2%
Professional Procedures	\$94	\$96	\$97	3.0%	2.9%	1.1%
Prescription - Filled Days ²	\$3	\$3	\$3	2.1%	1.6%	3.2%
Brand	\$7	\$8	\$10	10.3%	18.2%	25.4%
Generics	\$1	\$1	\$1	-7.5%	-7.7%	5.3%
Average Intensity per Service by Service Category						
Inpatient Subset ¹	1.29	1.29	1.30	0.2%	0.3%	0.4%
Outpatient	2.92	2.88	2.85	-1.0%	-1.3%	-1.0%
Visits	16.17	15.69	15.26	1.6%	-3.0%	-2.7%
Other	1.28	1.29	1.30	-2.9%	0.6%	0.8%
Professional Procedures	1.70	1.72	1.71	-0.7%	1.1%	-1.0%
Average Intensity-Adjusted Price per Service by Service Category						
Inpatient Subset ¹	\$11,760	\$12,451	\$13,116	4.4%	5.9%	5.3%
Outpatient	\$137	\$146	\$156	6.9%	6.2%	6.7%
Visits	\$137	\$148	\$161	7.2%	8.1%	8.9%
Other	\$139	\$143	\$148	6.4%	3.4%	3.3%
Professional Procedures	\$55	\$56	\$57	3.7%	1.8%	2.1%

Source: HCCI, 2013.

Notes: All data to represent the total population of insureds younger than 65 and covered by ESI. Actuarial completion was performed on data from 2011 and 2012. All per capita dollars calculated from allowed costs. All figures rounded.

1. Skilled nursing facility (SNF), hospice, and ungroupable claims were excluded from analysis of inpatient expenditure trends due to the lack of information about the intensity and unit prices of those services at the time of analysis.
2. Prescriptions uncategorizable as brand or generic were also analyzed, but they are not included in the tables due to very low dollar amounts and low utilization.

Table 3: Decomposition of Spending Changes (2012)

	2012 Expenditures Per Capita	Components of 2012 Expenditures Trend		Components of 2012 Price Trend	
		Utilization	Prices Paid	Intensity	Unit Price
Inpatient	2.4%	-2.9%	5.4%	N/A	N/A
Inpatient Subset ¹	2.4%	-3.1%	5.7%	0.4%	5.3%
Outpatient	6.5%	0.9%	5.6%	-1.0%	6.7%
Visits	7.4%	1.4%	6.0%	-2.7%	8.9%
Other	5.1%	0.8%	4.2%	0.8%	3.3%
Professional Procedures	3.1%	1.9%	1.1%	-1.0%	2.1%
Prescription - Filled Days ²	3.8%	0.6%	3.2%	N/A	N/A
Brand	-0.6%	-20.7%	25.4%	N/A	N/A
Generics ³	13.5%	7.7%	5.3%	N/A	N/A

Source: HCCI, 2013.

Notes: All data to represent the total population of insureds younger than 65 and covered by ESI. Actuarial completion was performed on data from 2011 and 2012. All per capita dollars calculated from allowed costs. All figures rounded.

1. Skilled nursing facility (SNF), hospice, and ungroupable claims were excluded from analysis of inpatient expenditure trends due to the lack of information about the intensity and unit prices of those services at the time of analysis.
2. Prescriptions uncategorizable as brand or generic were also analyzed, but they are not included in the tables due to very low dollar amounts and low utilization.
3. Generic prices per day were less than \$1.50 in 2011 and 2012.

EXPENDITURES ON MDCs IN 2012

HCCI assigned each inpatient facility claim a major diagnostic category (MDCs).

As seen in Appendix Table A9, the five MDCs with the highest expenditures per capita in 2012 were musculoskeletal (\$160), circulatory (\$126), pregnancy and childbirth (\$94), digestive (\$93), and nervous system (\$63). Except for diagnoses associated with the circulatory system (which declined by 0.9% between 2011 and 2012), expendi-

tures per capita rose for the other four MDCs.

Between 2011 and 2012, expenditures on these services rose 4.6 percent for the musculoskeletal system, 5.5 percent for pregnancy and childbirth, 4.4 percent for the digestive system, and 4.6 percent for the nervous system. Rising expenditures for these services were driven by intensity-adjusted price increases rather than utilization. The decline in circulatory system MDCs, however, was primarily due to a 7.0 percent decline in utiliza-

tion that was offset by increases in intensity (2.3%) and intensity-adjusted prices (4.1%).

