



**The State of New Hampshire**  
**Insurance Department**  
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# **New Hampshire Insurance Department Annual Report on Health Care Spending 2024**

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# 1. Abstract

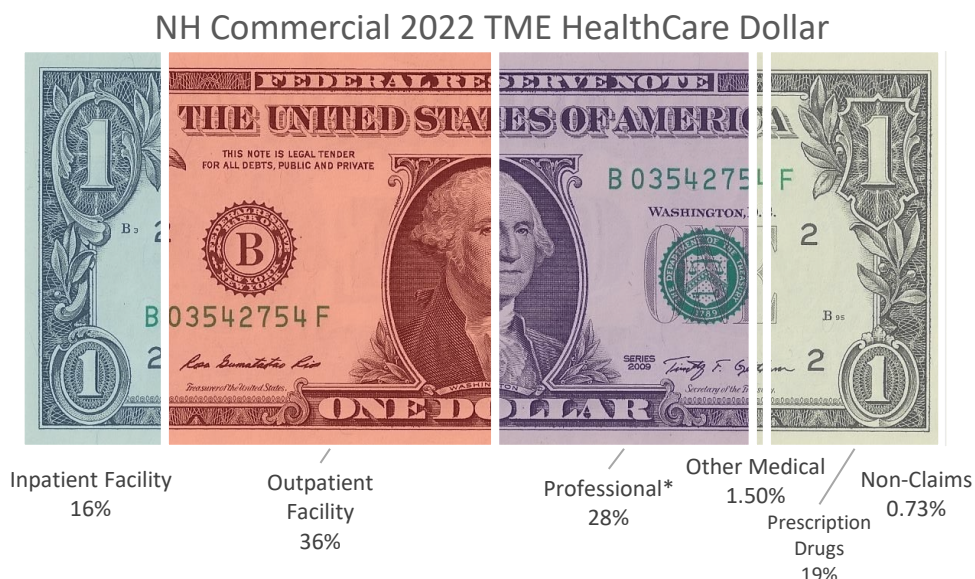
The New Hampshire Insurance Department (NHID) contracted with Oliver Wyman Actuarial Consulting to create New Hampshire's first Total Health Care Expenditure (THCE) Model for calendar years 2021 and 2022. The data that informs the THCE model are empirically derived cost measures using data directly from New Hampshire Insurers, the New Hampshire Medicaid Office, the Center for Medicare and Medicaid Services (CMS), and the Department of Veterans Affairs. This report aims to educate the reader on how the methodology for the model, data sources, and summary statistics.

The THCE model is useful for analyzing healthcare costs in New Hampshire and is a critical tool for evaluating cost drivers, forecasting future expenditures, and informing policy decisions aimed at improving efficiency and sustainability in healthcare spending.

We report the total healthcare expenditures of \$12.78 billion (\$9,213.59 NH citizen) in 2021. This number increased in 2022 to \$13.02 billion (\$9,331 per NH citizen).

## a. New Hampshire Healthcare Dollar

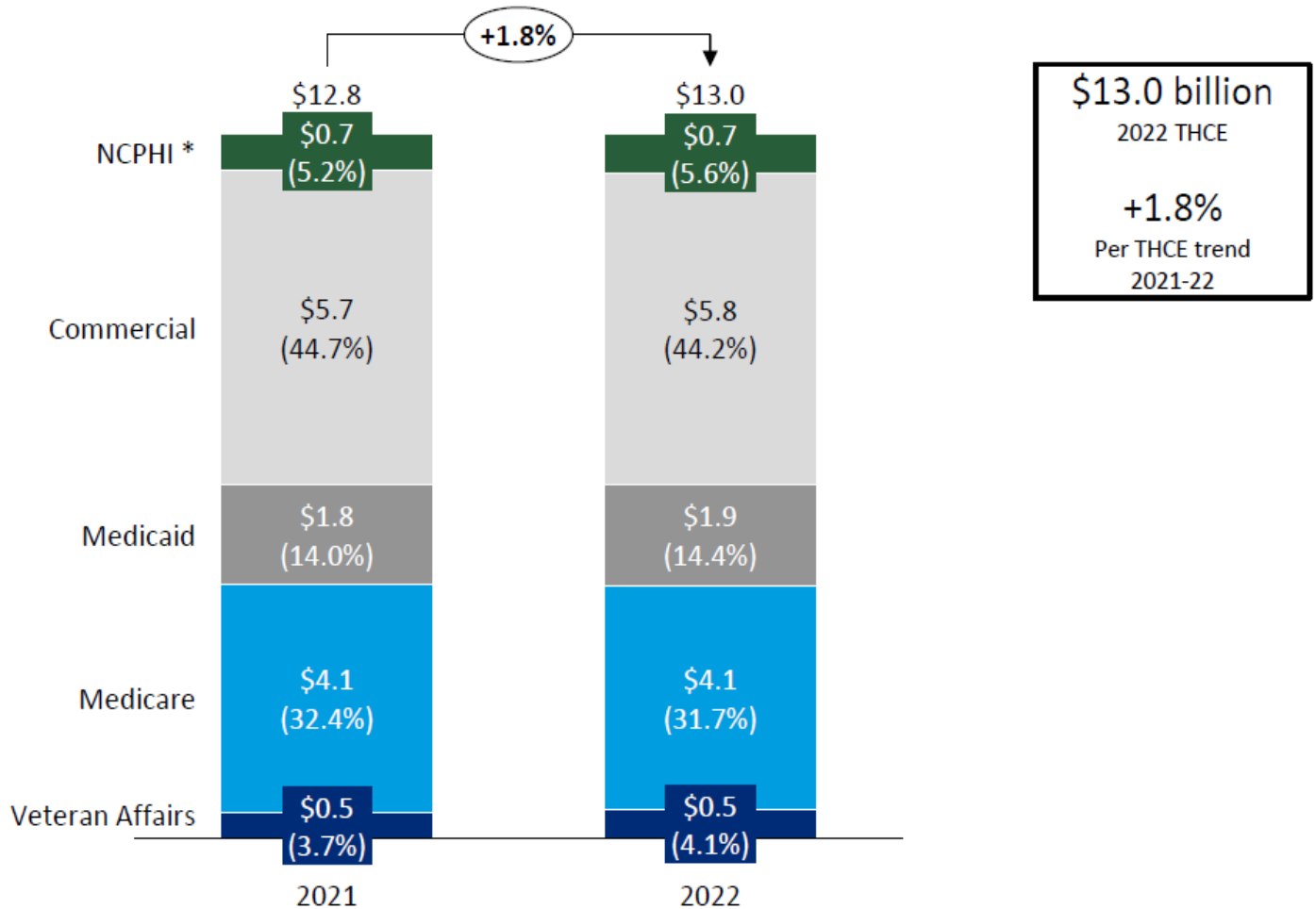
To optimize the interpretation of the THCE model, NHID created a New Hampshire Health Care Dollar. This graphic represents the share of total healthcare spending in the state by service category (see Appendix A for definitions of these categories).



