Presenters

- Tim Mahony
  State Health Policy Analyst, American Academy of Actuaries

- Rob Damler, FSA, MAAA
  Member, American Academy of Actuaries Medicaid Work Group

- Kate Tottle, FSA, MAAA
  Member, American Academy of Actuaries Medicaid Work Group

- Mike Nordstrom, ASA, MAAA
  Chair, American Academy of Actuaries Medicaid Work Group
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Presentation Agenda / Outline

- Academy Overview and Certification Requirements—Tim Mahony and Rob Damler
- Capitation Rate Development—Rob Damler and Kate Tottle
- Additional Financial Provisions—Mike Nordstrom
- Q & A
Academy Overview and Certification Requirements

Tim Mahony and Rob Damler
American Academy of Actuaries Code of Professional Conduct

Professional Integrity Precept 1:

- A public actuary shall act honestly, with integrity and competence, and in a manner to fulfill the profession’s responsibility to the public and to uphold the reputation of the actuarial profession.

The Public Actuary can be considered to have a unique role, different from the role in the private sector. One example of this is the importance of balancing concerns regarding underfunding or overfunding of public programs.
Medicaid Managed Care Final Rule; Effective August 13, 2002

*Federal Register, Friday, June 14, 2002, 42 CFR 438.6(c)(1)(i)*

Actuarially sound capitation rates means capitation rates that:

A. Have been developed in accordance with generally accepted actuarial principles and practices;

B. Are appropriate for the populations to be covered, and the services to be furnished under the contract; and

C. Have been certified, as meeting the requirements of this paragraph (c), by actuaries who meet the qualification standards established by the American Academy of Actuaries and follow the practice standards established by the Actuarial Standards Board.
American Academy of Actuaries Practice Note, August 2005*, “Actuarial Certification of Rates for Medicaid Managed Care Programs”
http://www.actuary.org/pdf/practnotes/health_medicaid_05.pdf

- Proposed Definition of Actuarial Soundness:

“Medicaid benefit plan premium rates are “actuarially sound” if, for business in the state for which the certification is being prepared and for the period covered by the certification, projected premiums, including expected reinsurance and governmental stop-loss cash flows, governmental risk adjustment cash flows, and investment income, provide for all reasonable, appropriate and attainable costs, including health benefits, health benefit settlement expenses, marketing and administrative expenses, any state-mandated assessments and taxes, and the cost of capital.”

*Practice notes may be updated from time to time and readers are encouraged to consult the Academy website periodically (www.actuary.org).
Capitation Rate Development
Rob Damler and Kate Tottle
Capitation Rate Development - Outline

- Overview
- Base Data and Adjustments
- Program and Policy Changes
- Medical Trend
- Managed Care Adjustments
- Administration, Profit, Risk & Contingency Adjustment
- Premium Tax / Fees
Capitation Rate Development Overview

- Capitation Rate methodology can be applied to the following rate certification processes:
  - Medical services / physical health
  - Behavioral health
  - Integrated care model with long-term care
  - HIO, PIHP or PAHP

- Capitation rate development methods:
  - Capitation rate rebasing
  - Capitation rate update or trend and policy/program adjustment update
Capitation Rate Development Overview

Capitation rate development considerations beyond Per Member Per Month (PMPM) capitation rate:

- Maternity and/or Newborn “kick” payment
- Risk Adjustment: Age / Gender only vs. adding Diagnosis and/or pharmacy based tools
- Reinsurance (Commercial or State-sponsored)
- Risk Pools
- Risk Corridors
- Performance Incentives and/or Withholds
Base Data and Adjustments

- Base Data Sources
  - Fee for Service (FFS) / PCCM Claims Data
  - MCO Encounter Data
  - MCO Medicaid-specific Financial Reports
- State Plan Services and “in lieu of” services
- ASOP No. 23, Data Quality. See Q&A #4, pages 4-6, of January 14, 2011 letter from the Academy Medicaid Work Group to CMS
  - Requires the actuary to review the appropriateness of the data sources
Base Data and Adjustments

