

# Health Care Spending, Prices, and Use in Minnesota: 2016 to 2020

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## Key Findings

- Health care spending by privately insured Minnesotans grew by 19.0% from 2016 to 2019 and fell 4.2% from 2019 to 2020.
- Most spending growth was due to increasingly higher prices rather than increased use of health care.
- The spending decline from 2019 to 2020 was driven by a decrease in utilization of health care coinciding with the disruption to health care delivery caused by the COVID-19 pandemic. In contrast, health care prices rose each year from 2016 to 2020.
- Payments to doctors and other providers were the largest component of health care spending.

## Background

Medical care and prescription drugs continue to be a major source of spending in the United States, with total health expenditures in 2020 reaching \$4.1 trillion nationally and \$60.1 billion in Minnesota.<sup>i</sup> Health spending is the product of two main factors, the volume of health care used (utilization) and the price of each procedure, visit, drug, or other service (price).<sup>ii</sup>

This issue brief uses data from the Minnesota All Payer Claims Database (MN APCD) to measure trends in health care spending, utilization, and prices in Minnesota from 2016 through 2020. The MN APCD is a state repository of de-identified health care enrollment and claims data administered by the Minnesota Department of Health.<sup>iii</sup> The source of these data are health care payers—primarily insurance plans and managed care organizations.

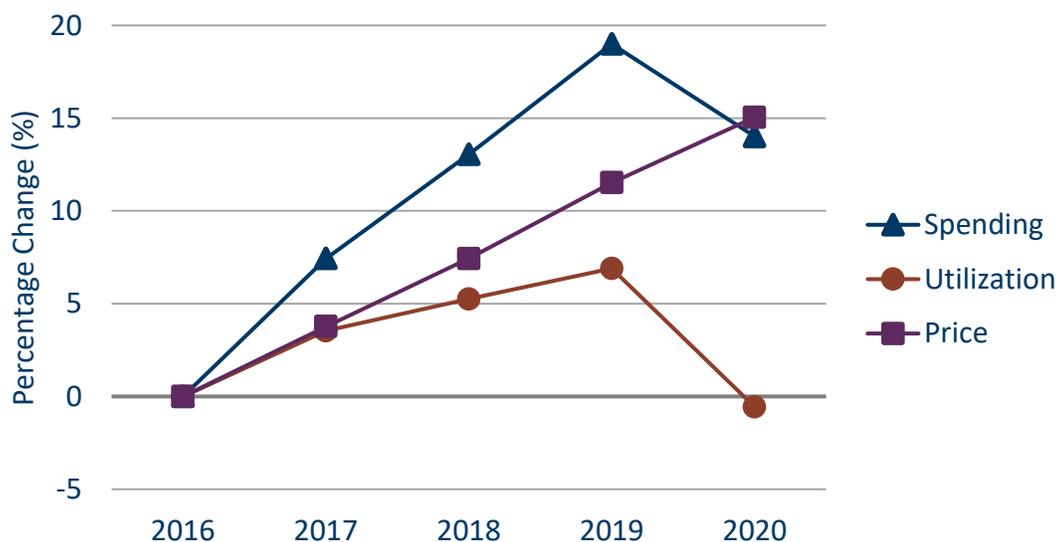
This brief uses research methods developed by the Health Care Cost Institute (HCCI) to produce population-based estimates of utilization, prices, and spending for medical care and prescription drugs.<sup>iv</sup> More details on these methods are available from the Health Care Cost Institute.<sup>v,vi</sup> In line with the HCCI approach, this issue brief focuses on health care spending among Minnesotans, ages 64 and younger, who have private health insurance through an employer or purchase health insurance on their own, including through Minnesota’s health insurance exchange, MNsure. Focusing on those with private coverage is important not only because this group represents a majority of the Minnesota population, but also because health care prices tend to be higher and more variable for privately insured patients.<sup>vii,viii</sup>

## Results

Annual estimated per-person health care spending was \$5,184 in 2016 and grew by 19.0% to \$6,169 in 2019, an average annual percentage increase of 6.0%. Spending decreased by 4.2% from 2019 to 2020 (\$5,911). Average annual per-person health care spending was \$5,739 for commercially insured non-elderly Minnesotans during the period of 2016 to 2020.

