DEPARTMENT OF HEALTH

Historical Health Care Spending Estimate Methodology

2021 SPENDING ESTIMATES

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Overview

What is "Health Care Spending"?

The amount spent each calendar year (January 1 to December 31) for Minnesota residents on:

- Medical care and prescription drug costs
- Public health and government administrative costs for those activities (federal, state, and local)
- Administrative costs and profits (i.e., net cost of insurance) for health plan companies
- Health care spending related to COVID-19 pandemic support
- All long-term care services covered by Medical Assistance (Medicaid), Medicare, private health insurance, and nursing home and home care costs that are paid privately out of pocket

Estimates do not explicitly include:

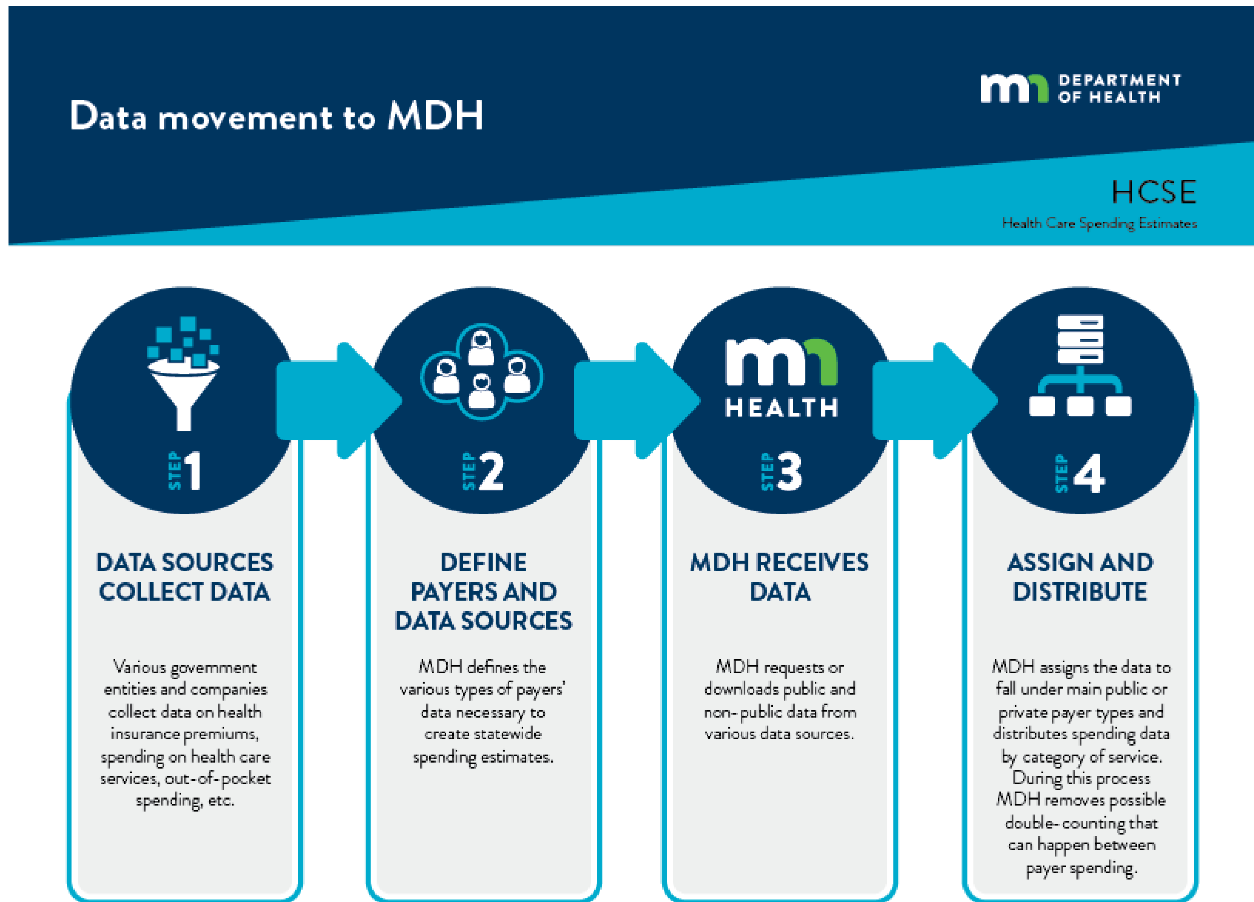
- Private philanthropic care and investments (i.e., non-commercial research, structures, and equipment)
- Charity care from hospitals or other providers, unless the costs are part of a "transactional" cost of care, meaning the item is part of a medical claim or is funded by public program payments
- Capital expenditures by hospitals, clinics, and other providers—except in the sense that these costs are included in the prices paid for medical care from these providers
- All long-term care services covered by a long-term care policy

The Minnesota Department of Health's (MDH), Health Economics Program (HEP) has been generating annual estimates of total health care spending for state residents for over 25 years, with estimates going back to 1993. MDH estimates health care spending not only in aggregate, but also by payers and categories of service. Generally, the data sources used for the development of Minnesota's historical health care spending estimates are aggregated at these levels; thus, no patient-level information on volume, utilization, or location of health care services is available.

The data originate with payers of health care spending, such as health plans, government agencies, and consumers. Minnesota's approach to developing spending estimates is a bottom-up approach—in that all health care spending for consumers is tracked by the source of payment. This is an important distinction from the top-down approach used by the Centers for Medicare & Medicaid Services (CMS); CMS uses a data flow from providers or equivalent estimates to construct national spending estimates. While MDH works to align with the CMS framework—dividing estimates using similar payer categories and categories of service to that of its National Health Expenditure Accounts estimates—the data sources used by CMS are not available with the geographic specificity necessary to directly reproduce these estimates. As such, MDH utilizes different data sources that are available on a state-specific basis. This process is further defined in Figure 1.