As well, HCCI is watching one MDC that showed high expenditure growth and increasing admissions in 2012. The dollars spent on infectious and parasitic disease (\$33) rose by 8.0 percent in 2012. For infectious disease admissions, increased expenditures were due to increased utilization (2.7%), intensity (1.8%), and intensity-adjusted price (3.3%).

Out-of-Pocket and Payer Expenditures

In this section, HCCI examined trends in out-of-pocket and payer expenditures per capita. Payer expenditures reflect the actual amounts paid by insurers (employers or health plans) to providers for health care services. Out-of-pocket expenditures are actual payments made by insureds directly to medical professionals, facilities, and pharmacies, and are the most visible health care costs to consumers.

HCCI found that out-of-pocket expenditures were about 16.3 percent of total per capita expenditures and about 4.8 percent higher in 2012 than in 2011 (Table 4). Payer expenditures, which remained the bulk of expenditures per capita (83.7%), increased by 3.8 percent (Table 5). For both payers and consumers, profes-

sional procedures accounted for the most of their expenditures, while outpatient services was the second largest service category of expenditures (Figure 12 and Figure 14). Out-of-pocket expenditures on prescriptions fell while payer expenditures on prescriptions grew faster in 2012 than in 2011.

Out-of-pocket expenditures per capita increased by \$35

In 2012, out-of-pocket expenditures per capita rose from \$733 in 2011 to \$768 in 2012 (Table 4 and Figure 11). This 4.8 percent increase was higher than the rate of out-of-pocket expenditures growth in 2011, but lower than the 6.9 percent increase observed for 2010. Between 2010 and 2012,

KEY FINDINGS

OUTPATIENT CARE WAS 25.9% OF OUT-OF-POCKET EXPENDITURES

In 2012, consumers paid about 16.3% of the medical services (inpatient, outpatient, and professional procedures) payments through out-of-pocket expenditures. Of the \$768 per capita dollars spent out-of-pocket, \$199 was spent on outpatient services.

4.8% AND \$768

Growth (2011-2012) and per capita dollar amount of out-of-pocket expenditures (2012).

3.8% AND \$3,932

Growth (2011-2012) and per capita dollar amount of expenditures by payers (2012).

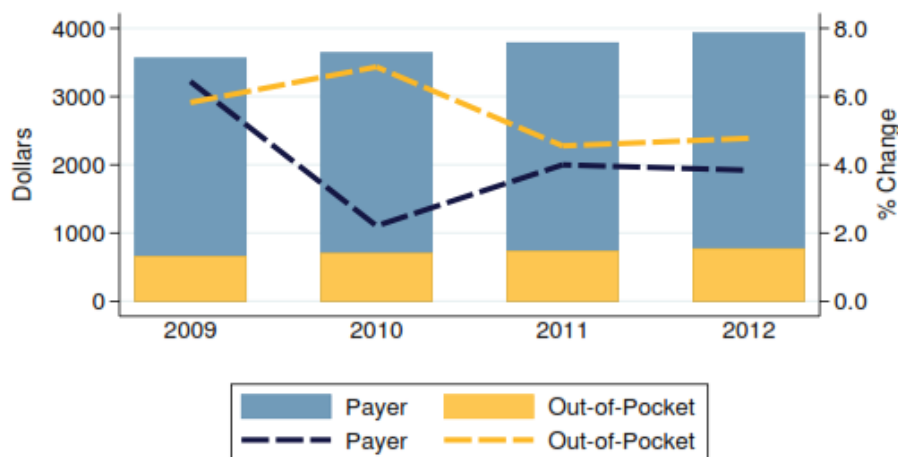
16.3%

Share of total per capita expenditures that came from insureds' co-pays, deductibles, and co-insurance (2012).