The graphics shown below reflect **commercial** fully insured Individual, Small Group, Large Group, and Self-Funded data. The professional category includes physician and non-physician professionals. The prescription drug category excludes Rx drug charges administered during inpatient and outpatient encounters. The dollar does not include the Net Cost of Private Health Insurance (NCPHI).

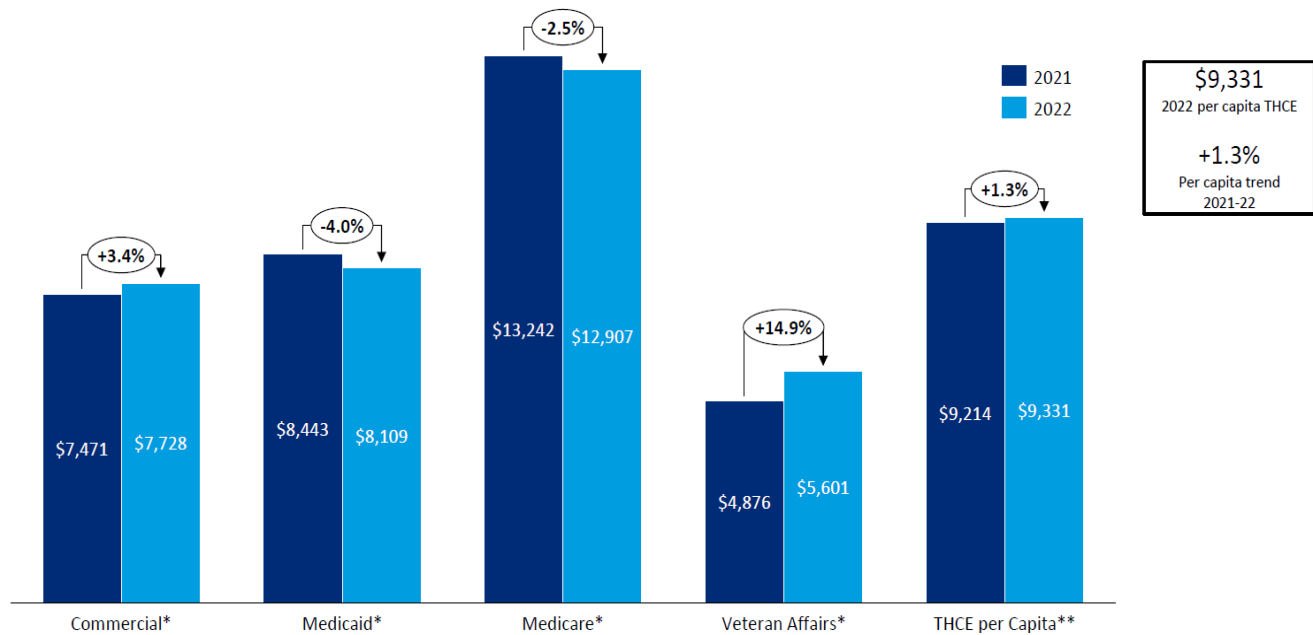
## 2. Data Outputs: THCE in New Hampshire (2021 and 2022)

### a. Statewide Total Health Care Expenditure Spending In New Hampshire 2021-2022 (Billions)



\* Net Cost of Private Health Insurance (NCPHI) is represented as an aggregate value of Commercial, Medicaid, and Medicare NCPHI by year.