The growth in total spending was driven primarily by rising prices for health care. The change in total spending is made up of the change in the number of services (utilization) and the change in the price of each service. In each year from 2016 to 2020, price growth for health care was greater than inflation overall.<sup>ix</sup> As shown in Figure 1, prices grew by 3.8% and utilization grew by 3.5% from 2016 to 2017, leading to spending growth of about 7.4%, the largest year-to-year growth in our study period. From 2019 to 2020, prices still grew (by 3.1%), but utilization, affected by COVID-19 disruptions to health care delivery, declined by 7.1%, leading to a spending decline of about 4.2%.

**Figure 1: Cumulative Growth in Health Care Spending, Utilization, and Prices, 2016 to 2020**

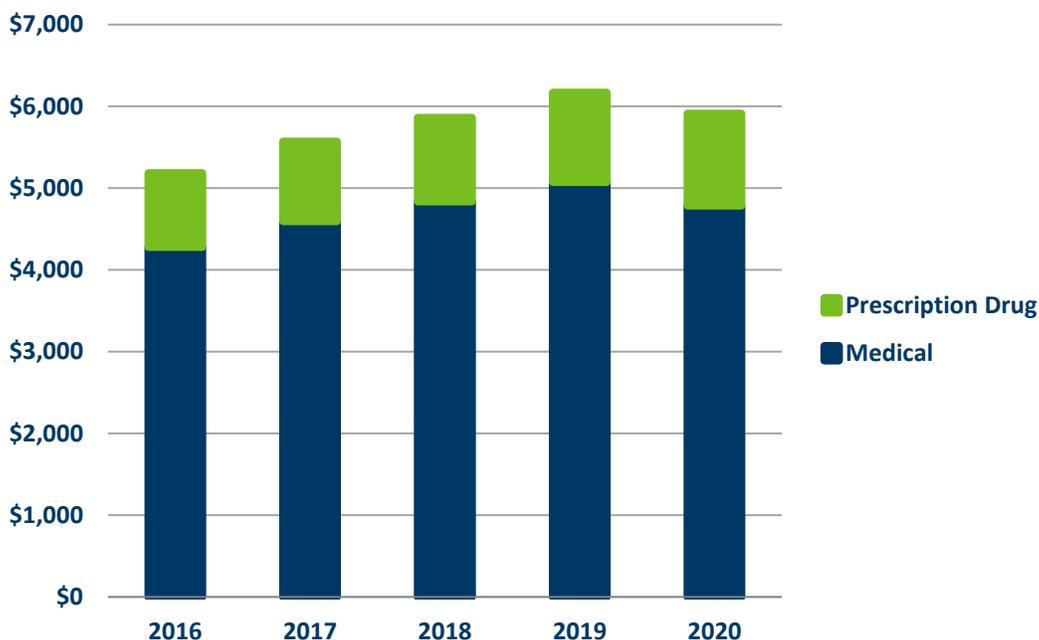


Source: Health Economics Program analysis of 2016 to 2020 data from the Minnesota All Payer Claims Database, July 2022

Over the entire study period (2016 to 2020), prices grew by 15.1%, but utilization, primarily due to the 2020 decline, dropped by about 0.6%. Future analyses of additional years of data will show to what extent utilization returns to pre-COVID-19 patterns.

