

The Path to Equity in Healthcare

Rupinder Singh

Cozeva

rupinder@cozeva.com

Value-Based Care Done The Wrong Way



Incentivizing
High Quality
“Medical” Care



Intensifies
Healthcare
Disparities



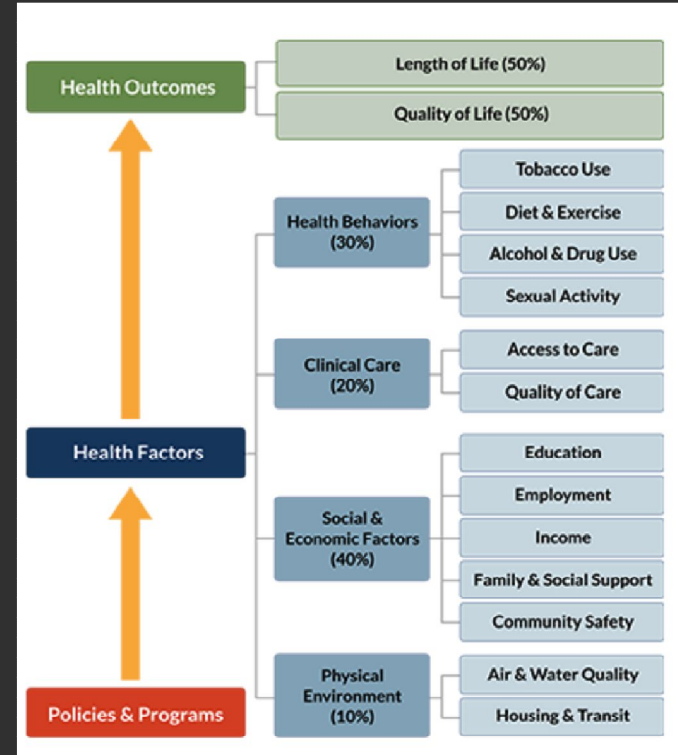
Value-Based Care Done The Wrong Way



The screenshot shows the top portion of a web page for the journal *Annals of Internal Medicine*. The journal title is in a large, teal font. Below it is a navigation bar with links for LATEST, ISSUES, CHANNELS, CME/MOC, IN THE CLINIC, JOURNAL CLUB, WEB EXCLUSIVES, and AUTHOR INFO. Further down, there are links for PREVIOUS ARTICLE, THIS ISSUE, and NEXT ARTICLE. The article title is "The Value-Based Payment Modifier: Program Outcomes and Implications for Disparities" and it is dated 20 FEBRUARY 2018. The authors listed are Eric T. Roberts, PhD; Alan M. Zaslavsky, PhD; J. Michael McWilliams, MD, PhD.

- 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



State of the Art of Risk Adjustment

In 2013

RESEARCH SYNTHESIS REPORT NO. 25
JULY 2013

Eric Schone, Ph.D. and
Randall S. Brown, Ph.D.

Mathematica Policy Research

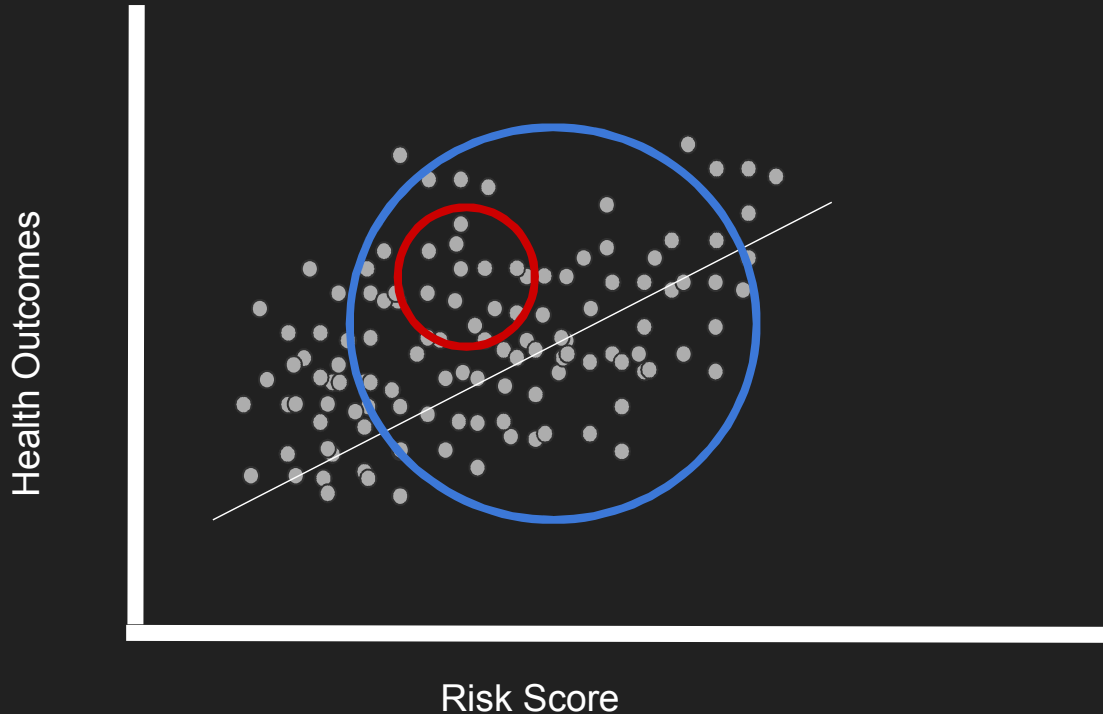
Risk Adjustment:
What is the current
state of the art,
and how can it
be improved?