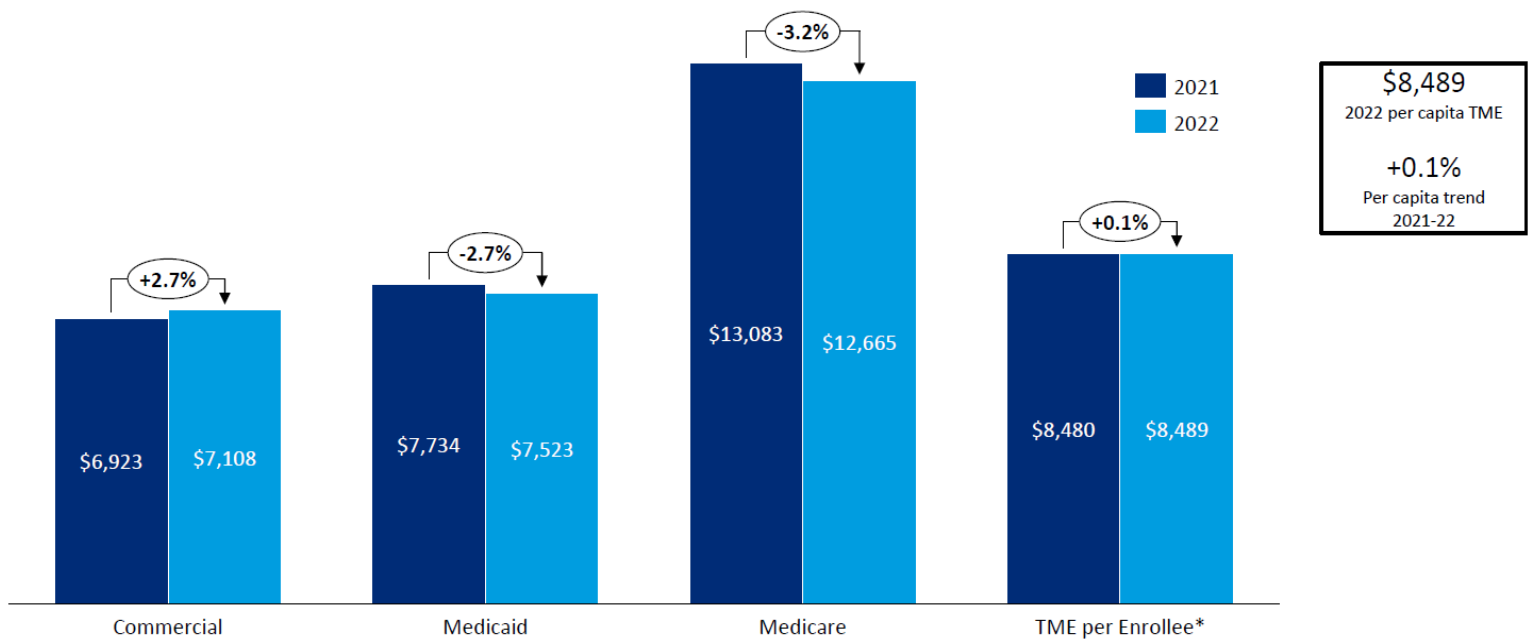
## b. Per Enrollee/Capita Total Health Care Expenditure in New Hampshire 2021-2022



\* Metrics are based on estimated resident-based enrollment in New Hampshire in Commercial, Medicaid, Medicare, and Veteran Affairs markets.

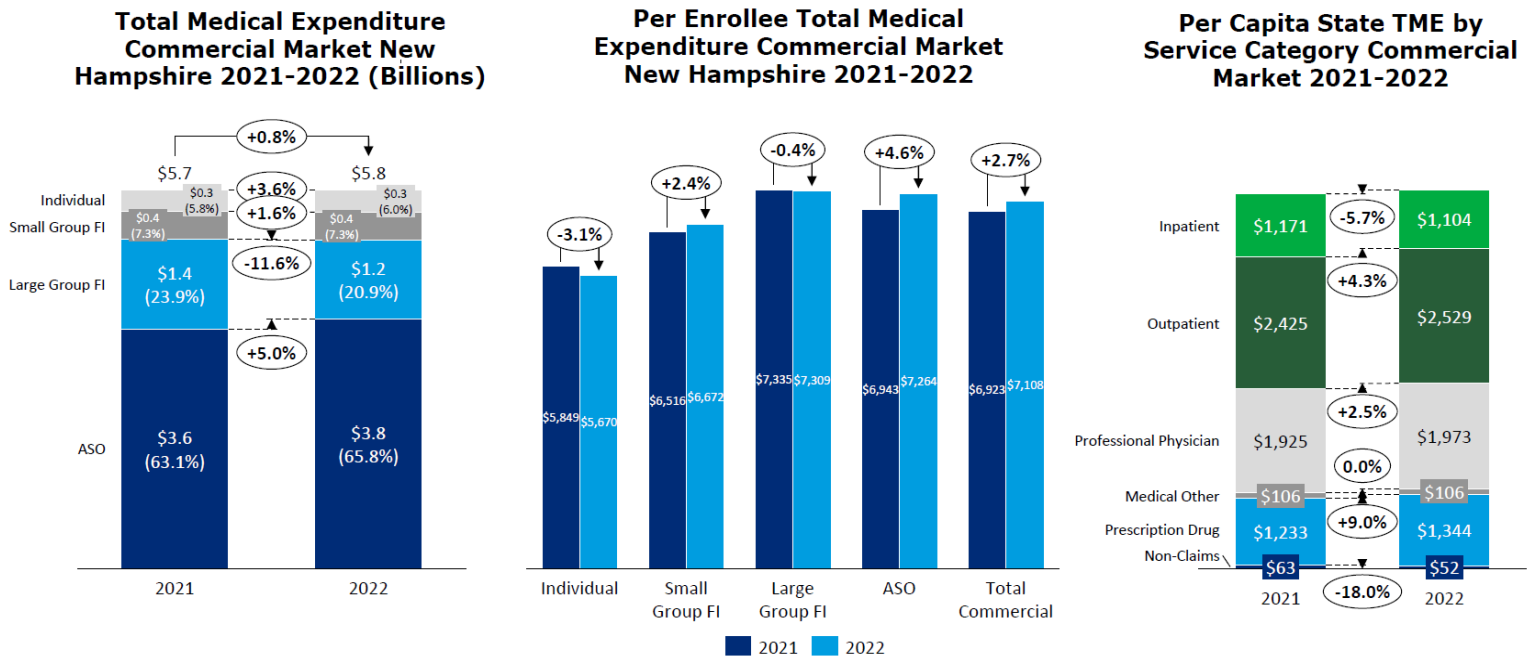
\*\* THCE per Capita is based on estimated population/capita in New Hampshire