9.8% AND \$118

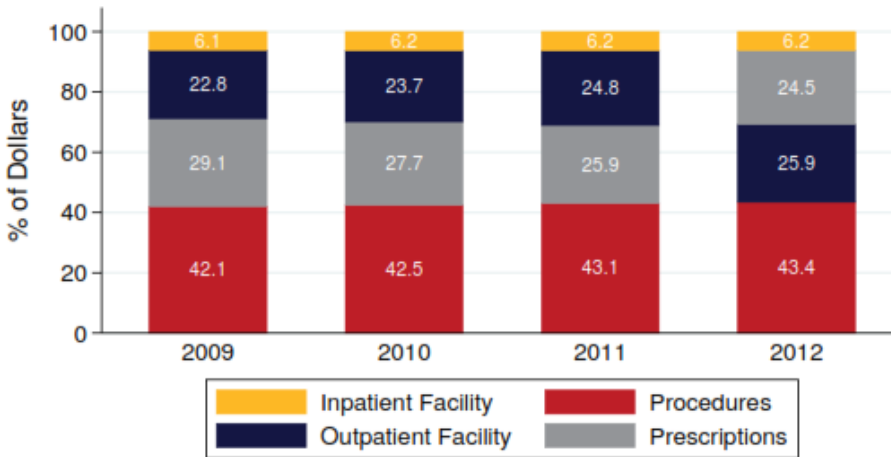
Out-of-pocket growth (2011-2012) and per capita dollar amount of expenditures for outpatient visits (2011-2012).

Figure 11
Payer and Out-of-Pocket ESI Expenditures Per Capita on Insureds Younger than Age 65: 2009-2012



Source: HCCI, 2013.
Notes: All data weighted to reflect the national, younger than 65 ESI population. Data from 2011 and 2012 adjusted using actuarial completion.

Figure 12
Out-of-Pocket Expenditures Per Capita by Service Category: 2009-2012



Source: HCCI, 2013.
 Notes: All data weighted to reflect the national, younger than 65 ESI population.
 Data from 2011 and 2012 adjusted using actuarial completion.

out-of-pocket expenditures, while lower than payer expenditures, experienced faster growth.

The growth rate for out-of-pocket expenditures was highest in the Midwest and South, which were also the regions with the highest out-of-pocket per capita expenditures (Table 4). In the South, out-of-pocket per capita expenditures increased by \$44, a 5.5 percent increase over 2011; since 2009, out-of-pocket expenditures grew by an annual average of 5.8 percent in this region. In the Midwest, out-of-pocket expenditures also grew by 5.5 percent per capita, an increase of \$41. For the Northeast, the out-of-pocket expenditures rose 5.2 percentage points (\$35). The West had the lowest growth rate in out-of-pocket expenditures, rising 2.2 percent (\$15) between 2011 and 2012.

Out-of-pocket expenditures rose 6.5 percent for adults ages 26-44, from \$707 in 2011 to \$753 in

2012 (Table 4). The highest expenditures were for the oldest adults (ages 55-64), who spent \$1,265 per capita out-of-pocket in 2012, a 2.3 percent increase from 2011. The lowest out-of-pocket expenditures were for children (ages 0-18) at \$427 in 2012 – a 5.9

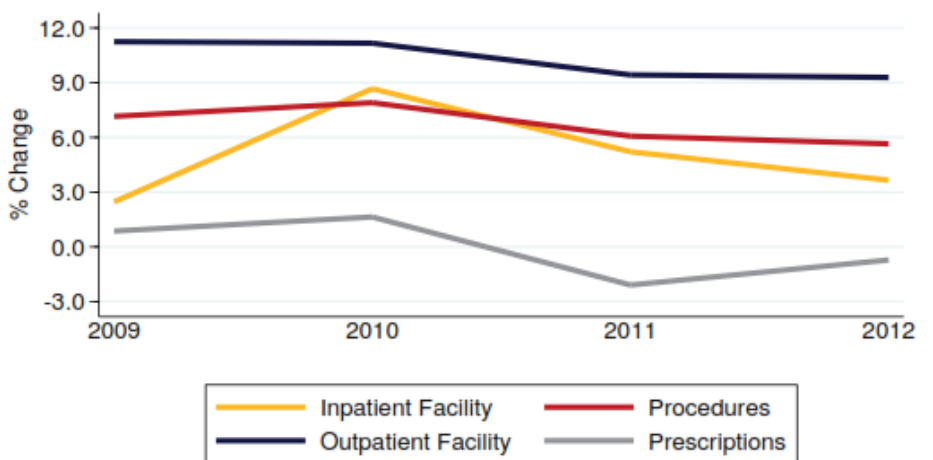
percent increase over 2011.

