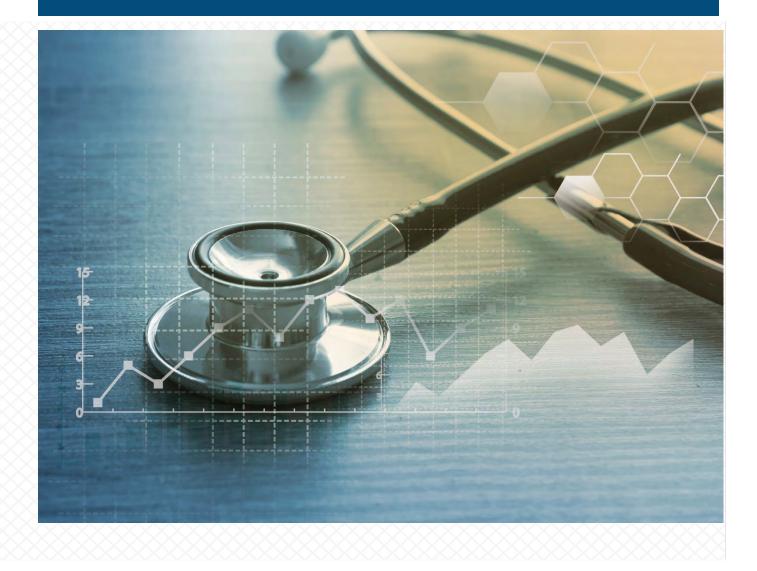


A Summary of the Health Care Cost Institute's 2020 Annual Cost and Utilization Report



February 2020: By Achilles Natsis – SOA Health Research Actuary



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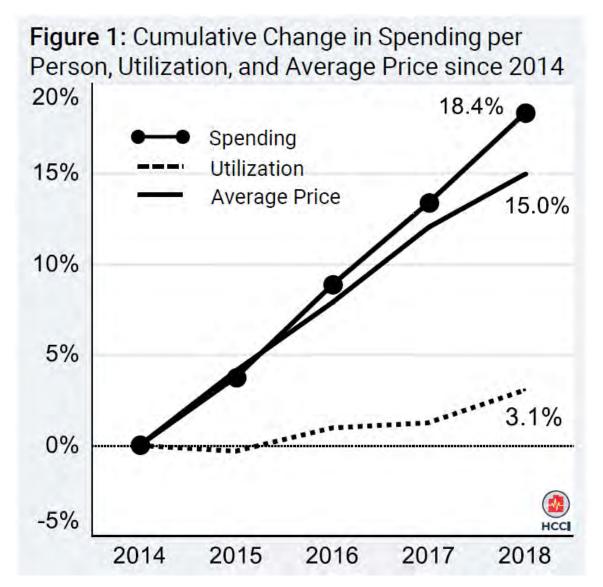
BACKGROUND:

The Health Care Cost Institute (HCCI) recently released their annual health care cost and utilization report¹ on February 13, 2020. This report illustrates employer group commercial health care costs and trends from 2014 – 2018. The HCCI data draws upon the experience of over 40 million members across the US with varying degrees of membership in all 50 states. The report provides breakouts of costs and trend by service category. The report itself provides data aggregated across the United States. The underlying data which was used to create this report is being made available to the public. In addition, HCCI has created an interactive tool which will allow those interested in looking at some state specific trends. HCCI's report will be using data from United Health Care for the last time following United's decision to end their data sharing agreement with HCCI. However, HCCI recently signed an agreement with Blue Health Intelligence (BHI) to utilize data from current partners Aetna-CVS, Humana and Kaiser Permanente, will be incorporated into future annual trend reports.²

SUMMARY OF RESULTS AND MAIN CONTRIBUTORS OF TREND:

