

Disparities in Clinician Decisions to Withhold and Withdraw Life- Sustaining Treatment

Gina Piscitello MD MS

Overview



Discuss disparities in decisions to provide or withhold life sustaining treatment for patients with serious illness



Describe reasons these disparities may exist



Identify mechanisms to improve these disparities

Patient case



Patient case

A 35-year-old patient with decompensated liver cirrhosis is admitted to the MICU with hepatic encephalopathy requiring intubation, hypotension requiring vasoactive agents, and hepatorenal syndrome.

The clinician explains to the surrogate that acute continuous renal replacement therapy will not be provided to the patient because, in their medical judgment, the harms of this treatment outweigh the benefits for the patient.

The patient's surrogate disagrees with this and requests the patient be started on CRRT

Terminology



Physiologic futility – cases when LST cannot accomplish its physiologic goal but is requested by the patient or surrogate.



“Potentially inappropriate” treatment - LST that may accomplish the effect sought by the patient or surrogate but clinicians believe competing ethical considerations justify not providing it.



Part 1:
**Disparities in Decisions to
Withhold and Withdraw Life
Sustaining Treatment**

Disparities in Withholding and Withdrawing Life Sustaining Treatment

1

Withholding ECMO

2

Withholding
Mechanical
Ventilation

3

Withholding CPR

Disparities in Adult Patient Selection for Extracorporeal Membrane Oxygenation in the United States

A Population-Level Study

Anuj B. Mehta^{1,2,3}, Jennifer K. Taylor¹, Gwenyth Day¹, Trevor C. Lane¹, and Ivor S. Douglas^{1,2}

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Disparities in placing patients on ECMO

Groups less likely to be treated with ECMO

Female patients

Patients with Medicaid, Medicare, Other
Insurance

Patients from Lowest Income
Neighborhoods

Patients who are Black

ECMO Disparities Across US Hospitals

Nationwide Readmissions Database – 2016-2019 - 18,725 ECMO Cases

Table 2. Adjusted odds of extracorporeal membrane oxygenation use, based on patient demographics

Demographic Category	Multivariable Hierarchical Logistic Regression aOR (95% CI)	E-Value Estimates*	IPTW Analysis aOR (95% CI)
Sex			
Female	0.73 (0.70–0.75)	2.08	0.77 (0.75–0.79) [†]
Male	Reference [‡]	—	Reference
Primary insurance			
Medicare	0.50 (0.48–0.52)	3.41	—
Medicaid	0.55 (0.52–0.57)	3.04	0.57 (0.55–0.58) [§]
Other	0.64 (0.60–0.68)	2.50	—
Private insurance	Reference	—	Reference
Median income of patient zip code [¶]			
Quartile 1	0.63 (0.60–0.67)	2.55	0.64 (0.61–0.66) ^{**}
Quartile 2	0.78 (0.74–0.81)	1.88	—
Quartile 3	0.87 (0.83–0.91)	1.56	—
Quartile 4	Reference ^{††}	—	Reference
Intersectionality Identity [¶]			
Female, income quartile 1	0.50 (0.46–0.53)	3.41	— ^{‡‡}
Male, income quartile 1	0.64 (0.61–0.68)	2.50	—
Female, income quartile 2	0.56 (0.53–0.60)	2.97	—
Male, income quartile 2	0.80 (0.76–0.85)	1.81	—
Female, income quartile 3	0.64 (0.60–0.69)	2.50	—
Male, income quartile 3	0.89 (0.84–0.94)	1.50	—
Female, income quartile 4	0.74 (0.69–0.79)	2.04	—
Male, income quartile 4	Reference ^{§§}	—	—

ECMO Disparities Using State Inpatient Databases

Table 4. State inpatient database analyses*

	ECMO (n = 5,254)	Mechanical Ventilation Only (n = 588,609)	aOR for ECMO (95% CI)
Race, % [†]			
White	64.0	66.3	Reference
Black	14.7	17.9	0.72 (0.65–0.79)
Asian	5.4	5.0	0.91 (0.78–1.07)
Native American/PI	0.6	0.8	0.74 (0.48–1.14)
Other	15.4	10.0	0.98 (0.88–1.09)
Ethnicity, % [‡]			
Hispanic	17.4	17.5	0.92 (0.84–1.01)
Not Hispanic	82.6	82.5	Reference
Sex, % [§]			
Female	34.0	43.1	0.77 (0.72–0.83)
Male	66.0	56.9	Reference
Primary insurance, %			
Medicare	33.6	56.5	0.51 (0.46–0.56)
Medicaid	21.3	20.5	0.57 (0.52–0.63)
Other	38.6	16.3	0.46 (0.37–0.56)
Private insurance	6.6	6.7	Reference
Median income of patient zip code ^{¶**}			
Quartile 1	25.6	36.0	0.54 (0.47–0.62)
Quartile 2	27.2	29.0	0.70 (0.61–0.80)
Quartile 3	23.9	20.9	0.83 (0.73–0.94)
Quartile 4	23.4	14.1	Reference

ECMO Disparities at ECMO Capable Hospitals

Table 5. Key subgroup sensitivity analyses

Exposure	ECMO	Mechanical Ventilation Only	aOR (95% CI)
ECMO-capable hospitals (<i>n</i> = 1,089,225)*			
Female (%)	36.1	43.5	0.72 (0.70–0.75)
Primary insurance, %			
Medicare	36.5	56.2	0.50 (0.48–0.52)
Medicaid	18.2	17.3	0.54 (0.52–0.57)
Other	7.2	7.8	0.64 (0.60–0.68)
Private insurance	38.1	18.7	Reference
Median income of patient zip code, % [†]			
Quartile 1	24.5	32.0	0.63 (0.60–0.67)
Quartile 2	24.6	26.4	0.77 (0.73–0.81)
Quartile 3	25.8	23.3	0.87 (0.83–0.91)
Quartile 4	25.1	18.3	Reference
Nonelective admissions (<i>n</i> = 2,032,224)*			
Female, %	35.5	44.5	0.71 (0.68–0.73)
Primary insurance, %			
Medicare	33.5	57.5	0.47 (0.44–0.49)
Medicaid	19.8	17.8	0.55 (0.52–0.57)
Other	7.8	7.7	0.64 (0.60–0.68)
Private insurance	38.9	17.1	Reference
Median income of patient zip code, % [†]			
Quartile 1	24.8	32.7	0.62 (0.59–0.66)
Quartile 2	24.3	26.7	0.76 (0.72–0.80)
Quartile 3	25.6	23.2	0.85 (0.81–0.90)
Quartile 4	25.3	17.3	Reference
Pneumonia or sepsis present on admission[‡] (<i>n</i> = 294,401)			
Female, %	35.6	44.0	0.75 (0.67–0.84)
Primary insurance, %			
Medicare	22.5	60.9	0.39 (0.33–0.45)
Medicaid	29.0	19.9	0.57 (0.50–0.65)
Other	7.6	5.4	0.54 (0.44–0.67)
Private insurance	41.0	13.9	Reference
Median income of patient zip code, % [†]			
Quartile 1	25.6	36.7	0.53 (0.43–0.66)
Quartile 2	30.4	28.8	0.81 (0.66–1.00)
Quartile 3	22.5	20.5	0.92 (0.74–1.14)
Quartile 4	21.6	14.1	Reference

Other
Insurance-

Why Is
ECMO
Used Less
Often?

~**16.9-30%** of organ donors
in the United States did not
have health insurance

Only **0.8%** of uninsured
patients receive an organ
transplant.

