CHAMPIONING MEDICALLY INTEGRATED ONCOLOGY:

Celebrating a Decade of Impact

2025 NCODA INTERNATIONAL FALL SUMMIT

HEOR in Action: Using DCEA to Advance Health Equity in Medically Integrated Care

Moderator: C. Daniel Mullins, PhD, University of Maryland School of Pharmacy

Panelists:

Quoc Trinh, MD, University of Pittsburgh School of Medicine

Barbarajean Robinson-Shaneman, RN, MS, University of Maryland School of Pharmacy

Brandon L. Keith, PharmD, DPLA, BCACP, George Washington Medicine

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OBJECTIVES

1. Define Distributional Cost Effectiveness Analysis (DCEA) and Social Determinants of Health (SDOH)
2. Explore how DCEA identifies and addresses health disparities
3. Demonstrate practical application of HEOR insights in patient care
4. Encourage a multidisciplinary approaches health equity

DISCLOSURES

The following relevant financial relationships from the past 24 months have been identified and disclosed for the following faculty and planners of this CE activity:

Dr. Mullins received consulting income during the past three years from AstraZeneca, Bayer, Rocket, and Takeda

Dr. Trinh served as a Consultant for Bayer, Intuitive Surgical, Novartis, Pfizer. He also received research support from the American Cancer Society & Pfizer Prostate Cancer Community Grant, Health Disparity Award from the Congressionally Directed Medical Research Programs (PC220551)

Polling Question

Which "missed opportunity" for high-quality, affordable care for all do *you* think you can impact the most?

a. Poor quality care ⇨ high quality care
b. Inadequate safety ⇨ lower toxicity
c. High cost of questionable value ⇨ high value care
d. Health Disparities ⇨ health equity

Distributional Cost Effectiveness Analysis (DCEA) Definition

- DCEA is a general term for various ways of analyzing *equity* in the *distribution of costs and effects* (i.e., benefits and harms of interventions) as well as *value for money* in terms of aggregate costs and effects.

Reference: https://www.york.ac.uk/che/equity/distributional-cost-effectiveness-analysis/

World Health Organization (WHO) Definitions

- *Equity* is the absence of unfair, avoidable or remediable differences among groups of people, whether those groups are defined socially, economically, demographically, or geographically or by other dimensions of inequality (e.g. sex, gender, ethnicity, disability, or sexual orientation).
- Health is a fundamental human right.
- *Health equity* is achieved when everyone can attain their full potential for health and well-being.

Reference: https://www.who.int/health-topics/health-equity#tab=tab_1

WHO Definitions (cont'd)

- *Social determinants of health* are the conditions in which people are born, grow, live, work and age, and people's access to power, money and resources – have a powerful influence on health inequities.

- At all levels of income, health and illness follow a *social gradient*: the lower the socioeconomic position, the worse the health. People who have limited access to quality housing, education, social protection and job opportunities have a higher risk of illness and death. Research shows that these social determinants can outweigh genetic influences or healthcare access in terms of influencing health.

- Addressing the social determinants of health equity is fundamental for improving health and reducing longstanding inequities in health.

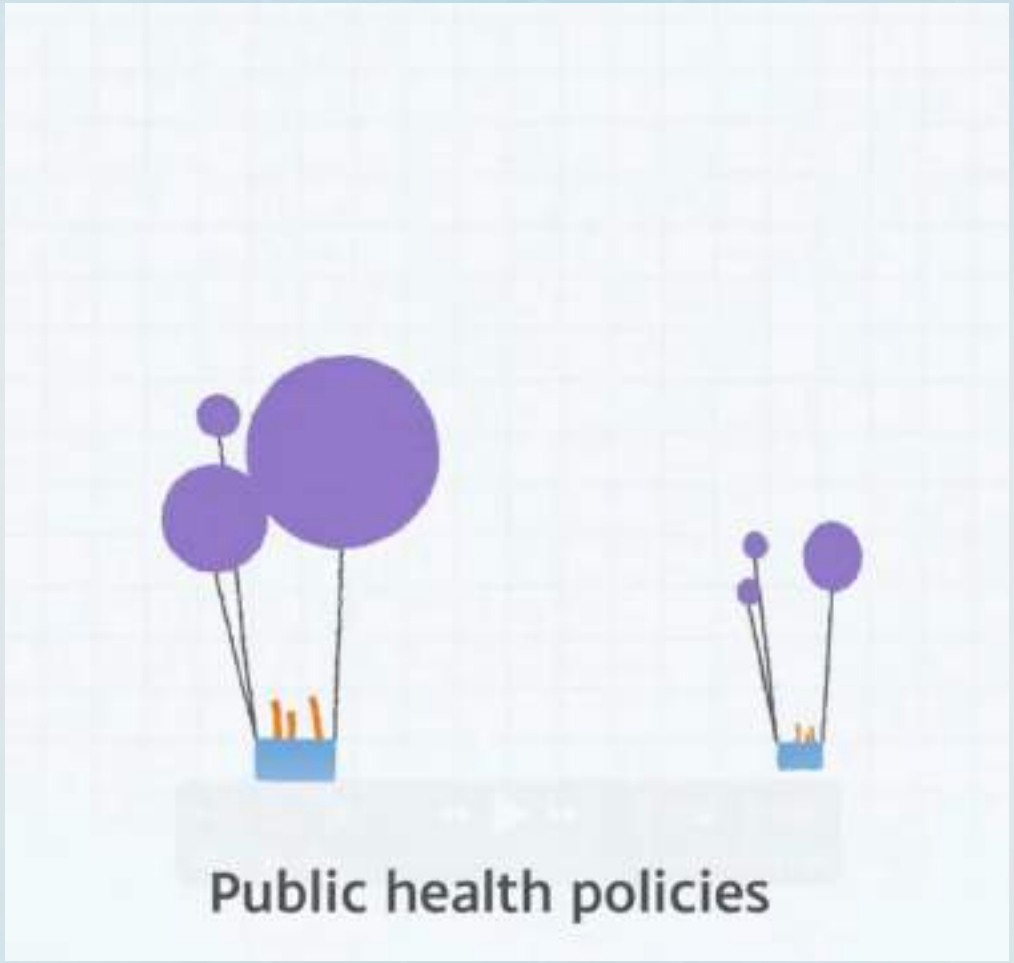
Reference: https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1

Polling Question

Which do *you* think is the most equitable treatment?