Overall allowed medical costs increased from 2017 to 2018 by 4.4% in this study population. This trend is slightly higher than that observed in 2017, but very close to the 4-year average of 4.3% from 2014 – 2018 for the populations measured. One significant change from last year was the relative contribution of cost and utilization trends. In most of the previous years there was very little utilization trend. In fact, from 2013 – 2017 utilization trends showed an overall decline of 0.2%. However, in 2018, utilization trends were on the rise again with a 1.8% year over year increase. Average prices similarly grew by 2.6%, which was one of the lowest increases in recent years. The 4.4% overall 2018 trend compares reasonably well with National Health Expenditure (NHE) Data published by The Centers for Medicare and Medicare Services (CMS) which projected per capita trends of 5.2%.³ It is worth noting that this is not a direct comparison, since the data from HCCl's report only reflects Allowed Claims Costs, while CMS' NHE data includes all dollars spent on employer sponsored private health insurance. Another interesting observation is that the per capita gross domestic product (GDP) rose at a higher rate than overall healthcare inflation in 2017 and 2018.⁴ This means that the overall percentage of U.S. national health expenditures compared to GDP declined from 17.9% in 2016 to 17.7% in 2018.⁵ This value however remains significantly higher than the remainder of the developed world as highlighted by the Society of Actuaries' recent 18/11 Initiative.⁶

Overall trends from 2014 to 2018 increased by 3.1% for utilization, 15.0% for average price, and 18.4% overall. While the year by year inflation was relatively stable, coming in between 4% and 5% for each year, there was a shifting of the cause of this trend. At the beginning of the period almost all of the trend was attributable to average price trends. By 2018, increasing utilization trends accounted for almost 40% of the average trend. Figure 1 below which was taken directly from HCCI's report illustrates that point.⁷



2018 Health Care Cost and Utilization Report February 13, 2020, Page 2. https://healthcostinstitute.org/annual-reports/2020-02-13-18-20-19. accessed February 19, 2020.

When comparing five-year periods from HCCI's current year and prior year report, it is evident that the lower 2013 trends driven by negative utilization trends were one of the main contributors to why the 2014 – 2018 trends were higher than those of 2013 – 2017. However, as mentioned earlier, utilization trends were a key factor here. While 2013 to 2014 utilization dropped off, there was a significant utilization trend from 2017 to 2018 relative to what had been observed in prior periods.⁸

Another key aspect to the trend changes observed from 2014 to 2018 was the trends broken out by service categories. 2018 trends were higher than what was previously observed from 2014 to 2017.⁹ The actual spending increases are greater for Outpatient, Professional Services, and Prescription Drugs in 2018, and slightly lower for the Inpatient category. Compared to the overall period from 2014 – 2018, the 2018 trends were higher for Outpatient and Professional Services, but lower for Inpatient and Pharmacy.¹⁰

Although the overall trends for 2017 and 2018 were very similar, the components of trend both by service category and broken out between utilization and average price. Table 1 below illustrates some of those key differences.

Table 1

TREND FACTORS BY SERVICE CATEGORY

Trend Category	Inpatient	Outpatient	Professional	Pharmacy	Overall
2017 Utilization	-0.6%	-0.6%	0.6%	3.3%	0.5%
2018 Utilization	0.2%	1.6%	3.1%	1.1%	1.8%
2017 Average Price	3.0%	5.7%	3.5%	1.4%	3.6%
2018 Average Price	2.0%	3.8%	1.3%	3.6%	2.6%
2017 Overall Trend	2.4%	5.1%	4.2%	4.7%	4.2%
2018 Overall Trend	2.2%	5.5%	4.5%	4.7%	4.4%

2018 Health Care Cost and Utilization Report February 13, 2020, Page 5. https://healthcostinstitute.org/annual-reports/2020-02-13-18-20-19. accessed February 19, 2020.