Out-of-pocket expenditures grew faster for women (5.0%) than for men (4.4%; Table 4). Women’s out-of-pocket per capita expenditures reached \$883 in 2012 – about \$236 more than expenditures by men. Men’s out-of-pocket expenditures rose by \$27 per capita between 2011 and 2012, compared with a \$42 rise for women.

Unlike in prior years, out-of-pocket expenditures per capita on outpatient services were higher than expenditures on prescriptions (Figure 12). Insureds paid \$190 per capita out-of-pocket for prescriptions and \$182 for outpatient services in 2011, while in 2012 these averages were \$189 and \$199, respectively.

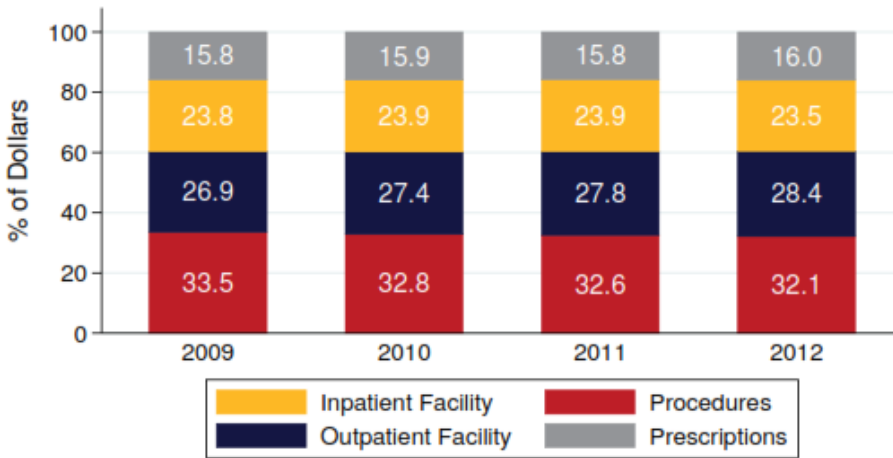
For the third year in a row, growth in out-of-pocket inpatient expenditures per capita slowed (Table 4 and Figure 13). Out-of-pocket brand prescription expenditures per capita declined, falling 12 per-

Figure 13
Annual Percentage Changes in Out-of-Pocket Expenditures Per Capita by Service Category: 2009-2012



Source: HCCI, 2013.
 Notes: All data weighted to reflect the national, younger than 65 ESI population.
 Data from 2011 and 2012 adjusted using actuarial completion.

Figure 14
Payer Expenditures Per Capita by Service Category: 2009-2012



Source: HCCL, 2013.
 Notes: All data weighted to reflect the national, younger than 65 ESI population. Data from 2011 and 2012 adjusted using actuarial completion.

cent in 2012 to \$85. The category with the highest 2012 per capita expenditure growth was generic prescriptions (10.9% to \$103), followed by outpatient visits (9.8% to \$118).

Growth rate for payer expenditures slowed to 3.8%

Payer expenditures rose 3.8 percent, a \$145 increase from \$3,787 in 2011 to \$3,932 in 2012 (Table 5 and Figure 11). As in prior years, payer expenditures made up more than 83 percent of per capita expenditures in 2012. On average, payer expenditures per capita grew at rates slower than overall per capita expenditures for the previous three years.

Payer expenditures grew fastest in the Northeast and the South, which were also the regions with the highest per capita expenditures (Table 5). In the Northeast, payer expenditures were \$4,157 per capita in 2012, a \$191 or 4.8