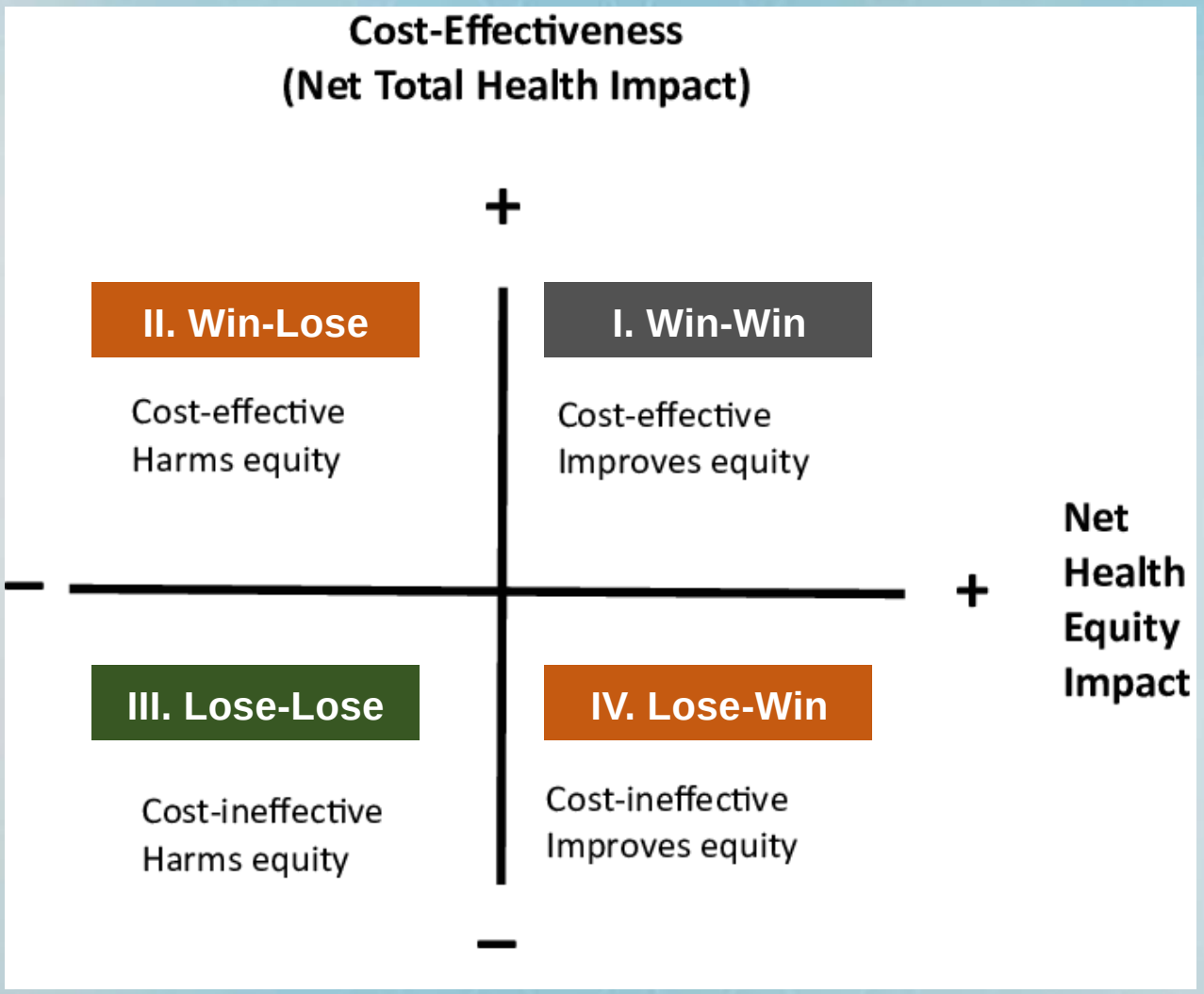
a. Maximize number of patients who survive, even if most of the survivors come from one group?
b. Increase survival mainly among wealthier patients while all patients survive longer
c. Increase survival among everyone equally
d. Increase survival more among those with shortest life expectancy while all patients survive longer

DCEA Made Simple – A Video from York University



Reference: https://www.york.ac.uk/che/equity/distributional-cost-effectiveness-analysis/

Quantification of health equity impacts and trade-offs with DCEA



Cookson et al. Using cost-effectiveness analysis to address health equity concerns. Value in Health. 2017;20(2):206-12.

A Physician Perspective

Quoc-Dien Trinh, MD, MBA

Professor and Chair, Department of Urology

Frederic N. Schwentker Endowed Chair in Urological Surgery

University of Pittsburgh Medical Center

October 16, 2025

2025 NCODA INTERNATIONAL FALL SUMMIT

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Access to timely, guideline-concordant care is the primary driver of survival differences

Marieke J Krimphove, MD

When access to care, treatment, and cancer characteristics are accounted for, Black race was associated with better overall survival in men with advanced prostate cancer.