## c. Per Enrollee Total Medical Expenditure in New Hampshire 2021-2022

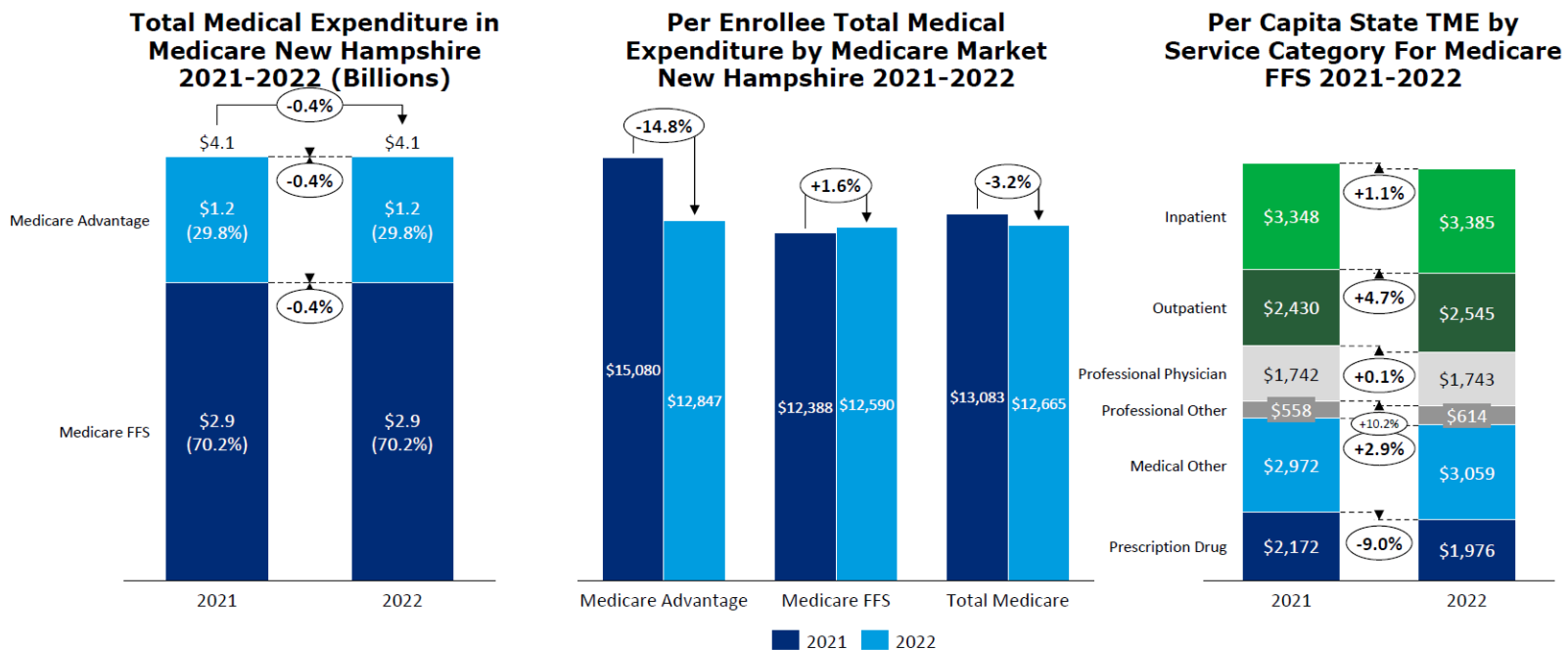


\* TME per Enrollee is based on estimated resident-based enrollment in the Commercial, Medicaid, and Medicare markets.