(Cull et. al. Greenville Health System Proceedings, 2016; Herring et. al. Int J Health Serv, 2008)



Other
Insurance-

Why Is
ECMO
Used Less
Often?

This is despite recommendations by the 1984 National Organ Transplant Act recommending **“equitable access by patients to organ transplantation and for assuring the equitable allocation of donated organs among transplant patients and among patients medically qualified for an organ transplant.”**

(United States National Organ Transplant Act: Public Law 98-507, 1984)

Association between Patient Race and Ethnicity and Use of Invasive Ventilation in the United States

Fred M. Abdelmalek¹, Federico Angriman^{2,3,10}, Julie Moore^{5,6}, Kuan Liu², Lisa Burry^{3,4,6}, Laleh Seyyed-Kalantari⁹, Sangeeta Mehta^{3,6}, Judy Gichoya¹¹, Leo Anthony Celi^{12,13}, George Tomlinson^{2,6}, Michael Fralick⁶, and Christopher J. Yarnell^{2,3,6,7,8}

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Lower Use of Invasive Mechanical Ventilation in Asian, Black and Hispanic Patients

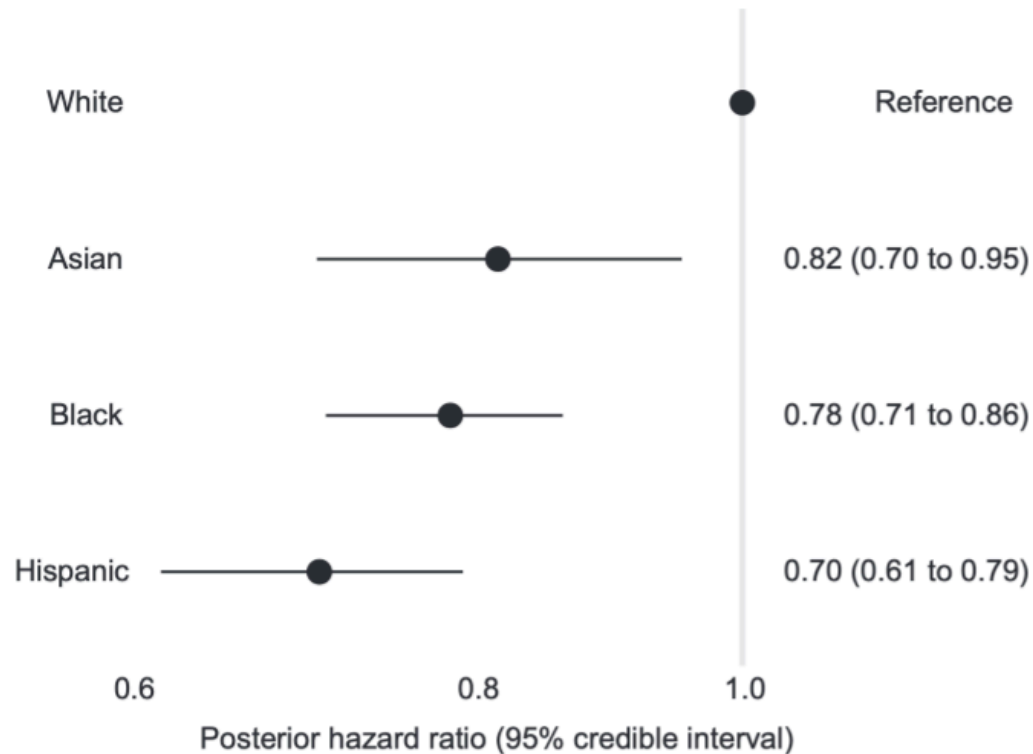
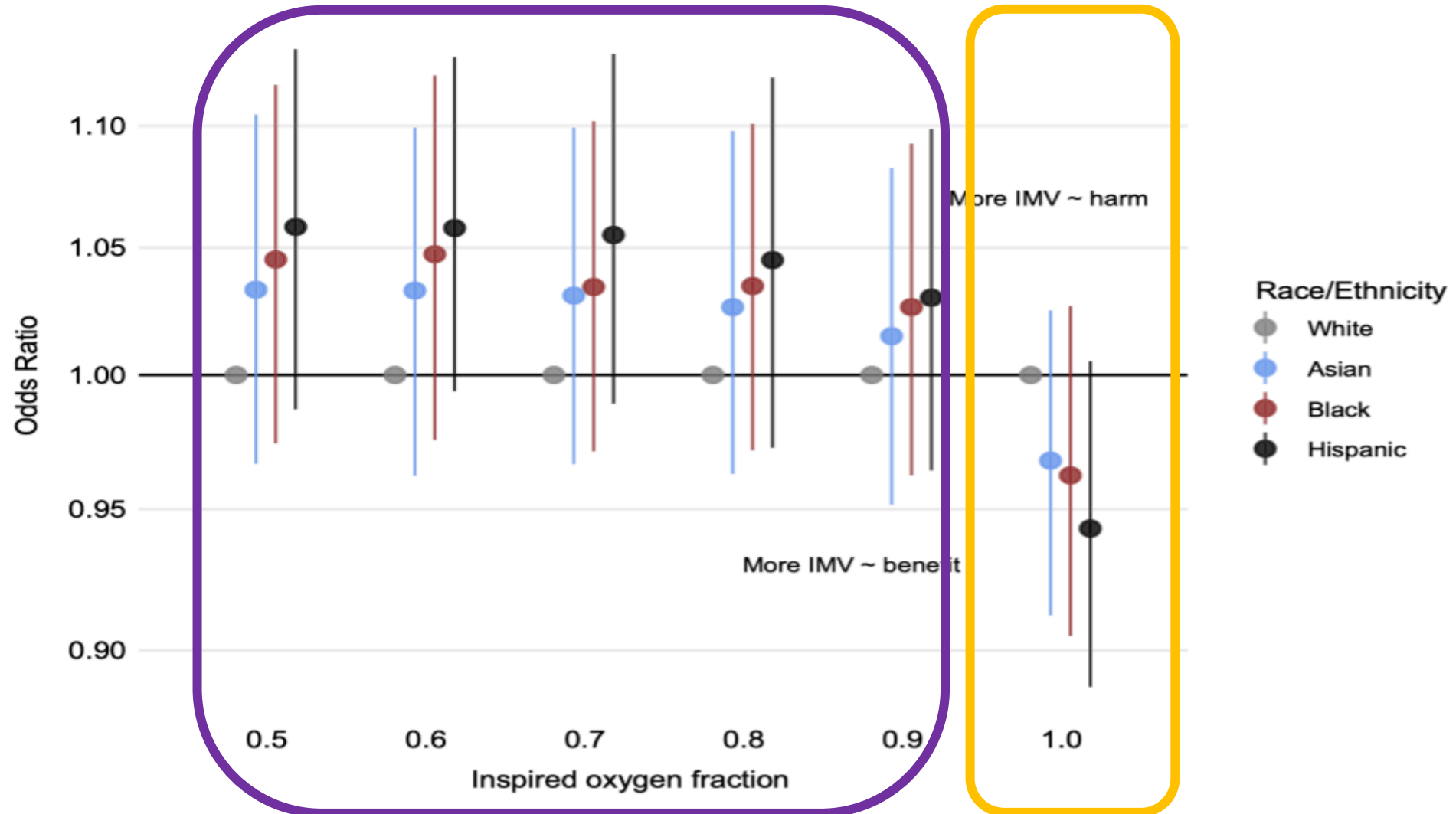


Figure 1. Hazard ratios for invasive ventilation. This figure shows the posterior hazard ratios for the transition from oxygen therapy to invasive ventilation (x-axis) by patient race and ethnicity (y-axis). White race and ethnicity is the reference category. The x-axis scale is logarithmic. The posterior mean hazard ratios (with 95% credible intervals) are in the righthand column. The figure shows that Asian, Black, and Hispanic patients had a lower hazard of invasive ventilation than White patients, with the largest discrepancy seen in Hispanic patients.

