DEPARTMENT OF HEALTH

Health Care Spending Projections Methodology

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Overview

What are spending projections?

Projections use information from the past to estimate what will happen in the future. They are usually based on economic, population and spending information, and how they are related to each other. Projections tell us "if we keep doing things the way we have been, this is what may happen."

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 (2020-2026)

- 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 projections of total health care spending for over ten years. MDH projects 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 health care spending projections are based on aggregated historical spending data, and current and projected macroeconomic factors, discussed later.

MDH developed spending projections based on requirements outlined by Minnesota Statutes, section 62U.10 for the primary purpose of estimating future health care spending over a 10-year period. MDH contracts with an outside consultant to assist with developing the macroeconomic model(s) used to project these health care spending estimates.

The methods used to build the projection model(s) are based on the Centers for Medicare & Medicaid Services (CMS) National Health Expenditures Data (NHE) methodology used to produce national health care spending projections, and, where appropriate, is customized to

Minnesota's health care and data environment, based on the current policy landscape.[1]
Estimates use similar payer categories and categories of service to those produced by National
Health Expenditure Accounts estimates.

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[1] CMS projection methodology is available at the CMS projection methodology website:
https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-
Reports/NationalHealthExpendData/index.html. MDH attempts to align its projections with the CMS methodology
framework; however, is limited in its ability to match all variables and calculations. For example, MDH is limited in
the use of lagged values of variables due to the short historical timeframe of Minnesota's data (beginning in 1993),
compared with CMS' data which began in 1960.

Health Care Spending Projections

This document outlines the methodological approach used, identifies the data sources used, and describes key assumptions made when working to develop these projections. Like CMS' projection approach, Minnesota's approach uses a macroeconomic forecast and aims to project an overall model of health care spending. It does so by modeling spending by payer and service categories, within payer models, and benchmarking results to form a more predictive total spending model.

MDH works to provide health care spending projections for both private payers (private health insurance spending, consumer out-of-pocket expenses, and other private spending[2]) and public payers (Medical Assistance – Minnesota's Medicaid program, Medicare, and other public spending[3]). Data on health care spending projections, specific to Minnesota, by various payers are sparse. Generally, the only Minnesota payer with health care spending projections, is the Minnesota Department of Human Services (DHS) for Medical Assistance (Minnesota's Medicaid program) and MinnesotaCare – and these estimates are produced on a state fiscal year for a limited number of years. This means spending data must be projected for nearly all payers and by categories of services since data is not readily available.

For the 2022 projections, attempts were made to account for the remaining effects from the COVID-19 pandemic and the current economic situation, further described in this Supplemental Information. Projections also try to account for known changes in health care policy, but do not make assumptions about future policy directions. In future years, MDH will continue to re-align its methodology with CMS projections' methodology, as needed.

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[2] Other private spending includes workers' compensation and medical care covered by auto insurance.
[3] Other public spending includes MinnesotaCare, Veterans Affairs, TRICARE [through the Department of Defense], Indian Health Service, certain public health spending, school-based health care spending, and COVID-19 pandemic support spending.

Changes to Projections Methodology

MDH utilizes the most up-to-date available data sources when creating 10-year health care spending projections, using both public and not public sources. As a result, MDH's health care spending projections are *not* static, meaning projections are updated each time they are produced (for example, health care spending projections for years 2021-2030 produced in 2022 change again for years 2022-2031 when they are produced in 2023). This is similar to CMS updating its 10-year projection spending estimates each calendar year.

On an annual basis, details are routinely reviewed and considered,[4] such as if:

- 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

- There are updates to historical spending

- New source data becomes available

- Methodology can be improved

- National spending projections produced by CMS changed source data or methodology[5]

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

[5] For CMS' health care spending projections beginning in 2021, CMS altered its methodology to account for the COVID-19 pandemic. 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 for the projections 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, Minnesota Health Care Programs (MHCP), which includes Medical Assistance and MinnesotaCare—and other public sources.