Marieke J. Krimphove | Alexander P. Cole | Sean A. Fletcher | Sabrina S. Harmouch | Sebastian Berg | Stuart R. Lipsitz | Maxine Sun | Junaid Nabi | Paul Nguyen | Jim C. Hu | Adam S. Kibel | Toni K. Choueiri | Luis A. Kluth | Quoc-Dien Trinh

27%

Black men are 27% more likely to die when accounting for demographics

4%

Black men are 27% more likely to die when accounting for demographics and access to care

8%

Black men are 8% LESS likely to die when accounting for demo-graphics, access to care, treatment and cancer

Prostate Cancer Foundation

Curing Together.

Source: Krimphove et al, Prostate Cancer Prostatic Dis. 2019 Mar;22(1):125-136. doi: 10.1038/s41391-018-0083-4. Epub 2018 Aug 31.

Funded by the Prostate Cancer Foundation ($225,000)

Racial disparity in receipt of definitive therapy for intermediate/high-risk localized prostate cancer

David Friedlander, MD

available at www.sciencedirect.com
journal homepage: www.europeanurology.com

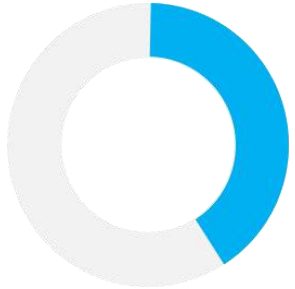
European Association of Urology

Prostate Cancer

Racial Disparity in Delivering Definitive Therapy for Intermediate/High-risk Localized Prostate Cancer: The Impact of Facility Features and Socioeconomic Characteristics

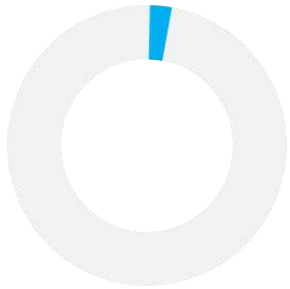
David F. Friedlander [a,†], *Quoc-Dien Trinh* [a,b,†,*], *Anna Krasnova* [b], *Stuart R. Lipsitz* [b], *Maxine Sun* [b], *Paul L. Nguyen* [c], *Adam S. Kibel* [a], *Toni K. Choueiri* [c], *Joel S. Weissman* [b], *Mani Menon* [d], *Firas Abdollah* [d]

[a] Brigham and Women's Hospital, Division of Urological Surgery, Harvard Medical School, Boston, MA, USA; [b] Center for Surgery and Public Health, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, USA; [c] Department of Medical Oncology, Dana-Farber Cancer Institute and Brigham and Women's Hospital, Boston, MA, USA; [d] Vattikuti Urology Institute, Henry Ford Health System, Detroit, MI, USA



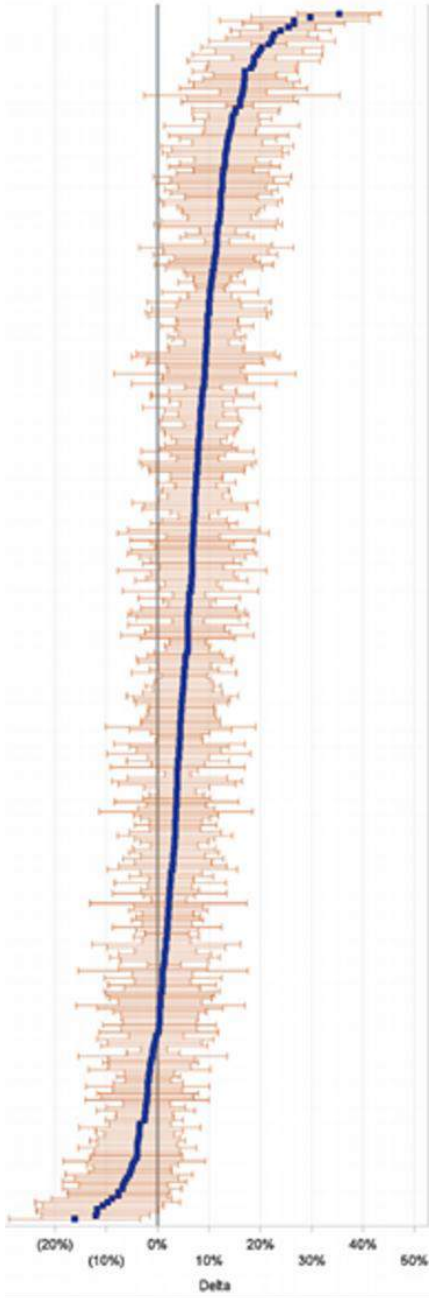
39%

of treating facilities demonstrated significantly higher rates of definitive therapy in White men