For the Sickest Patients, Mortality for Asian, Black and Hispanic Patients May Decrease if They Receive Invasive Mechanical Ventilation at Rates Similar to White Patients



(Abdelmalek et.al. Ann Am Thorac Soc, 2023)

Unilateral DNR Orders

AFTER THE **DNR**

Surrogates Who Persist in Requesting Cardiopulmonary Resuscitation

BY ELLEN M. ROBINSON, WENDY CADGE, ANGELIKA A. ZOLLFRANK,
M. CORNELIA CREMENS, AND ANDREW M. COURTWRIGHT



Surrogates Disagreeing With Unilateral DNR Order Are Often Nonwhite and Born Outside the US

Table 1.
Characteristics of the Nineteen Patients
Whose Surrogates Rejected the Order to With-
hold Cardiopulmonary Resuscitation

Age in years	75.7 ± 3.4
Number of females	9 (47.4%)
Number of nonwhites	8 (42.1%)
Number whose primary language was not English	3 (15.8%)
Number born outside the United States	9 (47.4%)
Number who resided at home prior to admission	8 (42.1%)
Number who were completely or partially dependent prior to admission	17 (89.5%)
Median number of those with major medical comorbidities on admission (with the interquartile range)	3 (2-4.5)
Days from admission to ethics consultation	15.3 ± 6.4
Number seen by one of these consulting services:	
medicine	13 (68.4%)
general surgery	4 (21.1%)
other	2 (10.5%)
Number hospitalized in an intensive care unit	10 (52.6%)
Median number of life-sustaining treatments at the time of consultation (with the interquartile range)	3 (2-4.5%)
Number with official health care proxy documentation	6 (31.6%)
Number whose surrogate decision-maker was	
an adult child	11 (57.9%)
a spouse	7 (36.8%)
other (parent, sibling, friend, legal guardian)	1 (5.3%)
Number who had more than four meetings held	7 (36.8%)

FEATURE ARTICLES

Disparities in Unilateral Do Not Resuscitate Order Use During the COVID-19 Pandemic*

Piscitello, Gina M. MD, MS^{1,2}; Tyker, Albina MD³; Schenker, Yael MD, MAS^{1,2}; Arnold, Robert M. MD^{1,2}; Siegler, Mark MD^{4,5}; Parker, William F. MD, PhD^{5,6}

[Author Information](#) 

Critical Care Medicine 51(8):p 1012-1022, August 2023. | DOI: 10.1097/CCM.0000000000005863

BUY

SDC

EDITOR'S CHOICE

 Metrics

Unilateral DNR More Often Used During 1st and 2nd Wave of COVID-19 Pandemic

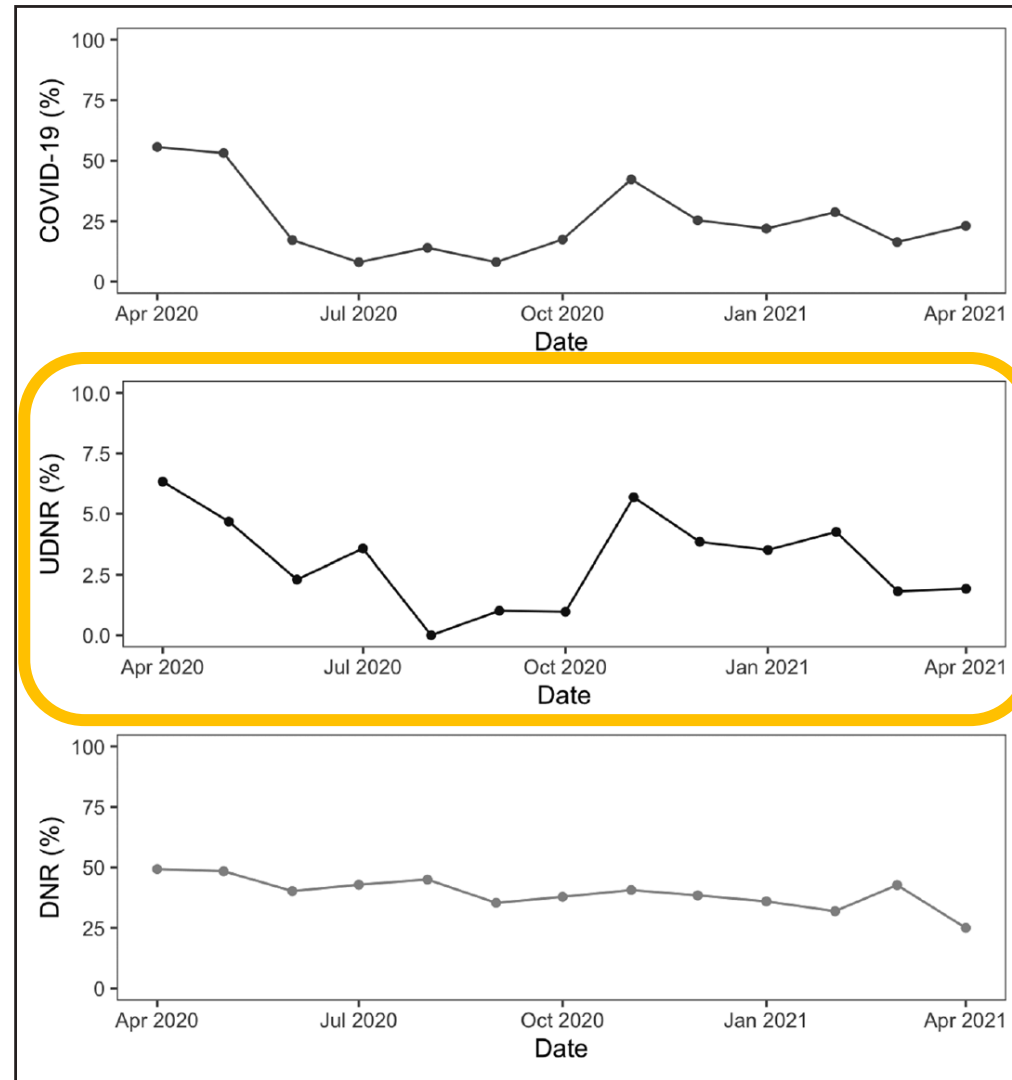


Figure 2. COVID-19 positive status, unilateral do not resuscitate (UDNR) status, and do not resuscitate (DNR) status in the ICU over time.