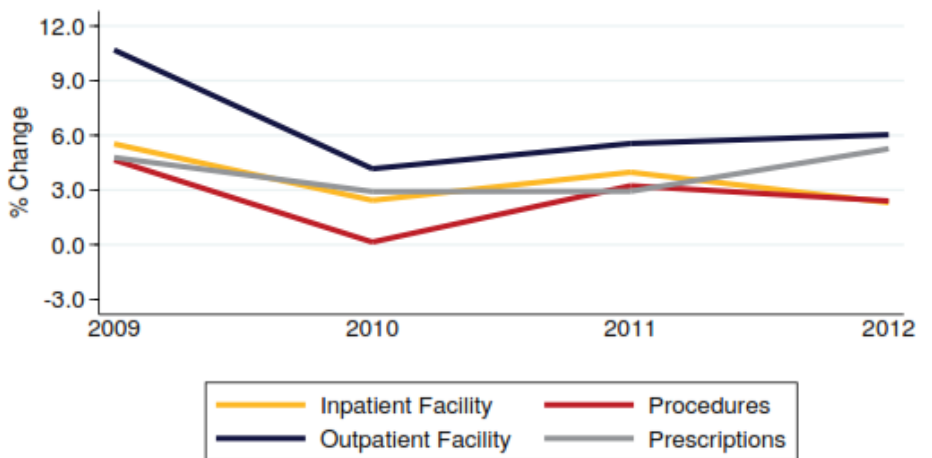
percent increase from 2011. In the South, payer expenditures per capita increased \$170 to \$3,956 (4.5% growth). Payer expenditure growth slowed in the Midwest (3.8%) and the West (1.8%).

In 2012, payers saw expenditures per capita for young adults (ages

19-25) rise 5.2 percent (Table 5). Overall, payers paid more for older adults than for younger adults, with expenditures for the oldest adults (ages 55-64) reaching \$7,656 per capita in 2012. This was \$2,508 more than the expenditures per capita on the next oldest group (ages 45-54) and more than twice the amount spent on 26 to 44 year olds.

As seen in Table 5 and Figure 14, payers spent the most per capita dollars on professional procedures (\$1,263), followed by outpatient services (\$1,116). Between 2011 and 2012, payer expenditures on outpatient visits rose by 7.0 percent to \$691, and expenditures on outpatient other claims rose 4.4 percent to \$425. Payers saw prescription expenditures rise 5.3 percent to \$629, due to a 1.9 percent increase in brand expenditures (\$455) and a 15.1 percent increase in expenditures on generics (\$174).

Figure 15
Annual Percentage Changes in Payer Expenditures Per Capita by Service Category: 2009-2012



Source: HCCI, 2013.
 Notes: All data weighted to reflect the national, younger than 65 ESI population. Data from 2011 and 2012 adjusted using actuarial completion.

Summary

In 2012, per capita out-of-pocket expenditures increased \$35 and continued to grow faster than payer expenditures. Payer expenditures accounted for the vast majority of per capita expenditures, but for the third year in a row, the share of the insureds' out-of-pocket expenditures increased. Payer expenditures were highest in the Northeast, whereas out-of-pocket expenditures were highest in the South. Out-of-pocket expenditure growth rates remained higher than payer growth rates for the three youngest age groups (ages 0-44). Out-of-pocket expenditures also grew faster than payer expenditures for both men and women.

Out-of-pocket and payer expenditures for outpatient services continued to rise more rapidly than expenditures on other services. Out-of-pocket expenditures on outpatient care experienced more than 9 percent growth for the fourth consecutive year. As well, in 2012, out-of-pocket and payer expenditures for generic prescriptions grew faster than for other services.

WHAT ARE OUT-OF-POCKET EXPENDITURES PER CAPITA?

Out-of-pocket payments are made directly to a health care provider by the insured, including any copayments, coinsurance payments, and deductible payments. Any health care payments made out-of-pocket for which a claim was not filed (such as over-the-counter medicines), are not included in this metric. Out-of-pocket expenditures per capita are calculated by dividing total out-of-pocket expenditures by the insured population.

WHAT ARE COINSURANCE PAYMENTS?

Coinsurance is the portion of covered health care costs borne by an insured. After the insured meets a

deductible requirement, insurers often apply coinsurance according to a fixed percentage of the prices paid.

WHAT ARE COPAYS?

Copays are a cost-sharing arrangement in which the insured pays a specified charge for a specified service. Typical co-payments are fixed flat amounts for physician office visits, prescriptions, or hospital services.

WHAT ARE DEDUCTIBLES?

Deductibles are the amount that the insured must pay out of pocket to providers before the health plan pays any reimbursement to the insured. For example, an insured

with a \$1,000 deductible would pay the first \$1,000 of service costs in the given year. After the deductible is satisfied, the insureds and the health plan jointly pay further expenses according to the insurance contract.