Adjustments include:

- Missing Data (data outside of claims processing system)
- Incomplete Data (claims lag – unpaid claims liability, settlements)
- Population Carve-Outs (nursing home residents, for example)
- Funding/Service Carve-Outs (GME, DSH, MH/SA, LTC, for example)
- Retroactive Eligibility (FFS/PCCM base data)
- Program/Policy changes part way through the Base Data period (these can be Category of Service and/or Category of Aid specific)
- Data Smoothing to address anomalies/distortions where member months are too small, or unusually high or low claims exist. Smoothing should be budget-neutral; i.e., no dollars gained or lost within the process.
Pricing Assumptions

Kate Tottle
Capitation Rate Development - Outline

- Base Data and Adjustments
- Program and Policy Changes
- Medical Trend
- Managed Care Adjustments
- Administration, Profit, Risk & Contingency Adjustment
- Premium Tax/Fees
Program and Policy Changes

These may include changes required by State or Federal mandates:

- **State fee schedule adjustments**
  - Actuaries should build in their expectation of the MCOs’ ability to attain unit cost changes

- **Benefit changes**
  - Explicit calculation should be performed to determine the value of the benefit change
  - Are there credible data sources for new benefits?

- **Eligibility changes**
  - Consider how new members might have different health care needs than current population

- **Federal mandates**
  - Health care reform implications – impact on pharmacy rebates

- **State legislative actions**
  - State imposed budget cuts (see first three bullets above) or target medical loss ratios
  - What do actuaries do if statutory changes are counter to her/his pricing assumptions?
Program and Policy Changes

Program changes can have a huge impact on rate setting process.

Some additional considerations:

- The actuary should consider an independent review of assumptions relative to reliance upon legislative program change estimates.
- The actuary should consider practical realities of when the statutory changes can effectively be implemented by the MCOs.
- Need to avoid double counting impact on trend or other assumptions.
Claim Cost Trends

Calculation:
- Project from midpoint of Base Data Period to midpoint of Contract Period.
  Illustrative Example:
  - Base Period is 7/1/2009 through 6/30/2010, midpoint is 1/1/2010
  - Contract Period is 1/1/2012 through 12/31/2012, midpoint is 7/1/2012
  - Number of months to trend would be difference between 1/1/2010 and 7/1/2012, or 30 months

Source: Chart created by Kate Tottle
Claim Cost Trends

Calculation:

- Typically displayed as an annualized amount.
- Trend is compounded over time.
  - For example, a 4% annual trend for 2.5 years (30 months) from the Base Data period to the Contract period has the following impact on the capitation rates:

\[
(1+0.04)^{\frac{30}{12}} = 1.103019901 \text{ or a rough } +10.3\%
\]

- Trend can be applied to Utilization and Unit Cost separately or to the Per Member Per Month (PMPM) costs
  - If applied separately, the utilization and unit cost trends would be multiplicative.
  - For example, if you had a 2% trend for utilization and a 3% trend on unit cost, the combined trend would be: \((1 + 0.02) \times (1 + 0.03) = 1.0506\)
Trend Considerations

- Are the sources for the claim cost trend factors described?
- Are the sources appropriate predictors for Medicaid trend?
- Are the trends based on medical costs that may persist in the future (e.g., H1N1)?
- How have the actual and projected trends changed over time? Fairly consistent, or significant swings?
- Do trend rates include changes in state Medicaid fee schedules?
- How to avoid double-counting program changes, managed care adjustments and trend?
Managed Care Adjustments

Common Practices:

- Can target poor performing MCOs and remove their higher expense and member months from the base experience

- Can target specific adjustment to what a moderately or aggressively managed MCO could attain
  - For example, can target specific emergency room utilization reductions to what a well managed plan may be able to attain
  - The actuary does not always identify what services are being targeted for reductions; could be overall savings target
  - Debate over whether the target needs to be attainable for the MCOs doing business in that state during the rate period

- The rate setting model application of program/policy changes, claim cost trend, and managed care adjustments are often multiplicative in nature (independent variables).
Managed Care Considerations

- How to interpret attainable in definition of actuarial soundness?
- How should provider reimbursement differences be considered if using health plan cost data?
- Does the documentation of the managed care adjustment provide authoritative support (data and information driven) rather than being more general in nature, insufficient, or non-existent?