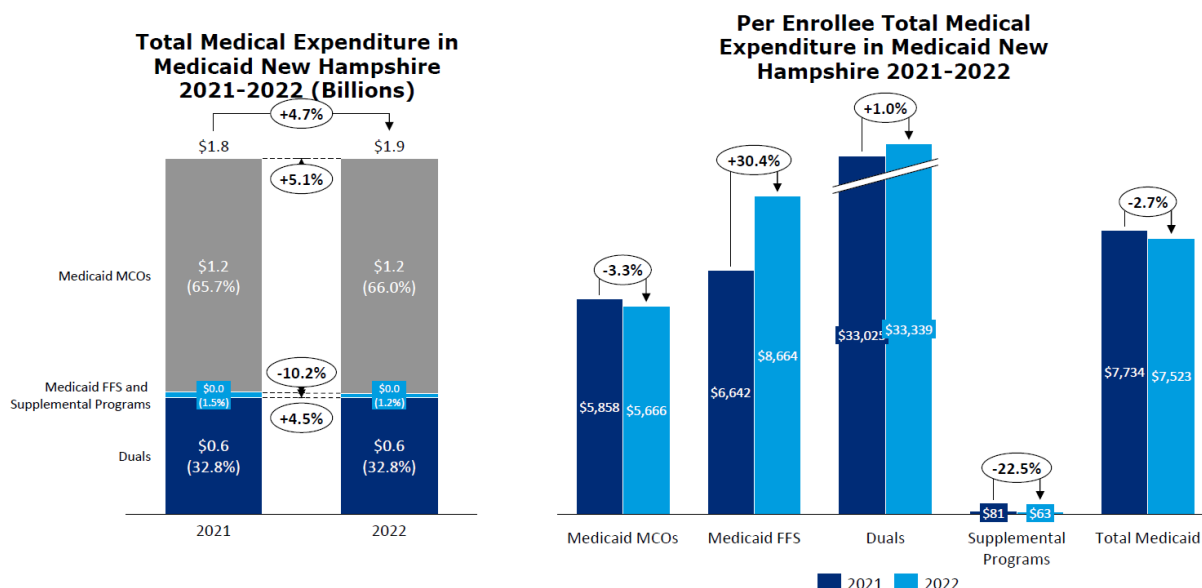
## d. Commercial Total Medical Expenditures in New Hampshire 2021-2022



## e. Medicare Total Medical Expenditures in New Hampshire 2021-2022



## f. Medicaid Total Medical Expenditures in New Hampshire 2021-2022



## 3. Methodology

### a. Introduction

THCE is a measure of total health care spending in the state on both on a total dollar basis and per capita basis. THCE is a measure of health care expenditures for New Hampshire residents from private and public sources including all medical and pharmacy expenses and all non-claims related payments to providers, patient cost-sharing amounts (e.g., spending for deductible, copayment, and coinsurance), and the cost of administering private health insurance accrued in a given period (e.g., calendar year). The THCE model is comprised of Total Medical Expenditures (TME), and Net Cost of Private Health Insurance (NCPHI). The TME is the portion of THCE that represents spending on an allowed basis for all medical and pharmacy expenses and all non-claims related payments to providers (including all patient cost-sharing amounts) This is typically expressed on a per member per month basis. The NCPHI represents the cost of administering private health insurance includes administrative costs, commissions, taxes and fees, and contribution to surplus/profits of private health insurance (e.g., Commercial, Medicare Advantage, Medicare Advantage PDP and Medicaid MCOs). It is generally calculated as the difference in revenue collected by health plans and their incurred claims. The THCE is the sum of the TME and NCPHI. THCE and TME can be summarized in formula format as follows:

$$\text{NCPHI} = \text{NCPHI}_{\text{Commercial}} + \text{NCPHI}_{\text{Medicare Adv.}} + \text{NCPHI}_{\text{Medicaid MCO}}$$

$$\text{TME} = \text{TME}_{\text{Commercial}} + \text{TME}_{\text{Medicare FFS}} + \text{TME}_{\text{Medicare Adv.}} + \text{TME}_{\text{Medicaid MCO}} + \text{TME}_{\text{Medicaid FFS}} + \text{TME}_{\text{VA}}$$

$$\text{THCE} = \text{TME} + \text{NCPHI}$$

## **b. Data Sources**

Below are the data sources used in development of Enrollment, NCPHI, TME, and THCE.

### ***Enrollment***

Resident specific enrollment was not available for all segments. Enrollment for Individual and Small Group Fully Insured is sourced from the 2023 NHID Annual Hearing (AH) Report. This is situs based enrollment but in the Individual Market, situs based and resident based enrollment should be equivalent. We have assumed that the Small Group situs based enrollment from the AH Report is a proxy for resident based enrollment.

The Large Group Fully Insured and ASO enrollment is estimated based on 2021 and 2022 US Census self-reported health coverage as primary Employer Sponsored Insurance (minus Small Group Fully Insured enrollment) in New Hampshire. The Medicare Fee-for-Service (FFS) and Medicare Advantage enrollment is sourced from CMS reports requested by NHID and is resident based.<sup>1</sup> The Medicaid Managed Care Organization (MCO) and FFS enrollment is based on the Member Months metric reported by New Hampshire Health and Human Services (NH HHS), which was requested on behalf of NHID and is divided by 12 to calculate the estimated annual enrolment. The 2021 and 2022 New Hampshire total population was sourced from the US Census as of July 1 for both years and utilized in the calculation of the THCE per capita metrics.<sup>2</sup>

### ***TME***

TME metrics on a PMPM basis for Commercial markets (Individual, Small Group Fully Insured, Large Group Fully Insured, ASO) and by service categories<sup>3</sup> are sourced from the 2023 NHID AH Report for 2021 and 2022. The PMPM metrics are utilized to calculate the TME spending based on the resident based enrolment estimates outlined in section III a.

Medicare FFS data is sourced from CMS reports for calendar years 2021 and 2022 (Total Expenditures). Prescription drug expenditures were sourced from CMS reports for both Medicare FFS and Medicare Advantage. The Medicare Advantage TME (excluding prescription drugs) is sourced from the 2021 and 2022 Supplemental Healthcare Exhibit (SHCE) for issuers in New Hampshire as reported for Medicare Advantage and Prescription Drug Plans line of business and provided by NHID.

