Health Equity from an Actuarial Perspective
Health Plan Pricing

Rebecca Sheppard, MAAA, FSA, MHS
Member, Health Equity Committee

Cori Uccello, MAAA, FSA, FCA, MPP
Senior Health Fellow

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About the Academy

- The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues.
- The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

For more information, please visit:

www.actuary.org

Why actuaries care about health equity

- Key health decision-makers rely on actuaries for advice
- Unique skillset to quantify costs of health disparities to the health care system
- Commitment to identifying and addressing issues on behalf of the public interest
- Desire to explore and understand whether any actuarial practices inadvertently lead to or exacerbate health disparities and inefficient use of health care dollars
- Potential to use actuarial principles to reduce health disparities and improve health outcomes

American Academy of Actuaries
Health Equity Committee

- Created to contribute actuarial perspective to health equity
- Focus:
  - Evaluate actuarial practices in the context of health equity
  - Educate actuaries and other stakeholders on health equity issues
  - Apply an equity lens when considering the impact of current or proposed health care policies

Definitions used by the Health Equity Committee

Health Equity: Everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.

Health Disparities: Differences in health or its key determinants that adversely affect marginalized or excluded groups. Disparities in health and in the key determinants of health are the metric for assessing progress toward health equity.

Social Determinants of Health: Nonmedical factors such as employment, income, housing, transportation, child care, education, discrimination, and the quality of the places where people live, work, learn, and play, which influence health.

Source: Braveman P, Arkin E, Orleans T, Proctor D, and Plough A, *What Is Health Equity And What Difference Does a Definition Make?* Princeton, N.J.: Robert Wood Johnson Foundation, 2017.

Initial phase—Discussion brief developed a list of questions and topics to explore further

MARCH 2021

Health Equity from an Actuarial Perspective
QUESTIONS TO EXPLORE

Actuaries are adding their voices to the national conversation on health equity. The American Academy of Actuaries Health Practice Council has formed the Health Equity Work Group, whose goal is to contribute to efforts to reduce health disparities and improve health equity. The work group will examine health actuarial practices and methods to assess the extent to which they may affect health disparities and recommend changes when appropriate, educate actuaries and other stakeholders on health equity issues, and apply an equity lens to the Academy's health policy work.

This discussion brief acts as a framework to introduce the first phase of the work group's work—identifying areas in which health actuaries are involved that may affect health equity, and developing a list of questions and topics to explore further. While through its exploration and analysis the work group may find that some actuarial methods and practices help mitigate health disparities, it may find that others —no matter how well-intentioned —could be perpetuating long-standing health inequities and inadvertently leading to poor health outcomes and an inefficient use of health care dollars. In general, actuaries focus primarily on identifying and managing financial risk. The questions below help broaden the scope of the work group's considerations to include non-financial outcomes, such as health outcomes and health disparities, when considering the effects of actuarial practices. By sharing information on the work group's process, including on these initial questions and the efforts to start to answer them, the aim is to initiate a more focused health equity dialogue from an actuarial perspective, and deepen the understanding of this complex issue, which could eventually lead to effective solutions.

The Health Equity Work Group has found it instructive to refer to the following definitions in its work:

Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.

Health disparities are differences in health or its key determinants that adversely affect marginalized or excluded groups. Disparities in health and in the key determinants of health are the metric for assessing progress toward health equity.

Social determinants of health are nonmedical factors such as employment, income, housing, transportation, child care, education, discrimination, and the quality of the places where people live, work, learn, and play that influence health.

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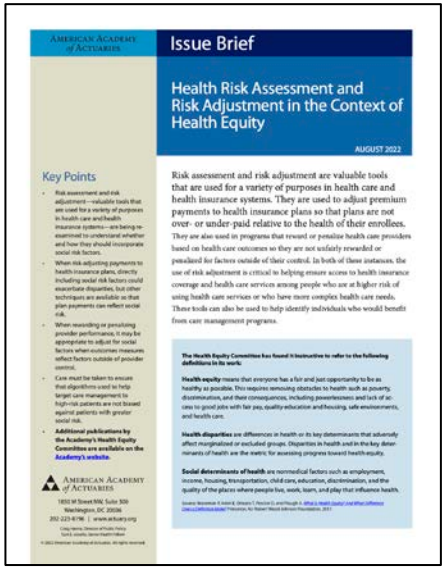
- Comprehensive list served as starting point for further analysis
- Four areas of focus:
  - Health plan pricing
  - Health plan benefit design
  - Provider contracting and network development
  - Population health management