Absolute Rate of UDNR ~10% for Spanish Speaking Patients

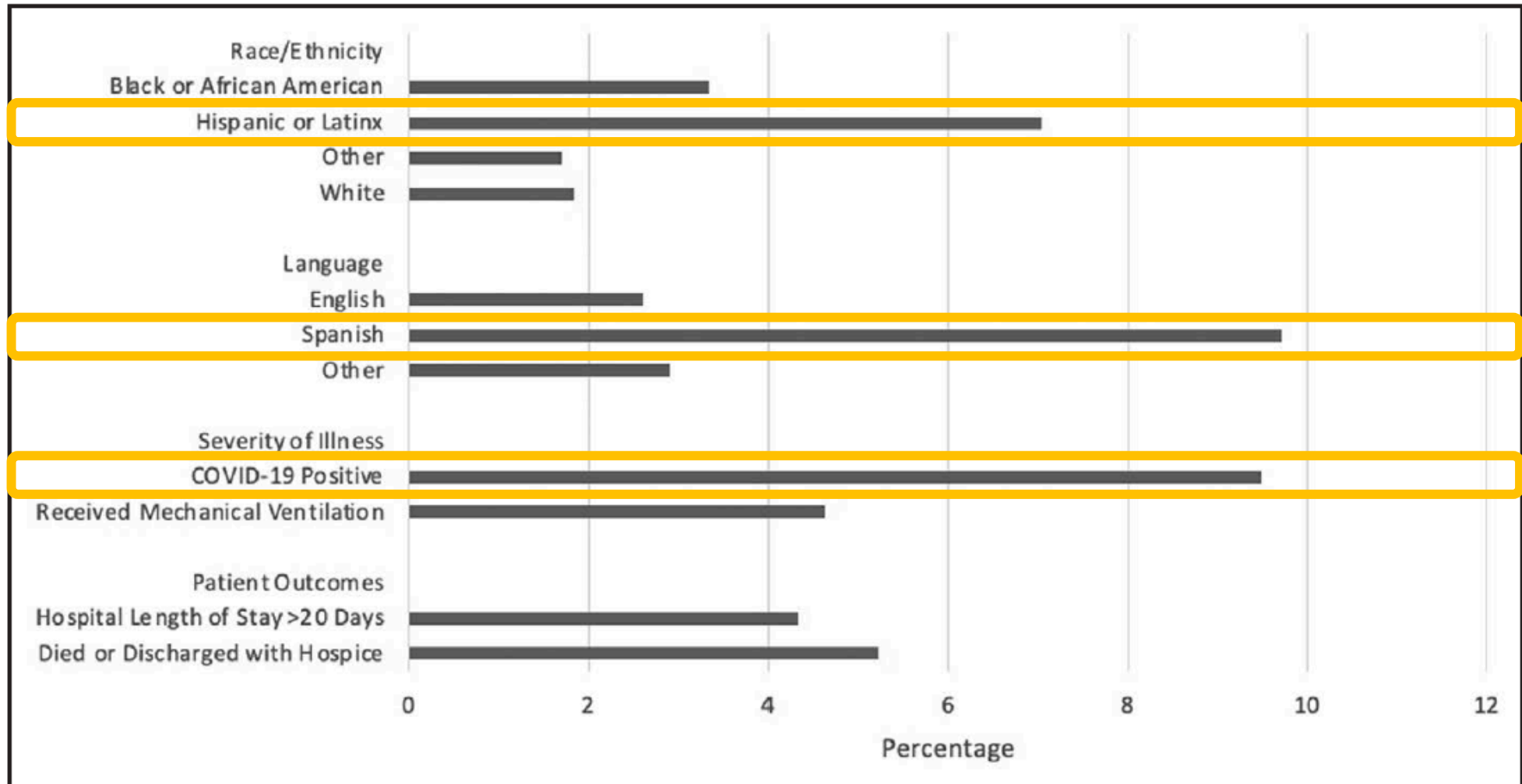


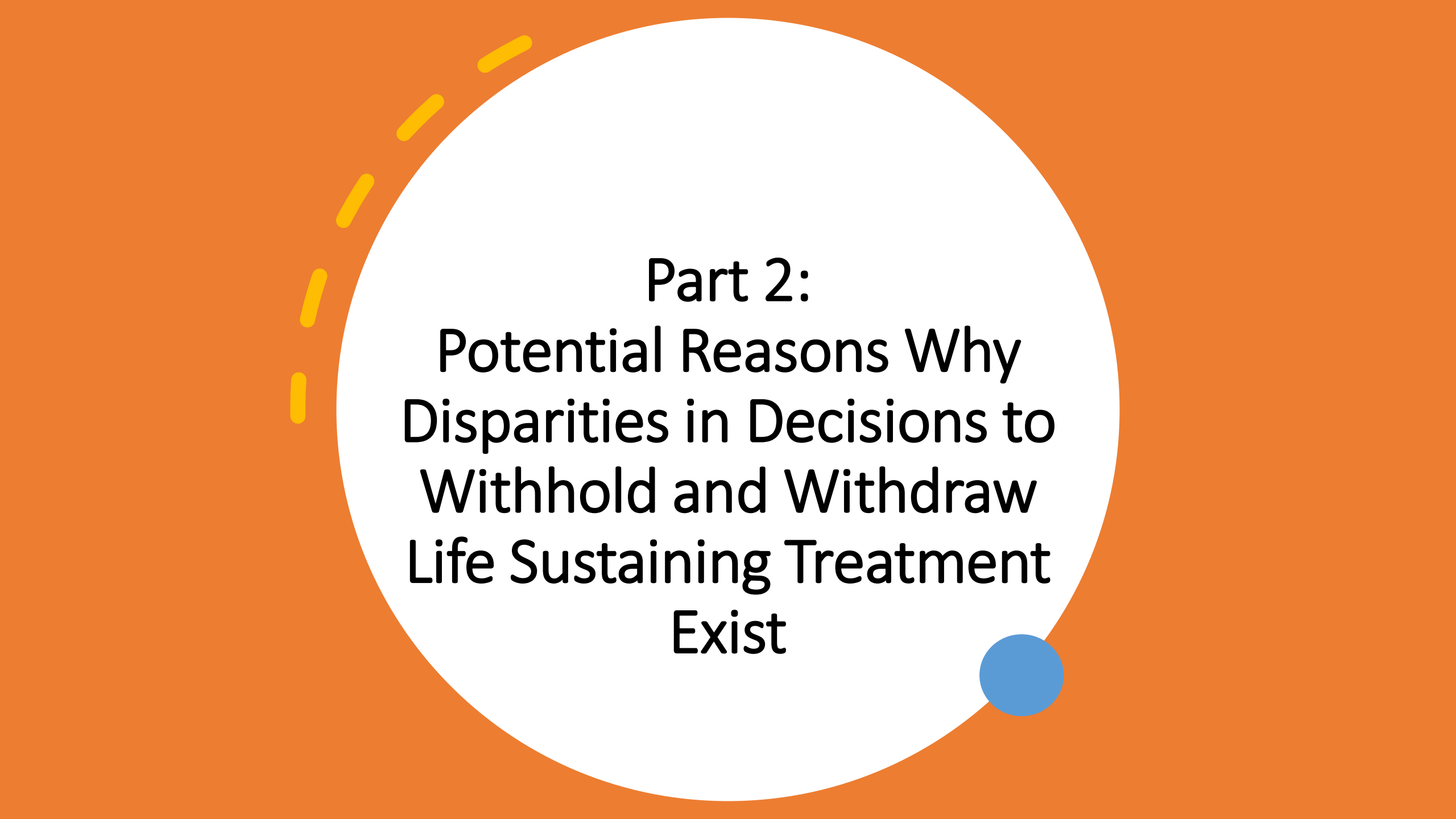
Figure 1. Absolute rate of unilateral do not resuscitate orders.

