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Overview of Health Risk Adjustment in the U.S.

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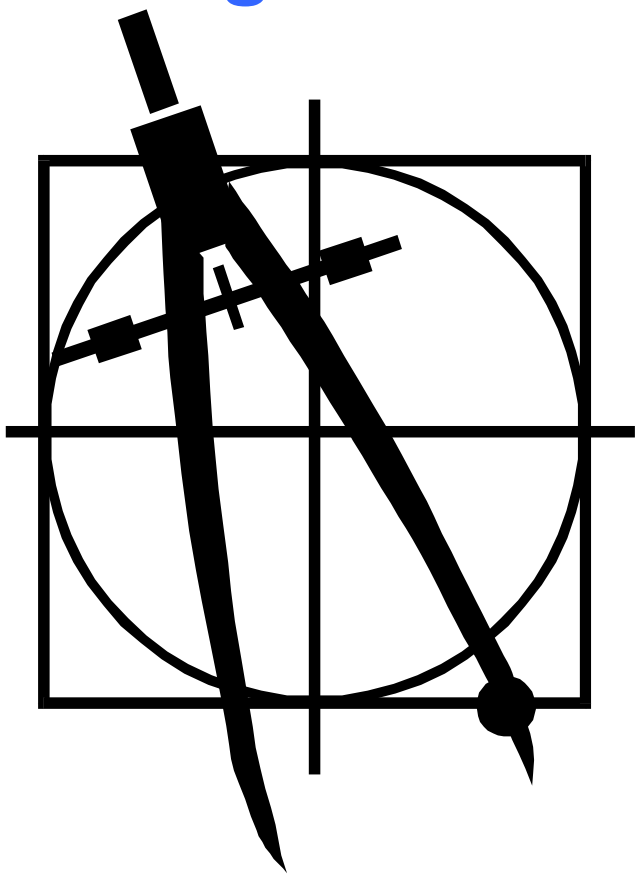
Health Risk Adjustment in the U.S.: An Evolving Tool



- **Overview of use for**
  - Medicare (public program for 65+)
  - Medicaid (public program for the poor and disabled)
  - Employer groups
  - Insurance companies
- **Key goal -- appropriate level of payment to health insurance contractors**
- **Emphasis on practical issues**

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U.S. Medicare - Appropriate Payment to Health Plans

- **Medicare contracts with health plans (HMOs) and pays prospective amounts using age, gender, status and (to some degree) health status**
  - 5.5 million seniors (total of 38 million) insured with HMOs
  - Today, Medicare uses hospital inpatient diagnostic data only to determine part of the payment
    - Principle InPatient Diagnostic Cost Groups (PIP-DCGs; Ash et al, Boston Univ.)
    - Individual R-squared is low (~.05)
    - Payment blend is only 10% with diagnostic data, 90% with age/gender/status
    - Criticized for using only one diagnosis and inpatient only

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Medicare in 2004 - Better Methods

- **Under consideration by the Medicare agency for 2004:**
  - "Selected Significant Diagnoses" methods
    - Rather than use all diagnoses, choose a list of "selected diagnoses"
      - » Considers diagnoses that are high cost and reasonably prevalent
      - » Limited to fewer condition groups (6, 25 or 100) due to practical concerns with data collection
      - » New issue of which diseases to include/exclude
    - Site neutral -- a diagnosis from any site would create additional payment
      - » Would minimize the incentive to hospitalize for greater payment
      - » Will ignore some of the extra data from other hospital admissions that won't be "scored"
    - R-squared in a range of .072 to .115, depending on number of conditions on the list

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Medicare in 2004 - Better Methods (continued)

- Will begin data collection on 7/1/02 for 1/1/04 implementation
- Alternative: "InPatient Plus Short List" data models
  - Uses better hospital inpatient model plus a short list of high cost/high predictive ambulatory diangoses (e.g., cardiac, diabetes w/complications)
  - R-squared is in the .09-.11 range
  - Much less data (e.g., 5-20 diagnostic groups vs. 100-200)

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Medicaid - Appropriate Payment for Poor/Disabled Beneficiaries

- **Medicaid contracts with Managed Care plans in many states**
  - Needs to adjust payment for highly skewed risk
  - Beneficiaries can have very high costs
- **Several methodologies**
  - Chronic Illness and Disability Payment System version 1.7 (CDPS) (Kronick et al, University of California, San Diego)
  - Adjusted Clinical Groups (Weiner et al, Johns Hopkins Univ.)
  - Other variations are being used

