CHARLES D. BAKER
Governor

KARYN E. POLITO
Lieutenant Governor

MARYLOU SUDDERS
Secretary

DANIEL TSAI
Assistant Secretary for
MassHealth

Tel: (617) 573-1600
Fax: (617) 573-1891
www.mass.gov/eohhs

March 6, 2017

The Honorable Karen E. Spilka
Senate Committee on Ways and Means
State House, Room 212
Boston, MA 02133

The Honorable Brian S. Dempsey
House Committee on Ways and Means
State House, Room 243
Boston, MA 02133

Dear Chairs Spilka and Dempsey,

Line item 4000-0300 in the budget for fiscal year 2017 requires the Executive Office of Health and Human Services to submit a report to the House and Senate Committees on Ways and Means outlining the agency's methodology for projecting caseload and utilization. To comply with this requirement, we describe below the methodology that has been employed for fiscal year 2017.

MassHealth enrollment has expanded dramatically since 2013. During the 2014 launch of the Affordable Care Act, the Commonwealth's Health Insurance Exchange ("HIX") - the eligibility system serving both MassHealth and the Massachusetts Health Connector - failed, resulting in our inability to determine eligibility for most applicants to MassHealth. Temporary MassHealth eligibility was granted to all applicants in the period following this failure and enrollment surged to over 2 million members in December 2014. Since this time, MassHealth has implemented a functioning HIX system and resumed annual redeterminations on all members. As of December 2016 the MassHealth caseload is approximately 1.9 million members, up from approximately 1.4 million in 2013.

Caseload Forecast Methodology

In early 2013, MassHealth began working with Alan Clayton-Matthews, a professor at Northeastern University, to review our existing caseload forecasting methodology and to advise whether a better methodology was possible. Professor Clayton-Matthews tested two methodologies against the existing methodology (see attachment A for technical details of these models and the testing process) by feeding data from June 2006 to July 2009 into the models, using the models to forecast the caseload from July 2009 to June 2011, and comparing these forecasts to actual enrollment over the same period. Professor Clayton-Matthews found that both models presented a lower error rate than the existing methodology and recommended a switch. Based on these findings, MassHealth then worked with Professor Clayton-Matthews to implement a new methodology, which is described below. Implementation was completed in mid-2013, and the new methodology has been in use ever since.

The caseload forecast begins with historical snapshots of enrollment data. An enrollment snapshot is a report of member eligibility at the time/date the report is run. The eligibility data in a snapshot is broken down by month and population group (there are 82 population groups which are broken down using program type, managed care

status, and demographic factors). Some examples of these 82 population groups are "PCC (Primary Care Clinician) Non-Disabled Children", "SCO (Senior Care Organization) Institutional", and "Standard Non-Disabled Children-Premium Assistance". A new enrollment snapshot is produced each month, adding the most recent month's data and updating previous months to account for any enrollment changes. As an example, the snapshot produced in December 2014 contains data through November 30, 2014. Similarly, the snapshot produced in January 2015 contains data through December 31, 2014.

We use the snapshots to capture the pattern of enrollment for each population group over time and calculate completion factors. Completion factors are multipliers that address the issue of variance in eligibility data based on the effects of redeterminations, retroactive eligibility determinations, application verification eligibility appeals, and member movement among aid categories. See Step 1 of Attachment C for technical details about the completion process.

Once completion factors have been applied, we can begin our statistical analysis using STATA, which is a data analysis and statistical software package. This program uses statistical calculations (see page 2 of Attachment A) to find the trend level and build a trend line off of the most recent month of enrollment data, extending into the next fiscal year, for each population group. Next, we make adjustments for impacts that cannot be captured by the historical trends alone (e.g., manual redetermination schedules following HIX failure) and confirm forecast is consistent with long-term trends reported by CHIA. Finally, we sum all population groups to project the overall MassHealth caseload.


Utilization and Price Methodology

For MassHealth's managed care capitation programs, MassHealth is mandated to develop actuarially sound capitation rates. MassHealth contracts with Mercer, a health care consulting firm, for this purpose. Mercer uses historical utilization and cost data from MassHealth and trends it forward into the current rate year. Mercer also makes various additional price and utilization adjustments (for example, an adjustment for the cost of new drug therapies coming to market). MassHealth then applies these rates to enrollment projections for each program to estimate total managed care spend for the fiscal year.

MassHealth contracts with the Center for Health Information and Analysis (CHIA) for its Fee-for-Service rate-setting activities. These rates are developed using historical utilization and cost data. MassHealth uses historical spending and enrollment data to calculate historical utilization patterns for each provider type and population group. MassHealth then projects future utilization by applying a best fit trend line using the method of least squares. Additional adjustments are then incorporated to capture the impacts of planned rate increases. This projected utilization is combined with our caseload forecast to project total FFS spend for the fiscal year.

I hope you find this report useful and informative. If you have any questions, please feel free to contact me at 617-573-1770, or contact Danielle McCourt at (617) 573-1640.

Sincerely,
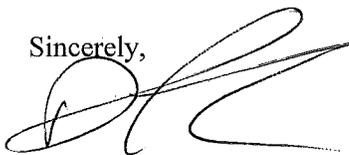
Daniel Tsai
Assistant Secretary, MassHealth

cc: Marylou Sudders, Secretary, Executive Office of Health and Human Services

ATTACHMENTS
ATTACHMENT A: Test of Three Methodologies for Forecasting MassHealth Caseloads
ATTACHMENT B: Mathematica Policy Research Final Report April 30, 2014
ATTACHMENT C: MassHealth Forecast Methodology