Subsequent papers explored issues in more detail



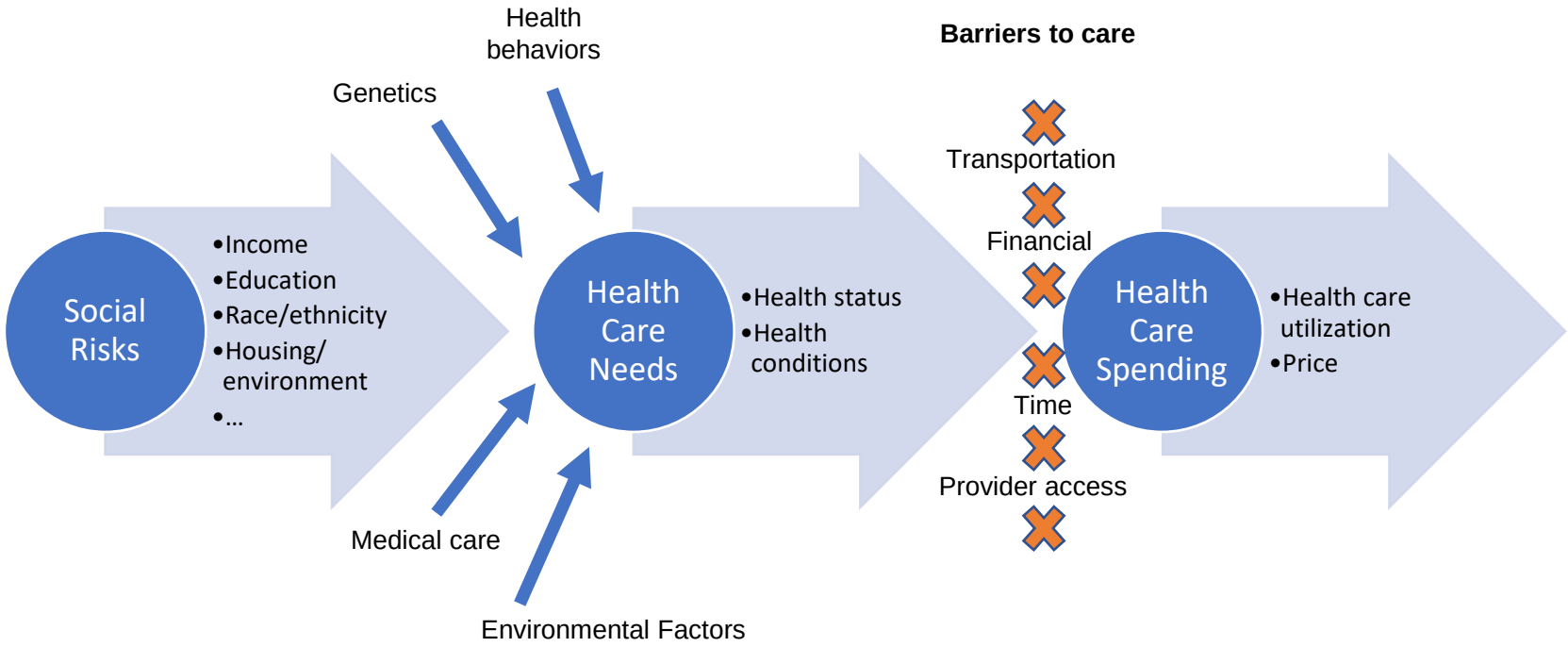
Health equity and health plan pricing

In what ways might the methods of pricing plan benefits, developing premiums, and paying plans affect health disparities related to access to coverage, coverage affordability, and health outcomes?

Experience data and trending data forward

- Health actuaries analyze historical claims experience and apply assumptions about cost changes over time to develop premium rates
- Do these data and methods embed any disparities into premiums?
  - Proactively identifying any biases embedded in the data can help determine whether results and conclusions are compromised
  - Data to identify disparities need to be collected

Health care spending can understate health care needs for marginalized populations



What are the implications of understating health care needs in premium development?

- Are plan incentives to enroll underserved populations affected?
- If premiums don’t fully reflect health care needs, are there incentives to ignore those needs?
- Are trend rates developed separately for different enrollee groups, and, if so, how does this affect health disparities?