WHAT ARE PAYER EXPENDITURES PER CAPITA?

Payer expenditures are dollars paid by the insurer directly to a health care provider on behalf of the insured. This excludes any rebates, discounts, incentive payments, or administrative costs that are not captured by the claims system. Payer expenditures per capita are calculated by dividing total payer expenditures by the insured population.

Table 4: Out-of-Pocket Expenditures Per Capita (2010–2012)

	2010	2011	2012	Percent Change 2009 / 2010	Percent Change 2010 / 2011	Percent Change 2011 / 2012
Out-of-Pocket Per Capita						
National	\$701	\$733	\$768	6.9%	4.6%	4.8%
Share of Expenditures	16.1%	16.2%	16.3%	N/A	N/A	N/A
Out-of-Pocket Per Capita by Geographic Region						
Northeast	\$654	\$675	\$710	8.8%	3.3%	5.2%
Midwest	\$724	\$760	\$801	6.0%	4.9%	5.5%
South	\$750	\$790	\$834	6.4%	5.4%	5.5%
West	\$644	\$668	\$683	7.0%	3.8%	2.2%
Out-of-Pocket Per Capita by Age						
18 and Younger	\$378	\$403	\$427	7.3%	6.7%	5.9%
19-25	\$447	\$473	\$502	6.0%	5.9%	6.1%
26-44	\$671	\$707	\$753	7.6%	5.4%	6.5%
45-54	\$888	\$925	\$964	6.3%	4.2%	4.2%
55-64	\$1,201	\$1,236	\$1,265	6.0%	3.0%	2.3%
Out-of-Pocket Per Capita by Gender						
Men	\$592	\$620	\$647	7.1%	4.7%	4.4%
Women	\$804	\$841	\$883	6.8%	4.5%	5.0%
Out-of-Pocket Per Capita by Service Category						
Inpatient	\$43	\$46	\$47	8.7%	5.2%	3.7%
Inpatient Subset ¹	\$43	\$45	\$47	8.7%	5.5%	3.8%
Outpatient	\$166	\$182	\$199	11.2%	9.4%	9.3%
Visits	\$98	\$107	\$118	12.0%	9.4%	9.8%
Other	\$68	\$74	\$81	10.0%	9.5%	8.5%
Professional Procedures	\$298	\$316	\$334	7.9%	6.1%	5.6%
Prescriptions ²	\$194	\$190	\$189	1.6%	-2.1%	-0.7%
Brand	\$102	\$97	\$85	4.9%	-5.2%	-12.0%
Generics	\$92	\$93	\$103	-1.6%	1.3%	10.9%

Source: HCCI, 2013.

Notes: All data to represent the total population of insureds younger than 65 and covered by ESI. Actuarial completion was performed on data from 2011 and 2012. All per capita dollars calculated from allowed costs. All figures rounded.

1. Skilled nursing facility (SNF), hospice, and ungroupable claims were excluded from analysis of inpatient expenditure trends due to the lack of information about the intensity and unit prices of those services at the time of analysis.
2. Prescriptions uncategorizable as brand or generic were also analyzed, but they are not included in the tables due to very low dollar amounts.

Table 5: Payer Expenditures Per Capita (2010–2012)