This document is updated each year, and outlines the methodological approach used to generate the historical spending estimates. It identifies data sources and key assumptions made when working to isolate annual trends in expenses resulting from the use of health care services ("health care consumption") by Minnesota residents.

Figure 1: Data Movement to MDH



Estimating Historical Health Care Spending

Data on health care spending are available in aggregated form, generally submitted to MDH by payers of health care services. This means spending data that would allow for a *detailed* analysis of drivers of health care growth—including changes in mix of services (for example, technology), health care demand due to aging or other population factors, or unit prices of various products and services—are not readily available.

Changes to Historical Methodology

MDH utilizes the most up-to-date available data sources when creating health care spending estimates, including both public and not public sources. As a result, MDH's historical health care spending estimates are *not* static, meaning that estimates from previous years are revised on an annual basis (for example, 2021 historical spending figures include the most recent year of estimates *and* updated data for prior years.). This is similar to many of MDH's data producers who update data on an ongoing basis—like the federal government for Medicare spending or the CMS National Health Expenditure Data (NHE).

On an annual basis, details are routinely reviewed, including whether:[1]

- There has been a change in the data collection process by a data provider
- The data source used for analysis continues to be available
- The definitions for categories of service have stayed consistent
- New source data become available
- Methodology can be improved
- National spending estimates produced by CMS changed source data or methodology[2]

If a new source of data is used, then historical spending is updated using the new source for at least five years, unless it is not available historically. In cases where there is a new source of data—or the methodology for a particular data source changed—data is blended to eliminate large fluctuations over time, particularly for categories of service spending.

[1] This is not an exhaustive list, rather it is an example of the types of questions considered as MDH generates and revises historical health care spending estimates.

[2] In 2020, CMS altered historical estimate methodology to account for the COVID-19 pandemic, as well as other modifications. Refer to CMS NHE methodologies: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData.

Data Sources

The sources of funding are grouped by payer categories, including private health insurance, consumer out-of-pocket spending, spending by other private payers, and spending by public payers—including Medicare and Minnesota Health Care Programs (MHCP, Medical Assistance and MinnesotaCare)—and other public sources. In addition to health care spending, data on types of health insurance coverage and the state population are used to estimate per capita and per-enrollee spending, and the size of the overall Minnesota market. As shown in Table 1, MDH uses several primary data sources to create health care spending estimates. The first three data sources—covering private spending, spending for state public program enrollees, and Medicare fee-for-service program spending—consistently capture the majority of total health care spending in the state.

Table 1: Major Data Sources Used in Minnesota Historical Health Care Spending

Data Source Name	Types of Data	Sources of Data	Data Use
Health Plan Financial and Statistical Report (HPFSR)	Aggregated spending data, enrollment, revenue	Group purchasers (health plan companies)	Fully-insured and self-insured private health plans, Medicare Advantage, Medicare Supplement, and Medicare Prescription Drug Plan spending
Reports and Forecasts Division, Minnesota Department of Human Services (DHS)	Aggregated spending data, enrollment	Minnesota DHS	Minnesota Health Care Programs (MHCP) spending
Medicare Fee-for-Service (FFS) Spending Estimate	Aggregated spending	Centers for Medicare & Medicaid Services (CMS)	Medicare spending
Medicare Part D	Spending data, enrollment	Group purchasers (health plan companies), CMS	Estimating Medicare Part D and Medicare Advantage-Part D Prescription Drug plan (PDP) spending

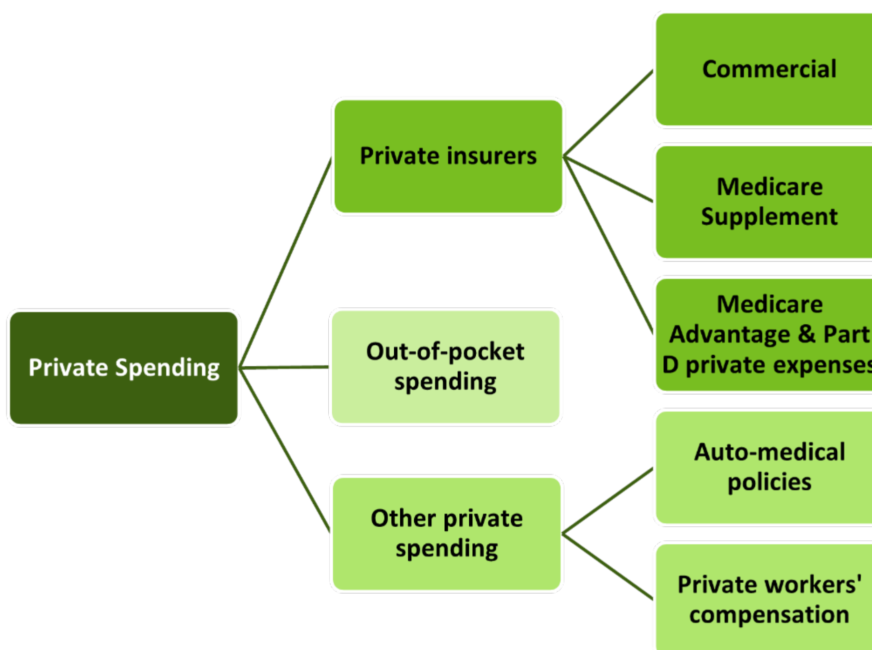
Data Source Name	Types of Data	Sources of Data	Data Use
Medical Expenditure Panel Survey (MEPS)	Out-of-pocket cost estimates	Agency for Healthcare Research and Quality (AHRQ)	Estimating out-of-pocket costs
National Health Expenditure Accounts	Out-of-pocket cost estimates	CMS	Estimating out-of-pocket costs, distribution of other public spending
Various administrative reports and data	Aggregate spending, enrollment	Federal and state agencies	Other public and private spending

The remainder of this section discusses approaches to estimating spending by primary payers in two broad categories: private and public sources of spending.