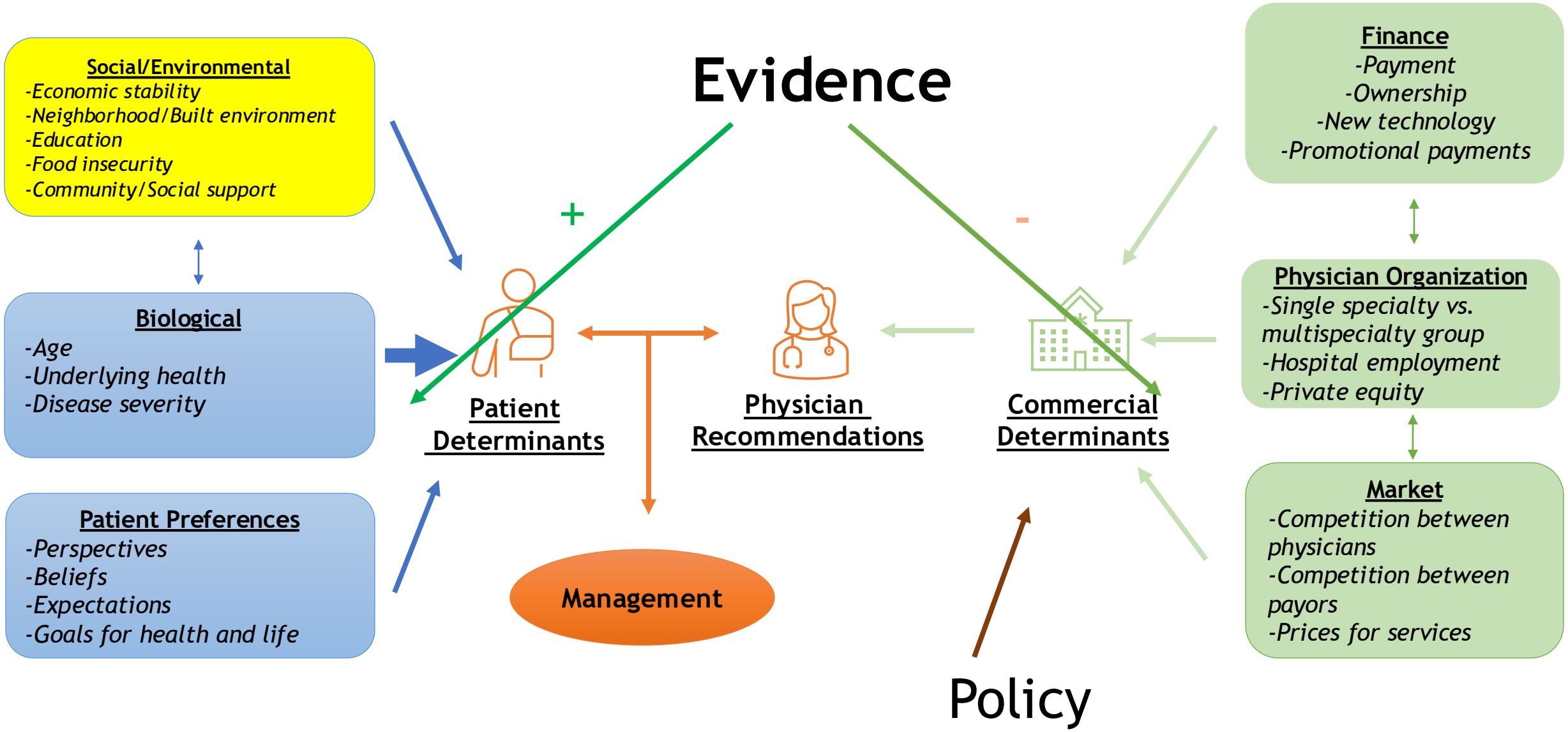


1%

of treating facilities demonstrated significantly higher rates of definitive therapy in Black men



Structural and financial forces shape treatment access



Interventions that reduce prostate cancer mortality: targeted screening?

The Impact of Intensifying Prostate Cancer Screening in Black Men: A Model-Based Analysis

Yaw A. Nyame, MD,[1,2] Roman Gulati, MS,[2,*] Eveline A. M. Heijnsdijk, PhD,[3] Alex Tsodikov, PhD,[4] Angela B. Mariotto, PhD,[5] John L. Gore, MD,[1,2] Ruth Etzioni, PhD[2]

[1]Department of Urology, University of Washington Medical Center, Seattle, WA, USA; [2]Division of Public Health Sciences, Fred Hutchinson Cancer Research Center, Seattle, WA, USA; [3]Department of Public Health, Erasmus Medical Center, Rotterdam, The Netherlands; [4]Department of Biostatistics, School of Public Health, University of Michigan, Ann Arbor, MI, USA and [5]Division of Cancer Control and Population Sciences, National Cancer Institute, Bethesda, MD, USA

*Correspondence to: Roman Gulati, MS, Division of Public Health Sciences, Fred Hutchinson Cancer Research Center, 1100 Fairview Ave N, M2-B230, Seattle, WA 98109-1024, USA (e-mail: rgulati@fredhutch.org).