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Medicaid Risk Adjustment Issues

- **Data issues**
  - HMO contractors may not have complete data sets
    - State of Colorado needed a “data adjustment
    - Phase-in is common
- **Implementation mistakes**
  - State of Maryland applied a method calibrated on 12 months of data to 24 months of encounter information
    - Overpaid HMOs
- **Prospective vs. Retrospective payment**
  - Some conditions are not predictable -- high cost neonatal babies are frequently reimbursed on a retrospective basis

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Employer Pools and Risk Adjustment

- **Several purchasing pools use risk adjustment**
  - Small employer (<50 employees) pools sometimes use risk adjustment to pay vendors
    - California's Health Insurance Purchasing Coop (HIPC) risk adjusted a modest amount of total funds (around 1%) in first year; decreased in later years
  - Minneapolis large employers (Business Health Care Action Group) uses risk adjustment to "buy direct" from hospital/physician "care systems"
  - Washington State Employees pool uses risk adjustment to make appropriate payment to 20+ health plans across the state

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Insurer Use of Risk Adjusters

- **Potential insurer uses of risk adjustment methods**
  - Identification of member candidates for Disease Management
  - Underwriting
  - Payment to capitated physicians
  - Severity- and risk-adjusted profiling of providers
- **Use appears to be rising**
  - Issues include
    - Lack of staff familiarity with methods, process, limitations, etc.
    - Cost of tools
    - Cost of Information Technology work to implement

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Insurer Use of Risk Adjusters

- **Identifying Disease Management ("DM") candidates**
  - DM in the U.S. involves intensive monitoring and treatment of high-cost chronic individuals (e.g., those with cardiac conditions)
  - First step is to find the individuals -- through risk assessment
- **Underwriting**
  - Risk assessment methods offer an "automated" way of supplementing or replacing traditional underwriting of health risks
    - Use available data for re-underwriting existing groups
    - Potentially, using existing databases, for prospect underwriting
  - Used mainly in small group insurance business (employers with fewer than 50 employees)

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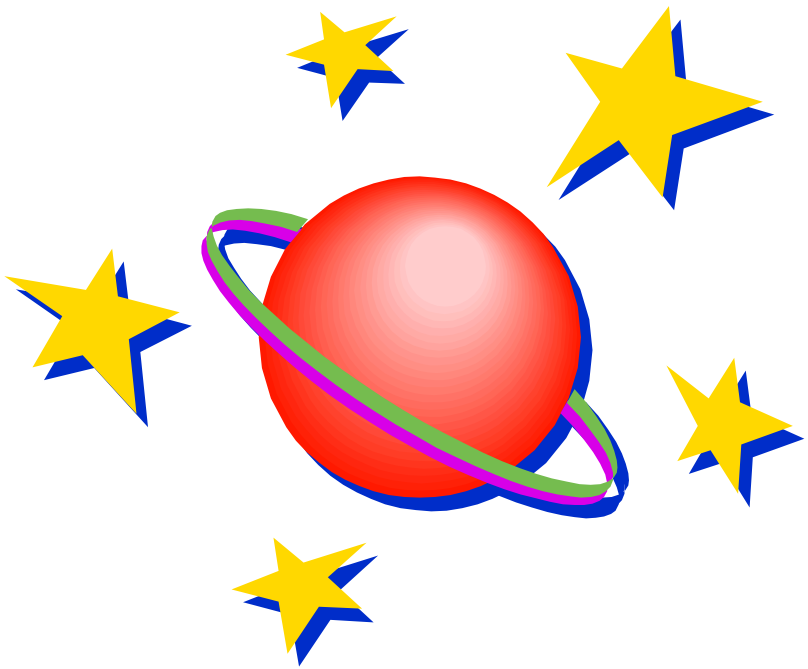
Insurer Use of Risk Adjusters

- **Provider payment -- less likely now, due to reduction in "capitation" arrangements**
- **Provider profiling**
  - Along with severity-adjusters for patients, risk assessment techniques used to judge "efficiency" of providers
  - Still under development
  - Lots of controversy

Where Does Risk Adjustment Go Next?



- **Is this "rocket science?"**
  - No, but methods are not well known among U.S. actuaries
  - There may be significant technical limitations, especially for prospective methods
  - Research continues, pushed by U.S. Medicare agency
- **More uses will likely emerge in a rapidly changing U.S. health system**