Spending growth in Minnesota for commercially insured individuals was faster than the national average from 2016 to 2019 (pre-COVID-19). Spending increased by 19.0% in Minnesota compared to 15.5% nationally. This was due to larger increases in utilization in Minnesota (6.9%) than in national data (2.1%). Minnesota price growth (11.5%) from 2016-2019 was somewhat slower than national price growth (13.2%).<sup>x</sup>

**Figure 2: Per-Person Spending by Category 2016 to 2020**



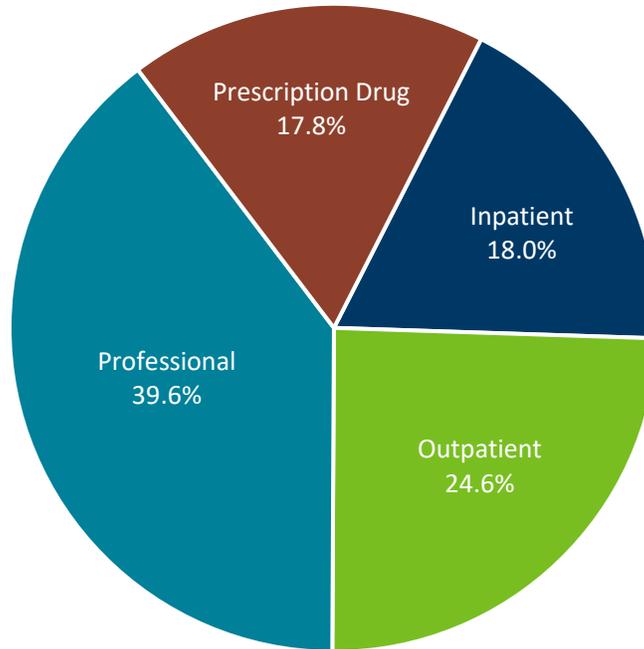
Source: Health Economics Program analysis of 2016 to 2020 data from the Minnesota All Payer Claims Database, July 2022

Medical spending represented the majority of per-capita annual health care spending in each year from 2016 to 2020 (Figure 2). About 82.2% of spending was on medical care and the remaining 17.8% was on retail prescription drugs.<sup>xi</sup>

The largest share of per-person health care spending during the full 5-year analysis period (2016 to 2020), about 39.6%, went to fees charged by providers for professional services (see Figure 3). These types of claims are usually for services such as office visits and consultations, as well as fees charged by providers who are working in hospitals (e.g., surgeons, anesthesiologists, therapists). The outpatient and inpatient categories both refer to “facility claims,” bills charged by institutions—including hospitals, nursing homes, and surgical centers—for room and board, medical supplies, nursing care, and other services.<sup>xii</sup> Inpatient facility fees accounted for about 18.0% of health care spending and outpatient fees accounted for about

24.6% of health care spending. The remaining 17.8% was for retail pharmacy prescription drugs. The reported proportions are averages of per-person spending across the full 5-year analysis period (2016 to 2020). Though overall spending varied from year to year (as reported above), the proportion of spending contributed by each category remained roughly the same.

**Figure 3: Components of Per-Person Health Care Spending (2016 to 2020, combined)**



Source: Health Economics Program analysis of 2016 to 2020 data from the Minnesota All Payer Claims Database, July 2022

## Conclusion

Health care spending averaged \$5,739 per commercially insured non-elderly Minnesotan during the period 2016 to 2020. Annual spending per-capita grew by 14.0% during this period. Utilization grew from 2016 to 2019, but declined from 2019 to 2020 amidst disruptions to health care delivery caused by the COVID-19 pandemic. Prices, however, grew every year. As has been demonstrated consistently in other analyses of national, state, and other data, price growth remains the most influential driver of overall commercial health care spending growth.