To create projections, MDH also estimates health insurance coverage and the state population in order to calculate per capita and per-enrollee spending projections. As shown in Table 1, MDH uses several primary data sources to create health care spending projections.

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

| Data Source Name	Types of Data	Sources of Data	Data Use
Economic variables	National and state personal income, personal disposable income, and gross domestic product (GDP)	US Dept. of Commerce, Bureau of Economic Analysis (BEA)	Macroeconomic modeling
Economic forecasts	State personal income, unemployment rate, non-farm employment	Minnesota Management and Budget (MMB)	Macroeconomic modeling
Enrollment projections	State population – total and by age	MN State Demographic Center	Enrollment estimates and projections
Enrollment projections	National and state population – total and by age	Population Division, U.S. Census Bureau	Enrollment estimates and projections
Semi-annual Expenditure Forecast, Minnesota Department of Human Services (DHS)	Aggregated spending data, enrollment	Reports and Forecast Division, Minnesota DHS	Minnesota Health Care Programs (MHCP) spending
National Health Expenditure Accounts	Projection estimates and methodology	CMS	Estimating rates of growth by payers and enrollment, where applicable

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 projections include all health care expenses incurred by non-public contributors to health care financing. This includes claims paid by private insurers, costs paid by consumers out-of-pocket, and expenses paid by other entities such as automobile insurance carriers, third-party administrators, and others (Figure 1). For more detailed information on the methodology used to create historical spending for each payer beyond what is documented herein, please review the MDH, Health Economics, Supplemental Information: Historical Health Care Spending Estimate Methodology (PDF) (https://www.health.state.mn/data/economics/docs/spendingestimate21.pdf).

Figure 1: Private Payers
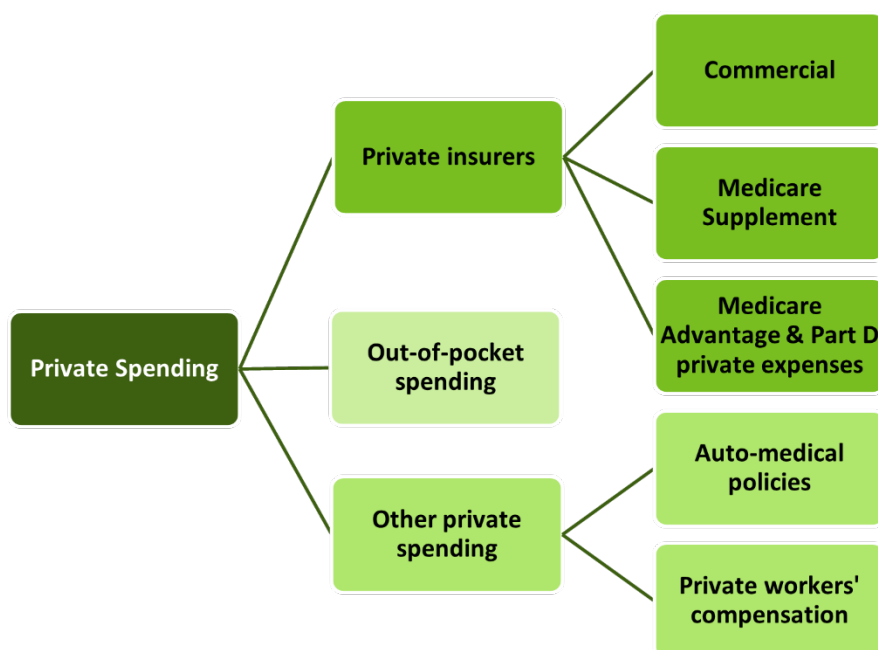
Private Insurance

Private spending projection results for 2022 and 2023 were based on separate modeling, specifically accounting for variation in health care utilization, health insurance coverage, and spending due to the COVID-19 pandemic. An outside consultant estimated spending per enrollee, by sponsor of coverage (e.g., private insurers, out-of-pocket), and by category of service using MDH estimates for enrollment and other sources, such as health plan company statutory financial filings, MDH estimates for Medical Assistance and MinnesotaCare, and CMS enrollment reports.