- How does the actuary avoid potential double-counting of previously attained managed care savings and normal trend?

Illustrative Example:

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Claims w/ MC Savings</th>
<th>Claims w/o MC Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2</td>
<td>$100</td>
<td>$101</td>
</tr>
<tr>
<td></td>
<td>$102</td>
<td>$104</td>
</tr>
</tbody>
</table>

Trend net of MC Savings 2.0%
Trend gross of MC Savings 3.0%

Source: Table created by Kate Tottle

For a detailed discussion, see Q&A #8b, pages 9-11, of January 14, 2011 letter from the Academy Medicaid Work Group to CMS.

http://www.actuary.org/pdf/health/American_Academy_of_Actuaries_Letter_on_Rate_Setting_Checklist_to_CMS.pdf
MCO Administration Load

- Like with medical assumptions, the administration load should be reasonable, appropriate and attainable.

- Can use a flat percentage across all Categories of Aid, or utilize a Fixed & Variable (F&V) approach.
  - F&V provides a higher overall Administration % for lower cost Categories of Aid, and a lower overall Administration % for higher cost Categories of Aid. Modeled to be projected to be equal to the flat percentage approach.

- Typically (but not always) displayed as a percentage of the total capitation rate (before any Premium Tax). For example, 9.0% Administration on a $100 PMPM capitation rate = $9.00 PMPM for Administration.
Administrative Considerations

- How balanced are the assumptions? If there is an increase in managed care efficiencies, the administrative load may be higher to implement new savings programs.

- If a portion of the administrative load is at risk based on contract considerations, are the expected administrative dollars appropriate for the risk?

- How should the actuary treat caps on administrative loads based on state legislative or regulatory actions?

- For a detailed discussion, see Q&A #13, pages 14-16, of January 14, 2011 letter from the Academy Medicaid Work Group to CMS.

http://www.actuary.org/pdf/health/American_Academy_of_Actuaries_Letter_on_Rate_Setting_Checklist_to_CMS.pdf
Profit/ Risk/ Contingency Load

- Typically (but not always) displayed as a percentage of the total capitation rate (before any Premium Tax). For example, 3.0% Underwriting Profit/Risk/Contingency on a $100 PMPM capitation rate = $3.00

- Investment Income generated by the MCO typically implicitly considered when developing this load

- Risk-Based Capital (RBC) requirements should be considered in setting profit/risk/contingency load

- For a detailed discussion, see Q&A #13, pages 14-16, of January 14, 2011 letter from the Academy Medicaid Work Group to CMS
Premium Tax Load

- State-mandated assessments and taxes (these are non-income related)

- The full amount of the tax should be built into the rates
  - For example, if there is a $100 premium rate, upon which a 2% tax is levied, the rates must be increased to $100 / (1 – 0.02) = $102.04
  - The tax is 2% of $102.04, which is $2.04, so the $100 premium rate is still paid in full to the MCO

- For changes to premium tax rates, the capitation should consider the effective date for the MCO actually owing premium tax
Additional Financial Provisions

Mike Nordstrom
Risk Adjustment

Not mandatory, but incrementally improves the matching of payment to risk. Many methodologies, based upon enrollees’ health status, diagnosis and/or pharmacy usage. If the State uses a statistical methodology to calculate health risk, they should use generally accepted groupers. Documentation should:

- Explain the risk assessment methodology chosen
- Indicate how payments will be adjusted to reflect the actuarially sound cost of the applicable population
- Demonstrate how the particular methodology used is cost-neutral
- Outline periodic monitoring and/or rebasing to ensure that the overall payment rates do not artificially increase due to providers finding more creative ways to classify individuals with more severe diagnoses (also called upcoding or diagnosis creep)
Risk Adjustment

Risk adjustment must be cost-neutral. It cannot add cost to the program; it can only distribute cost differently amongst contracting entities and delivery systems.