## Acknowledgements

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## Notes and References

- <sup>i</sup> Centers for Medicare and Medicaid Services. [“National Health Expenditure 2020 Highlights.”](https://www.cms.gov/files/document/highlights.pdf) (<https://www.cms.gov/files/document/highlights.pdf>) Retrieved May 26, 2022, and Health Economics Program, Minnesota Department of Health. “Minnesota Health Care Spending: 2020 Estimates and Ten-Year Projections”, forthcoming.
- <sup>ii</sup> Population change, illness burden, and changes in medical technology are more specific factors that can affect spending through their effects on utilization, prices, or both. We opted not to examine these specific factors because they are not easily quantified.
- <sup>iii</sup> Health Economics Program, Minnesota Department of Health. [“Minnesota All Payer Claims Database”](https://www.health.state.mn.us/data/apcd/) (<https://www.health.state.mn.us/data/apcd/>). Retrieved May 26, 2022.
- <sup>iv</sup> [Health Care Cost Institute](https://healthcostinstitute.org) (<https://healthcostinstitute.org>)
- <sup>v</sup> Health Care Cost Institute. [“2019 Health Care Cost and Utilization Report Analytic Methodology 2019 V1.0.”](https://healthcostinstitute.org/images/pdfs/HCCI_2019_Methodology_public_v1.pdf) ([https://healthcostinstitute.org/images/pdfs/HCCI\\_2019\\_Methodology\\_public\\_v1.pdf](https://healthcostinstitute.org/images/pdfs/HCCI_2019_Methodology_public_v1.pdf)) Retrieved May 26, 2022.
- <sup>vi</sup> Spending was calculated by adding up all health care spending during the year, then dividing it by the total number of commercially insured non-elderly adults in the MN APCD to measure annual spending per person. Utilization was calculated similarly by counting the number of health care services and dividing by the number of enrollees. Prices are equal to spending divided by utilization.
- <sup>vii</sup> Congressional Budget Office (2022). [“The Prices That Commercial Health Insurers and Medicare Pay for Hospitals’ and Physicians’ Services.”](https://www.health.state.mn.us/data/economics/hasurvey/index.html) (<https://www.health.state.mn.us/data/economics/hasurvey/index.html>) Retrieved May 26, 2022.

<sup>viii</sup> Health Economics Program, Minnesota Department of Health. [“Chartbook Section 2: Trends and Variation in Health Insurance Coverage”](https://www.health.state.mn.us/data/economics/chartbook/docs/section2.pdf#page=4) (<https://www.health.state.mn.us/data/economics/chartbook/docs/section2.pdf#page=4>). Retrieved October 11, 2022.

<sup>ix</sup> Our study period saw annual health care price increases of 3.8%, 3.5%, 3.8%, and 3.1%. These values are substantially greater than the annual changes in the overall consumer price index over the same period (2.1%, 2.4%, 1.8%, 1.2%). CPI values used here are from the [Bureau of Labor Statistics](https://data.bls.gov/cgi-bin/surveymost?cu) (<https://data.bls.gov/cgi-bin/surveymost?cu>) following guidance produced by the [Agency for Healthcare Research and Quality](https://meps.ahrq.gov/about_meps/Price_Index.shtml) ([https://meps.ahrq.gov/about\\_meps/Price\\_Index.shtml](https://meps.ahrq.gov/about_meps/Price_Index.shtml)).

<sup>x</sup> Health Care Cost Institute. [“2019 Health Care Cost and Utilization Report.”](https://healthcostinstitute.org/images/pdfs/HCCI_2019_Health_Care_Cost_and_Utilization_Report.pdf) ([https://healthcostinstitute.org/images/pdfs/HCCI\\_2019\\_Health\\_Care\\_Cost\\_and\\_Utilization\\_Report.pdf](https://healthcostinstitute.org/images/pdfs/HCCI_2019_Health_Care_Cost_and_Utilization_Report.pdf)) Retrieved May 26, 2022.

<sup>xi</sup> Claims for retail prescription drugs include prescriptions written by a provider and filled at a pharmacy. They do not include drugs administered by providers or over the counter medications. The prices of retail drugs are recorded before manufacturer rebates are applied.

<sup>xii</sup> Please note that this issue brief follows the methodology used by HCCI in their Health Care Cost and Utilization reports; in these reports, HCCI differentiates between facility charges and provider charges. Other estimates of health care spending, including those used in other MDH reports ([“Minnesota Health Care Spending: 2018 and 2019 Estimates and Ten-Year Projections”](https://www.health.state.mn.us/data/economics/docs/2019spendingrpt.pdf) [<https://www.health.state.mn.us/data/economics/docs/2019spendingrpt.pdf>]) and by CMS ([National Health Expenditure Accounts](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData) [<https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData>]) are aggregated differently, and therefore are not directly comparable to the estimates presented here.