Private spending projections for years 2024 through 2031 were projected by estimating a series of Autoregressive Integrated Moving Average (ARIMA) models using historic spending estimates and macroeconomic data for the years 1993 through 2021, with adjustments to the real private personal health care per capita dependent variable. These ARIMA models allow for

flexibility and ease of model interpretation, and allow MDH's consultant to use time series data and address concerns that may be present in statistical models, such as lack of variability and statistical errors being related to each other.

The method utilized by MDH and its consultant is designed and updated to align with CMS methods, as appropriate. Again, this process determines the historic relationship between macroeconomic variables and health care spending, aiming to hold this pattern constant. After fitting the historic data, future spending is estimated using projected macroeconomic factors as explanatory variables. Spending is projected in total, by private payer type (for example, private health insurance, out-of-pocket, and other private), and by categories of service (except for uncategorized spending which is projected as part of other public spending).

The following factors are considered as explanatory variables, with each model using a subset, based upon the best fit:

- **Relative Medical Price Inflation (lagged basis for years one to three):** Estimates of national personal health care (PHC) deflator divided by the national GDP deflator. Only explanatory variables were created on a lagged basis for years one to three. The current period variable was ignored to avoid influencing variables and outcomes in the model.

- **Minnesota Personal Health Care to GDP Growth Rate (lagged):** This variable is calculated as the annual growth rate of nominal private and public health care spending (from historical estimates and projections) divided by the annual state GDP. Only explanatory variables were created on a lagged basis for years one to three. The current period variable was ignored to avoid influencing variables and outcomes in the model.

- **Minnesota Real Per Capita Disposable Personal Income Growth Rate:** Estimates and projections are obtained from forecasts by Minnesota Management and Budget (MMB). When certain projection year data were not available from MMB, estimates were projected using prior year growth trends. In line with CMS methodology, public health care spending is subtracted to better approximate income of the population that accounts for private health care spending. This value is divided by population estimates for per capita values. Additional explanatory variables were created on a lagged basis for years one to three.

- **Minnesota Real Per Capita Public Personal Health Care Spending Growth Rate:** This variable is calculated as public spending from MDH estimates divided by the total state population and the aggregate personal health care deflator. Additional explanatory variables were created on a lagged basis for years one to three.

- **Recession Indicator:** This variable is based on years 2007-2010 to account for the one-time effect of the Great Recession (2007-2009) on private health care spending, as well as to the implicit impact of the Great Recession already accounted for in the Minnesota Real Per Capita Disposable Personal Income Growth Rate.

- **COVID-19 Indicator:** This variable is based on years 2020-2022 to account for the one-time effect of the COVID-19 pandemic on private health care spending.

- **Additional explanatory variables used in the payer and categories of service growth models:** To create models for specific payers and categories of service, additional explanatory variables were created, including:

    - Relative Out-of-Pocket Spending Price Index (lagged) for out-of-pocket projections.

- Relative Medical Price Inflation by service categories (lagged) for inpatient, physician and outpatient, dental, professional services, long-term care, and other services.

- Shortened Recession Indicator, used in the dental model only.

- ACA Expansion (2014-2016) Indicator, used in the physician and retail prescription drug model.

- Medicare Part D Expansion Indicator, used in the retail prescription drug model only.

Using these variables, separate and distinctive models are run in aggregate and by payer type and categories of service. Payer type and categories of service models are then constrained so that the sums of estimates from the individual models are equal to the projected aggregate spending.

For this year's projections, specific adjustments occurred to the following models:

- **Private insurer model:** adjustments in 2024 to account for expected growth in medical inflation and adjustments in 2026-2031 to smooth-out growth among payer types to match aggregate spending.