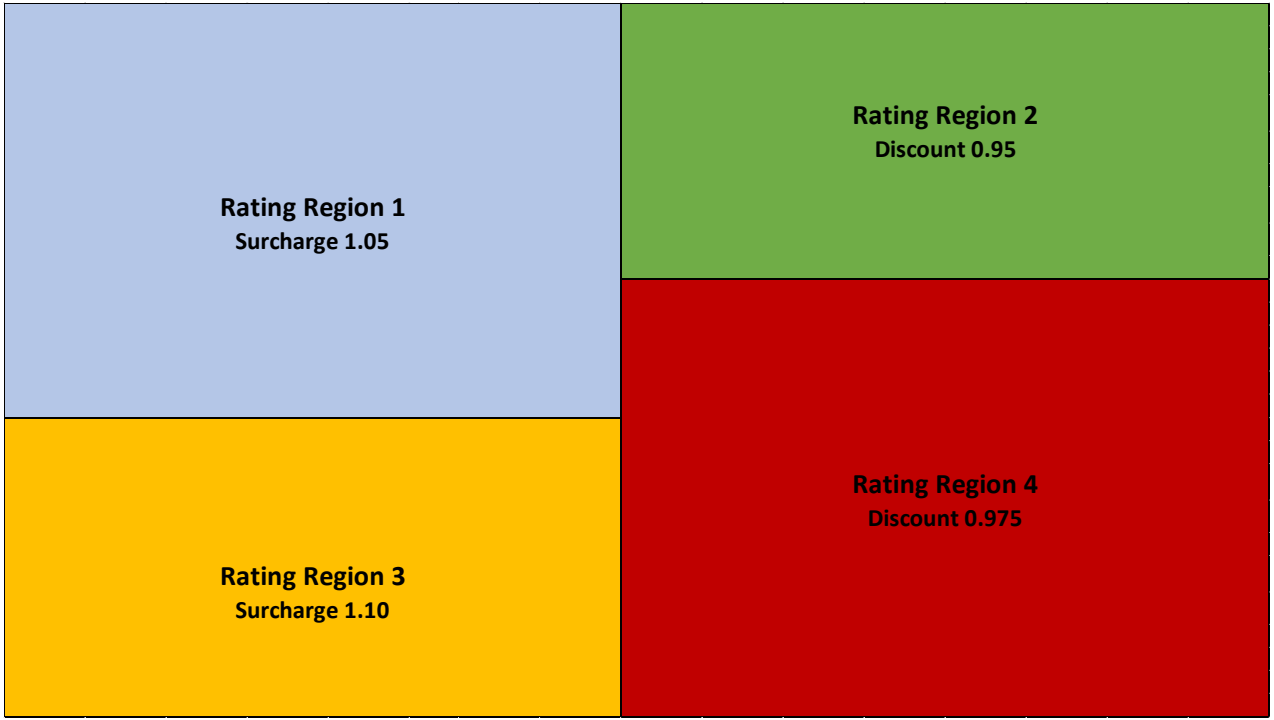
Methods of pricing new or additional benefits

- Challenges to pricing new health benefits:
  - Selection of external data source, especially to estimate spending for services with low utilization
  - Actuarial models that isolate the cost of the new benefit may ignore related reductions in other spending
  - One-year health insurance term may discourage benefits if offsetting benefits would not be realized until future years
- Conservativeness in methods and assumptions may discourage adding benefits that aim to address health disparities

