

Data and Health Equity in Quality Improvement

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Agenda

- 1. The Why
- 2. Shared Language
- 3. The Role of Data in Health Equity
- 4. Examples from Prior Literature
- 5. Group Engagement



Nonprofit corporations and independent licensees



Key Takeaways

- Health outcomes are heterogeneous
- Focusing on delivering high quality care for all patients means understanding which groups may be experiencing different outcomes
- Using race/ethnicity data is one way to understand how people experience care
- Best place to start is where you are now—build out from there



The Why

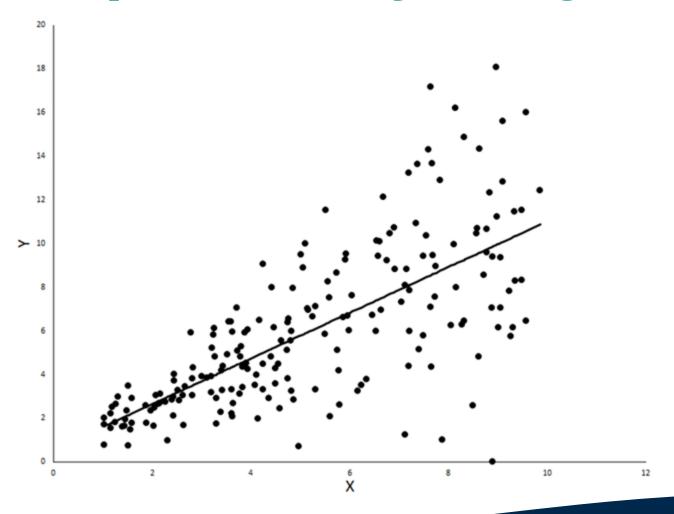


Legacy of CQIs in Quality Improvement



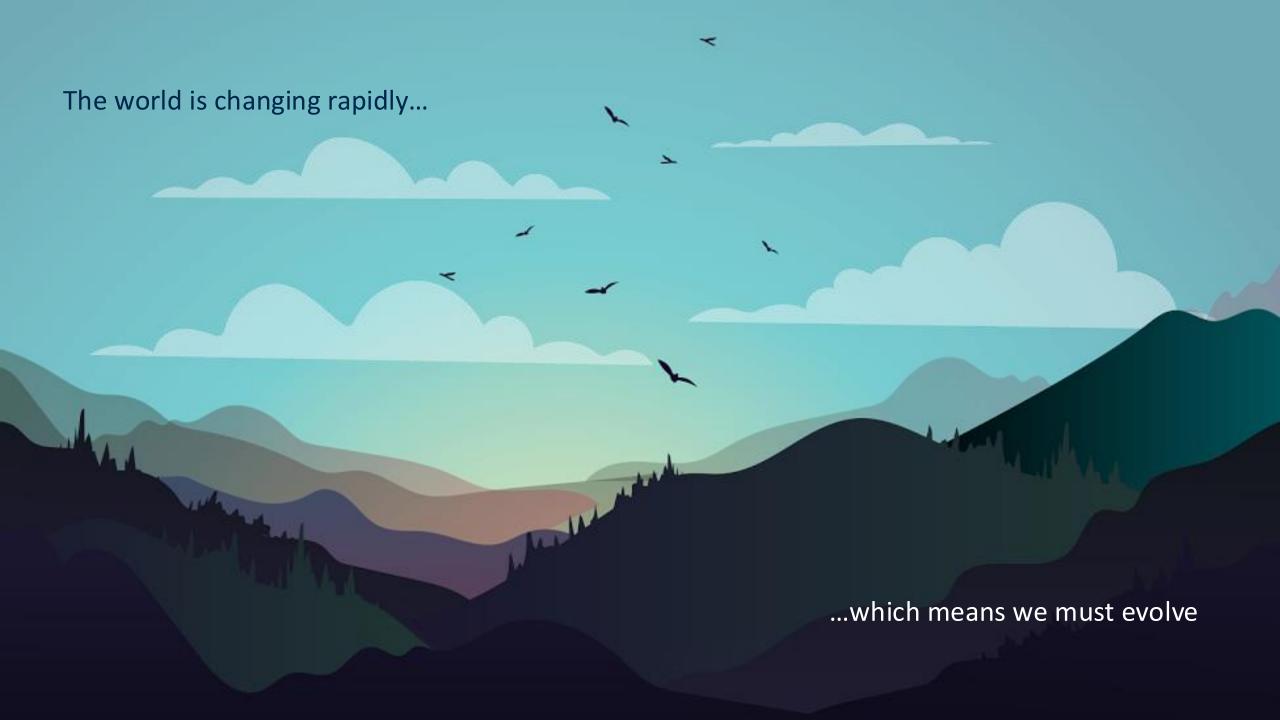


Heterogeneity in Outcomes around Apparent Upward Trajectory









Health Equity / Health Care Equity / Equity: Definition / Synonyms

The fair distribution of health determinants, outcomes, and resources within and between segments of the populations, regardless of social standing