A general description of the steps followed should include:
- The system used
- Any calibration or adjustments made to the system specific to the State
- Any additional adjuster methodologies employed by the State
- Populations risk adjusted
- Any population or service carve-out
- How the payment system works
Risk Adjustment

The overview should also describe the methodology for addressing payment for members that do not have sufficient experience to assess their health risk (such as new members) and the point at which the risk adjustment methodology will be applied. Finally, the overview should describe how the State will determine/review the model for recalibrations/updates to ensure validity.

Points of Interest/Considerations include (but are not limited to):
- Personal Health Information (PHI) involved, so protections required
- Models include demographic (Category of Aid, Age, Gender) info
- Individual or Aggregate systems for risk factor determination
- Prospective or Concurrent (Retrospective) models
Additional Financial Provisions

- **Maternity Supplemental (Lump Sum) Payment**: What’s included besides the delivery event? Pre-natal care? Post-partum care? Expenses not included here should remain within the other applicable Category of Aid rate cells. Cesarean assumption key.

- **Reinsurance (Commercial or State-sponsored)**: If Commercial, does the price appear commensurate with the risk? Given the high risk to the reinsurer, there are typically significant non-claims related loads to the reinsurance rate.

- **Risk Pools**: A set-aside where MCOs contribute to a pool for coverage of higher cost individuals or higher cost services based upon projections, and draw (proportionately) from the pool based upon actual experience. Set-aside amount = total drawn amount in aggregate across all MCOs.
Additional Financial Provisions

- **Risk Corridors**: Always recommend discussing in advance with CMS any desire for flexibility on regulatory valuation limit. Otherwise there’s the “risk” to risk corridors. Can non-symmetrical risk corridors be proven to be actuarially sound?

- **Performance Incentives/Withholds**: All payments under the risk contract must be actuarially sound. 5% limitation in 42 CFR. Why 5% and not 6%?

- **TPL/COB**: Typically reflected in the MCO base data. Can become a rating consideration if MCO/state responsibilities shift.

- **Rate Ranges**: Consider the natural statistical variation associated with several components of the rate development, as well as a more-aggressive and less-aggressive assumption approach. Also affords states the ability to pay different rates to different MCOs based on negotiations, or for a wide variety of reasons.
More Intricate Topics

- **Retroactive Rate Changes**: For a detailed discussion, see Q&A #5, pages 6-7, of January 14, 2011 letter from the Academy Medicaid Work Group to CMS. [http://www.actuary.org/pdf/health/American_Academy_of_Actuaries_Letter_on_Rate_Setting_Checklist_to_CMS.pdf](http://www.actuary.org/pdf/health/American_Academy_of_Actuaries_Letter_on_Rate_Setting_Checklist_to_CMS.pdf)

- **Provider Directed Payments, Supplemental Payments, IGTs, etc.**: On these complex contractual arrangements the state and CMS need to be in agreement on terms and conditions.

- **Minimum Medical Loss Ratios (MLRs), Profit Caps/Sharing**: What are included/excluded in the numerator and denominator? Better when viewed over multiple years? The minimum MLR or Profit Caps limit MCO’s “upside,” while not limiting their “downside.”
Role of State Personnel

- Partnership with the actuary (of course, the actuary may be part of “state personnel”).
- Provide data and information responsive to actuarial requests
- Provide detailed knowledge of programs
- Identify program/policy changes
- Provide approval of work product
- Point of contact with MCOs throughout the process
- Submission of capitation rates to CMS
Q&A
Appendices
Presenters

Robert Damler, FSA, MAAA

- Principal and Consulting Actuary
- 24 years experience with Milliman, Inc. providing health care consulting services
- Member, American Academy of Actuaries Medicaid Work Group
- Contributing author to the American Academy of Actuaries Practice Note on Capitation Rate Setting

http://www.actuary.org/pdf/practnotes/health_medicaid_05.pdf
Mike Nordstrom, ASA, MAAA