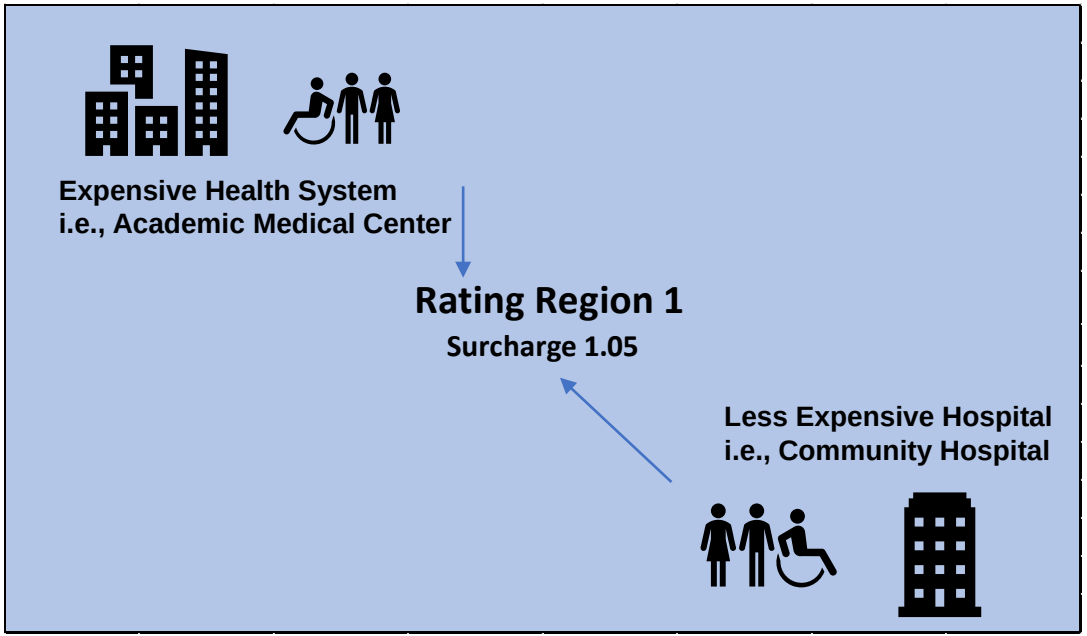
Geographic and other rating factors

- Allowable rating factors reflect societal view of what degree of rate variation and cross subsidization is acceptable
- Unintended consequences can result
  - If certain marginalized populations are clustered within cohorts used to develop rating factors, disadvantaged groups could be rated differently from other groups

Illustrative rating example: geographic rating areas



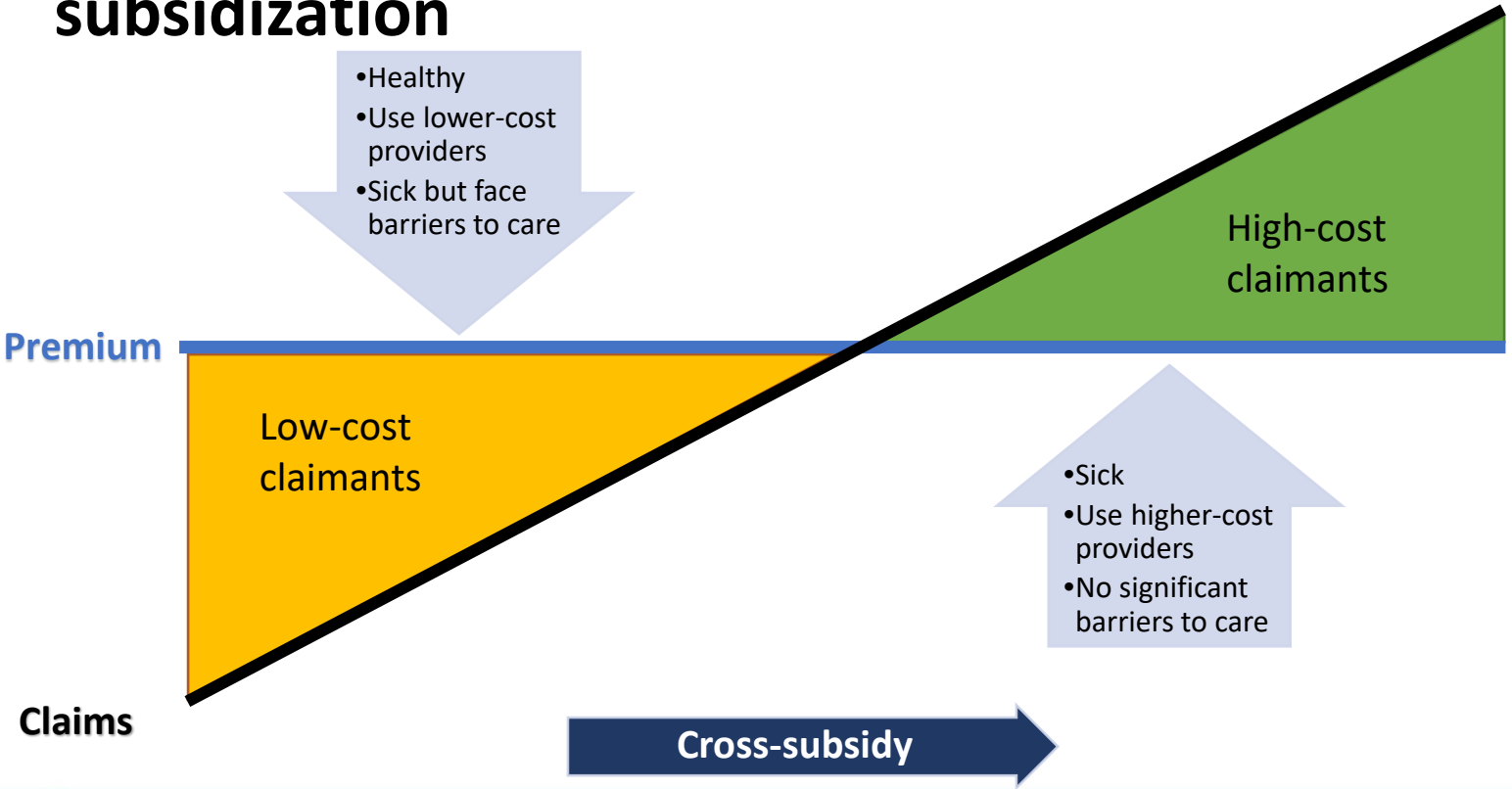
Illustrative rating example: geographic rating areas (cont.)



