

# Critical Issues in Health Reform: Risk Adjustment

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# Agenda

- What is risk assessment?
- What is risk adjustment?
- How is risk adjustment used today?
- Issues for consideration in health care reform context



# What is Risk Assessment?



# What is risk assessment?

- Means of determining whether an individual/group is close to an average risk and, if not, quantifying the deviation from the average
- Individuals are assigned to a health risk category, based on objective standards
  - Demographic factors (e.g., age, gender)
  - Health-related factors (e.g., medical diagnosis, pharmacy usage)
- Each individual is assigned a numerical value or “risk score”
- Weighted average of individual risk scores can be used to compare relative risk of one population to another



# Risk score example

## Illustrative example

Risk Marker	Risk Weight
Male age 32	0.20
Diabetes with significant co-morbidities	1.30
Low cost dermatology	0.40
Asthma / COPD	0.90
Total	2.80

- This member has a ‘risk factor’ of 2.8
- An average member typically has a risk factor of 1.0
- This means that this member is expected to be 2.8 times as expensive as an average member



# What can risk assessment be used for?

- To adjust payments to health plans and to providers who accept capitated payments
- By health plans for underwriting, identifying high-cost patients for disease management, and provider efficiency measurement



# What is Risk Adjustment?



# What is risk adjustment?

## Illustrative example

Variations of Capitation Payments	Health Plan A	Health Plan B	Average
Capitation Payment - Uniform	\$ 300	\$ 300	\$ 300
Capitation Payment - Demographic Adj	\$ 305	\$ 295	\$ 300
Capitation Payment - Demographic Adj & Risk Adj	\$ 310	\$ 290	\$ 300

- Process of adjusting payments to health plans based on differences in enrollee risk characteristics
- Relies on risk assessment to determine the relative risks between individuals and groups
- For example, a health plan receives a risk adjustment factor of 1.05. This means their payment (premium) will be increased by 5%.
- **Important component of many health care reform proposals that include a provision to limit or prohibit premium variation by health status or other factors**





# What are the goals of risk adjustment?

- Compensate insurers adequately for the risks they assume
  - Reduce incentives for competing plans to avoid high-risk individuals
- Help reduce the effects of risk selection
  - Insurers can compete on the basis of efficiencies and quality of care rather than on the ability to select risk
- Promote consumer choice among plans based on plan design differences and administrative efficiencies instead of selection
- Ensure the financial soundness of the insurance system



# How is Risk Adjustment Used Today?



# How risk adjustment is used today

## ■ Medicare

- Used to adjust plan payments in the Medicare Advantage program and Part D prescription drug program
  - Plan payments are adjusted to reflect enrollee demographics and diagnoses based on historical medical claims
  - In the future, Part D risk adjustment factors will also incorporate data on prescription drug claims

## ■ Medicaid

- Used in managed care programs where Medicaid enrollees can or must enroll with a private insurance company
  - Risk adjustment methods vary by state, but typically incorporate claims-based risk factors



# How risk adjustment is used today

## ■ Massachusetts

- Risk adjustment not originally included, but now being implemented in Commonwealth Care (subsidized coverage for low-income)
  - Risk adjustment factors based on demographics and diagnoses

## ■ Employer-based plans

- Employers that offer multiple plan choices sometimes pay risk-adjusted premiums to plans, depending on average risk profile of employees enrolled in each plan



# Risk adjustment with multiple plan options

## Illustrative example

Description	Not Risk Adjusted		Risk Adjustment	Risk Adjusted	
	Total Cost	Member Portion (25%)		Total Cost	Member Portion (25%)
High Cost Plan	\$480.00	\$120.00	1.20	\$400.00	\$100.00
Low Cost Plan	\$288.00	\$72.00	0.80	\$360.00	\$90.00
Low Cost / High Cost	60%	60%		90%	90%



# Implementation Considerations



# Implementation considerations

- Risk adjustment timing
- Resistance to gaming
- Data options and availability
  - Phased-in implementation
- Other tools for mitigating risk issues
- Administrative costs
- Other considerations
- Is risk adjustment appropriate?



