



April 1, 2009

State of California – Medi-Cal Risk Adjusting Rates Overview

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County Average Rates

- Capitation rates (Two-Plan and GMC) have been developed at a health plan specific level for 07/08 and 08/09
 - Appropriate without risk-adjusters
- Another approach would be to develop rates at a County specific level
 - Already done for COHS
 - Would be done for GMC and Two-Plan for use with risk-adjusted rates
 - Risk-adjusted rates would require a starting point of County average rates

Overview

- County specific rates would be developed on a weighted average basis to maintain budget neutrality
- All health plan data/experience in a County could/would be considered in the rate development
- Options for how to utilize Risk Adjusted County average rates include:
 - Combination of health plan specific and county average rates such as:
90%/10%, 75%/25%, or 50%/50%, (for example)

What is Risk Adjustment?

- A process to estimate health care expenses based on the disease conditions attributed to the population
- Distributes capitation payments across plans based on the health risk of the members enrolled in each plan
- Captures adverse or positive selection without using experience rating by plan (health status, not cost based)
- Rate allocation, not rate setting

Why Risk Adjust?

- Addresses the real and imagined perceptions of fairness
 - “Cherry picking” low risk individuals
 - Attracting high risk individuals
- Better matches payment to risk
 - Pay for the risk of individuals enrolled
 - Help control payment escalation and encourage efficiency
 - If actual/like technology used by medical management staff, may promote plan profitability through managing care
 - Possible incentive for plans to enter and stay in Medicaid

States that Risk Adjust Payments

- States currently (or in the process of) using risk adjustment:
 - Pennsylvania
 - New Jersey
 - Wisconsin
 - Texas
 - Michigan
 - Ohio
 - Maryland
 - Tennessee
 - New York
 - Florida
 - Delaware
 - Oregon
 - Colorado
 - Minnesota
 - South Carolina
 - Washington
 - Utah
 - Arizona
 - Massachusetts
 - Medicare (Medicare Advantage)

How Risk Adjustment Works

- Uses historical diagnosis codes and/or National Drug Codes (NDC) available on individual's claims records as basis for risk assessment
- Certain conditions (AIDS, asthma, diabetes, etc.) and use of particular pharmaceuticals have strong link to future health care costs
- Statistical models correlate historical diagnoses/pharmaceutical utilization to likelihood of future health care cost
- Risk adjustment models in Medicaid usually contain standard (i.e., national) weights and state-specific weights
- Weights should match the managed care covered benefits of a specific State's program

How Risk Adjustment Works

- Individuals assigned an acuity factor or “risk score” using historical data
- Plans credited with risk score of each individual enrolled
- Collective risk scores of members generate plan revenues/capitation tied to health costs
- New members that are not in the historic time period require an assumption for assessing their risk score
- Individual scores are updated on a periodic basis
- Plan assignment methodology is determined and also updated periodically
- Usually implement a minimum enrollment requirement to score an individual (scoring criteria)

Who is Risk Adjusted?

- Models are generally calibrated for different Medicaid populations
 - SSI
 - TANF Children vs. Adult
- Potential California rating categories
 - Adult and Family (combined) \geq 18 Years
 - Children Family $<$ 18 Years
 - Aged and Disabled (Medi-Cal only)
- Excluded California categories
 - Aged and Disabled (dual eligible)
 - BCCTP
 - AIDS
 - OBRA
 - Long Term Care

Risk Adjusted Rates Illustration

Application of Plan Factors

	Plan 1	Plan 2	Plan 3	All plans
Before Risk Adjustment	\$1,000,000	\$1,000,000	\$1,000,000	\$3,000,000
Budget Neutral Case Mix	1.0680	0.9126	1.0194	1.0000
After Risk Adjustment	\$1,068,000	\$912,600	\$1,019,400	\$3,000,000

