Risk Adjustment Models and Uses

Southeastern Actuaries Conference Spring Meeting
Bonita Springs, FL
June 21, 2018

PRESENTED BY
Suzanna-Grace Sayre, FSA, MAAA, CERA – Consulting Actuary
Matt Sauter, ASA, MAAA – Consulting Actuary

Risk Adjustment Poll

How many of you have worked with risk adjustment models before?

Risk Adjustment Poll

Which risk adjustment model are you most familiar with?

A. Medicare
B. Medicaid
C. ACA (Commercial)
D. Other

Risk Adjustment Poll

Are you in involved in any revenue management activities that use Risk Adjustment?

Examples include risk-adjustment reporting, forecasting risk scores, etc.

Overview of Risk Adjustment

- Process by which health plans are reimbursed based on the health status of their members
  - Typically based on ICD-10 diagnoses coding
  - ACA models also use prescription information, relying on NDEs

- Implemented to pay plans more accurately for the predicted health costs of their members
  - Payments based on demographics as well as health diagnoses

- Payment models do not use diagnoses codes reported from all sources
  - Only encounters from acceptable physicians (professional) or acceptable facilities (inpatient/outpatient) are allowed

Medicare Risk Adjustment Model

- Prospective model
  - Diagnoses from the current year inform risk scores and payments in the following year
- Typically a 25 month claim submission window
  - Submission period has been extended for payment year 2017
- Plans submit diagnoses through two different methods
  - Risk Adjustment Processing System (RAPS)
  - Encounter Data System (EDS)
- Separate models for MA and Part D
  - MA model has different factors for low-income (Duals), institutional, ESRD, and new enrollees
  - Part D model has different factors for low income (LIS), institutional, and new enrollees
- Risk Adjustment Data Validation Audits (RADV)
  - Performed by CMS to validate the diagnoses submitted by health plans for payment

Medicaid Risk Adjustment Model

- Risk models and weights vary by state
- Concurrent, Prospective
- Models include: CDPS, CDPS+Rx, ACG, ERG
- Different models for Disabled, Adults, and Children
- Uses encounter data
- Risk adjustment is key part of revenue management

Commercial ACA Risk Adjustment Model

- Model Overview
  - Concurrent model
  - Demo, Dx and Rx in 2018 model and forward
- Model notes and changes
  - Rx began in 2018
    - Different completion patterns?
    - Shift in relative risk?
  - Commercial data (1/3) blended with large group (2/3) to create 2018 risk weights. All commercial by 2020.
  - RADV
  - 2019 Model

Other Risk Adjustment Models

- Adjusted Clinical Groups (ACGs)
  - Developed by Johns Hopkins
  - 4 states use the ACG system for their Medicaid program
- Diagnostic Cost Groups (DxCG)
  - Developed by researchers at Boston University
  - Used by many health plans and provider groups to settle reimbursement arrangements
- Other population risk models
  - Wakely Risk Assessment Model (WRA)
  - Milliman Advanced Risk Adjusters (MARA)

Other Uses for Risk Adjustment

- Pricing
- Member-level profitability analysis
- Financial reporting
- 1332 waiver activity
- High-risk member identification
- Provider risk-sharing arrangements
- Benefit uniformity flexibility

Questions?