After adjusting for sociodemographic factors and severity of illness, **Spanish speaking patients had higher odds of UDNR order placement**

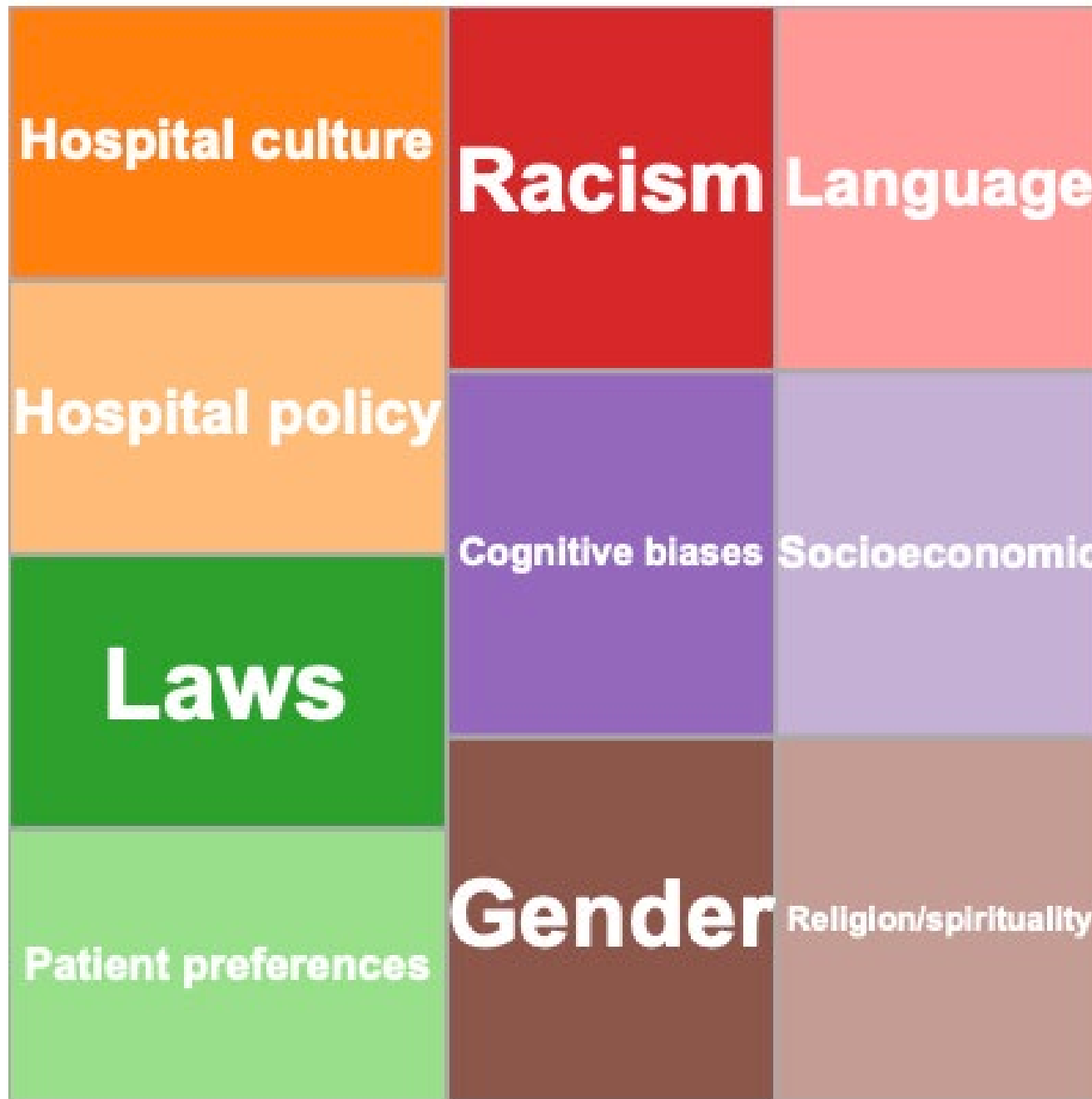
TABLE 2.

Multivariable Logistic Regression Analysis Identifying Factors Associated With Use of Unilateral Do Not Resuscitate Orders

Patient Characteristics	Base Model OR (95% CI) ^a	Base Model + COVID-19 Positive and Intubation Status OR (95% CI) ^b
Age		
< 49	1 (Reference)	1 (Reference)
50–69	0.5 (0.3–0.97)^c	0.5 (0.3–0.9)^c
70–89	0.8 (0.6–1.2)	0.8 (0.7–0.99)^c
> 90	0.7 (0.6–0.8)^e	0.8 (0.7–0.8)^e
Race/ethnicity		
White	1 (Reference)	1 (Reference)
Black or African American	2.5 (1.3–4.9)^d	1.8 (0.9–3.4)
Hispanic or Latinx	1.2 (0.3–4.4)	0.7 (0.2–2.3)
Other	0.7 (0.6–0.9)^d	0.4 (0.4–0.5)^e
Primary language		
English	1 (Reference)	1 (Reference)
Spanish	4.4 (2.1–9.4)^e	2.8 (1.7–4.7)^e
Other	1.4 (0.2–8.8)	1.5 (0.2–11.2)
Hospital		
Hospital A	1 (Reference)	1 (Reference)
Hospital B	3.6 (3.5–3.7)^e	3.3 (2.8–3.9)^e
COVID-19 positive		7.8 (4.3–14.3)^e
Intubated		1.3 (0.6–2.7)



**Part 2:
Potential Reasons Why
Disparities in Decisions to
Withhold and Withdraw
Life Sustaining Treatment
Exist**



Clinician Preferences

CORRESPONDENCE | [VOLUME 152, ISSUE 1, P224-225, JULY 2017](#)

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Unilateral Do Not Resuscitate Orders

Physician Attitudes and Practices

[Michael S. Putman, MD](#)   • [Andrew D'Alessandro, MEd](#) • [Farr A. Curlin, MD](#) • [John D. Yoon, MD](#)

DOI: <https://doi.org/10.1016/j.chest.2017.03.041> •  [Check for updates](#)  [Metrics](#)

Nonwhite Physicians Less Likely To Agree that Unilateral DNR Orders Can Be Appropriate

Physician Characteristics ^a	No. (%)	<i>P</i> Value	OR (95% CI)
Race/ethnicity			
White	372 (50)	.013	Referent
Black	18 (38)		0.43 (0.18-0.99) ^b
Asian	80 (36)		0.45 (0.26-0.78) ^b
Hispanic/Latino	22 (38)		0.57 (0.26-1.23)
Other	33 (52)		0.97 (0.48-1.94)

Family Practice, Cardiologists and Nephrologists Less Likely To Agree Unilateral DNR Orders Can Be Appropriate



Physician specialty			
Pulmonary/critical care	101 (62)	< .001	Referent
Internal medicine	150 (52)		0.64 (0.40-1.04)
Family medicine/general practice	114 (41)		0.34 (0.21-0.57) ^b
Cardiology	19 (28)		0.26 (0.12-0.56) ^b
Nephrology	7 (23)		0.20 (0.06-0.59) ^b
Hematology/oncology	63 (57)		0.81 (0.44-1.49)
Geriatrics/hospice and palliative care	71 (60)		0.98 (0.55-1.75)

(Putman et. al. CHEST, 2017))



Original Article

U.S. Physicians' Opinions About Accommodating Religiously Based Requests for Continued Life- Sustaining Treatment

Derek D. Ayeh MS^a, Hyo Jung Tak PhD^b, John D. Yoon MD^c,
Farr A. Curlin MD^d  

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^d Trent Center for Bioethics, Humanities & History of Medicine, Duke
University, Durham, North Carolina, USA

- More likely to accommodate if family mentioned their **Orthodox Jewish community** (85% vs. 70%, $p < 0.001$).
- More likely to accommodate if a family member states the patient's **religious faith** does not permit discontinuing life sustaining treatment (65% vs. 46%, $p < 0.001$).
- NOT more likely to accommodate if patient's family stated they expected **divine healing** (50% vs. 46%).

Patient Preferences


[J Gen Intern Med.](#) 2009 Jun; 24(6): 695–701.