Private Spending

Private payer spending includes all health care expenses incurred by non-public contributors to health care financing. This includes claims paid by private insurers, out-of-pocket costs paid by consumers, and expenses paid by other entities such as automobile insurance carriers, third-party administrators, and others (Figure 2).

Figure 2: Private Payers



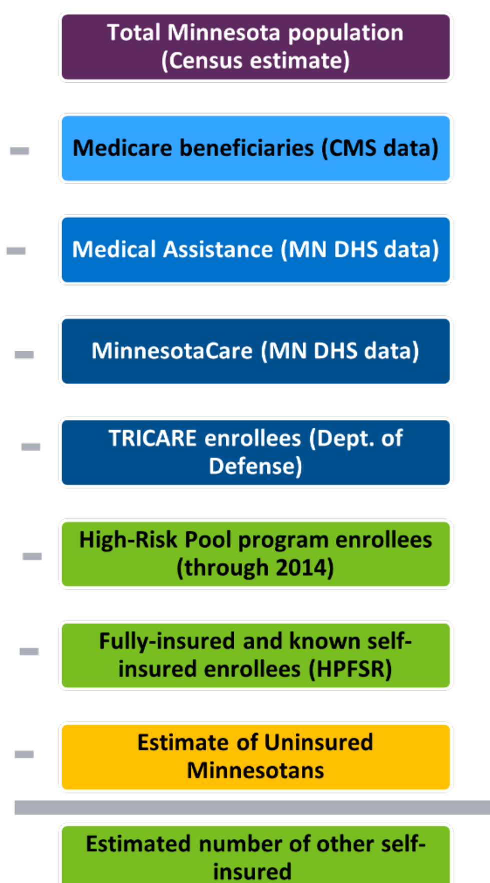
Private Insurance

For the fully-insured market, estimates of private health insurance spending are computed using data reported to MDH by health plan companies licensed to provide health insurance coverage in Minnesota. The vehicle of data collection is the annual Health Plan Financial and Statistical Report (HPFSR). Health plan companies report the data by 13 categories of service and by type of insurance product. MDH commercial market health care spending estimates include individuals who have fully-insured health insurance coverage through an employer, or purchased it individually (i.e., coverage purchased on the individual market directly from a health plan company, through MNsure, or through a broker).

A significant share of privately insured Minnesotans (approximately 69%) receive coverage through self-insured employers. Total self-insured spending is estimated by creating a product of calculated per capita ratios of fully-insured to self-insured spending for health care and administrative spending, and an estimate of the number of self-insured Minnesotans. MDH periodically reviews the ratio of fully-insured to self-insured spending for health care and administrative spending and updates them if needed.

The estimate of the number of self-insured residents in Minnesota is derived as a population remainder using information on the distribution of health insurance coverage for Minnesota residents. The population remainder removes enrollment from Medicare, Minnesota Health Care Programs (MHCP) – including Medical Assistance, MinnesotaCare, and the historical General Assistance Medical Care (GAMC) program, TRICARE (through the Department of Defense), historical high-risk pool programs, and the estimate of uninsured Minnesotans, fully-insured, and known self-insured Minnesotans (Figure 3).

Figure 3: Estimate for Self-Insured Minnesotans



Beginning with the 2017 health care spending figures and report, MDH specifically designated several Affordable Care Act (ACA) cost-sharing reductions and tax credits, and state-based premium security plans as private health insurance. This is because MDH defines payer categories only one way, while CMS has two different ways of allocating health care spending, by payer and by financer of health care services. Historical spending estimates were updated based on this designation; however, for 2016 and prior spending figures and reports, MDH did not include any distinct ACA cost sharing reductions or tax credits. These programs are accounted for within MDH spending estimates in the following ways:

- ACA Cost-sharing reductions (CSR): CSR is included within private health insurance spending.
- ACA Advance Premium Tax Credit (APTC): APTC is included within revenue calculations, affecting the Net Cost of Insurance calculations.
- State-based Minnesota Premium Security Plan: This program affects health care spending.[3]

[3] In January 2017, Minnesota established a state-run reinsurance program to help stabilize premiums in the individual insurance market. [MN Commerce Section 1332 State Innovation Waiver](https://mn.gov/commerce/insurance/industry/reinsurance/) https://mn.gov/commerce/insurance/industry/reinsurance/

Medicare Supplement

Medicare Supplement spending also uses the HPFSR, which is one of the types of insurance products that is reported. Spending under Medicare Supplement policies is calculated consistently with commercial spending, using the aforementioned 13 categories of service.

High-Risk Pools (Ended in 2014)

Spending for Minnesotans who were covered in two high-risk pool programs—the Minnesota Comprehensive Health Association (MCHA) and the federal Pre-existing Condition Insurance Plan (PCIP)—was calculated separately for each program. MCHA spending was derived from aggregated claims data obtained from the plan administrator in Minnesota. PCIP private spending was calculated based on reported average monthly premiums per enrollee. The portion of PCIP spending that was funded by the federal government for the small number of Minnesota enrollees is included in the analysis as public spending (under other public spending). In 2014, both MCHA and PCIP programs terminated due to the onset of additional ACA provisions. MCHA ended December 31, 2014, and PCIP ended April 30, 2014.

