# METHODOLOGY PAPER
## TOTAL MEDICAL EXPENSES

**AUGUST 2015**

# INTRODUCTION

Total Medical Expenses (TME) measures the total medical spending for a member population based on allowed claims (payer paid amount plus patient cost sharing) for all categories of medical expenses, as well as all non-claims related payments to providers. The Center for Health Information and Analysis (CHIA) is statutorily mandated to collect and report TME data from private and public health care payers operating in the Massachusetts health care market.[1] CHIA collects TME data to examine provider and payer efficiency by monitoring TME levels and trends in the Commonwealth.

This paper provides an overview of the data elements collected, and describes CHIA's methodology used in calculating both unadjusted and health status adjusted TME.

# DATA COLLECTION

### Timeline

TME data filed by payers each May includes preliminary data from the previous calendar year, as well as final data from the year that ended 16 months prior. Preliminary TME data includes paid claims available to the payers at the time of the submission; while final TME has at least 14 months of claims run out and finalized performance payment settlements. In order to report preliminary TME data that is complete and comparable to a previous year's TME data, payers apply completion factors, which include payer estimates for the cost of services that have been incurred but not reported (IBNR) by service category. For payers taking into account the quality and financial performance of providers, much of the measured quality scores and financial/risk performance are not available at the time of the preliminary TME submission deadline. In order to obtain more complete payment information, payers are required to include estimates for the final settlements in the preliminary data. As such, the final TME of a given year reported by some payers could differ from the preliminary TME that was submitted to CHIA a year earlier.

### Data Submitters

CHIA collects TME data from major commercial payers in the Massachusetts commercial health insurance market,[2] as well as commercial payers that offer Medicare Advantage plans, MassHealth Managed Care Organization (MCO) plans, and Commonwealth Care plans.[3] CHIA also collects TME data from MassHealth, Massachusetts' Medicaid program, for its Primary Care Clinician (PCC) Plan. Payers must report data for all Massachusetts residents based on zip code of residence as of the last day of the reported year (December 31), or the resident's last day of enrollment in the payer's plan.

### Data Elements

Payers submit two TME data files: one at the member zip code level and one at the managing physician group level. Payers include only information pertaining to members for which they are the primary payer, and exclude any paid claims for which they are the secondary or tertiary payer.

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1    CHIA is required by M.G.L. c. 12C to promulgate regulations for the uniform calculation and reporting by payers of health status adjusted TME and to publicly report that data. 957 CMR 2.00 governs the methodology and filing requirements for health care payers to calculate and report Health Status Adjusted Total Medical Expenses.

2    These payers account for approximately 99% of the Massachusetts commercial market based on CHIA's report on enrollment trends. For details, please see http://www.chiamass.gov/enrollment-in-health-insurance/.

3    A full list of payers required to submit TME data to CHIA can be found here: http://chiamass.gov/list-of-payers-required-to-report-data.

In the managing physician group file, for members whose insurance products require the selection of primary care physicians (PCPs) such as HMO-type products, payers allocate members based on the provider organizations that their PCPs are associated with. For members whose insurance products do not require the selection of PCPs, such as PPO-type products, if applicable based on the contract between payers and provider groups, payers would allocate members to appropriate provider organizations based on the payer's own member attribution/assignment logic. Currently, there are two levels of managing physician groups: parent physician groups and local practice groups. Parent physician groups are the provider groups with whom the payer contracts. These parent physician groups are sometimes comprised of several subsidiary local practice groups. TME data is also reported at this "local practice group" level if the group meets a membership threshold of 36,000 member months.[4] Going forward, payers will also report managing physician group data at the registered provider organization (RPO) level, once provider organizations complete the RPO registration with the Health Policy Commission.[5]

In both the managing physician group and member zip code files, member months and payment amounts are reported by insurance category and product type.[6] Aggregate member health status scores are also reported by zip code and managing physician group. Payment amounts are reported by the following service categories: hospital inpatient, hospital outpatient, professional-physician, professional-other, pharmacy, other, and non-claims payments. In the managing physician group file, non-claim payments are further reported by the following types: incentive programs, risk settlements, care management, and other. For details on TME data collection and data elements, please visit: http://chiamass.gov/information-for-data-submitters-payer-data-reporting/.

## METHODOLOGY

### Unadjusted TME

Unadjusted TME is calculated as the sum of expenses in all service categories (both medical claims and non-claims based) for a given membership population, divided by the total member months of that same population. This measure does not adjust for differences in the illness burden of member populations or benefit levels, but allows for broad comparison across payers.

### Health Status Adjusted TME

Health Status Adjusted (HSA) TME is calculated to examine the payer-specific TME trends for their member populations. Payers report a health status adjustment score (or risk score), a value that measures a member's illness burden and predicted resource use based on differences in member characteristics or other risk factors, aggregated to the zip code and physician group levels. Payers must disclose the health status adjustment tool, version number and calibration settings used to calculate risk scores. HSA TME is calculated as the sum of expenses in all service categories (both medical claims and non-claims based) for a given membership population, divided by the product of the population's member months and associated risk score. Because payers report the use of different health status adjustment tools and versions, HSA TME is generally not comparable across payers.

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[4]    Reporting thresholds are established in 957 CMR 2.00. Available from: http://chiamass.gov/assets/docs/g/chia-regs/957-2-00-payer-data-emergency-adopted-reg.pdf.

[5]    The Health Policy Commission's website provides more information on RPO registration: http://www.mass.gov/anf/budget-taxes-and-procurement/oversight-agencies/health-policy-commission/registration-of-provider-organizations/.

[6]    Please refer to the TME Data Specification Manual for detailed information on collected data fields: http://chiamass.gov/data-specification-manuals.

### Normalized Health Status Adjusted TME

Normalized HSA (NHSA) TME is calculated to normalize payer-reported risk scores such that the statewide average risks score for a given payer's member population of an insurance category in a calendar year is equal to 1.0. NHSA TME is used for comparisons between managed and non-managed populations as well as between member populations of different managing physician groups within a payer's network. Risk scores are meaningful as a comparison with a "reference population," whose risk score is represented as 1.0. Because payers report the use of different health status adjustment tools and versions, the reference population for health status comparison is not based on the general Massachusetts population or each payer's own Massachusetts member population. To address this issue, HSA TME is adjusted by each payer's statewide average risk score (within a given insurance category) so that the network average of normalized risk scores equals 1.0 for each year. This results in risk scores, aggregated to the zip code or managing physician group level, to be relative to the payer's statewide average – rendering the payer's Massachusetts members as the reference population.

## CONCLUSION

TME data provides critical information for monitoring the performance of health care payers and providers in the Massachusetts health care market. It is one of the major data sources for the calculation of total spending amounts for populations covered by commercial health insurance and public insurance programs. TME data also enables CHIA to examine whether a payer or a provider organization's HSA TME growth exceeds the health care cost growth benchmark set forth by the Health Policy Commission. CHIA will regularly update this document to reflect any changes to TME data collection and methodology.

*For CHIA's latest TME report, please visit: http://chiamass.gov/total-medical-expenses-2/.*

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