Risk Adjustment Under the ACA
What you can be doing now

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Agenda
Overview of ACA risk adjustment
The model
Transfers
Operational issues
Risk score optimization
When Adverse Selection Isn’t
Risk adjustment data validation
Milliman Advanced Risk Adjusters (MARA)
What is Risk Adjustment?

In General

- 2007 SOA Study:
  “...the process of adjusting health plan payments, health care provider payments and individual or group premiums to reflect the health status of plan members…”

- A two-step process:
  1. Assess relative risk
  2. Make the payment or rate adjustment

What is Risk Adjustment?

Under the ACA

- The only permanent “R” out of the three
- Applies to all non-grandfathered (and non-“grandmothered”) individual and small group policies—on and off Exchanges—starting in 2014
- Policy goals:
  - Mitigate antiselection due to guaranteed issue and rate compression
  - Stabilize premiums during influx of former uninsured
  - Refocus competition away from risk selection
  - Zero sum transfers – no overall net cost to the government
What is Risk Adjustment?
More than a model—a methodology

- Components of a “methodology” are defined in regulations
  - 45 CFR Part 153
  - HHS Notice of Benefit and Payment Parameters for 2014
- A “methodology” includes:
  - The risk adjustment model;
  - The calculation of plan average actuarial risk;
  - The calculation of payments and charges;
  - A data collection approach; and
  - A schedule.

What is Risk Adjustment?
More than a model—a methodology

- States may administer; Federal default if they don’t
- Methodologies must be Federally certified
- For 2014, only Massachusetts had an alternative methodology certified
- For more (much more), head to https://www.regtap.info or http://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/index.html (look under “Premium Stabilization Programs”)
- This presentation will focus on the default Federal methodology, especially the HHS-HCC risk adjustment model at its core.
HHS-HCC Model
Fundamental Concepts

- Shares some “bones” with the risk adjustment models used in Medicare Advantage and Part D, but:
  - Concurrent, not prospective (current year diagnoses vs. prior year diagnoses)
  - Transfers money between issuers vs. adjusting capitations from the government
  - Different conditions
  - Different weights

HHS-HCC Model
Fundamental Concepts

- Scores based on age, gender, and filtered diagnosis data
  - Key diagnosis filtering inputs include procedure codes and bill type codes
  - Dx are grouped into Hierarchical Condition Categories (HCCs)
  - Three models by age: Infants (0-1), Children (2-20), Adults (21+)

  - Each model predicts net relative plan costs by metal level
Pre-ACA Models Predict Total Cost
(Same prediction regardless of member cost sharing)

HHS-HCC Models Predict Plan Cost
Different predictions by metal level, including catastrophic

The same member will get a different score depending on what benefit plan they are enrolled in. Special adjustments apply to those with cost sharing subsidies.
HHS-HCC Models Predict Plan Cost
Scores reflect leveraging of member cost sharing

*P=Platinum, G=Gold, S=Silver, B=Bronze, C=Catastrophic

Let’s try that again! All scores now relative to Platinum

*P=Platinum, G=Gold, S=Silver, B=Bronze, C=Catastrophic
Transfers happen within “risk pools”
In a state, in a market, metals vs. catastrophic

Small Group Metal Plans

- Issuer A
- Issuer B
- Issuer C

Individual

- All Metals
  - Issuer A
  - Issuer B
  - Issuer C

Catastrophic

- A
- B
- C

If small group and individual markets are combined in a state, risk adjustment pools are combined.

Transfer Formula
Calculated for each plan, rating area, market, and state

\[ T_i = \left[ \frac{PLRS_i \times IDF_i \times GCF_i}{\sum_i (s_i \times PLRS_i \times IDF_i \times GCF_i)} \right] \times \left[ \frac{AV_i \times ARF_i \times IDF_i \times GCF_i}{\sum_i (s_i \times AV_i \times ARF_i \times IDF_i \times GCF_i)} \right] \times P_s \]

- \( i \) is a plan in a rating area
- \( PLRS_i \) = plan’s liability risk score
- \( IDF_i \) = induced demand factor
- \( GCF_i \) = geographic cost factor
- Denominators are weighted averages based on each plan’s share of State enrollment (\( s_i \))

- \( AV_i \) = metal level actuarial value
- \( ARF_i \) = allowable rating factor
- \( P_s \) = State average premium
- Transfers are summed across an issuer’s plans and areas.
Transfer Formula

How to think about it

\[ T_i = \left[ \frac{\text{Premium Factor Including Risk}}{\sum (s_i * PLRS_i * IDF_i * GCF_i)} \right] - \left[ \frac{\text{Premium Factor Excluding Risk}}{\sum (s_i * AV_i * ARF_i * IDF_i * GCF_i)} \right] \times Ps \]

- "What I would like to charge" means "the rating factors a plan might use in the absence of ACA and state rating restrictions."
- "What I am allowed to charge" means the "the rating factors allowed under the ACA in this state and market."
- However, it does not take into account tobacco rating or transitional reinsurance.