Medicare Advantage and Part D Private Expenses

Health plan companies offering Medicare Advantage, Medicare Advantage and Part D, and Medicare Part D standalone policies report spending for those plans via the HPFSR to MDH. Spending estimates are divided between public and private payer categories by subtracting CMS capitation payments from total Medicare spending to provide an estimate of the premiums paid by enrollees to cover costs, exclusive of cost sharing.[4] Cost sharing amounts paid by enrollees are included in out-of-pocket costs (Figure 4).

Figure 4: Medicare Advantage Private Expenses

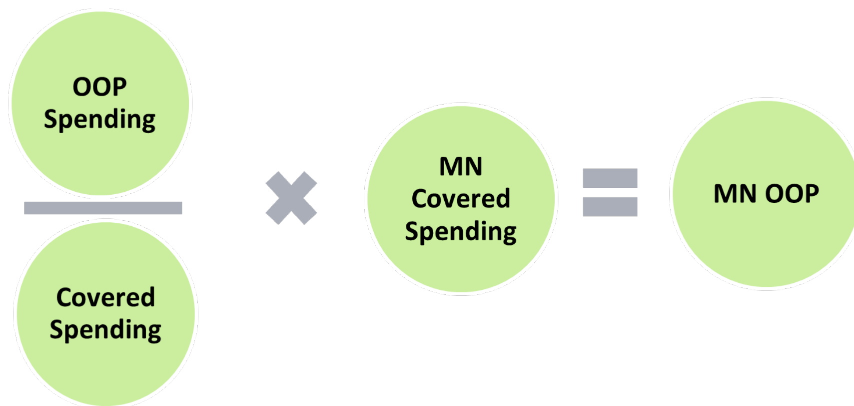
Out-of-Pocket Costs

MDH estimates consumer out-of-pocket spending from a ratio of national estimates of consumer out-of-pocket spending to covered spending (the share of spending paid by a health plan company). This analysis is conducted at the spending category level and is based on aggregated health spending data drawn from the household component of Medical Expenditure Panel Survey (MEPS) (Midwest) and the NHE. MDH weights this ratio to the

[4] A capitation payment is an upfront amount of money given to an insurer or health care provider to cover the predicted cost of health care services by a person over a certain period. If costs are higher than the capitation, the insurer or health care provider is responsible for the added cost, and if costs are lower, the insurer or health care provider keeps the extra funds.

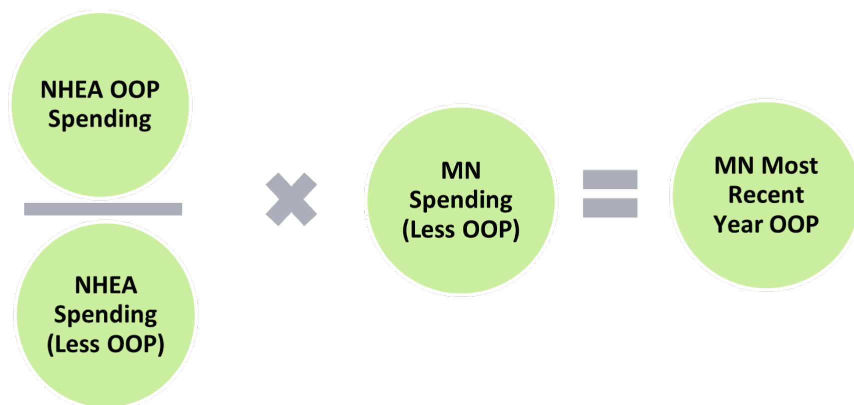
distribution of coverage in Minnesota, to account for the difference in coverage distribution between Minnesota and the Midwest region overall (Figure 5). The results are multiplied by an estimate of Minnesota covered spending.

Figure 5: Conceptual Approach to Estimating Out-of-Pocket Spending



Due to delays in data availability, the most recent year of out-of-pocket spending is not able to be calculated in the same manner as historical estimates. Therefore, MDH calculated this most recent year of data by taking total Minnesota estimated spending for the most recent year (excluding out-of-pocket) and multiplied that by the most recent year percent of National Health Expenditure Data (NHEA) out-of-pocket spending over NHEA "covered" spending (NHEA total spending minus out-of-pocket spending) (Figure 6). This is done separately for each category of service. Historically, the share of Minnesota out-of-pocket spending as a percent of total covered spending (including out-of-pocket spending) has aligned very closely with the share of national out-of-pocket spending as a percent of total covered spending (including out-of-pocket spending); thus, using a similar ratio to estimate the most recent year spending is an accurate way to reflect broader spending trends.

Figure 6: Conceptual Approach to Estimating Most Recent Year Out-of-Pocket Spending



Other Private Spending

Other private spending includes spending estimates for several smaller-volume payers—including workers' compensation spending for non-government workers and automobile insurance medical spending.