Risk Adjustment is a Data Intensive Process

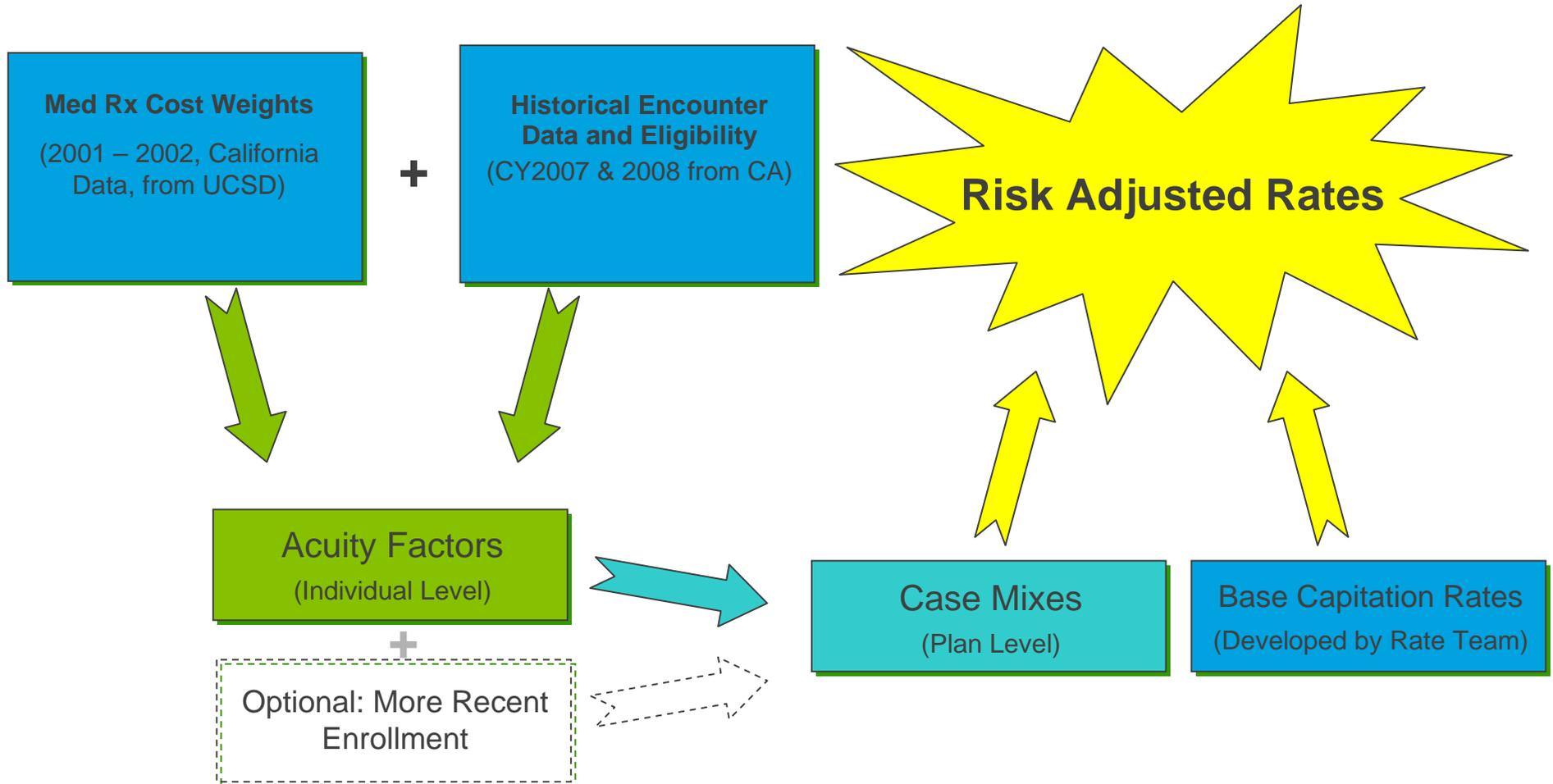
- Claims submitted by providers will be used to classify members into disease conditions
- Services to be used in the risk adjustment process will depend upon the selected risk adjustment model
 - Pharmacy-based using national drug codes
 - Facility/professional-based using diagnosis codes
 - Combination of data sources
- Data quality and completeness can significantly impact the risk scores and should be considered when selecting data to be used along with risk adjustment model

Risk Adjustment Models

- Risk adjustment models are differentiated by their data sources
 - Pharmacy-based
 - Facility/professional-based
 - Combination of data sources
- Society of Actuaries sponsored a research project that was published April 20, 2007
 - 11 risk adjustment models were evaluated for use with commercial populations (4 diagnosis based, 3 pharmacy based and 4 combination models)
 - Report did not attempt to identify which model is best, but was intended to provide useful quantitative information
 - MedicaidRx was very comparable, based on the analytical statistics, to the other models evaluated: “MedicaidRx performs surprisingly well... given that it was developed for a Medicaid population.”

The Risk Adjustment Process

Medicaid Rx Risk Assessment Overview



Medicaid Rx Model

UCSD Cost Weights

Category (Examples)	Standard Cost Weight	Adjusted CA Cost Weight
<u>Demographics</u>		
Age 15 to 25 M	0.200	0.141
Age 15 to 25 F	0.535	0.470
<u>Disease Categories</u>		
Anti-coagulants	1.542	2.026
Asthma/COPD	0.218	0.267
Burns	1.61	0.643
Cardiac	0.308	0.568
Depression/Anxiety	0.375	0.451
Psychotic Illness / Bipolar	1.110	0.000
HIV	2.765	0.000
Pain	0.134	0.213

- All Cost Weights are developed by UCSD
 - Recently updated in 2008 (based on national Medicaid data from 2001 – 2002)
 - 45 disease categories
 - *Prospective and Concurrent Models* are available
- The values in the **Standard Cost Weight** column are the standard cost weights developed for Medicaid Rx
 - Include comprehensive acute services
 - Uses NDCs and individuals' costs to estimate current or anticipated relative acuity by disease categories
 - Utilizes age/gender characteristics in the development of demographic factors
- The values in the **Adjusted CA Cost Weight** column are examples of the actual cost weights that may differ from the standard weights that reflect CA Medicaid data and Medi-Cal benefits
 - These cost weights are adjusted by UCSD
 - Modified to reflect Medi-Cal managed program parameters