- **Out-of-pocket model**: adjustments in 2024 to account for expected growth in medical inflation and adjustments in 2026-2031 to smooth-out growth among payer types to match aggregate spending; some of this is anticipated due to the Inflation Reduction Act (IRA) policy impacts on Medicare (additional information is available on the CMS website: www.cms.gov/inflation-reduction-act-and-medicare.

- **Category of service models**: adjustments from 2028-2031 to keep the final real spend amount level and to match aggregate spending. The long-term care model, the outpatient model, and professional model, also had adjustments for some of the years prior to 2028.

Public Spending

Public spending includes government-sponsored health insurance programs—such as Medicare, Medical Assistance (Medicaid), MinnesotaCare—and spending for other programs—including 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.

Four types of public spending are included in the MDH projections: Medicare, Medical Assistance (Medicaid), MinnesotaCare, and other public spending (which includes COVID-19 pandemic funding). For more detailed information on the methodology used to create historical spending for each payer beyond what is documented herein, please review the MDH, Health Economics, Supplemental Information: Historical Health Care Spending Estimate Methodology (PDF) (https://www.health.state.mn/data/economics/docs/spendingestimate21.pdf).

Figure 2: Public Payers
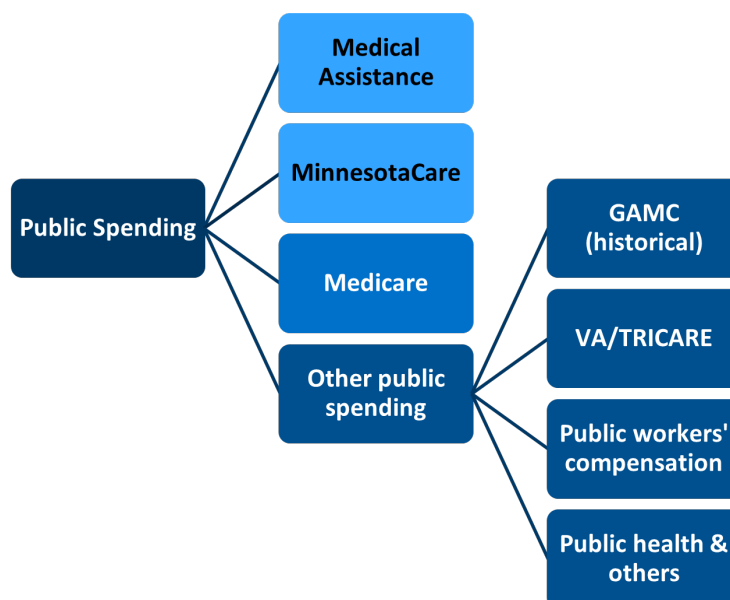
Public spending projection results for 2022 and 2023 were based on separate modeling, taking into account health care utilization and spending due to the COVID-19 pandemic and recent trends in enrollment and spending. An outside consultant estimated spending per enrollee, by sponsor of coverage (e.g., Medical Assistance, MinnesotaCare, Medicare), and by category of service using MDH estimates for enrollment and outside sources, including statutory financials, MDH estimates for Medical Assistance and MinnesotaCare, and CMS enrollment reports.

Medicare

Medicare spending includes 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)—again, the private portion of these payments is included in private spending.[6]

- For years 2022 and 2023: Medicare spending projections were based on separate modeling, as mentioned above.

- For years 2024 through 2031: the Medicare spending projection was calculated by applying the projected Medicare CMS NHE Health Consumption Expenditures' (HCE) Medicare per-enrollee growth rate adjusted by 0.5% to the historical Minnesota Medicare per-enrollee spending as of 2023, and then multiplying by the estimated Minnesota Medicare population. Applying this adjustment factor was prudent given that the average historical Minnesota Medicare growth rates were higher than the NHE national Medicare growth rates. The annual projection was then distributed amongst the categories of service by using the 2022-2023 category of service distributions, accounting for the Inflation Reduction Act.