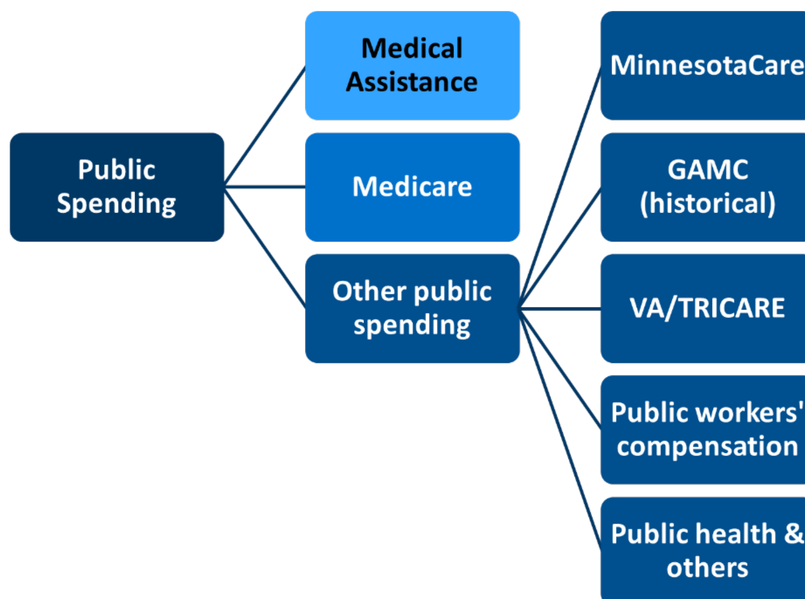
Spending on workers' compensation for non-federal employees is provided by the Minnesota Department of Administration and Minnesota Department of Labor and Industry. Health care spending for the private portion of the workers' compensation program is calculated as the product of the total spending and a ratio of private-to-public employment based on annual employment data from the Minnesota Department of Employment and Economic Development, Quarterly Census of Employment and Wages.

The estimate of health care spending paid by automobile insurance (the other component of this spending category) is based on a ratio of medical paid losses to total paid losses. This ratio—which is derived from "Best's Averages & Aggregates," a publication for the property and casualty industry—is applied to an estimate of total Minnesota paid losses, estimated from historical data on medical paid losses.

Public Spending

Public spending includes public spending for government-sponsored health insurance programs [such as Medicare, Medical Assistance (Medicaid)] and spending for other programs [including MinnesotaCare, Veterans Affairs, TRICARE (through the Department of Defense), workers' compensation, state and federal correctional systems, public health, and spending related to the COVID-19 pandemic] (Figure 7).

Figure 7: Public Payers



Medicare

Medicare expenses include costs for beneficiaries enrolled in fee-for-service (FFS) Medicare and payments made to health plans as part of the Medicare Advantage and Prescription Drug programs (commonly referred to as Medicare Part D)— the private portion of these payments is included in private spending. FFS spending is based on a series of data tables prepared by CMS for Minnesota (residence-based) Medicare Parts A and B spending. The amount Medicare Advantage plans report on the HPFSR as revenue from CMS is used to represent public Medicare capitation payments,[5] which are paid by CMS to Medicare Advantage plans. Together these represent public Medicare spending, less prescription drug spending.

Prescription drug spending for beneficiaries enrolled in standalone Medicare Part D and the prescription benefit included in some Medicare Advantage plans is based on reporting from CMS, adjusted for pharmacy rebates and member spending (already accounted for within out-of-pocket spending estimates). Due to delays in data availability, estimates for the most recent year of prescription drug spending are based on trending the prior year's prescription drug per member spending against current year enrollment. All data are benchmarked against CMS monthly enrollment reports, when possible, and updated when new data are available.

[5] For purposes of these analyses, Medicare Advantage includes Medicare Cost plans, which until 2019 were common in most Minnesota counties.

Minnesota seniors eligible for both Medicare and Medicaid may enroll in Minnesota Senior Health Options (MSHO), a program that blends Medicare and Medicaid benefits into one managed care product. CMS and the Minnesota Department of Human Services (DHS) make capitated payments directly to the managed care organizations (HMOs); enrollees pay no premiums.[6] These HMOs report revenue and expenditures (otherwise known as spending) as part of their annual financial reporting on the Minnesota Supplement Report #1. To avoid double counting of expenses and ensure accurate allocation of payer-type data, DHS administrative records are used to subtract Medicaid contributions to MSHO, leaving the Medicare capitations. The distribution of these payments across service categories is calculated based on the distribution observed for Medicare Advantage enrollees. The remaining payment stream (the DHS capitation amounts) is captured in Medical Assistance managed care spending within Minnesota Health Care Programs.

Medical Assistance

Spending estimates for Medical Assistance (MA), Minnesota's Medicaid program, are computed separately for the managed care and FFS portions of the program. DHS reports MA FFS data directly. The managed care components of health care spending for MA are distributed across categories of service using historical estimates provided by DHS. Spending in 2013 and 2014 included estimates on the additional federal funding related to the temporary (2013 and 2014) ACA provision that increased payments for primary care services to be equal to Medicare Part B payments. To avoid double counting of expenses, payments for Individualized Educational Program (IEP) and medical transportation services spending captured in estimates for school-based health care spending are removed.

For Medical Assistance spending estimates, managed care performance payments and gross adjustments are assigned to the calendar year they are associated with, rather than the year these amounts were paid (for example, managed care performance payments for calendar year 2021 are paid in July 2022; in MDH's spending estimates, these amounts are included as health care spending in 2021).

Other Public Spending

The estimate of other public spending includes spending by MinnesotaCare, the historical General Assistance Medical Care (GAMC) program, Veterans Affairs, TRICARE (through the Department of Defense), government workers' compensation, public health programs, the Indian Health Service (IHS), school-based health care spending, the state and federal correctional systems, and one-time spending related to the COVID-19 pandemic ("COVID-19 pandemic support spending") from federal, state, and local governments—most of which was not directly linked to covering costs of health care services.[7]

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[6] Health Maintenance Organizations (HMOs) are defined and regulated under Minnesota Statutes Chapter 62D; the Minnesota Department of Human Services is only allowed to contract with licensed Minnesota HMOs to provide services to enrollees in Minnesota Health Care Programs.