Published online 2009 Apr 23. doi: [10.1007/s11606-009-0952-6](https://doi.org/10.1007/s11606-009-0952-6)

PMCID: PMC2686762

PMID: [19387750](https://pubmed.ncbi.nlm.nih.gov/19387750/)

Racial and Ethnic Differences in Preferences for End-of-Life Treatment

[Amber E. Barnato](#), MD, MPH, MS, ¹ [Denise L. Anthony](#), PhD,² [Jonathan Skinner](#), PhD,³ [Patricia M. Gallagher](#), PhD,⁴
and [Elliott S. Fisher](#), MD, MPH^{3,5}

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Black patients more likely to want life-prolonging drugs and respirator for life extension

Table 2

Relationship of Race/Ethnicity and Concerns and Preferences for end-of-life Medical Treatment*

	Adjusted odds ratio, compared to non-Hispanic whites (95% confidence interval)†		
	Black	Hispanic	Other
Concerned re: too little medical care	0.5 (0.4 – 0.7)	0.7 (0.4 – 1.2)	0.7 (0.4 – 1.2)
Concerned re: too much medical care	2.0 (1.5 – 2.7)	1.4 (0.9 – 2.5)	1.3 (0.8 – 2.2)
Want to spend last days in a hospital	2.3 (1.6 – 3.2)	2.2 (1.3 – 4.0)	2.1 (1.1 – 4.0)
Want life-prolonging drugs	1.9 (1.4 – 2.6)	1.2 (0.7 – 2.1)	0.6 (0.3 – 1.2)
Want palliative drugs	0.4 (0.3 – 0.5)	0.5 (0.3 – 0.7)	0.8 (0.4 – 1.3)
Want a respirator for 1 weeks' life extension	2.1 (1.6 – 2.9)	1.4 (0.8 – 2.5)	1.7 (1.0 – 3.1)
Want a respirator for 1 months' life extension	2.3 (1.6 – 3.3)	1.8 (0.91 – 3.4)	1.4 (0.68 – 3.0)

[Open in a separate window](#)

*All models adjusted for age and health status; individual models additionally adjusted for other significant predictors of each concern/preference, which may include sex, education, financial strain, self efficacy, preference for specialists, belief in the effectiveness of mechanical ventilation, living alone, church attendance, less than weekly contact with friends or family, never attending social or community activities, daily pain/discomfort, and having a personal doctor

†Odds ratios should not be interpreted as rate ratios for these concerns/preferences with prevalence >5%

(Barnato et. al.,
J Gen Intern Med, 2009)

Original Investigation | Equity, Diversity, and Inclusion



July 5, 2023

Perspectives About Racism and Patient-Clinician Communication Among Black Adults With Serious Illness

Crystal E. Brown, MD, MA^{1,2,3}; Arisa R. Marshall, BS²; Cyndy R. Snyder, PhD⁴; [et al](#)

» [Author Affiliations](#) | [Article Information](#)

JAMA Netw Open. 2023;6(7):e2321746. doi:10.1001/jamanetworkopen.2023.21746

Participants reported high levels of medical mistrust and high frequency of discrimination and microaggressions experienced in health care settings. Participants reported epistemic injustice as the most common manifestation of racism: silencing of their own knowledge and lived experiences about their bodies and illness by health care workers. Participants reported that these experiences made them feel isolated and devalued, especially if they had intersecting, marginalized identities, such as being underinsured or unhoused. These experiences were associated with exacerbation of existing medical mistrust and poor patient-clinician communication.

“...our study findings suggest that Black patients who were multiply marginalized may have had values and preferences borne from surviving unjust conditions and unequal power relationships.”

Hospital Culture

This Issue

Views **5,542** | Citations **0** | Altmetric **88**

Original Investigation | Less Is More

July 3, 2023

Hospital Culture and Intensity of End-of-Life Care at 3 Academic Medical Centers

Elizabeth Dzung, MD, PhD, MPH^{1,2,3}; Jason N. Batten, MD, MA^{4,5}; Daniel Dohan, PhD²; et al

» [Author Affiliations](#)

JAMA Intern Med. 2023;183(8):839-848. doi:10.1001/jamainternmed.2023.2450

(Dzung, JAMA Internal Medicine, 2023)

Hospital Policy

Hospital Policy Variation in Addressing Decisions to Withhold and Withdraw Life-sustaining Treatment

Gina M. Piscitello, MD; Patrick G. Lyons, MD; Valerie Gutmann Koch, JD; William F. Parker, MD, PhD; and Michael Huber

Hospitals varied in their stated guidance, permitting life sustaining treatment to be withheld or withdrawn in cases of:

1. patient or surrogate request (82%)
2. physiologic futility (81%)
3. “potentially inappropriate” treatment (64%)

Rare Alignment with Consensus Policy Statement on Responding to “Potentially Appropriate” Treatment