Technical notes

- Subtleties exist regarding "billable" vs. "non-billable" member months
- Recent new guidance on how ARF works in tier rating states
- GCF is developed based on silver plan premiums.
- Since transfers are based on statewide premium, distortions can occur for plans with higher or lower non-claim expense levels than average.
Data Collection, Fees, & Schedule
The nuts & bolts

- Distributed data collection model ("Edge servers")
  - HHS to run software on enrollee and claim-level data residing in each issuer’s data environment
  - HHS to store aggregated issuer results
- User fee of 8¢ PMPM for 2014 and 2015, retrospective collection

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Risk Score Optimization
Keeping up with the pack

- In Medicare Advantage, optimizing risk scores has become an industry (even an arms race)
- ACA differs from MA: optimization changes transfers between carriers, not capitation revenue from government
- Goal: ensure all appropriate diagnoses are recorded and submitted, resulting in the highest supportable risk score
- Carriers that do not improve coding at a level comparable to competitors may be materially undercompensated
- A wide variety of approaches exist
Risk Score Optimization
Some Common Approaches

- Health risk assessments (HRAs)
- Chart reviews
- Longitudinal analysis (are last year’s diabetics coded this year?)
- Drug-based analysis (is everyone taking insulin coded with diabetes?)
- Prevalence studies vs. benchmarks (why do we have very few diabetics vs. the general population?)
- Other predictive modeling (where should chart reviews or HRAs be focused?)

When Adverse Selection Isn’t
Which members are likely to be profitable (or not) under ACA

- Risk adjustment eliminates incentive to attract and retain healthy individuals
- Newborn, adult female, and elderly members appear to generate higher margins than other demographics
- Members with more health conditions appear to generate higher margins than those with fewer conditions
When Adverse Selection Isn’t
Additional Considerations

- It’s All Relative
  - Market Share
  - Competition/Game Theory
  - Risk adjustment does not compensate for deviations in expected market risk

- Sustainability
  - Model Recalibration
  - Competitive Forces

- The “Age 0" Issue
  - Model uses age at end of benefit year
  - Guaranteed Renewability/Availability

- HHS Operational Issues
  - Will issues similar to Marketplace rollout impact Risk Adjustment?

ACA Risk Score Data Validation
Guidance to date – subject to change

- RADV for 2014 will start in early 2015
- However, need to start work now so risk scores can survive audit
- Basic guidance in current rules
- White paper and stakeholder meeting in June 2013*
- Minimal new guidance in 2015 Payment Notice

ACA Risk Score Data Validation
Guidance to date – subject to change

- Will be able to submit diagnoses based on chart reviews and health risk assessments as well as claim data
- 2016 error rates will be used to adjust 2017 transfers (which are paid in 2018)
- 2014 and 2015 error rates not directly used, but “monitored”
  - May be published / “wall of shame”

ACA Risk Score Data Validation
Guidance to date – subject to change

- Sample selection
  - ~300 enrollees per issuer per state in initial years
  - Up to 2/3 with HCCs (oversampling)
  - Selected by HHS
- Initial validation audit by independent auditors hired by issuer
  - Diagnoses substantiated by review of medical records
- Second validation audit by independent auditor hired by HHS
  - Subsample of the initial validation sample
- Issuers will be required to submit individually identifiable information to HHS on the subsample
ACA Risk Score Data Validation
Guidance to date – subject to change
- Error rate applied to final calculated risk score
  - Error rates at issuer level, then applied to each plan
  - Normalized vs. market average error
  - Still not clear exactly how this will work
- Appeals can be made in 2nd audit
- Payment adjustment to be applied prospectively

Thought Exercise – Tobacco Rating
- Pre ACA
  - No Federal Limit, State Limits Varied
  - Fairly Straight Forward (Price for Increased Claim Cost)
- Post ACA
  - Federal Maximum Rate-Up of 50% over Non-Tobacco Rate
    - Can vary by age
    - States may maintain more restrictive limits
  - Weak Enforcement
- Risk Adjustment Impact
  - Impact of Tobacco Use on Risk Scores Should Be Considered
  - What if Increased RA payments offset Increased Costs?
What can I do now?
Actuaries are in a unique position to help

- Be a liaison between business and IT
  - Explain the potential financial risks
  - Help IT understand whether results are reasonable
- Data quality / risk score optimization
- Plan modeling approaches for pricing, accruals
  - Explore new data sources that might help here
- Prepare for audits

MARA – Milliman Advanced Risk Adjusters

- “Mimics” the HHS-HCC model in comparison to risk scores developed by Milliman
- Complex Diagnosis Handling
  - Diagnosis mapping
  - Newborn/Infant/Child/Adult modeling
  - Metal Level and Cost-Share Reduction plan impacts
  - Data quality reporting and log files
- Platform Independent
- Standalone or Integrated Processing
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