Targeted screening yields the largest population benefit

National Comprehensive Cancer Network®

NCCN Guidelines Version 2.2024
Prostate Cancer Early Detection

NCCN Guidelines Index
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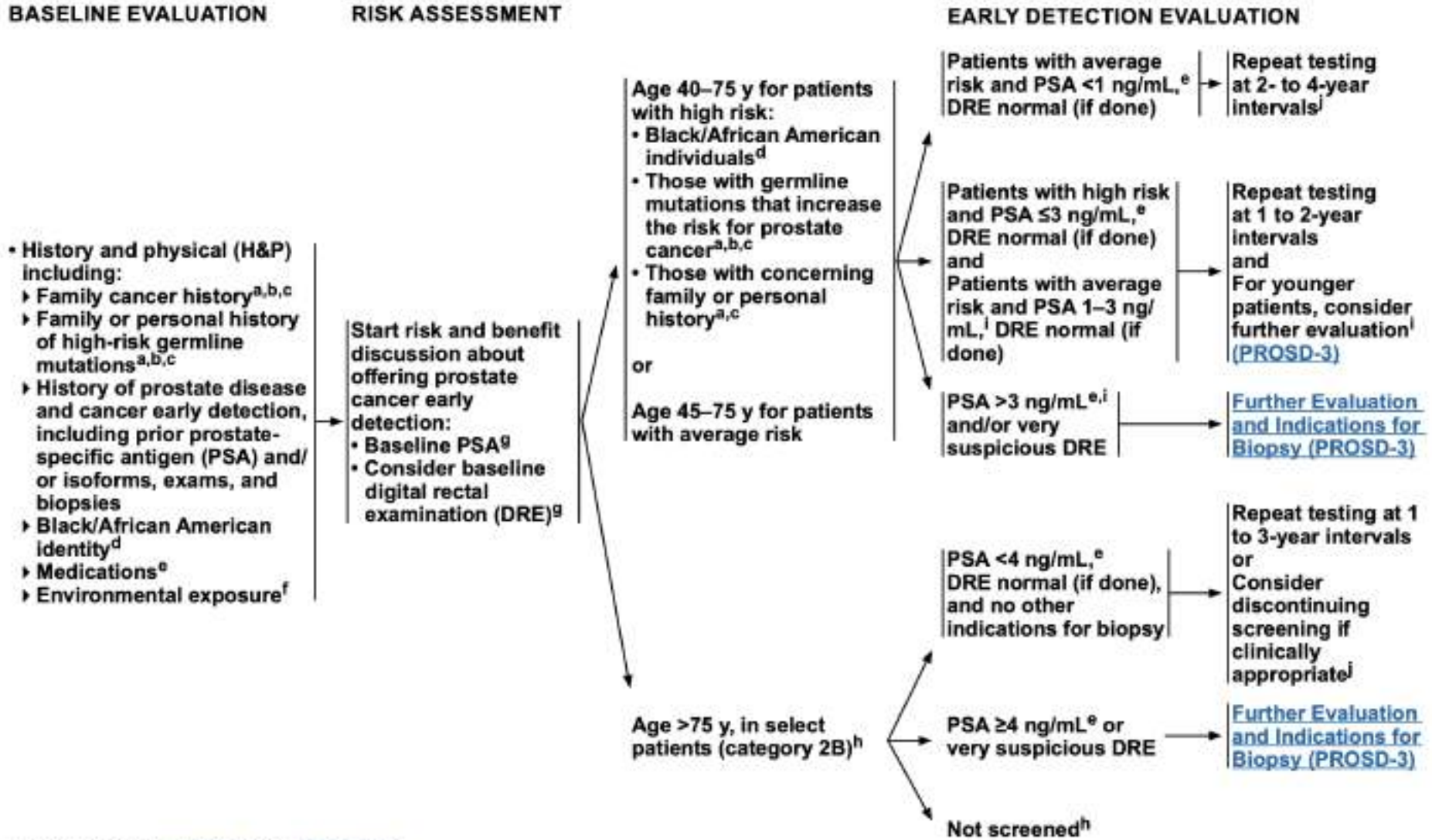
Discussion



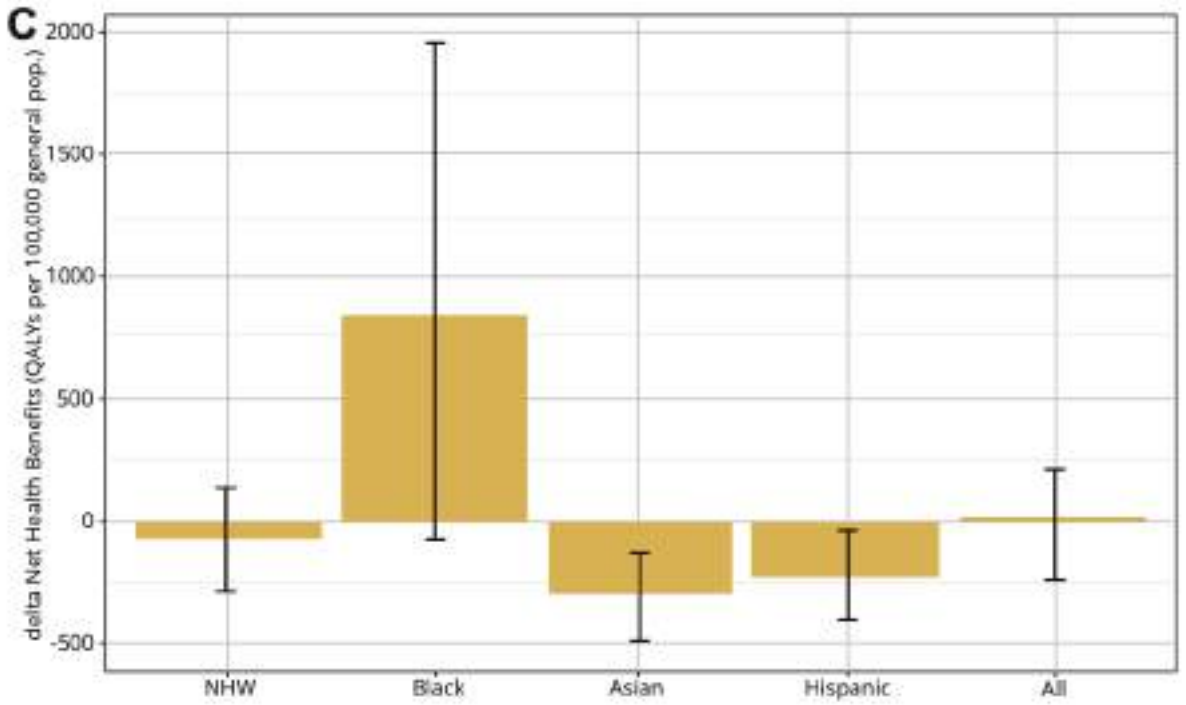
See footnotes on PROSD-2A and PROSD-2B

Economic Evaluation

The Health Inequality Impact of Darolutamide for Nonmetastatic Castration-Resistant Prostate Cancer in the United States: A Distributional Cost-Effectiveness Analysis

Jeroen P. Jansen, PhD, Iris Brewer, MSc, Thomas Flottemesch, PhD, Jamie Partridge Grossman, PhD

Darolutamide 1 ADT results in greater and a more even distribution of QALYs than ADT for nmCRPC. The greatest gains among NH-Black individuals implies a favorable health inequality impact with darolutamide.



Incremental net health benefit (iNHB) per 100 000 individuals of each general population subgroup, factoring in equally distributed opportunity costs across the overall general population at a threshold of 150k per QALY.