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

Table 2: Comparison of risk-adjustment tools from the 2007 SOA study

Tool	As offered	100K truncation	250K truncation	Recalibrated + 250K truncation	Prior Costs + 250K truncation	Concurrent +250K truncation
R-square (%)						
ACGs	16.2	20.8	19.2	19.6	23.0	31.5
CDPS	12.4	17.6	14.9	17.7	24.6	36.8
CRGs	14.9	19.3	17.5		20.5	
DCGs ¹	17.4	22.3	20.6	21.3	26.5	54.5
RxGroups	16.8	23.8	20.4	20.5	27.1	36.9
PRGs	17.2	25.0	20.5	21.2	27.4	
Medicaid Rx	12.9	19.3	15.8	17.7	26.3	31.0
Impact PRO	21.3	26.3	24.4	25.6	27.2	
ERGs	16.2	23.7	19.7	20.0	26.5	43.3

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

FFS population	1.000
Non-dual	1.015
Dual	0.957
Full benefit duals	0.914
Partial benefit duals	1.092

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

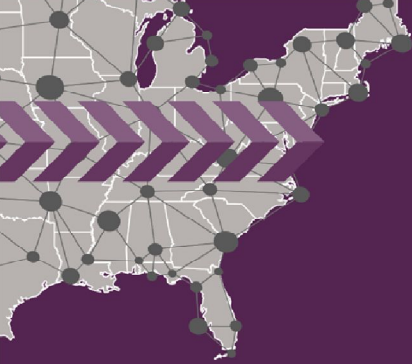
Executive Office of Health & Human Services

October 14, 2016

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- 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 ($R^2 \sim 38\%$)

State of the Art of Risk Adjustment



Medicaid and Social Determinants of Health: Adjusting Payment and Measuring Health Outcomes

Robert Wood Johnson Foundation

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of Public & International Affairs
PRINCETON UNIVERSITY

Prepared by Ellen Breslin and Anissa Lambertino of Health Management Associates in partnership with Dennis Heaphy of the Disability Policy Consortium and Tony Dreyfus.

- 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

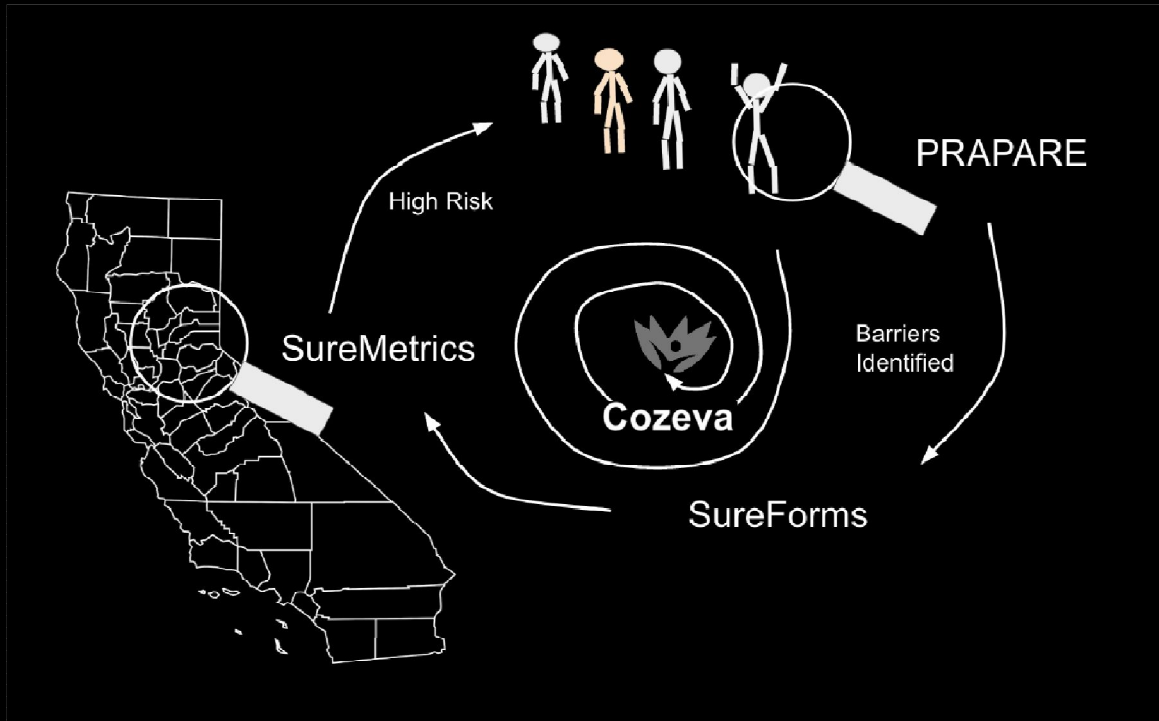
Assessing the capacity of social determinants of health data to augment predictive models identifying patients in need of wraparound social services FREE

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

Journal of the American Medical Informatics Association, Volume 25, Issue 1, 1 January 2018, Pages 47–53, <https://doi.org/10.1093/jamia/ocx130>

Published: 21 November 2017 **Article history** ▾

- 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



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)