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

## Figure 3: Conceptual Approach to Estimating Medicare Spending

Medical Assistance

Medical Assistance projections are derived from data obtained from the Minnesota Department of Human Services (DHS) – its semi-annual forecast is used, as well as customized data requests to understand spending by category type and main demographics. The historical and anticipated effects from the COVID-19 pandemic were included in this year's forecast, as were effects from the continuous enrollment provision that ended March 31, 2023 and the temporary increase in federal medical assistance percentage (FMAP) that began to be phased out as of April 1, 2023 and will end December 31, 2023.[7] DHS' forecast only projected spending through state fiscal year 2027.

- For years 2022 through 2026: MDH worked to project Medical Assistance spending by averaging state fiscal year spending, along with establishing estimates of managed care performance payments and gross adjustments.

- For years 2027 through 2031: Spending projections were calculated by taking the projected Medicaid CMS NHE HCE Medicaid per-enrollee growth rate (based on five years between 2026-2031) of 5.0%, against the estimated Minnesota Medical Assistance population. The annual projections are then distributed amongst the categories of service, by using the 2026 category of service distribution; it is assumed the distribution by category of service will not change in future years.

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[7] For additional information on the FMAP increase and continuous enrollment provisions, consider reading the National Academy for State Health Policy, Blog (Cardwell A): Q&A: What States Should Know about the Medicaid FMAP Increase. March 30, 2020; and the Kaiser Family Foundation (Tolbert J, Ammula M) 10 Things to Know About the Unwinding of the Medicaid Continuous Enrollment Provision. January 11, 2023.

Figure 4: Conceptual Approach to Estimating Medical Assistance Spending, 2027-2031
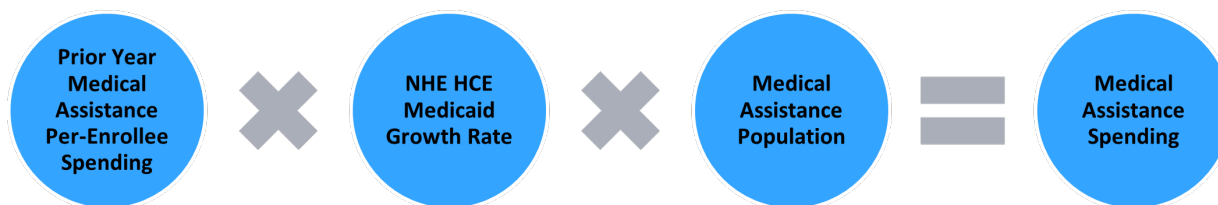

MinnesotaCare

MinnesotaCare projections are derived from data obtained from DHS – its semi-annual forecast is used. The historical and anticipated effects from the COVID-19 pandemic were included in this year's forecast, were effects from the continuous enrollment provision that ended March 31, 2023 and the temporary increase in federal medical assistance percentage (FMAP) that began to be phased out as of April 1, 2023 and will end December 31, 2023.[8] DHS' forecast only projected spending through state fiscal year 2027.

▪ For years 2022 through 2026: MDH worked to project MinnesotaCare spending by averaging state fiscal year spending, along with establishing estimates of managed care performance payments and gross adjustments.

▪ For years 2027 through 2031: Spending projections were calculated by taking the MDH MinnesotaCare five-year per-enrollee growth rate (between 2019-2025) of 2.9% with a 2.0 percentage point adjustment, against the estimated Minnesota MinnesotaCare population. Applying this adjustment factor was prudent given that the average historical Minnesota MinnesotaCare growth rates were similar to the NHE national Medicaid growth rates. The annual projections are then distributed amongst the categories of service, by using the 2026 category of service distribution; it is assumed the distribution by category of service will not change in future years.