# Risk adjustment timing

<b>July 2007 to June 2008</b>	<b>July 08 to December 08</b>	<b>Calendar Year 2009</b>
Collect data and assign risk scores to members	Lag or runout period	Risk adjust payment to health plans*

\*Based on members enrolled calendar year 2008 or July 2009

- Medicare tracks individual members – captures switches and program changes from historic period to payment period.
- Some Medicaid programs use enrollment during historic period and assume it is representative of future period (i.e., calendar year 2009)





# Resistance to gaming

- Risk adjustment systems should be designed to minimize gaming by health plans or providers
- Risk adjustment provides incentives to completely code encounters with patients and prescribe necessary medications
  - Incentives can be so strong they encourage providers to up-code diagnoses, add inaccurate diagnoses, or prescribe unnecessary medications
- The regulatory authority should administer controls to detect/resolve inappropriate coding/prescribing



# Data options and availability

- Type and availability of data is a key determinant in choosing a risk adjustment model
  - Diagnoses-related data preferable; treatment data susceptible to gaming
  - Data unavailable for previously-uninsureds; data non-uniform across different previous-insurers
  - Incomplete, inaccurate, untimely data from health plans new to risk adjustment
- Claims information can be used to develop risk adjustment systems based on three categories of data:
  - Diagnosis data from inpatient claims
  - Diagnosis data from outpatient claims
  - Pharmacy claims data



# Data options and availability (cont.)

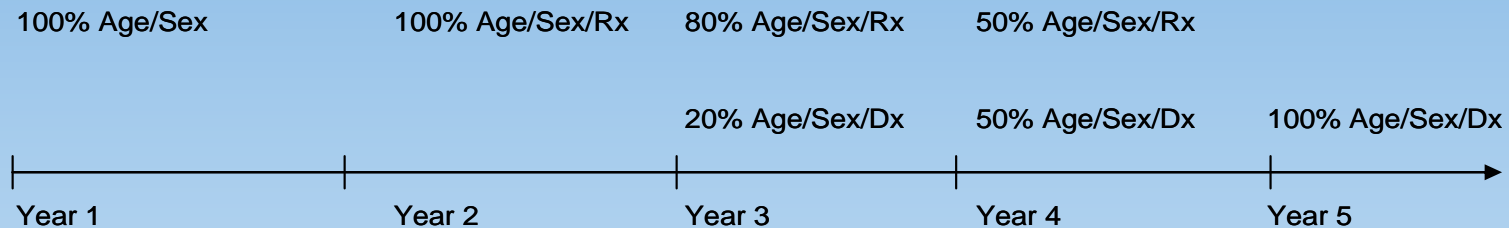
- Diagnosis data from inpatient claims
  - Very resistant to gaming
  - Diagnosis information can be incomplete; lengthy data collection process
  - Does not capture information for enrollees who only use outpatient services
- Diagnosis data from outpatient claims
  - More susceptible to gaming than inpatient diagnosis data
  - Diagnosis information can be incomplete and lengthy data collection process
  - Including diagnoses from outpatient data can provide more complete assessment of an individual's relative risk
- Pharmacy claims data
  - Access to fairly complete data quickly
  - More treatment-based than diagnosis-based so can be more susceptible to gaming
  - Doesn't distinguish between levels of severity among enrollees



# Phased-in implementation

- Complete data on health-based factors may not be available when a risk adjustment system is first implemented, so phased-in risk adjustment payment system may be appropriate
- Could begin with demographic-based factors and incorporate health-based factors over time

## Example of Phase-In of Risk Adjustment using Age/Sex, then Rx, then Diagnoses (Dx)



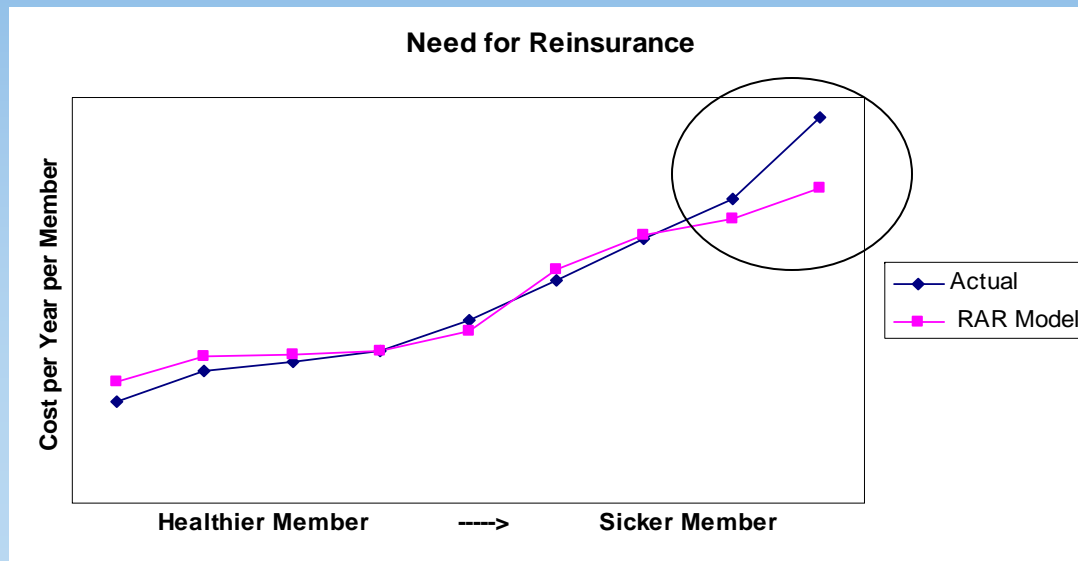
- In initial years, plans won't be fully compensated for risk they bear
  - Could layer on risk-sharing provisions to mitigate that risk (e.g., risk corridors, reinsurance)