Synonyms to consider

- Ensuring access to high-quality care for all patients
- Ensuring the opportunity for all to achieve a better/high quality of life
- Achieving whole health* for all people
- Achieving the highest level of health for all people

- Providing the opportunity for all people to have/achieve optimal health
- Partnering together to ensure/help all people to have optimal health and health care outcomes
- Providing opportunities for better health and health care choices



^{*}By whole health we mean physical, behavioral, spiritual, and socioeconomic well-being as defined by individuals, families, and communities

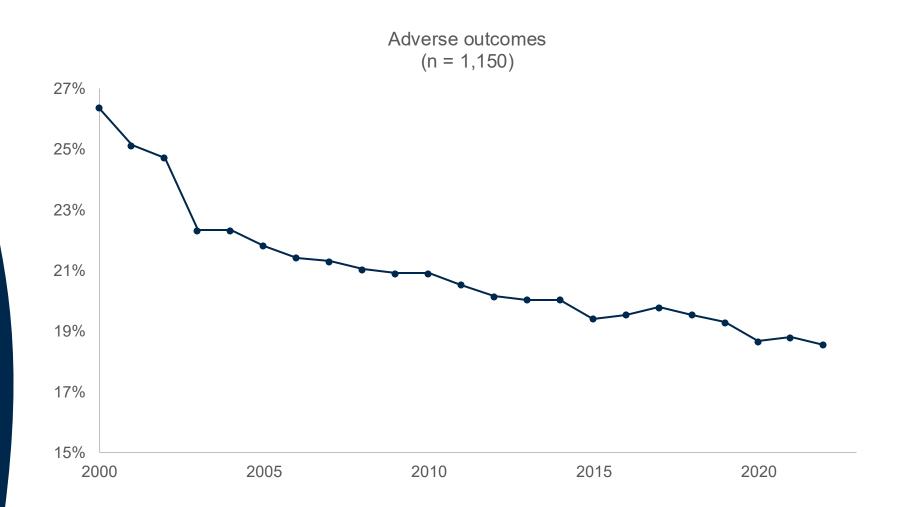


"Failure to disaggregate race or ethnicity data... can mask critical between- and within-group differences that policies and programs should address."

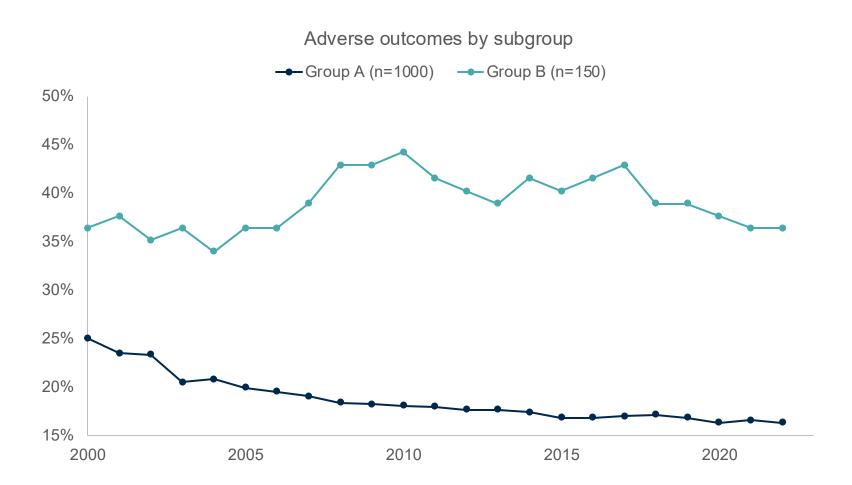
Braveman, P., Arkin, E., Proctor, D., Kauh, T., & Holm, N. (2021). Systemic and Structural Racism: Definitions, examples, health damages, and approaches to dismantling. Health Affairs 41, NO. 2 (171-178)



Why do data aggregation choices matter?