	2010	2011	2012	Percent Change 2009 / 2010	Percent Change 2010 / 2011	Percent Change 2011 / 2012
Payer Per Capita						
National	\$3,641	\$3,787	\$3,932	2.2%	4.0%	3.8%
Share of Expenditures	83.9%	83.8%	83.7%	N/A	N/A	N/A
Payer Per Capita by Geographic Region						
Northeast	\$3,784	\$3,966	\$4,157	2.4%	4.8%	4.8%
Midwest	\$3,641	\$3,790	\$3,934	2.6%	4.1%	3.8%
South	\$3,652	\$3,786	\$3,956	1.8%	3.7%	4.5%
West	\$3,502	\$3,634	\$3,699	2.4%	3.7%	1.8%
Payer Per Capita by Age						
18 and Younger	\$1,791	\$1,936	\$2,010	4.0%	8.1%	3.8%
19-25	\$1,786	\$1,945	\$2,046	0.9%	8.9%	5.2%
26-44	\$3,136	\$3,227	\$3,370	1.5%	2.9%	4.4%
45-54	\$4,765	\$4,940	\$5,148	1.4%	3.7%	4.2%
55-64	\$7,242	\$7,471	\$7,656	2.3%	3.2%	2.5%
Payer Per Capita by Gender						
Men	\$3,209	\$3,357	\$3,478	2.6%	4.6%	3.6%
Women	\$4,051	\$4,194	\$4,363	1.9%	3.5%	4.0%
Payer Per Capita by Service Category						
Inpatient	\$869	\$904	\$925	2.4%	4.0%	2.3%
Inpatient Subset ¹	\$855	\$893	\$914	2.0%	4.5%	2.3%
Outpatient	\$997	\$1,053	\$1,116	4.2%	5.6%	6.0%
Visits	\$607	\$645	\$691	5.9%	6.3%	7.0%
Other	\$390	\$407	\$425	1.6%	4.4%	4.4%
Professional Procedures	\$1,195	\$1,233	\$1,263	0.1%	3.2%	2.4%
Prescriptions ²	\$580	\$597	\$629	2.9%	2.9%	5.3%
Brand	\$420	\$446	\$455	7.9%	6.2%	1.9%
Generics	\$160	\$151	\$174	-7.9%	-5.8%	15.1%

Source: HCCI, 2013.

Notes: All data to represent the total population of insureds younger than 65 and covered by ESI. Actuarial completion was performed on data from 2011 and 2012. All per capita dollars calculated from allowed costs. All figures rounded.

1. Skilled nursing facility (SNF), hospice, and groupable claims were excluded from analysis of inpatient expenditure trends due to the lack of information about the intensity and unit prices of those services at the time of analysis.
2. Prescriptions uncategorizable as brand or generic were also analyzed, but they are not included in the tables due to very low dollar amounts.

Data & Methods

Data

HCCI has access to several billion de-identified commercial health insurance claims for the years 2007 through 2012. HCCI's claims data is compliant with the Health Insurance Portability and Accountability Act (HIPAA) and includes the prices paid to providers. HCCI data includes claims for the people with group insurance (fully insured and administrative services only), individual insurance, and Medicare Advantage. Three major health insurers contributed the data to HCCI for the purposes of producing this national, multi-payer, commercial health care claims database.

For the *2012 Health Care Cost and Utilization Report*, HCCI performed research on over 5.4 billion claim lines (2007-2012) for about 40 million insureds per year. This analytic subset of the data consisted of all non-Medicare claims on behalf of insureds younger than age 65 with ESI. The claims used in this report represent about 25.6 percent of the national ESI population, making this one of the largest collections of data on the privately insured ever assembled.

Methods

The analytic subset was weighted using U.S. Census Bureau data to make the estimates representative of the national ESI population across demographic and geographic characteristics.⁴ Claims for

2011 and 2012 were adjusted using actuarial completion to account for claims incurred but not adjudicated.

HCCI used these weighted and adjusted claims to estimate per capita health expenditures, prices, utilization, unit prices, and service intensity for 2007 through 2012. HCCI did not correct dollars for inflation; thus, all reported expenditures and prices were nominal.

HCCI analyzed four major categories of services, several subservice categories, and detailed service categories.³ Inpatient facility claims were from hospitals, skilled nursing facilities (SNFs), and hospices where there was evidence that the insured stayed overnight. Outpatient facility claims were claims that did not have an overnight stay, but include observation and emergency room claims. Both outpatient and inpatient claims consisted of only the facility charges associated with such claims. Professional procedures were from claims billed by physicians and nonphysicians according to procedure codes commonly used in the industry. Prescription data came from retail and mail order pharmacies.

A Note on Premiums

HCCI does not report on premiums or their determinants. For more information on health insurance premiums and the multiple

factors that affect them (including health care expenditure; beneficiary, group, and market characteristics; benefit design; and the regulatory environment) see Congressional Research Service, *Private Health Insurance Premiums and Rate Reviews, 2011*; American Academy of Actuaries, *Critical Issues in Health Reform: Premium Setting in the Individual Market, 2010*; and Congressional Budget Office, *Key Issues in Analyzing Major Health Insurance Proposals, Chapter 3, Factors Affecting Insurance Premiums, 2008*.⁸⁻¹⁰

Changes in 2012

HCCI's analytic methodology underwent a number of changes to enhance reporting for the *2012 Health Care Cost and Utilization Report*.