# Other tools for mitigating risk issues

## ■ Reinsurance

- Risk assessment models work less well at predicting very high-health spending associated with unusual conditions and unexpected accidents/acute episodes
- Reinsurance (private- or public-sponsored) could protect health plans from unpredictable costs



# Other tools for mitigating risk issues

- Risk corridors
  - Could provide a government subsidy if plan losses exceed a certain percentage (could also be used to limit gains)
  - May be appropriate when not enough information is available to estimate premiums (e.g., not enough information on individuals who will become newly insured)

Health Plan Medical Experience	Health Plan Risk Share
\$295	25% of loss
\$285	50% of loss
\$270*	100% of gain/loss
\$255	50% of gain
\$245	25% of gain

\* \$270 is the medical portion of \$300 capitation rate

- Reinsurance and risk corridors don't necessarily reduce the incentives among plans to avoid enrolling high-risk individual



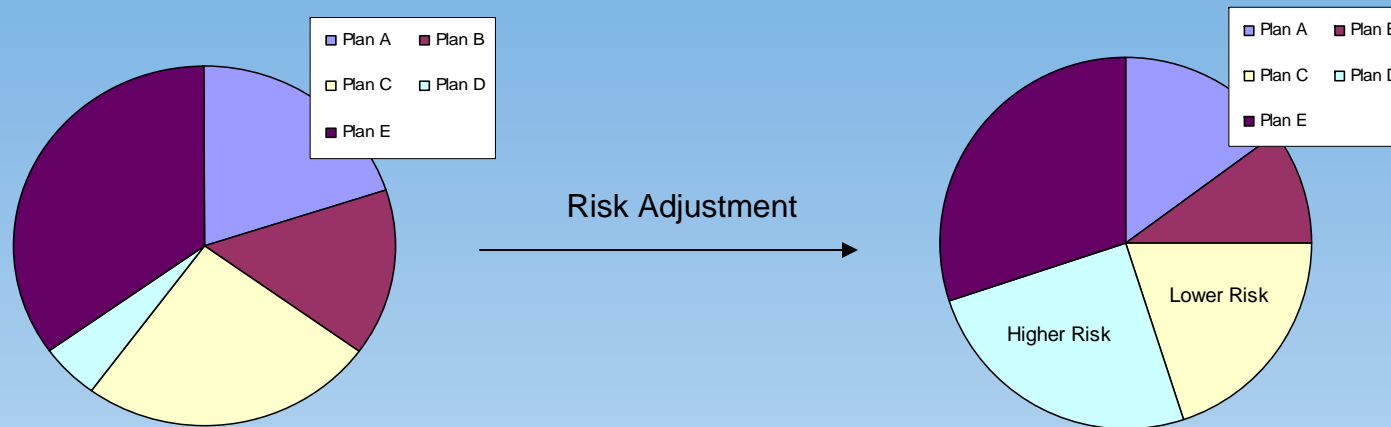
# Administrative costs

- Participants (payor and payees) in a risk adjustment system will incur various administrative costs
  - If a licensed risk assessment model is used, the private vendor will typically charge a flat fee and per-enrollee fee
  - Costs associated with collecting, checking/correcting, storing and processing the data used as inputs to the risk assessment model
- Administrative costs during the first year of implementation can be especially high
  - Will include start-up costs associated with data collection, checking/correcting the data, developing/modifying reporting systems, and testing the interaction of risk adjusted payment model and capitation rates
  - May include model calibration (customization) costs



# Other considerations

- Risk adjusting plan payments is typically budget neutral; just moving money among organizations



- Risk adjustment methodology needs to be aligned with the underlying premium rate variations, so it does not double count allowable rate adjustments
  - Risk trend used in premium rate calculations
  - Membership universe underlying premium rate development





# Is risk adjustment appropriate?

- Whether to incorporate risk adjustment depends on many factors:
  - Risk adjustment is most needed when there is wide variability in claims among enrollees in the same premium category. The wider the variability, the greater the incentive for plans to avoid high-risk enrollees. (And the greater risk of loss among plans that attract higher risks.)
  - The administrative costs of setting up and administering a risk adjustment system need to be reasonable compared to the amount of money that is shifted through risk-adjusting the plan payments
- Other risk-sharing mechanisms are available (e.g., risk corridors and reinsurance), but they have less ability to reduce the incentives among plans to avoid enrolling high-risk individuals



# Questions/Comments

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