[7] Federal, state, and local government sources allocated COVID-19 pandemic support spending to assist the health care and public health systems with things such as COVID-19 testing, vaccines, hospital surge capacity, laboratory enhancements, additional infection control including personal protective equipment (PPE), as well as supplemental revenue and paycheck disruption coverages to support providers and workers.

MinnesotaCare and the historical General Assistance Medical Care (GAMC) Program

Aggregated MinnesotaCare spending by calendar year is obtained from the DHS Reports and Forecasts division. DHS also provided historical spending distributions that MDH used to allocate spending across categories of service. Historically, the methodology for deriving spending estimates for enrollees in MinnesotaCare and GAMC was nearly identical. However, GAMC underwent significant program changes in fiscal year 2010. For 2010 and 2011, spending estimates are based on program reports for each component. They explicitly include budgetary expenses that the DHS Forecast no longer carries. This reconfigured program ended in 2011, and remaining enrollees moved to Medical Assistance.

For MinnesotaCare spending estimates, managed care performance payments, and gross adjustments are assigned to the calendar year they are associated with, rather than the year these amounts were paid (for example, managed care performance payments for calendar year 2021 are paid in July 2022; in MDH's spending estimates, these amounts are included as health care spending in 2021).

Veterans Affairs and TRICARE

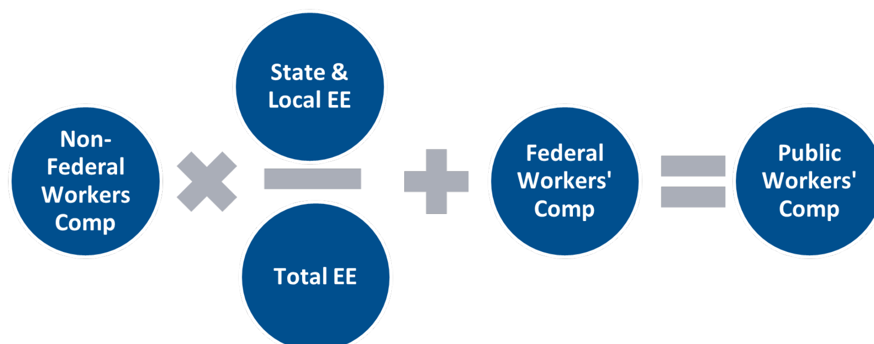
Veterans Affairs health care spending for Minnesota beneficiaries (medical care and general operating expenses) is obtained directly from the U.S. Department of Veterans Affairs website. Federal fiscal year data are converted to calendar years and allocated across spending categories of service based on historical information from the U.S. Office of Management and Budget (for years prior to 1997) and from the CMS NHE (for years 1997 forward). In limited circumstances when the most recent fiscal year is not available, a five-year annual growth rate trend is applied, considering any impacts from the pandemic that may have created nonstandard spending and utilization trends. Future spending figures are updated with complete data once data are available. The Department of Defense (DOD) reports TRICARE spending.[8] They report data by category of service, which are aligned to those in the Minnesota estimation model.

Public Payers' Workers' Compensation

Estimates of workers' compensation spending for state and local employees rely on data from the Minnesota Department of Labor and Industry (DOLI). Total Minnesota non-federal workers' compensation claims are multiplied by the share of the workforce employed by state and local government units (in the figure below referred to as "EE"). Estimates of workers' compensation spending for federal employees who are Minnesota residents are based on total federal workers' compensation expenses in the state from the U.S. Department of Labor (Figure 8).

[8] TRICARE is health insurance coverage for members of the United States Military and their families.

Figure 8: Conceptual Approach to Estimating Public Workers' Compensation Spending



Public Health Spending

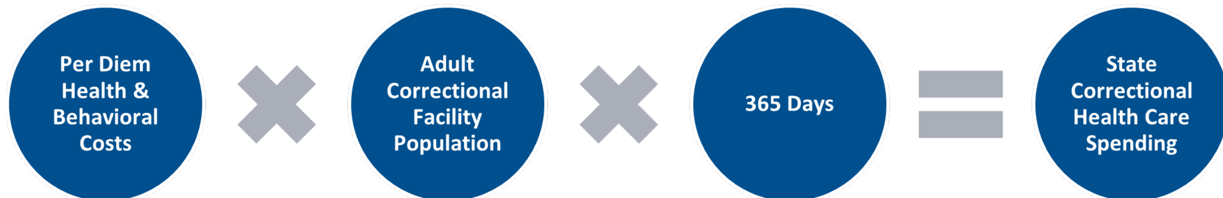
The estimate of public health spending for the state of Minnesota draws on data from a range of sources to estimate spending at the federal, state, and local public health level. The federal public health care spending estimate relies on data from USASpending.gov (the U.S. Department of Health & Human Services Health Resources and Services Administration data warehouse) and the Substance Abuse and Mental Health Services Administration website—which reports information on block grants and other major federal grant programs. State public health data are obtained from the DHS forecast and from a division of MDH that awards public health grants to local public health departments. Those data are converted from federal and state fiscal year to calendar year. In years in which data is not available, MDH applies a three- or five-year annual growth rate trend, considering any impacts from the pandemic that may have created nonstandard spending and utilization trends. Future spending figures are updated with complete data once data are available. Furthermore, any one-time pandemic support spending that may be duplicated in this public health spending is removed.