Medicaid MCO and FFS TME data is sourced from a report provided by NH HHS.<sup>4</sup>

Veteran Affairs (VA) data, including enrollment and TME, is sourced from the VA website for Fiscal Years 2021 and 2022.<sup>5</sup> We utilize Medical Care expenditures for TME for New Hampshire state without any adjustments.

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<sup>1</sup> CMS reports under file name "NH EXPENDITURES AND ENROLLMENT 2024 04.xlsx"

<sup>2</sup> <https://www.census.gov>

<sup>3</sup> Please note that service category definitions utilized in the NHID AH Report do not match exactly to the TME service definitions outlined in Appendix A of this memorandum. For example, TME Professional Other category is not included in the NHID AH Report, therefore no Professional Other expenditure was estimated for Commercial market in the THCE model. We performed a comparison of all other definitions of service categories and concluded that all other service categories align well between the TME and AH Report.

<sup>4</sup> NH HHS file name "NHID Medicaid Data Request Data Received.xlsx" as provided by Milliman Consulting as NH HHS contractor

<sup>5</sup> <https://www.va.gov/vetdata/expenditures.asp>



### ***NCPHI***

For Commercial fully insured lines of business (Individual, Small Group Fully Insured, and Large Group Fully Insured) the NCPHI per member per month (PMPM) was calculated based on federal MLR Rebate reports submitted by carriers in New Hampshire, with data reported for calendar years 2021 and 2022. The NCPHI PMPMs for Commercial fully insured was calculated at the line of business level.

For Medicare Advantage and Medicaid, we calculated the NCPHI PMPM from the 2021 and 2022 Supplemental Healthcare Exhibit (SHCE) for carriers in New Hampshire, as reported in the Insurance Statutory Financials accessed via the S&P Capital IQ service website.<sup>6</sup> Additionally, we utilized the Administrative Services Only (ASO) fees information for the Uninsured line of business from the federal MLR Rebate reports for ASO business reported in New Hampshire for 2021 and 2022.

### ***THCE***

The THCE was derived from the estimated TME and NCPHI metrics.

### **c. Calculations**

Below is the description of the methodology and calculations of the NCPHI, TME, and THCE metrics.

### ***TME***

TME represents the portion of the THCE for medical and prescription drug costs of services rendered by New Hampshire residents in calendar years 2021 and 2022. TME represents the total amount paid to providers for health care services delivered to a payer's member population, expressed on a PMPM basis for New Hampshire residents. TME includes the amounts paid by the payer as well as member cost-sharing and all categories of covered medical expenses and all non-claims-related payments to providers, including provider performance payments. The TME is estimated by market (Commercial, Medicare, Medicaid) and detailed lines of business:

- Individual, Small Group Fully Insured, and Large Group Fully Insured, ASO for Commercial
- Medicare Advantage and Medicare FFS for Medicare
- Medicaid MCOs, Medicaid FFS, Duals, Supplemental Programs for Medicaid

### **Commercial TME**

The sourced data for Commercial TME is the NHID AH report which is situs-based. Situs-based PMPMs by market segment were used as a proxy for resident-based PMPMs. The TME was determined by multiplying the PMPM expenditure (situs-based) by the estimated resident-based enrollment for twelve months to obtain a total annual cost. For Individual, Small Group Fully Insured, and Large Group Fully

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<sup>6</sup> <https://www.capitaliq.spglobal.com/>

Insured we utilized the service category information from the AH report as proxy for the TME service categories (Inpatient, Outpatient, Professional Physician, Professional Other, Medical Other, Prescription Drug, and Non-Claims).<sup>7</sup> Service category detail was not available for ASO, so we used the Large Group Fully Insured service category distribution to allocate the ASO data by service category.

### **Medicare TME**

TME for Medicare FFS was summarized from the CMS reports without further edits except for Prescription Drug TME. CMS medical service categories have been mapped to TME service categories utilizing the Massachusetts Center for Health Information and Analysis (CHIA) mapping in Massachusetts.<sup>8</sup>

Prescription drug TME was sourced from CMS reports for both Medicare FFS and Medicare Advantage. The reported Total Expenditures were reduced by estimated prescription drug rebate percentages sourced from the 2021 and 2022 SHCE for carriers in New Hampshire, as reported for Medicare Advantage and Prescription Drug Plans.

TME (excluding Prescription Drugs) on PMPM basis for Medicare Advantage was sourced from the 2021 and 2022 SHCE for the Medicare Advantage line of business (excluding carriers with Prescription Drug Plans enrollment) in New Hampshire utilizing the Incurred Claims without Prescription Drug expenditures divided by 0.9 to account for estimated member cost-sharing on Part A and B services. The 0.9 factor was estimated based on Comprehensive Health Care Information System (CHIS) data for the Medicare Advantage line of business provided by the NHID. The TME Medical expenditures (excluding Prescription Drugs) were calculated utilizing the PMPM amount from SHCE multiplied by Medicare Advantage enrollment. Total TME for Medicare Advantage is calculated as the sum of the Medical and Prescription Drug expenditures.