Medicaid Rx Model

Sample Acuity Factor Development

Recipient Name: John Doe

- Age/Sex: 22 Year Old/Male
- Managed Care Provider: XYZ Health Plan

Component	Med Rx Category	Standard Cost Weight
Demographic	Age 15 to 25 M	0.141
Rx Disease Condition	Depression/Anxiety	0.451
	Cardiac	0.568
ACUITY FACTOR	<i>Sum of Cost Weights</i>	1.160

- Individual Acuity Factors were developed from one year of data, this is called the ***study period*** (i.e., base period)
 - CY2007 data with six months of run-out was used in the initial risk assessment
- Acuity Factors were developed for each ***scored enrollee***
 - Any individual that meets a minimum enrollment requirement of six months or more of Medicaid eligibility during the study period will receive a score

Medicaid Rx Model

Sample Case Mix Development

- Plan risk factor development:
 - The Plan gets the assigned enrollees' Acuity Factor as part of its Case Mix calculation
 - Each Plan's Case Mix is computed as the *average* of the Acuity Factors of all of their assigned enrollees
 - A Plan's Case Mix indicates the *relative* health risk of its enrollees to the other plans
 - Enrollment was taken at a point in time to assign members to a plan (December 31, 2007)

Managed Care Provider: XYZ Health Plan
Total Scored Enrollees: 6

Enrollee	Acuity Factor
John Doe	1.160
Jane Eyre	0.561
Tom Sawyer	0.929
Scarlett O'Hara	1.072
Atticus Finch	1.009
Juliet Capulet	0.814
XYZ Health Plan Case Mix	0.924

Medicaid Rx Model Budget Neutrality

Assume the base capitation rate (for Family) for a county is
\$200.00

County 1	XYZ Health Plan	Top Notch Health	A+ Health Care	Total Population
<u>Scored Enrollees</u>				
MMs	6	16	28	50
Case Mix	0.924	0.980	1.089	1.034
<u>Unscored Enrollees</u>				
MMs	14	4	7	25
Assumed Case Mix	0.924	0.980	1.089	0.979
<u>Planwide</u>				
MMs	20	20	35	75
Composite Case Mix	0.924	0.980	1.089	1.016
Budget Neutral Case Mix	0.910	0.965	1.072	1.000
Risk Adjusted Rate	\$ 181.90	\$ 192.93	\$ 214.38	\$ 200.00

- Unscored enrollees are incorporated into the Composite Case Mix as follows:
 - For each plan, the same **attraction pattern** is usually assumed for unscored enrollees as for scored enrollees. Therefore, the Case Mix for the unscored enrollees is the same as the Case Mix of the scored enrollees.
 - As a result, the Composite (planwide) Case Mix is the same as the scored enrollees Case Mix
 - Unscored assumptions may vary depending on the enrollment policies
- The Total Population average Case Mix is then normalized to 1.00
 - This ensures that the risk adjustment process is **Budget Neutral (BN)**
 - These normalized Case Mixes are called the **Budget Neutral Case Mixes**
- Plan-specific rates are then calculated as:

(BN Case Mix) * (Base Family Rate)

Discussion

- Moving to Risk Adjusted County average rates would provide incentive to maximize efficiencies
- As with any change in rate development/reimbursement approach there will likely be some *perceived* “winners” and “losers”

Questions and Comments

- What data validation has DHCS/Mercer completed to determine the encounter/claims data is sufficient to support RAR?
- What model validation studies has DHCS/Mercer completed on Medicaid Rx to determine its projective modeling capabilities are sufficiently robust? What analysis was done to ensure this matches payment to risk better? Concerns with the use of only pharmacy data for risk adjustment.
- Can the risk results/information be shared? Request for transparency related to risk adjustment.
- Why was Medicaid Rx chosen? Will the Medicaid Rx model weights be re-calibrated to the most recent Medi-Cal managed care data available?

Questions and Comments

- The presentation assumed stationarity of risk. What data validation was done to confirm that this is a reasonable assumption for each of the counties and delivery systems in Medi-Cal managed care? What other options have been considered for the factors applied to new entrants (those without 6 months of eligibility)?
- The example seems to imply that the percentage of individuals in short cohort, when compared to long cohort, would remain relatively constant between the study period and the rate period. The TANF population has significant turnover, have you studied what percentage of individuals would be scored in the study period vs. the rate period? How does this turnover vary by county and health plan?

Questions and Comments

- Can the State explain their meaning of "budget neutrality"? At what level would this be done? Would the State ignore changing risk If the incoming population (short cohort) has different risk/acuity/morbidity factors than the longer duration population? Would the rates always renormalize to 1.0?
- Will county specific rates be used only if the State is moving to risk adjusted rates?
- Will RAR be developed for all Medi-Cal populations? Would RAR be phased in or given partial credibility for the first year or two?
- Some contracted providers stated they need additional time to improve the necessary data for risk adjustment.

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