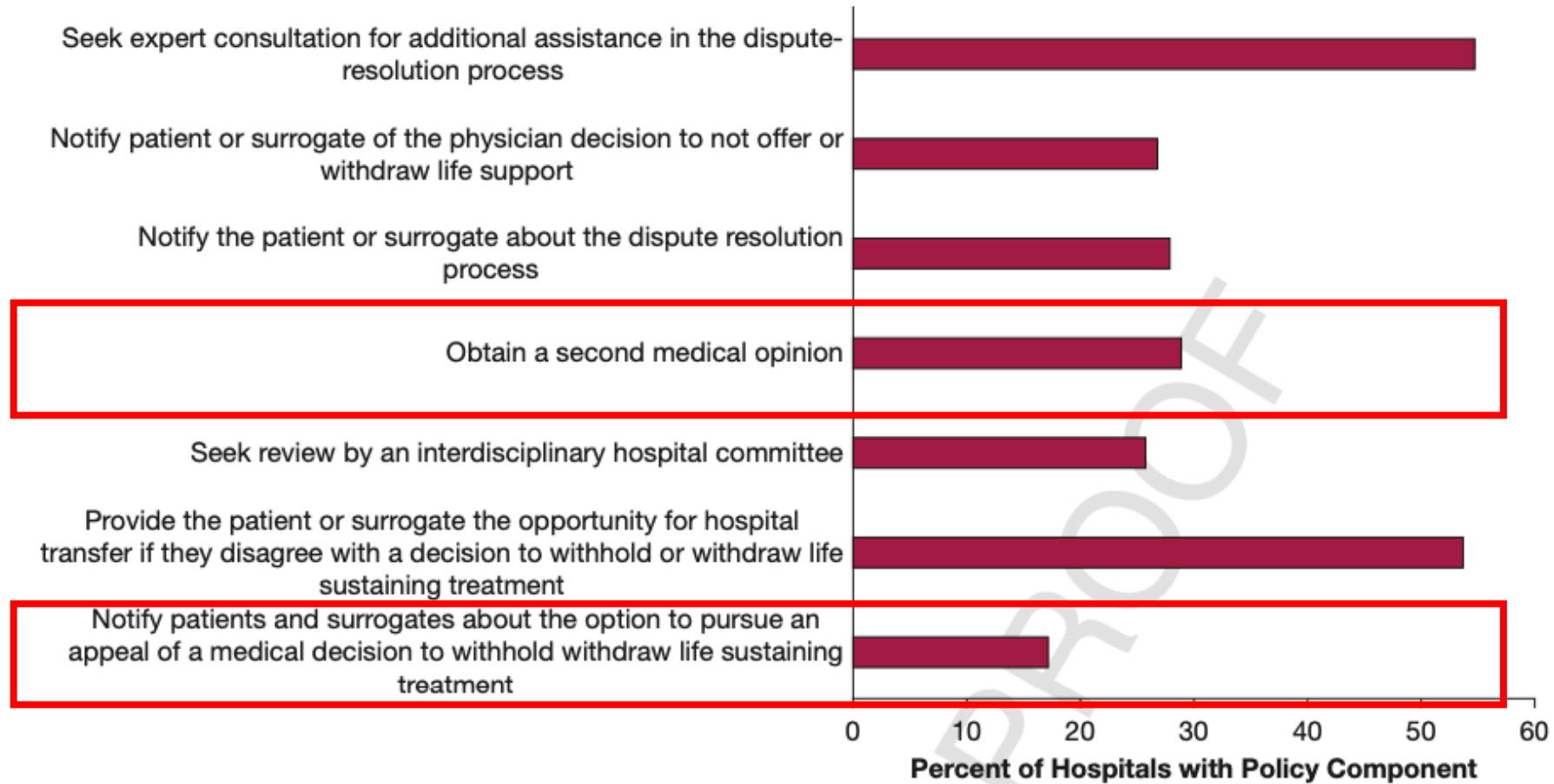


Figure 1 – Prevalence of policies recommending specific actions for approaching physician, patient, and surrogate disagreement in cases of potentially inappropriate treatment.

Committee Membership to “Discuss “Potentially Inappropriate” Treatment Varies Across Hospitals

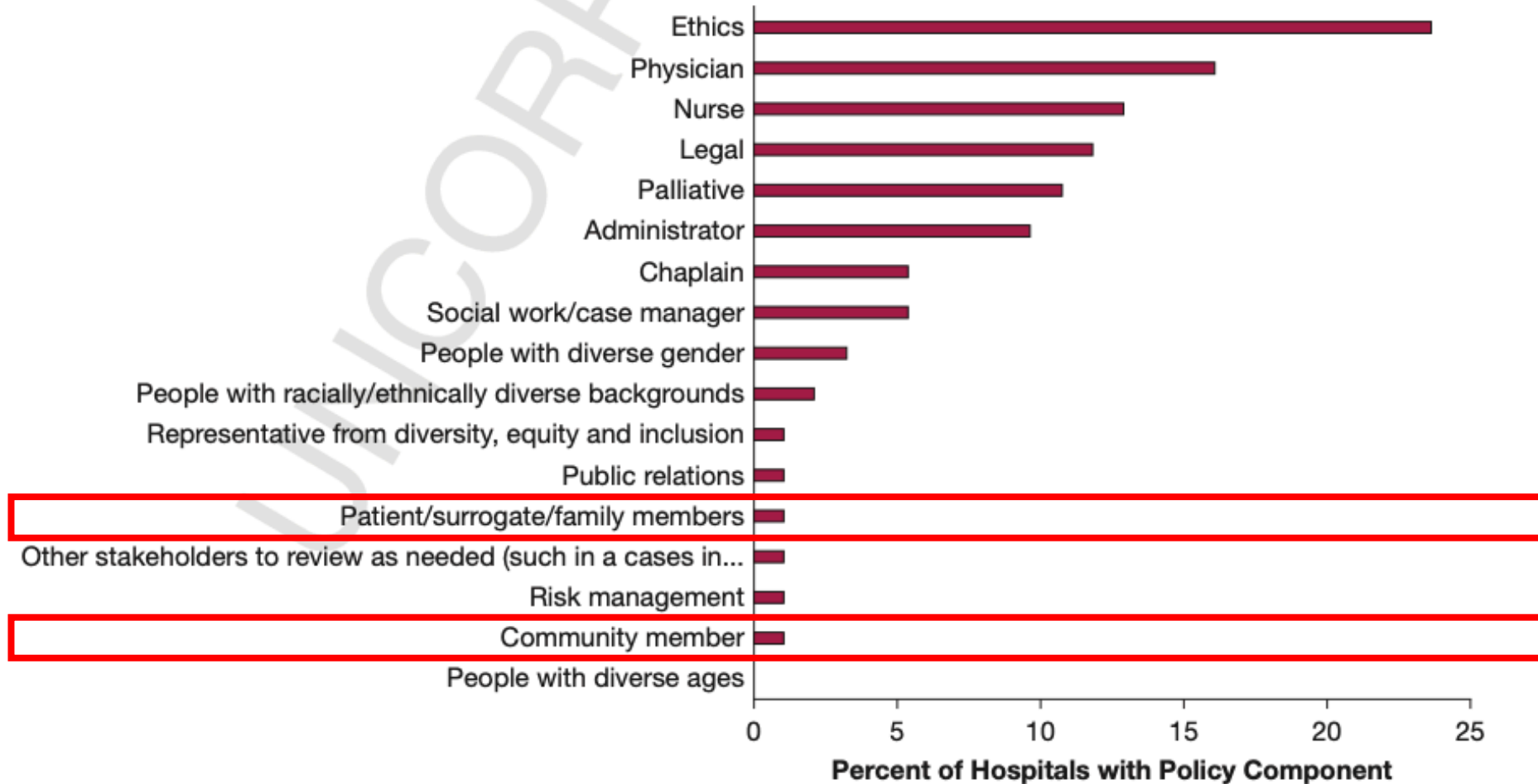


Figure 2 – Prevalence of policies recommending specific participant inclusion on committees to discuss cases of potentially inappropriate treatment.

8% of hospital policies addressed patient sociodemographic disparities in decisions to withhold or withdraw life sustaining treatment

Hospital policies addressing sociodemographic disparities provided **opposing recommendations** to either:

1. exclude sociodemographic factors in decision-making or
2. actively acknowledge and incorporate these factors in decision-making.

3% of hospitals had policies that recommended collecting and maintaining information about patients for whom life sustaining treatment was withheld or withdrawn that can be used to identify disparities in decision-making.

Nearly half of hospitals (**47%**) had policies that explicitly included clinician value judgments.

Examples of Clinician Value Judgements within Hospital Policies

TABLE 2] Selection of Survey Respondent Reports of Value Judgments Included in Hospital Policies that Support Physician Decisions to Withhold or Withdraw Life-sustaining Treatment

Example of Value Judgment
"There is no reasonable expectation that the patient will cognitively improve enough to perceive the benefits of treatment."
"Treatment may offer no realistic chance of meaningful benefit."
"Definition of terminal included in policy references a meaningful recovery."
"Physician judgment of patient meaningful life."
"Policy speaks of non-beneficial treatment as any treatment that cannot provide a benefit the patient can experience."
"No interaction with their environment."
"No meaningful recovery, care is futile."

A large orange circular graphic on the left side of the slide, containing the title text. The circle is partially cut off by the left edge of the frame.