Why do data aggregation choices matter?



Race/Ethnicity as Sociopolitical Categories

The categories we collect and report on are often used as proxies for other more difficult-to-measure concepts





Data Collection and Cleaning

Gather the available race/ ethnicity data.

Clean and prep data.

Information and Insights

Stratify performance and health outcomes by race/ethnicity to identify and measure disparities.

Analysis into Action

Use insights to develop QI strategies and interventions.

Intervention Evaluation and Adjustment

Share data and information to systematically review and evaluate progress.

Adjust intervention(s) as needed.

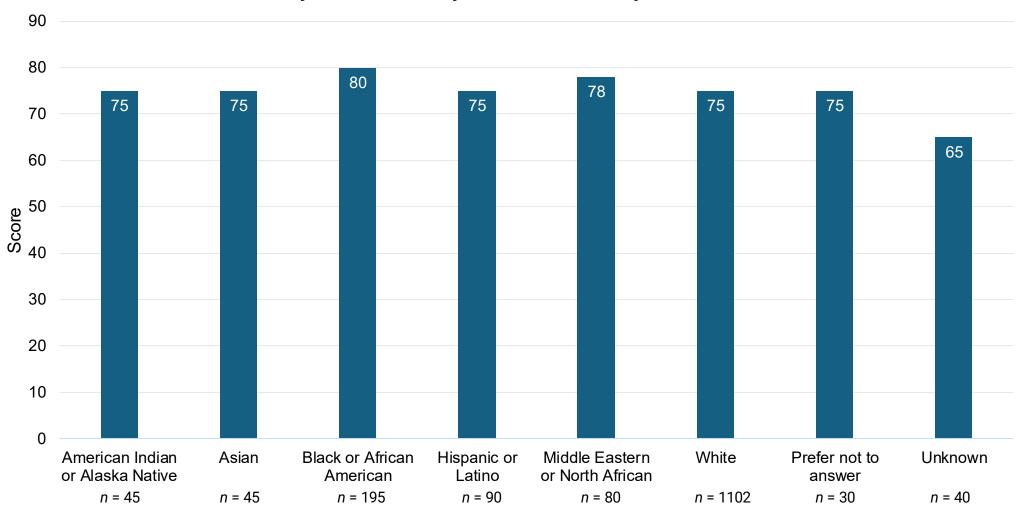


Best Practices for Presenting Data in Visualizations

- Titles should correspond to the measure(s)
 - "Performance by race/ethnicity, per hospital admission records"
 - Alternatively, offer a definition of the measure as a footnote
- Include a footnote of the data source and the method used to collect the data
- Display the n under each bar label
- Display the x-axis categories/groups alphabetically
 - "Prefer not to answer" and "Unknown" can be last in the order
- If there is missing data, include a footnote of how much missing data there is (e.g., 30% missing)
- If groups are too small to report out, include this information as a footnote, but not in the figure itself



Performance by Race/Ethnicity, as determined by Patient Attributes File



¹Sample for Native Hawaiian or Pacific Islander was too small to report.



²Of all patients, 10% do not have performance data.

³Data was collected from 2015-2020.