Limitations of DCEA

Data requirements: Implementing DCEA requires detailed unbiased data on health outcomes by demographic and socioeconomic status. Collecting and analyzing this data can be challenging.

Complex decision-making: Interventions that are most cost-effective on average may not be the most equitable.

Ethical considerations: Prioritizing interventions based on their equity impact can raise ethical questions.

Integration into clinical practice: Clinicians need guidance on how to apply these insights in a way that respects patient autonomy and addresses the complexities of individual patient care.

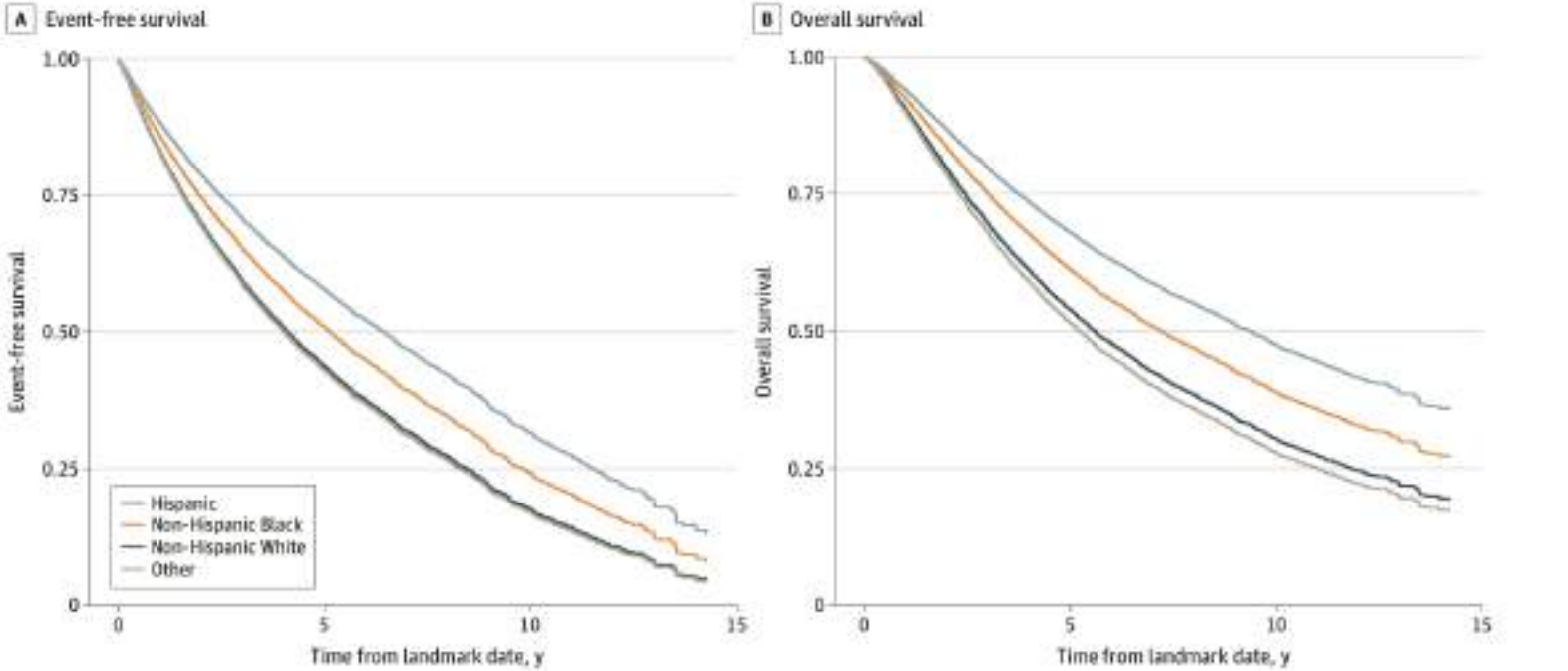
JAMA Network Open

Original Investigation | Oncology

Survival Outcomes by Race and Ethnicity in Veterans With Nonmetastatic Castration-Resistant Prostate Cancer

Kelli M. Rasmussen, MS; Vikas Patil, MS; Chunyang Li, PhD; Christina Yong, MA; Sreevalsa Appukkuttan, MBBS, MPH; Jamie Partridge Grossman, PhD, MBA; Jay Jhaveri, MD, MPH; Ahmad S. Halwani, MD

Figure 2. Adjusted Survival Curves for Survival by Race and Ethnicity



Metastasis-free (A) and overall (B) survival. The numbers at risk are not available for adjusted survival curves, because the survival curves are adjusted proportionally with the confounders. The original numbers at risk would not correctly reflect the curves. The same algorithm we used to create survival curves does not provide numbers at risk, because the scaling is working on survival probabilities. To our knowledge, there are no existing algorithms to scale the number of people in such cases. Other includes American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, unknown by patient, and patient declined to answer.

The MGB prostate cancer outreach clinic

VISION

The MGB prostate cancer outreach clinic will serve as a catalyst to bring our communities together through compassionate prostate cancer care.

MISSION

MGB PCOC to offer high-quality, accessible, and affordable prostate cancer care to minority men.