Data changes. In the 2012 report, new data were provided for 2007-2012 from the data contributors, resulting in changes in the membership, expenditures, utilization, and prices in all years. This is an unavoidable consequence of updating and refining the dataset over time. As a result, the trends reported in the 2012 report are somewhat different from those in the 2011 report.

The data were adjusted to account for new and revised data for 2012. For the 2012 analytic dataset, 2010 data was considered complete and no actuarial adjustment was performed. The 2011 and 2012 claims were completed using the new data. The average intensity weights were changed for some of the outpatient and professional procedure subservice categories due to improved imputation for

missing weights and to the introduction of some new weights in 2012.

Analysis changes. For the 2012 report, HCCI changed the analytical age groupings to correspond to Affordable Care Act provision enabling children through age 25 to be covered on their parents' insurance for qualifying plans. HCCI excluded data from Puerto Rico along with other U.S. territories, thus limiting reporting to spending for individuals residing in the 50 U.S. states and the District of Columbia. In response to public inquiries about the data, HCCI enhanced the reporting on prescriptions, and for the first time reported on trends by gender.

Citation for 2012 report

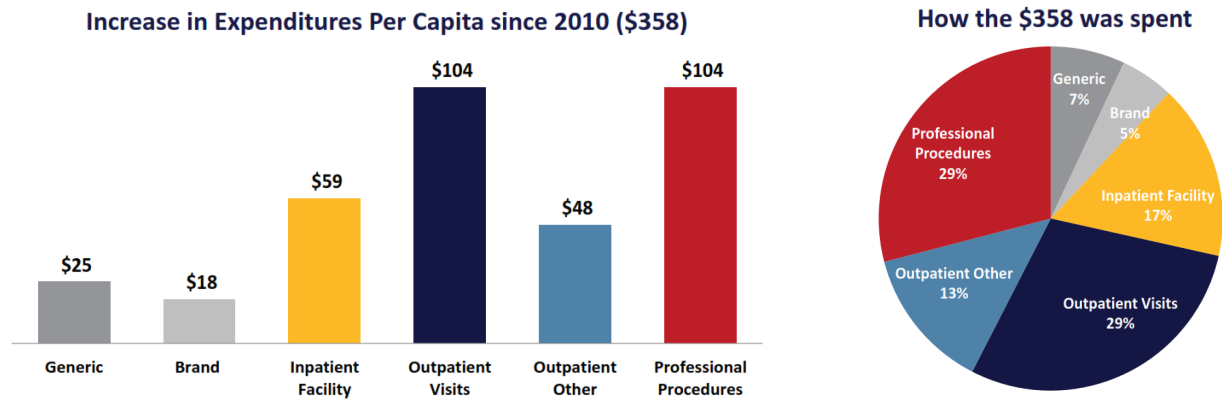
Please use the following when citing the *2012 Health Care Cost and Utilization Report*. Citation style is MLA.

"2012 Health care cost and utilization report." Health Care Cost Institute, Inc (2013):1-25. [Internet]. Washington (DC): HCCI; 2013 Sep. Available from: http://www.healthcostinstitute.org/files/HCCI_HCCUR2012.pdf

Endnotes

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Trend to Watch



Most of the dollars spent on health care have historically been spent on professional procedures and inpatient care. That trend appears to be changing as more dollars are spent on outpatient care.

Between 2010 and 2012, expenditures per capita for insureds younger than age 65 and covered by employer-sponsored health insurance have risen by \$358. About 42 percent (\$152) of these additional dollars came from outpatient facility claims.

Outpatient care is also one of the most rapidly growing sources of health care expenditures for the privately insured. HCCI found that between 2010 and 2012, outpatient visit expenditures rose 14.8 percent. During the three year period, expenditures on outpatient other claims, including facility claims for imaging and radiology, increased by 10.5 percent.

The outpatient care trends observed in this report may be indicative of changes in where the insured seek care, as well as in who bears the cost of care. In future reports, the Health Care Cost Institute will examine how rising outpatient expenditures reflect changes in the health care system.

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