The estimate of federal health care spending by the Indian Health Service (IHS) is obtained by a Freedom of Information Act Request through the Department of Health and Human Services; previously this data was obtained from the IHS Bemidji area office. Both data sets are provided on a federal fiscal year basis and have been converted to a calendar year estimate. In years in which data are not available, MDH applies a five-year annual growth rate trend. Future spending figures are updated with complete data once available. Beginning with the 2020 spending figures and report, MDH allocated spending across categories of service based on historical information from the CMS NHE (all years).

MDH also includes spending estimates for the medical care of individuals incarcerated in federal prisons located within the state and in-state correctional facilities. The federal data are obtained directly from the Federal Bureau of Prisons. Data on medical spending at state correctional facilities are obtained directly from the Minnesota Department of Corrections. To calculate state spending, MDH multiplies per diem costs for "health services" and "behavioral health" by the average annual population utilizing health services in state correctional facilities by 365 days in the year (Figure 9). In years in which data is not available, MDH applies a three-

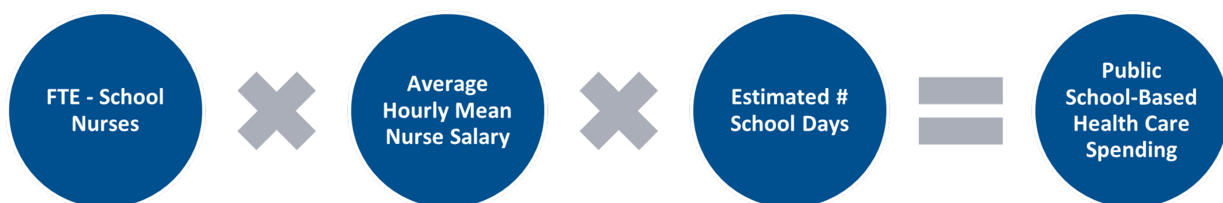
or five-year annual growth rate trend, considering any impacts from the pandemic that may have created nonstandard spending and utilization trends.

Figure 9: Conceptual Approach to Estimating MN Department of Corrections Spending



The estimate of school-based health care spending draws on a range of sources, and specifically estimates spending for public schools, non-public schools, Individualized Educational Program (IEP)/medical transportation, and school-based health clinics. Spending estimates begin in calendar year 2001, as prior year data were not available. Public school-based spending is estimated by multiplying the number of full-time equivalent (FTE) school nurses from the Minnesota Department of Education by an estimate of school nurse salaries based on the Registered School Nurse salary estimates from the U.S. Bureau of Labor Statistics, Occupational Employment Statistics, and multiplying those by the estimated number of school days worked in a year (Figure 10). Non-public school-based spending uses data from the Minnesota Department of Education converted to a calendar year estimate. IEP planning and medical transportation services spending uses data from the Minnesota DHS. School-based clinics spending is based on completed data requests from Minnesota school-based clinics; for clinics without available data, the spending estimates are extrapolated and averaged from completed data requests.

Figure 10: Conceptual Approach to Estimating Public School-Based Spending



COVID-19 Funding

The COVID-19 pandemic presented a unique situation in terms of health care utilization and spending; it interrupted typical patterns MDH would have expected during any period of economic change (including during a recession).

Most spending related to the COVID-19 pandemic in 2020 and 2021 was one-time spending and was indirectly linked to patient care, meaning this spending was not part of a health insurance claim. Federal, state, and local governments supplied one-time spending allocations to assist with public health needs, including COVID-19 testing, vaccines, hospital surge capacity, laboratory enhancements, and supplemental revenue and paycheck disruption coverages to support providers and workers. Furthermore, some spending was in the form of increased Federal Medical Assistance Percentage (FMAP) spending for Medical Assistance (which is not broken out separately in these estimates).

MDH followed methodology from the CMS NHE methodology, with the addition of local funding from public health-related funding and state/federal funding from the Short Term Emergency Grants from the Public Health Response Contingency Account and Health Care Response Funds. MDH worked to remove any funding and grants that already appeared within state or federal funding (i.e., through the CARES Act).

For federal funding, MDH reviewed over six different pieces of federal legislation providing federal funding to support individuals, business, and state and local governments. Any duplication in these federal funds from state and local COVID-19 funding (noted earlier) was removed, as well as those that were already included in MDH's review of federal funding via Indian Health Services (IHS), the Center for Disease Control (CDC), Health Resources and Services Administration (HRSA), and Substance Abuse and Mental Health Services Administration (SAMHSA). The main portions included were:

- Paycheck Protection Loans: MDH utilized point-in-time reporting from Small Business Administration Files to filter on MN businesses and NAICS codes (industry codes, mostly 62 which is health care services). Loans that were fully forgiven were included. Loans that were not yet forgiven were estimated to have a certain percentage forgiven, and those remaining amounts were included.
- Provider Relief Funds: MDH utilized state-level reporting from the Health and Human Services' (HHS) Tracking Accountability in Government Grants System (TAGGS) website. Funding (by category) was researched to determine applicable year(s) of funding, categories of service receiving funds, and if additional information was required to determine if the funding should be included.
- Public Health: MDH utilized state-level reporting from the HHS' Tracking Accountability in Government Grants System (TAGGS) website for the Public Health and Social Security Emergency (PHSSE) Fund, CDC, HRSA, and SAMHSA funding. Funding (by category) was researched to determine applicable year(s) of funding, categories of service receiving funds, and if any additional information was required to determine if the funding should be included.