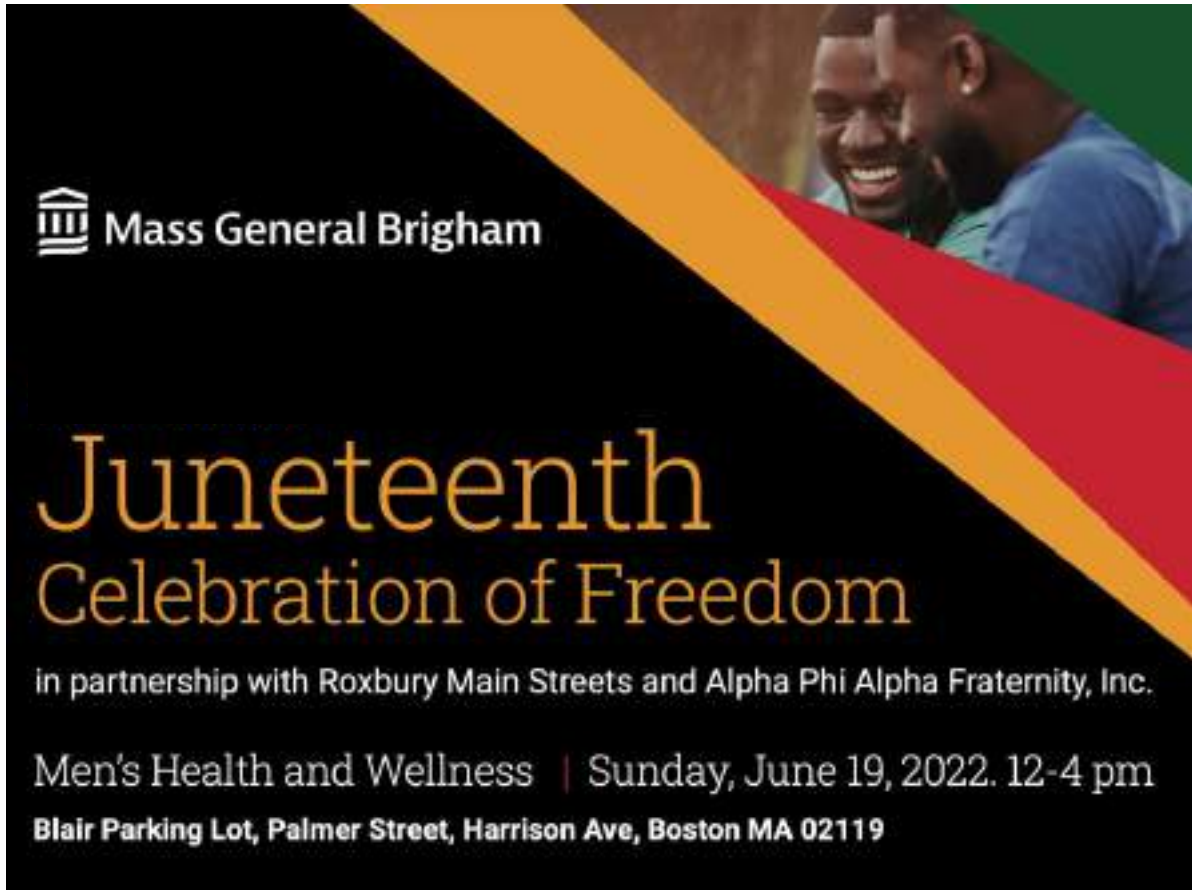
1. Description
   MGB Prostate Cancer Outreach Clinic
2. Customer
   Minoritized populations with insurance coverage
3. How
   Patient education and marketing, PCP outreach, safety net initiatives
4. Value
   Provide the best PCa care to minoritized populations through MGB or community partners
5. Investment
   Synergy with other research and operational opportunities, fundraising
6. KPI
   Inc minority PCa vol by 500 pts/yr
   dec minority PCa mortality in MA by 50% within 10 yrs

Quoc-Dien Trinh, MD, MBA

Adam Feldman, MD, MPH

Community engagement

Men's Health Fair organized in collaboration with BWH Community Health



MGB wide collaboration

25 community events since inception

‘So much more to do’

An inside view of Mass General Brigham’s sweeping campaign to confront institutional racism

By Usha Lee McFarling
STAT

When a routine cancer screening came back showing an elevated PSA reading, George Brickhouse knew he should take it seriously. His father had been treated for prostate cancer and his brother had dealt with a scare. But the urologist started ordering tests without fully explaining why. And when he couldn’t get through to a live person to schedule an MRI, Brickhouse gave up trying to find out whether he had cancer. “I wasn't comfortable with being pushed through,” he said.

Then Brickhouse met Dr. Quoc-Dien Trinh. It was during a Zoom meeting for Black men, part of an outreach program run by Mass General Brigham where Trinh and other physicians walked through the process of screening and treating prostate cancer. Brickhouse said it made him feel open to coming in for an appointment.

When he did, Brickhouse was pleased to find his care would be overseen by Trinh, a urologic oncologist considered one of the nation’s best young urologists. Though Trinh’s schedule gets booked months in advance, he has blocked off time for patients like Brickhouse who come in through the outreach program.

It’s a sign of change at Mass General Brigham, which has faced criticism for not being welcoming to patients from the city’s disadvantaged neighborhoods. The state’s largest health care system is undertaking a sweeping campaign to confront and address the systemic racism that has led here, as it has across the nation, to poorer health outcomes and higher death rates for patients of color.

While many health systems and hospitals are just starting to address medical racism, the work at Mass General Brigham seems to be in overdrive. Called United Against Racism, the $40 million initiative has launched more than a dozen programs in clinics and hospitals to provide anti-racist care and has more programs in development.

Clinicians are looking hard at disparities among their patients — from why Black women are less likely to receive knee replacements to why Black men are more likely to be accosted by hospital security and why non-English speakers miss so many follow-up appointments — and testing sometimes surprisingly simple ways to end them.

Creating large-scale change hasn’t been easy. Institutional inertia and ranks of skeptical doctors have slowed the work.

“It was messy. It was sausage-making,” Karen Fiumara, a vice president for patient safety at Brigham and Women’s Hospital, said of its nascent efforts to understand and confront health disparities in 2017.

Fiumara is among hospital leaders who have embraced health equity work. “I am so proud of what we are doing,” she said, “And oh, my God, there is so much more to do.”