Part 3: What Can Be Done to Improve These Disparities

What can
be done to
improve
these
disparities

**Internal review to
evaluate for
disparities in these
decisions**

What can
be done to
improve
these
disparities

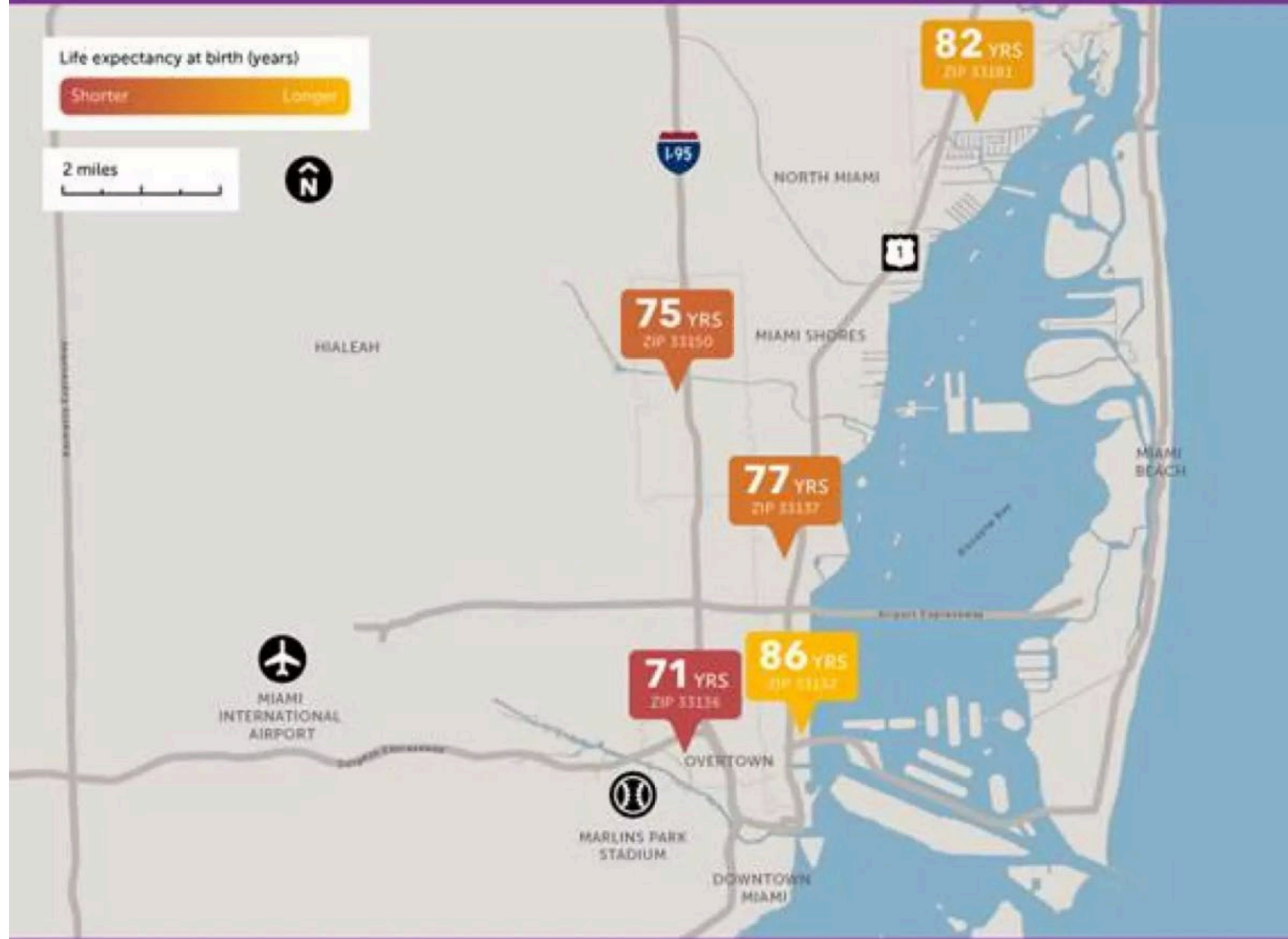
**Increase diversity of
clinicians to match the
patients we serve**

MIAMI, FLORIDA

Follow the discussion

#CloseHealthGaps

Short Distances to Large Gaps in Health



Research Letter

FREE

May 11, 2023

Temporal Trends in Childhood Household Income Among Applicants and Matriculants to Medical School and the Likelihood of Acceptance by Income, 2014-2019

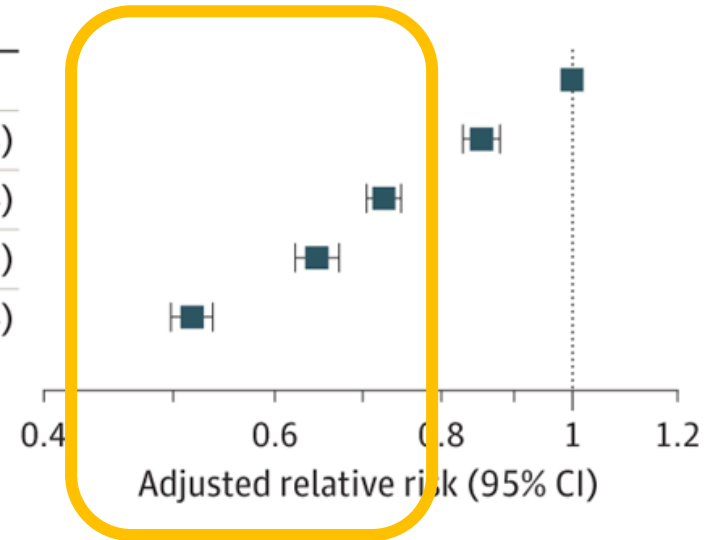
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JAMA. 2023;329(21):1882-1884. doi:10.1001/jama.2023.5654

Figure 2. Relative Risk of Acceptance to Medical School by Household Income

Household income, \$	Adjusted relative risk (95% CI)
≥200 000	1 [Reference]
125 000-199 999	0.85 (0.82-0.88)
75 000-124 999	0.72 (0.70-0.74)
50 000-74 999	0.64 (0.61-0.67)
<50 000	0.52 (0.50-0.54)



Adjusted relative risk of acceptance into at least 1 MD program for applicants from years 2014 to 2019, adjusting for self-reported race, ethnicity, sex, undergraduate grade point average, and the number of MD programs to which individuals applied.

What can
be done to
improve
these
disparities

**Promote research to
identify and reduce
these disparities**

What can
be done to
improve
these
disparities

**Increase diversity in
ethics committees**

AMA Code of Medical Ethics

10.7 Ethics Committees in Health Care Institutions

In making decisions about health care, patients, families, and physicians and other health care professionals often face difficult, potentially life-changing situations. Such situations can raise ethically challenging questions about what would be the most appropriate or preferred course of action. Ethics committees, or similar institutional mechanisms, offer assistance in addressing ethical issues that arise in patient care and facilitate sound decision making that respects participants' values, concerns, and interests.

In addition to facilitating decision making in individual cases (as a committee or through the activities of individual members functioning as ethics consultants), many ethics committees assist ethics-related educational programming and policy development within their institutions.

To be effective in providing the intended support and guidance in any of these capacities, ethics committees should:

(a) Serve as advisors and educators rather than decision makers. Patients, physicians and other health care professionals, health care administrators, and other stakeholders should not be required to accept committee recommendations. Physicians and other institutional stakeholders should explain their reasoning when they choose not to follow the committee's recommendations in an individual case.

(d) Be structured, staffed, and supported appropriately to meet the needs of the institution and its patient population. Committee membership should represent diverse perspectives, expertise, and experience, including one or more community representatives.

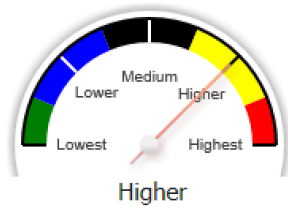
What can
be done to
improve
these
disparities

**Speak up when there
is concern disparities
are occurring**

Using AI to target GOC documentation may have the unintended consequence of disadvantaging severely ill patients lacking AI-generated scores from receiving targeted GOC documentation, including patients who are more likely to be nonwhite and have Medicaid insurance.

UPMC Clinical Risk Scores

Readmission Risk



Serious Illness Risk

The SIRS score cannot be calculated for this patient due to insufficient data. Use your clinical judgment to determine if this patient benefits from a Goals of Care discussion.

Conclusions

Disparities in end-of-life decisions exist

Multiple factors likely contribute to these disparities

Identifying mechanisms to improve these disparities are urgently needed