### **Medicaid TME**

The TME for Medicaid MCO data was provided by NH HHS based on capitation payments for fiscal years 2021, 2022, and 2023 and calendar years 2021 and 2022. Data includes Medicaid payments for Duals and Non-Dual by eligibility population.<sup>9</sup> The TME for Medicaid MCO was calculated as the sum of capitation payments to Medicaid MCO for Projected Service Cost (excluding Administrative Cost, Profit Allowance, and Premium Tax), Carved Out Services FFS, and Waiver and Other Services multiplied by Member Months for calendar years 2021 and 2022. Prescription Drug costs as reported were reduced by Pharmacy Rebates collected directly by NH HHS. Pharmacy rebates payments received directly by Medicaid MCOs are used to reduce the capitation rate amounts. In addition,

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<sup>7</sup> See Appendix A for definition of TME Service Categories in New Hampshire's THCE Model

<sup>8</sup> See 2024-Annual-Report-THCE-TME-APM-Technical-Appendix.pdf: <https://www.chiamass.gov/assets/2024-annual-report/2024-Annual-Report-Technical-Appendices.zip>

<sup>9</sup> Medicaid MCO Dual is based on eligibility categories "Dual Eligibles", "Severe/Persistent Mental Illness - Dual", "Severe Mental Illness - Dual", and "Low Utilizer - Dual" as defined in the NH HHS source file.

capitation rates are net of member cost sharing and third-party liability. We have not made attempts to estimate the member cost sharing to be added to TME as we expect the share of member cost sharing to be minimal for Medicaid MCO enrollees.

Additionally, NH HHS provided TME for FFS enrollees (e.g., VA Benefit population not eligible for Medicaid MCO enrollment), which was summarized without further adjustments.

The Medicaid MCO and FFS enrollment is based on the Member Months metric reported by NH HHS and divided by 12 to estimate the annual enrollment.

### **TME Metrics in the Model**

In addition to market and lines of business calculations of TME, a breakdown of TME by service categories (Inpatient, Outpatient, Professional, Professional Other, Medical Other, Prescription Drug, and Non-Claims) was calculated for Commercial lines of business, Medicare FFS, Medicaid FFS, and Medicaid Supplemental Programs. The description of the Service Categories is included as Appendix A of this memorandum. Breakdown by service categories was not available for Medicare Advantage (except for Prescription Drug), Medicaid MCO, and Medicaid Duals. For VA, no separate TME in total and by service category was calculated as source data did not provide breakdown by service categories.

Calculations of TME in the model include:

- Annual TME per Enrollee (resident-based estimate) – total and by service category
- 2021 to 2022 annual change metrics (TME annual dollars, enrollment, and per Member per Year (PMPY))
- Driver of change by market and service category for TME annual dollars
- Distribution of total and service category TME by market

### **NCPHI**

The NCPHI captures the private administrative costs of health insurance and is broadly defined as the difference between health plan premiums and the costs of covered benefits incurred. NCPHI includes administrative expenses, broker commissions, taxes, fees and the contribution to surplus or profit portion of the THCE. The NCPHI is estimated by market (Commercial, Medicare, Medicaid) and detailed lines of business:

- Individual, Small Group Fully Insured, Large Group Fully Insured, and ASO for Commercial,
- Medicare Advantage, and
- Medicaid MCO.

NCPHI is not attributed to Medicare FFS, Medicaid FFS, and VA.

The total NCPHI was calculated by multiplying the NCPHI PMPM by the estimated resident-based enrollment for each line of business.

For commercial lines of business (Individual, Small Group Fully Insured, and Large Group Fully Insured), we estimated the NCPHI PMPM as the sum of non-benefit expenses, including general administrative costs, commissions, taxes and fees, and contribution to surplus/profit, as reported for each line of business, divided by Member Months from the MLR Rebate report for each calendar year. The calculation was performed on a line of business level.

For Medicare Advantage and Medicaid, we calculated the NCPHI PMPM from the 2021 and 2022 SHCE for carriers in New Hampshire, utilizing non-benefit expense categories (general administrative costs, commissions, taxes and fees, and contribution to surplus/profit) divided by Member Months.

Additionally, we utilized the ASO fees information for the Uninsured line of business from the federal MLR Rebate reports for business reported in New Hampshire. The calculation of the NCPHI PMPM for ASO business was performed on market segment level.

Calculations of the NCPHI in the model include:

- Annual NCPHI per Enrollee (resident-based estimate)
- 2021 to 2022 annual change metrics (NCPHI annual dollars, enrollment, and per Member per Year (PMPY))
- Driver of change by market for NCPHI annual dollars

Distribution of total NCPHI by market

### ***THCE***

The THCE represents the sum of NCPHI and TME. Similar to the TME, breakdowns by market (Commercial, Medicare, Medicaid, VA) and lines of business were calculated in the model. Within each market, THCE per resident enrollee for calendar years 2021 and 2022 was calculated. Additionally, we provided metrics for annual change, drivers of change, and THCE distribution by line of business. The total THCE (aggregate THCE of the Commercial, Medicaid, Medicare, and VA markets) was also provided. The total THCE utilizes the per Capita metric to calculate the annual THCE per Capita.<sup>10</sup>

#### **d. Limitations**

**Data Verification** – For our analysis, we relied on publicly available data and information provided by the client and insurance carriers named herein without independent audit. Though we have reviewed the data for reasonableness and consistency, we have not audited or otherwise verified this data. Our review of data may not always reveal imperfections. We have assumed that the data provided is both accurate and complete. The results of our analysis are dependent on this assumption. If this data or information is inaccurate or incomplete, our findings and conclusions might therefore be unreliable.