The work is being hailed as a national model by the American Medical Association, which has enlisted Fiumara and other leaders to share what they’ve learned with other institutions. The AMA has even hired one of the Brigham physicians who worked on health equity issues, Karthik Sivashanker, as a vice president in its Center for Health Equity.

PHOTOS BY VANESSA LEROY FOR STAT NEWS

George Brickhouse (top) said an outreach meeting for Black men to screen and treat for prostate cancer run by Dr. Quoc-Dien Trinh, a urologic surgeon, made him feel open about making an appointment.

Because many of the programs are still getting underway, numbers showing improved patient outcomes in many areas are probably a year or more away. But some progress is already apparent. A program aiming to reduce uncontrolled hypertension in Black and Hispanic patients, by boosting screening for social needs and offering support from community health workers, has narrowed a 6.7 percent gap between Black and white patients to 5.5 percent and a 3.3 percent gap between Hispanic and white patients to 2.4 percent in five months, said Dr. Allison Bryant, a maternal-fetal medicine specialist and senior medical director for health equity at Mass General Brigham.

The system has also cut to below 5 percent the number of patients who don’t have race and language data in their records and increased the enrollment of Black and Hispanic patients into the system’s health portal by more than 20 percent, she said.

MASS GENERAL BRIGHAM, Page D2

Synthesizing diverse strategies into a cohesive approach

Access to Care: Studies indicate that improved access to care in advanced disease stages can mitigate, *or even reverse*, racial disparities

Policy & Outreach: Dual approach to reducing care variation:

- Implement policy changes for broader healthcare access
- Invest in targeted outreach to marginalized communities for early prostate cancer diagnosis and improved treatment of advanced disease

DCEA Utilization: Guides clinicians in:

- Prioritizing outreach efforts to the populations most in need
- Developing clinical guidelines that incorporate equity-focused strategies

QUESTION & ANSWER

A Community Clinical and Research Nurse Perspective

Barbarajean Robinson-Shaneman RN, MS

Senior Program Specialist, The PATIENTS Program

University of Maryland Baltimore

October 16, 2025

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The Brothers' Two Around the Corner: My Secret

Lack of Knowledge & Poor to No Communication

A never-ending story: Lack of Knowledge

And so it goes: Fear, Manhood, Why Me?

Poor Communication

Brothers Diagnosed with Prostate Cancer

- Why didn't you tell me?
- My Secrets

Thank You!

Barbarajean Robinson-Shaneman RN, MS

Senior Program Specialist, the PATIENTS Program
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A Pharmacist Perspective

Brandon L. Keith, PharmD, DPLA, BCACP

Manager, Specialty and Clinical Pharmacy Services
George Washington Medicine

October 16, 2025

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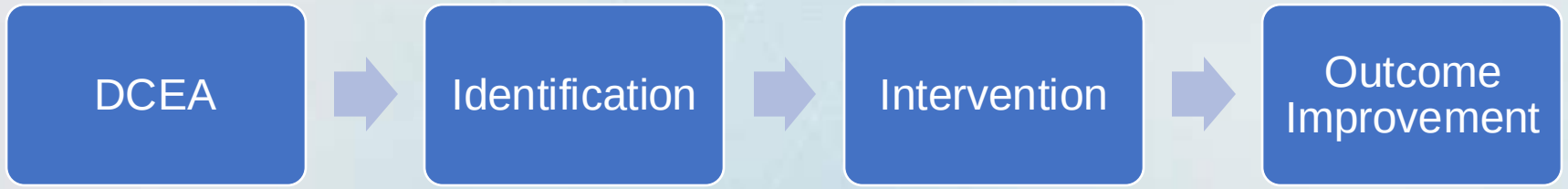
Translating DCEA into Practice

- Tailor treatment plans using DCEA insights
- Identify high-risk patients early
- Guide multidisciplinary teams to close gaps in access
- Adjust workflows based on equity-focused outcomes



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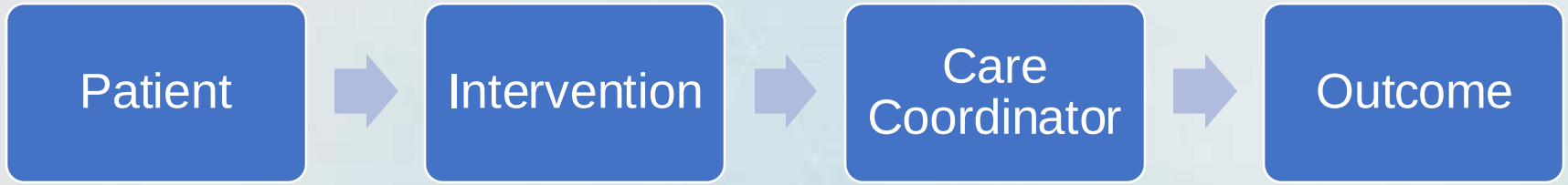
- Asaria, M., et al. (2016). Distributional cost-effectiveness analysis: A tutorial. Med Decis Making, 36(1), 8–19.

Real-World Example: Point-of-Care Strategies

- Identify patients with access barriers to novel therapies
- Prioritize interventions for high-need populations
- Engage care coordinators/community health workers for outreach



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Real-World Example: Practice-Wide Strategies

- Inform clinic-level policies to reduce disparities
- Allocate resources based on equity-weighted outcomes
- Integrate HEOR insights into multidisciplinary team meetings

Asaria, M., et al. (2016). Distributional cost-effectiveness analysis: A tutorial. Med Decis Making, 36(1), 8–19.

Cookson, R., et al. (2017). Using cost-effectiveness analysis to address health equity concerns. Value Health, 20(2), 206–212.

QUESTION & ANSWER