Risk pooling and cross-subsidization

- The more broadly a risk pool is defined, the greater the potential cross-subsidy.
- An intention of the ACA single risk pool is to make insurance more available and affordable for those with higher health care needs.
- Although subsidization across various health statuses is expected, unintended consequences can occur when disadvantaged populations underutilize services or use lower-cost providers
  - Underserved populations, along with the healthy, may be subsidizing those who are non-healthy, have easy access to health care, or use higher-cost providers

Illustrative rating example: risk pooling and cross-subsidization



Risk adjustment and health equity

- Goals of risk-adjusting payments to plans:
  - To appropriately compensate plans for the risks they bear, especially when they are limited by issue and rating rules
  - To reduce insurer incentives to risk select

- Evolution of risk adjustment models

Should risk adjustment incorporate social needs?

- Concern that risk adjustment doesn't adequately reflect health care needs of underserved or under-resourced populations
- Lack of adequate payments could reduce insurer incentives to enroll these populations and meet their health care needs
- BUT, risk adjustment is based on health care *spending*, which may not reflect health care *needs*

Potential methods to incorporate social needs into risk adjustment

- Direct inclusion of social risk factors into risk adjustment model
  - Not appropriate when coefficients are negative (e.g., when spending understates needs)
  - Even if positive, might not be sufficient to address true needs
- Constrained regression
  - Can reduce plan under-compensation for specified groups
- Pre-processing data transformation
  - Adjust the spending data to better reflect health care needs
- Increased payments outside of the risk adjustment model
- Are requirements needed to ensure extra payments are used to better address unmet needs?

On the horizon

- October 10: Presentation on health equity and provider contracting/network development
- Ongoing work to focus on strategies to incorporate more equity-enhancing features in health insurance benefit design
  - Series of issue briefs
  - Symposium on November 15

Additional Resources

American Academy of Actuaries Health Equity Committee

- *Health Equity from an Actuarial Perspective: Questions to Explore*
  https://www.actuary.org/sites/default/files/2021-03/Health_Equity_Discussion_Brief_3.21.pdf

- *Health Equity from an Actuarial Perspective: Health Plan Pricing*
  https://www.actuary.org/sites/default/files/2021-05/Health_Equity_Pricing_Discussion_Brief_05.2021.pdf

- *Health Risk Assessment and Risk Adjustment in the Context of Health Equity*
  https://www.actuary.org/sites/default/files/2022-08/RiskAdjust.8.22.pdf

- *Health Benefit Design Innovations for Advancing Health Equity: Removing the Barriers to Successful Implementation: Issue Brief 1—Overview*
  https://www.actuary.org/sites/default/files/2023-08/health-brief-benefit-design-overview.pdf

- Additional issue briefs and other materials available at:
  https://www.actuary.org/committees/dynamic/HEALTHEQUITY

Additional Resources

External resources on incorporating social risks into risk adjustment

- "Improving Risk Equalization with Constrained Regression" (van Kleef, McGuire, van Vliet, and van de Ven): https://link.springer.com/article/10.1007/s10198-016-0859-1
- "Data Transformations to Improve the Performance of Health Plan Payments" (Bergquist, Layton, McGuire, and Rose): https://www.sciencedirect.com/science/article/abs/pii/S016762961830290X
- *From Vision to Design in Advancing Medicare Payment Reform: A Blueprint for Population-Based Payments* (McWilliams, Chen, and Chernew) https://www.brookings.edu/wp-content/uploads/2021/10/From-Vision-to-Design-in-Advancing-Medicare-Payment-Reform-1.pdf
- *The Future of Risk Adjustment: Supporting Equitable, Comprehensive Health Care* (Zhu, Japinga, Saunders, and McClellan) https://healthpolicy.duke.edu/publications/future-risk-adjustment-supporting-equitable-comprehensive-health-care
- "Risk Adjustment and Promoting Health Equity in Population-Based Payment: Concepts and Evidence" (McWilliams, Weinreb, Ding, Nduleme, and Wallace) https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2022.00916

Questions?

Thank You

For more information contact:

Matthew Williams, JD, MA
Senior Policy Analyst, Health
American Academy of Actuaries
Email: williams@actuary.org