As Table 1 shows, overall trends did not vary a great deal between different service categories. 2018 Outpatient and Professional trends were slightly higher, while Inpatient trends came in a bit lower. Prescription drug trends remained the same at 4.7%. There was a marked shift between utilization and average price trend components as the 2018 average price trends were lower for all service categories except pharmacy. Conversely, the 2018 utilization trends were higher for all service categories except pharmacy when compared to 2017. This is consistent with the overall shift that was referenced earlier.¹¹

OTHER OBSERVED AGGREGATE CHANGES

The HCCl trend report also looked at spending differences by age and gender breakouts. The overall population distribution in 2018 was very similar to that observed in 2017. There was a slight relative increase in members aged 26-44, while member share for those with ages from 45-54 decreased slightly. The pattern of spending was generally increasing in conjunction with member ages with some slight variations. Members of age three and under had member costs that were almost triple those for Ages 4-8. This corresponds with expenses related childbirth and greater frequency of immunizations. One other unexpected result was that males ages 14-18 had a higher average cost than males ages 19-25. The pattern for women was different as their average medical expenses increased consistently from ages 4-8 to ages 55-64. Another pattern worth noting was that average male medical expenses were higher for ages 0-13 and 55-64. Female expenses were higher for ages 14-54, which significantly overlaps with childbearing ages.¹²

Spending for individuals also differed greatly depending on how many chronic conditions a member experienced. Those with one chronic conditions had average expenses that were more than double those with no chronic conditions. Similarly, members with two or more chronic conditions had expenses that were more than double those without chronic conditions. Somewhat surprisingly, the average cost increases from 2017 to 2018 were greatest for members with no chronic conditions and lowest for those with chronic conditions. The most common chronic conditions remained the same as in previous years, while the proportion of the population with those conditions generally increased from 2017. These conditions included: hypertension, asthma, diabetes, attention-deficit/hyperactivity disorder, and congestive heart failure in descending order of prevalence.¹³

This report also examined out-of-pocket spending trends in HCCI's employer sponsored commercial claims data. Out-of-pocket spending includes deductibles, copayments, and coinsurance, but not premiums. Some members may also participate in flexible spending accounts, health savings accounts, and health reimbursement accounts to help pay for these costs. Out of pocket spending continued to increase each year with an annual trend rate of 3.4% for 2014-2018 and a one-year trend of 3.8% in 2018. This is below the overall cost average trend of 4.3% for 2014-2018 and the 2018 cost trend of 4.4%. This means that employers continued to shield their employees from a greater portion of costs and trend increases in 2018. Despite that, there is a growing trend of individuals enrolled in consumer directed health plans, with the percentage increasing from 25.8% in 2014 to 33.5% in 2018.¹⁴

This year, HCCI also included a new analysis on the impact of prescription drug rebates. The HCCI data has historically only included pharmacy claims from the point of sale. Drug rebates are discounts given to pharmacy benefit managers and health plans which are typically adjudicated in aggregate and separate from the point of sale. As a result, true pharmacy costs have been overstated in the HCCI data. HCCI conducted a study using rebate information collected by the state of Massachusetts for commercial plans in their state and validated through comparison with two other independent sources. The results of this rebate analysis were used to demonstrate that net prescription drug spending lowered cumulative 2014-2018 pharmacy trend from 20.6% on a gross basis to 8.9% on a net basis. This is indicative of continually increasing rebate percentages. These estimated rebate percentages rose from 6.5% in 2014 to 15.6% in 2018. Many of these increases commonly take place by pharmaceutical manufacturers to attempt to keep their market share once a generic substitute is introduced.¹⁵

CHANGES BY SERVICE CATEGORY

The HCCI report also created some in depth looks at trends by service category. These included looking at service subcategories and breaking out trends between utilization and average price as well as changes in member out-of-pocket costs.

Inpatient hospital trends continued their decline from previous years with the 2018 trend of 2.0% coming in below the 2014-2018 average of 2.7%. The relative costs of different Inpatient Subcategories remained stable in 2018. The highest trends observed were in the Labor / Delivery / Newborn, Mental Health and Substance Abuse categories. Medical and Other trends were below average, with Other Inpatient costs showing a decline in 2018. Among the higher trend categories, Mental Health and Substance Abuse exhibited large trends in both utilization and average price, particularly in 2017 and 2018. Other Inpatient trend categories were mostly driven by increases in average price and relatively low utilization trends. Out of pocket shares for Inpatient services were fairly steady and not highly correlated to the average allowed costs of different inpatient services. The average out of pocket cost ranged from \$950 - \$1050 per inpatient admission for all categories except substance abuse. This ranged from 2.5% of costs for surgical admissions up to 10% of costs for Labor/Delivery/Newborns and Mental Health. Substance Abuse, on the other hand, had much higher out of pocket costs, exceeding \$1,600 on average per admission or almost 14% of average allowed cost. This may be due to benefit design differences for that benefit.¹⁶