Data from each of these sources was then aggregated and added to other public spending (either by category of service or as an uncategorized spending category) for 2020 and 2021.

Differences between MDH and CMS Estimation Approaches

As mentioned earlier, Minnesota has developed health care spending estimates since the mid-1990s, relying on data explicitly collected from payers for this effort and advancing the methodological approach and data sources used over time. While data used for Minnesota's estimates differ from those at the national level—Minnesota uses data from payers, while the NHE from CMS largely relies on data from providers—by design, both estimates use similar categories for payers and categories of service. Minnesota compares its results relative to a subset of CMS NHE data, the health consumption category (which includes spending for personal health care, government administration, the net cost of private health insurance, and government public health activities). Both estimates exclude resources spent on investments and research that are not explicitly built into prices by providers and paid for by payers. This category of national spending offers the best comparison with the Minnesota estimates, and provides context for spending, both at a per capita level and as a percent of the economy.[9]

In 2009, CMS restructured the NHE and moved away from having a separation between private and public payers—likely due to the line between private and public "payers" becoming increasingly difficult to ascertain. MDH continues to see value in reporting spending by private and public payers; therefore, MDH has kept this distinction in MDH's health care spending estimates and projections. CMS publishes two-types of health care spending estimates, one by who finances the health care and one by who pays for health care services.

Systemic differences do exist between Minnesota's state spending analysis and CMS' effort to estimate the state portion of the NHE account initiative. CMS historically had developed the State Health Expenditure Account (SHEA), in which CMS attempted to translate spending at the point of service into a point-of-residency perspective to estimate state-level health spending for Personal Health Expenditures (PHE). The estimates involved a two-step process of first generating estimates based on provider location, and then (using Medicare claims data) estimating the extent to which residents crossed state lines for care.[10] A historical independent analysis by an MDH contractor of the CMS SHEA approach did not reveal any factors that suggest CMS' approach is characterized by methodological strengths relative to Minnesota's approach, or vice versa. Rather, the CMS approach appears to be a tool that uses statistical

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[9] Although MDH does attempt to follow CMS' categories of service data aggregation methods, it is not always possible due to the nature of the data MDH is able to access. For example, data MDH utilizes for chemical dependency and mental health are often reported as a separate category of service. As a result, MDH is not able to proportion chemical dependency and mental health services to other categories of service, where these services were ultimately received (for example, residential, inpatient, outpatient). In comparison, NHE methodology does attempt to proportion data further. Information pertaining to the health care services spending crosswalk to NHE spending is found within the CMS NHE Methodology Paper https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html

[10] Further information on the methodology used by CMS to generate state-level spending estimates through 2020 can be found on the CMS State Health Expenditure web site https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsStateHealthAccountsResidence.html

methods to compensate for a lack of available data that are comparable for all (or most) states by apportioning a pre-defined spending amount across the nation.

For COVID-19 spending, MDH included both local and state-specific funding. Due to the level of reporting received by NHE, national estimates only include federal-based COVID-19 pandemic support funding. MDH was not able to include some federal funding that could not be disaggregated to the state level—for example, funding for vaccine research, and funding for strategically moving and obtaining supplies.

Key Terms

Below are key terms used within the Key Trends for Minnesota Health Care Spending report, in alphabetical order.

- **Fully-Insured** – Employers (on behalf of their employees) or individuals purchase an insurance plan from a health insurance company and pay premiums. Health insurance companies are responsible, or "at risk," for the cost of all covered medical care, even if that cost exceeds the amount paid in premiums.
- **Medical Assistance** – Minnesota's Medicaid program, focused on covering eligible low-income adults, children, pregnant women, elderly adults and people with disabilities; it includes both enrollment and spending.
- **Medicare** –Medicare is focused on covering people aged 65 and older, as well as people with disabilities and end-stage renal disease (kidney disease). For purposes of this chartbook it includes enrollment and spending for Traditional Medicare, Medicare Cost and Medicare Advantage plans, and Medicare Part D; it excludes the premiums paid for Medicare Supplement, Medicare Advantage, and Medicare Part D plans.
- **MinnesotaCare** – provides health care coverage for people with low incomes; it has higher income limits than Medical Assistance. It includes both enrollment and spending.
- **Other Factors** – references to items that drive spending growth or declines, such as changes in prices and use of health care services; it excludes changes in enrollment or inflation.
- **Other Private** – private workers' compensation and medical spending from auto insurance.
- **Other Public** –Veterans Affairs, Indian Health Service, certain public health expenditures, and school-based health care enrollment and spending; it includes the historical Minnesota General Assistance Medical Care (GAMC) program which ended in 2010.
- **Out-of-pocket** – all payments for health care services made directly by individuals to providers or suppliers to pay for health care goods and services, including copays and co-insurance for office visits, hospital stays and prescription drugs (excluding premiums).
- **Premiums** – the amount paid for health insurance each month.
- **Private Health Insurance** – Health insurance offered by employers or purchased by individuals, including Medicare supplement plans; it includes both enrollment and spending.
- **Private Payer** – includes private health insurance, out-of-pocket, and other private enrollment and spending.
- **Public Payer** – includes Medical Assistance, Medicare, and other public enrollment and spending.
- **Self-Insured** - Employers (on behalf of their employees) determine what health care services they will cover, and what premiums and cost-sharing will be. They contract with a third-party administrator to process claims, and usually with a health plan company to use their provider network. The employe is responsible, or "at risk," for the cost of all covered medical care, even if that cost exceeds their planned premium expenses.