- Chairperson, American Academy of Actuaries Medicaid Work Group
- Chairperson, Actuarial Standards Board (ASB) Task Force on Medicaid-specific Actuarial Standard of Practice (ASOP)
- 10.5 years with Mercer Government Human Services Consulting
- 17.5 years with Commercial/TRICARE health insurers encompassing varying lines of business
Kathleen A. Tottle, FSA, MAAA

- Senior Vice President and Chief Actuary, Amerigroup Corporation, Virginia Beach, VA
- 9 years of Medicaid experience; 17 years of health experience
- Active participation in Medicaid for 11 states
- Member, American Academy of Actuaries Medicaid Work Group
Building Blocks

- **Member Months** (Exposure in Evaluation Period) = 
  
  \[ \frac{(\text{Last} - \text{Initial}) \text{ Eligibility Date} \times 12 \text{ months}}{365 \text{ days}} \]

  So maximum Member Months (MM) per individual in a year = 12

- **Annual Utilization** per 1,000 Members =
  
  \[ \frac{\text{Total # of Units for a Service Category} \times 12 \times 1,000}{\text{Total # of Member Months}} \]

- **Unit Cost** =
  
  \[ \frac{\text{Total Cost for a Service Category}}{\text{Total # of Units for a Service Category}} \]
Building Blocks

- **Per Member Per Month (PMPM) Cost for a Service Category =**
  
  Total Cost for a Service Category / Total # of Member Months

- Also, **PMPM Cost =**

  \[
  \text{[Annual Utilization per 1,000 Members]} \times \text{Unit Cost} / (12 \times 1000)
  \]

Sometimes Base Data is broken down into Utilization and Unit Cost components, and sometimes it is just shown as a PMPM. Either approach is appropriate.
Building Blocks

- Rate Categories (Categories of Aid): Medicaid Eligibility Category or Group potentially further refined by Age, Gender, Geographic Region, Maternity Supplemental (Lump Sum) Payment, etc.

- Benefit Packages: Mandatory, Optional, CHIP/Expansion program, cost sharing differentials, etc.

- Service Categories (Categories of Service): Hospital Inpatient, Hospital Outpatient, Emergency Room, Primary Care Physician, Physician Specialist, Pharmacy, FQHC/RHC, Lab & X-ray, Transportation, Family Planning, Health Home, All Other, etc.
Base Data Sources: (Some) Advantages/Disadvantages of Each

- FFS/PCCM Claims Data

Advantages:
- If new managed care program, may be only available data
- Tremendous detail available
- Useful for program/policy change modeling
- State Plan Services Only, by definition

Disadvantages:
- If existing managed care program, may be old data
- Need to convert category of service costs to managed care environment via significant assumptions
- Selection concerns (adverse or positive) if voluntary program
Base Data Sources: (Some) Advantages/Disadvantages of Each

- MCO Encounter Data

Advantages:
- Actual managed care experience
- Can break into utilization & unit cost components, as with FFS, PCCM
- Useful for program/policy change modeling, as with FFS, PCCM
- Used for quality measures analysis as well

Disadvantages:
- Missing encounters
- “Unencounterable” costs need to be considered
- Unit Cost data can be incomplete or inaccurate
- Sub capitation costs are often a challenge
Base Data Sources: (Some) Advantages/Disadvantages of Each

- MCO Medicaid-specific Financial Reports

Advantages:
- Actual managed care experience
- Captures all expenses, unlike MCO encounter data
- Verifiable/auditable

Disadvantages:
- Utilization/Unit Cost detail often unavailable
- MCO reporting differences
- Expensive for the state to verify/audit, so can have transparency concerns
- State Plan Services Only are often a challenge to segment
- Need to overcome “cost plus” rate setting concerns
For both Claims and Administration, requirement of Medicaid Services for Medicaid Eligibles

Which Base Data source is the best? Impossible to answer without knowledge of specific circumstances. Most states that have managed care programs in place for three or more years have migrated away from FFS/PCCM as the sole Base Data source.

Use combination of sources if readily available and appropriate. Compare each source for reasonableness.