Outpatient visits once again continued to show the biggest observed trends of all service categories. The 5.5% average of 2018 was driven by the highest cost categories related to Surgery and Emergency Room costs. For the most part, these trends were driven by higher average prices. Observation utilization trends were slightly positive in 2018, while ER utilization trends were 7% for the period of 2014 – 2018. Out of pocket costs for Outpatient visits all increased between 2014 and 2018 all though the Out of pocket percentage of total allowed costs only rose for Emergency room, while it declined for Surgery and Observation. ¹⁷

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Outpatient procedures had slightly lower trends than visits, with the drivers of these changes being fairly evenly distributed between utilization and average prices. Lab and DME trends were driven by large utilization increases offset by average price declines. Radiology had the exact opposite pattern, as significant price increases offset declines in utilization. Some of these activities are attributable to coding changes which may be changing the way in which these services are reimbursed. Out of pocket costs were closely related to allowed costs for outpatient procedures. They were also stable as a percentage of allowed costs, with the relative member cost shares increasing slightly for each outpatient procedure category.¹⁸

Professional services expenses rose by 4.5% in 2018, which is above the 3.7% annual average for 2014 – 2018. This was characterized by increases in utilization, which were relatively flat in previous years. The professional subcategories which say the highest trend were related to administration of drugs and drugs administered, as well as to psychiatry and immunizations. Of those categories, administration of drugs, psychiatry, and immunizations all had large utilization trends. Surgical visits and anesthesia had lower trends, while lab trends were negative from 2014 – 2018. Like outpatient procedures, professional services had relatively stable out of pocket cost changes that accounted for a percentage of allowed costs that did not fluctuate much. Psychiatry did see a slight drop in out of pocket cost share from 2014 to 2018, with the out of pocket percentage of allowed costs going from 38% in 2014 to 34% in 2018. Psychiatry also had the largest overall utilization growth in 2018 at over 10%. 2018 Administered drugs trend, on the other hand, was almost entirely driven by higher drug costs. These were the two highest professional trend categories in 2018. Lab/pathology, anesthesia, and ER all had negative cost trends in 2018. ¹⁹

Pharmacy trends were skewed towards more average cost trends for 2014-2018. 2017 was a temporary blip where utilization trends predominated. However, in 2018, the trend pattern reverted back to being average cost driven. Pharmacy costs – particularly brand pharmacy - do not include the impact of rebates in the HCCI data. This analysis was looked at separately, using outside data. In general, there is a consistent trend of generic drugs replacing brand drug utilization that continued in 2018. Brands drug costs rose by almost 8%, while generics decreased by just over 4% relative to last year. Specialty drugs were included within the brand category. 2018 drugs saw the highest increases in the categories of rheumatoid arthritis, skin, blood, respiratory, and chemotherapy. Of those, skin and chemotherapy were driven by higher average prices, while the others also included a significant utilization component. Most generic drugs had 30-day supply average out of pocket costs ranging from \$6 to \$30. The one exception was bio response modifiers whose average 30-day supply cost was \$122. Brand drugs had a much higher and broader range of out of pocket costs on 30-day supplies. These ranged from \$40 for hormones to \$212 for rheumatoid arthritis. ²⁰

CONCLUSION:

The HCCI Trend report provides a good summary of its observed nationwide trends due to the robust nature of its underlying data. There are some very interesting trend patterns and demonstrated changes in medical utilization and cost that provide interesting stories and correspond to concurrent changes in the United States health care environment. Overall, it should be noted that the observations provided are for the specific population described and do not reflect overall trends for the commercial population during the measured period. Although there may be some drivers of trend that are common to many commercial populations, the observations from this report are not intended to be used to set trends for pricing or forecasting of commercial medical products. Instead, would be better suited to investigate or help validate root causes of trends that were observed in other data sources.

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