Avoiding Data Pitfalls

Data Best Practices

Avoid

Using White race as the default category

Collapsing small groups into "other" category

Using multiracial as an analytic category

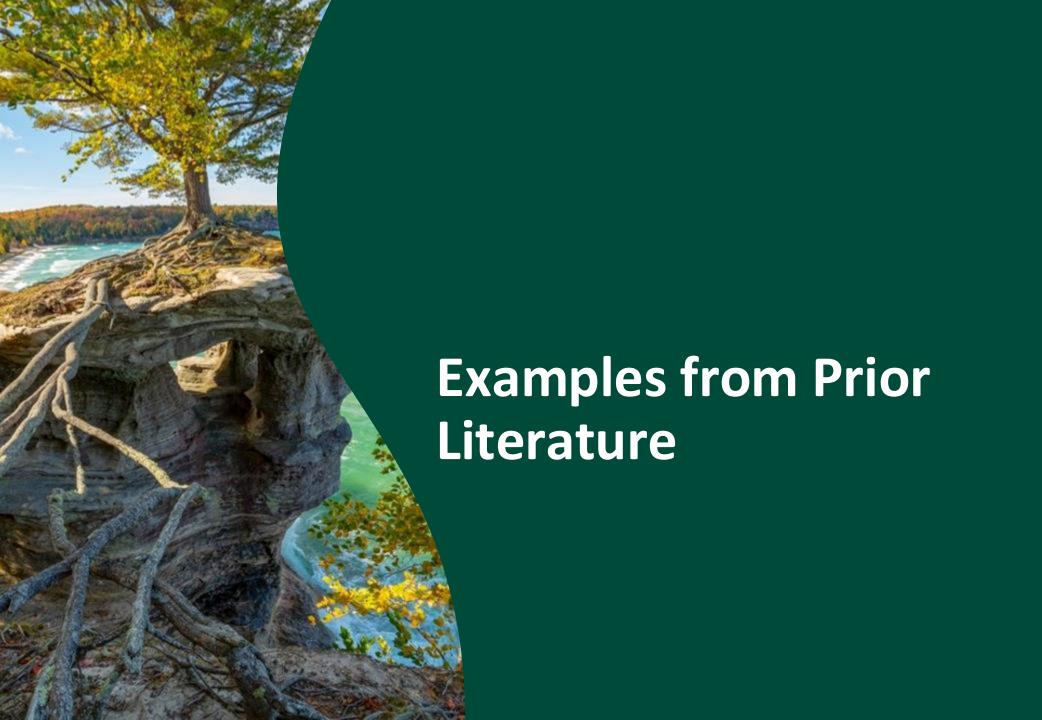
Using race, ethnicity, and geographic origin as proxies for genetic ancestry

Do This
Compare to overall population or goal value
Disaggregate when possible; Address data limitations
Use non-mutually exclusive race/ethnicity categories

Provide a rationale for inclusion of race/ethnicity as a



descriptor in any analysis



MPOG study finds Black vs. White patient race was associated with less antiemetic administration

ANESTHESIOLOGY

Antiemetic Administration and Its Association with Race: A Retrospective Cohort Study

Robert S. White, M.D., M.S.,
Michael H. Andreae, M.D., M.B.A. M.Sc., M.A.,
Briana Lui, B.S., Xiaoyue Ma, M.S.,
Virginia E. Tangel, M.A., M.Sc.,
Zachary A. Turnbull, M.D., M.B.A, M.S.,
Silis Y. Jiang, Ph.D., Anna S. Nachamie, M.B.A.,
Kane O. Pryor, M.D.; Multicenter Perioperative Outcomes
Group Collaborators*

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Table 2. Analysis of Ondansetron or Dexamethasone Administration

Characteristics	Adjusted Odds Ratio (95% CI)	<i>P</i> Value
Race/ethnicity		
White	1.00 (reference)	
Black	0.82 (0.81 to 0.82)	< 0.0001
Other	0.87 (0.86 to 0.88)	< 0.0001
Unknown	0.99 (0.98 to 1.00)	0.0043

- Previous studies found relationship between socioeconomic status and antiemetic administration
- Model also adjusted for patient sex, hospital-level factors, year, patient history (diabetes, motion sickness, smoking, etc.), and specifics about the care team and anesthesia technique

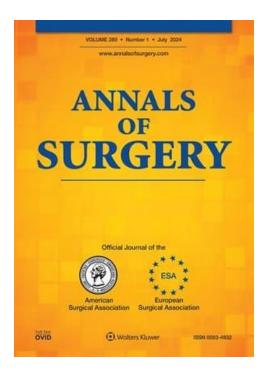


ERAS Protocols:

- Standardized, multimodal perioperative pathways
- Span the continuum of surgery (pre-, intra-, post-operative)
- Include processes addressing patient education, multimodal analgesia, early mobility
- Multidisciplinary input and implementation
- Driven by best evidence, creates a culture of pathway adherence

Enhanced Recovery After Surgery (ERAS) Eliminates Racial Disparities in Postoperative Length of Stay After Colorectal Surgery

Tyler S. Wahl, MD, MSPH,* Lauren E. Goss, MSPH,* Melanie S. Morris, MD,* Allison A. Gullick, MSPH,* Joshua S. Richman, MD, PhD,* Gregory D. Kennedy, MD, PhD,* Jamie A. Cannon, MD,* Selwyn M. Vickers, MD,* Sara J. Knight, PhD,* Jeffrey W. Simmons, MD,† and Daniel I. Chu, MD*







Has your site been included in any departmental or hospital initiatives related to health equity?

If yes, what opportunities have you come across?
 What challenges?

• If no, are there any you would like to be included in? Is there any support needed to make this happen?



Key Takeaways

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References

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Thank you!

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