**Unanticipated Changes** – We based our conclusions on the estimation of the outcome of many contingent events. We developed our estimates from historical

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<sup>10</sup> THCE Per Capita utilizes total resident population in New Hampshire, including uninsured population.

experience, with adjustments for anticipated changes. Unless otherwise stated, our estimates make no provision for the emergence of new types of risks not sufficiently represented in the historical data on which we relied or which are not yet quantifiable.

**Internal / External Changes** – The sources of uncertainty affecting our estimates are numerous and include factors internal and external to the client named herein. Internal factors include items such as changes in provider reimbursement and claims adjudication practices. The most significant external influences include, but are not limited to, changes in the legal, social, or regulatory environment, and the potential for emerging diseases. Uncontrollable factors such as general economic conditions also contribute to the variability.

**Uncertainty Inherent in Projections** – While this analysis complies with applicable Actuarial Standards of Practice, users of this analysis should recognize that our projections involve estimates of future events and are subject to economic and statistical variations from expected values. We have not anticipated any extraordinary changes to the regulatory, legal, social, or economic environment or the emergence of new diseases or catastrophes that might affect our results. For these reasons, we provide no assurance that the emergence of actual experience will correspond to the projections in this analysis.

#### **e. Acknowledgment of Qualifications**

This report and THCE Model are based on actuarial analyses conducted by Shay Darga and Peter Kaczmarek. The analyses and report have been peer reviewed by Jenn Smagula. Jenn and Peter are members of the American Academy of Actuaries and Fellows of the Society of Actuaries. They meet the qualification standards for performing the actuarial analyses presented in this report.

## **APPENDIX A**

### **Definition of TME Service Categories in New Hampshire's THCE Model**

<b>Category</b>	<b>Definition</b>
Inpatient	<p>All reported claims amounts must reflect both payer-paid amounts and member cost sharing. Calendar year allocation based on date of service for New Hampshire residents only.</p> <p>All payments made by the payer to hospitals for inpatient services generated from claims. Includes all room and board and ancillary payments. Includes all hospital types. Includes payments for emergency room services when the member is admitted to the hospital, in accordance with the specific payer's payment rules. Does not include payments made for observation services. Does not include payments made for physician services provided during an inpatient stay that have been billed directly by a physician group practice or an individual physician. Does not include inpatient services at non-hospital facilities.</p>
Outpatient	<p>All reported claims amounts must reflect both payer-paid amounts and member cost sharing. Calendar year allocation based on date of service for New Hampshire residents only. All payments to hospitals for outpatient services generated from claims. Includes all hospital types and includes payments made for hospital licensed satellite clinics. Includes emergency room services not resulting in admittance. Includes observation services. Does not include payments made for physician services provided on an outpatient basis that have been billed directly by a physician group practice or an individual physician.</p>
Professional Physician	<p>All reported claims amounts must reflect both payer-paid amounts and member cost sharing. Calendar year allocation based on date of service for New Hampshire residents only. All payments to physicians or physician group practices</p> <p>generated from claims. Includes services provided by a doctor of medicine or osteopathy.</p>
Professional Other	<p>All reported claims amounts must reflect both payer-paid amounts and member cost sharing. Calendar year allocation based on date of service for New Hampshire residents only. All payments generated from claims to health care providers for services provided by a licensed practitioner other than a physician. This includes, but is not limited to, community health center services, freestanding ambulatory surgical center services, licensed</p>

	podiatrists, nurse practitioners, physician assistants, physical therapists, occupational therapists, speech therapists, psychologists, licensed clinical social workers, counselors, dietitians, dentists, and chiropractors.
Medical Other	All payments generated from claims to health care providers for medical services not otherwise included in other categories. Includes, but is not limited to durable medical equipment, freestanding diagnostic facility services, hearing aid services, optical services, long term-care health care providers such as skilled or custodial nursing facility services, intermediate care facilities for individuals with intellectual disability, home health care services, home and community based services, assisted living, personal care services (for example, services in support of activities of daily living), adult day care, respite care, hospice, and private duty/shift nursing services. Payments made to members for direct reimbursement of medical services may be reported in Medical Other if the payer is unable to classify the service. However, payments to members for non-medical services, such as fitness club reimbursements, are not allowable medical expenses and should not be reported in any category.
Prescription Drug	All reported claims amounts must reflect both payer-paid amounts and member cost sharing. Calendar year allocation based on date of service for New Hampshire residents only. All payments generated from claims to health care providers for prescription drugs, biological products, or vaccines as defined by the payer's prescription drug benefit net of any coverage gap discount (for payers with Medicare business only). This should not include any prescription drugs administered in an outpatient or inpatient hospital setting; any drugs administered in these settings should be allocated to their respective service categories. Reported amounts are net of any prescription Drug rebates.
Non-Claims	All payments made to providers such as incentive programs, capitation, risk settlements, care management and other payments made pursuant to the payer's contract with a provider that were not made on the basis of a claim for medical services and that cannot be properly classified elsewhere. This may include governmental payer shortfall payments, grants, or other surplus payments. Only payments made to providers are to be reported. Payments to government entities may not be included in any category. When reporting capitation arrangements, payers should use fee-for-service (FFS) equivalents rather than reporting the arrangements within the Non-Claims service categories, any balance can be included in the Non-Claims field.