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[8] For additional information on the FMAP increase and continuous enrollment provisions, consider reading the National Academy for State Health Policy, Blog (Cardwell A): Q&A: What States Should Know about the Medicaid FMAP Increase. March 30, 2020; and the Kaiser Family Foundation (Tolbert J, Ammula M) 10 Things to Know About the Unwinding of the Medicaid Continuous Enrollment Provision. January 11, 2023.

Figure 5: Conceptual Approach to Estimating Medical Assistance Spending, 2027-2031
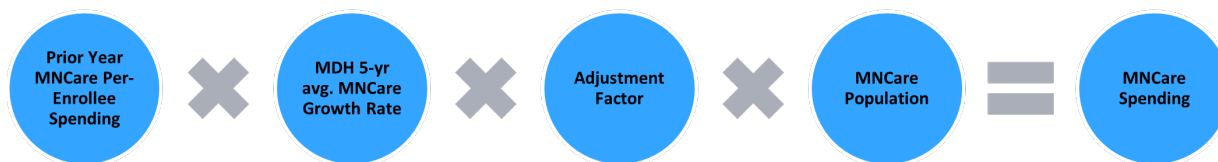
Other Public Spending

The projections for other public spending include spending by 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.[9]

Projections are independently calculated within broad payer categories for years 2022 through 2031: (1) Veterans Affairs and TRICARE (through the Department of Defense); (2) government workers' compensation; and (3) all other public spending [for public health programs, IHS, school-based health care spending, the state and federal correctional systems, and COVID-19 pandemic support spending].

Veterans Affairs and TRICARE:

- For years 2022 and 2023: spending projections were based on separate modeling, as previously mentioned.

- For years 2024 through 2031: the Veterans Affairs and TRICARE spending projection was calculated by taking the projected Veterans Affairs and TRICARE CMS NHE Health Consumption Expenditures' (HCE) growth rate adjusted by a factor of 1.35 to the historical Minnesota spending estimate as of 2021. Applying this adjustment factor was prudent given that the average historical Minnesota growth rates were higher than the NHE national growth rates (by a 1.35 ratio). The annual projection was then distributed amongst the categories of service by using the 2023 category of service distribution; it is assumed the distribution by category of service will not change in future years.

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[9] 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.

Figure 6: Conceptual Approach to Estimating Veterans Affairs and TRICARE Spending Projections, 2024 – 2031

Prior Year VA/TRICARE Spending ✕ NHE HCE VA & TRICARE Growth Rate ✕ Adjustment Factor = VA/TRICARE Spending

Government workers' compensation:

- For years 2022 and 2023: spending projections were based on separate modeling, as previously mentioned.

- For years 2024 through 2031, a ten-year average growth rate, from historical Minnesota government workers' compensation for years 2009 through 2019, was applied to project spending for each projected year from 2024 through 2031. The annual projection was then distributed amongst the categories of service by using the 2023 category of service distribution; it is assumed the distribution by category of service will not change in future years.

Figure 7: Conceptual Approach to Estimating Workers' Compensation Spending Projections, 2024 – 2031

Prior Year Workers' Compensation Spending ✕ 2010-2019 growth rate = Workers' Compensation Spending
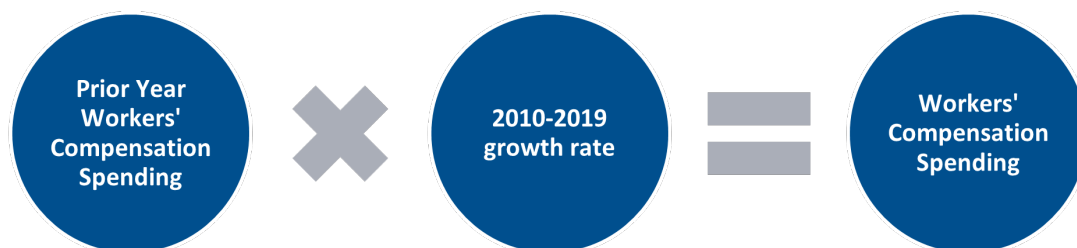
All other public spending:

- For years 2022 and 2023: spending projections were based on separate modeling, as previously mentioned.

