The Path to Equity in Healthcare

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Value-Based Care Done The Wrong Way

Incentivizing High Quality “Medical” Care

Intensifies Healthcare Disparities

EQUALITY

REALITY
Value-Based Care Done The Wrong Way

- Medicare's Value-Based Payment Modifier program (replaced now by MIPS)
  - performance differences as large as 67% could be explained by patient differences
  - disincentivized physicians who treated sicker, poorer patients
  - rewarded practices treating richer healthier populations.

- "As long as these programs do not account adequately for patient differences, which is very difficult to do, they will further deprive practices serving low-income populations of important resources." -- Eric T. Roberts
Healthcare disparities are SDoH in-action

Source: http://www.countyhealthrankings.org/what-is-health
Value-Based Care Done The Right Way

Incentivizing Risk Adjusted Performance

EQUALITY

EQUITY
State of the Art of Risk Adjustment

In 2013

- Predicted less than <20% of the variation in patient cost.
- Predicted >90% of the average (predictive ratio)

Risk Adjustment: What is the current state of the art, and how can it be improved?
State of the Art of Risk Adjustment

- Implications of poor $R^2$ control but good predictive ratio
  - Good Equity if sample size is large (e.g., MAOs)
  - Bad Equity if sample size is small (e.g., small practices)
State of the Art of Risk Adjustment

- In 2017, CMS updated the way they risk adjusted Part C payments for Medicare beneficiaries.
  - Went from 4 models to 9 to better capture variance observed in populations with limited resources (medi-medi)
  - The model previously underestimated costs by 4.3% for Duals and overestimated costs by 1.5% for Non-duals.
- In 2018, CMS proposed to further enhance its risk models to better adjust for Mental Health and Substance Abuse disorders.

**Table II-5. Predictive Ratios for Community Population, 2014 Model**

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<th>FFS population</th>
<th>Non-dual</th>
<th>Dual</th>
<th>Full benefit duals</th>
<th>Partial benefit duals</th>
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Notes: Predictive ratios are the ratio of predicted cost to actual cost for the applicable subgroup. Dual status is defined in the payment year. Source: RTI International analysis of 2010-2011 Medicare 100% data.
State of the Art of Risk Adjustment

MassHealth
Risk Adjustment Model
Social Determinants of Health

Executive Office of Health & Human Services

October 14, 2016

- In 2016, Massachusetts began using an enhanced DCG (HCC) model to set Medicaid capitation rates for its MCOs.
  - Added features for unstable housing and neighborhood stress.
  - Showed 10% improvement in predicting prospective payments ($R^2 \sim 38\%$)
Other States like Minnesota are taking aggressive steps
- Amassed large data set of SDoH and Outcomes
- Will be proposing better incentive models like Massachusetts
Use Census Data with Grain of Salt

- Predicting Referrals for Social Services
  - 84,317 adult patients (≥18 years old)
  - Visits between 2011 and 2016 at Eskenazi Health, the public safety-net health system of Marion County in Indianapolis, Indiana, comprising a hospital and several federally qualified health center sites
  - Achieved <73% Precision and >67% Recall using just tobacco use, Dx, Race & Ethnicity, & frequency of encounters
  - Was no better with SDoH data from census-tract level data

Assessing the capacity of social determinants of health data to augment predictive models identifying patients in need of wraparound social services

Suranga N Kasthuriratne, Joshua R Vest, Nir Menachemi, Paul K Halverson, Shaun J Grannis


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Call for Action

- **Today**
  - Be sensitive to not apply upstream incentives directly downstream
    - May intensify inequity
  - Incentivize Screenings for SDoH
    - Leverage tools to automatically structure screening responses
  - Risk Adjust Value-Based Performance

- **Tomorrow**
  - Achieve Better Health Outcomes and Equity
  - Continue to Calibrate Risk Adjustment methodology for your corner of the world (health system)

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