- Non-COVID-19 pandemic spending for 2024 through 2031: a ten-year average growth rate, from historical Minnesota non-COVID-19 spending for years 2009 through 2019, was applied to project spending for each year from 2024 through 2031. The COVID-19 pandemic spending (mentioned below) was then added to create overall other public spending.

- COVID-19 pandemic spending for 2024 through 2026: MDH was not able to rely on the standard projection model to project future COVID-19 spending, as this spending is not assumed to include any part of a health insurance claim and does not follow basic model principals. The estimated change in federal Public Health Activities for each year (from 2023

through 2026) from the CMS NHE were applied to the prior year COVID-19 pandemic spending; federal spending gradually declined to $0 by 2026. No additional COVID-19 spending was factored from 2027 through 2031 as it was assumed other public spending returned to pre-COVID-19 spending growth levels.

Differences between MDH and CMS Estimation Approaches

As documented in the MDH, Health Economics Program, Supplemental Information: Historical Health Care Spending Estimate Methodology (PDF) (https://www.health.state.mn/data/economics/docs/spendingestimate21.pdf); Minnesota's historical estimates differ from those at the national level—Minnesota uses data from payers, while the NHE from CMS largely relies on data from providers—however, by design, both estimates use similar categories for payers and categories of service.[10]

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 projected spending by private and public payers; therefore, has kept this distinction in MDH's health care spending historical estimates and projections.

Unlike CMS, MDH was able to include both local and state-specific funding around COVID-19 pandemic support due to the availability of data; the level of reporting received by NHE limited national estimates to include only federal-based COVID-19 pandemic support funding. Conversely, MDH was not able to include some federal COVID-19 funding that could not be disaggregated to the state level—for example, funding for vaccine research, and funding for strategically moving and obtaining supplies.

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[10] 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

Limitations of Projection Model

Users of these health care spending projections should recognize that these involve estimates of future events and are subject to economic and statistical variations from expected values (for example, they do not predict future recessions or pandemics), nor do they account for future policy changes that may impact health care spending. The results are subject to considerable uncertainties due to the range of necessary assumptions about future trends.

Even with accurately predicted explanatory variables, the precision of projections can be affected by external factors—such as changes in federal policy or economic shocks like the Great Recession or the COVID-19 pandemic—that are not built into the historic relationship between explanatory variables and health care spending. Like limitations with national projections developed by CMS, MDH's approach aims to update model specifications to capture those trends when they have happened historically; however, given that the model is macroeconomic in nature and the shifts might not carry through into the specific explanatory variables, the adjustment is only a best approximation. In addition, the soundness of the historical data, both about how much of the "signal" of underlying trends they carry and the length of the timeline from which to extract relationships between spending and explanatory factors, can be an important limitation. Minnesota's historical data (1993 through 2021)—while strong because of its consistency and the method by which it is aggregated—still represents a relatively short time series. National historical data are based on a much longer time series (1960 through 2021).

Key Terms

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

- **Explanatory Variables** – these are variables that explain the variation in dependent variables (in this case, spending); also known as an independent variables.

- **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.

- **Macroeconomic Forecast** – this is the forecast to predict future macroeconomic variables such as economic growth (i.e., gross domestic product), income, and employment.

- **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.

- **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).

- **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.

- **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.

- **Projection Model** – model that uses historical information to estimate what will happen in the future. For purposes of this work, the model is based on relationships between explanatory variables (which include economic variables), historical and projected population data, and historical spending.

- **Projections** – information from the past used to estimate what will happen in the future. Projections tell us "if we keep doing things the way we have been, this is what may happen."

- **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.