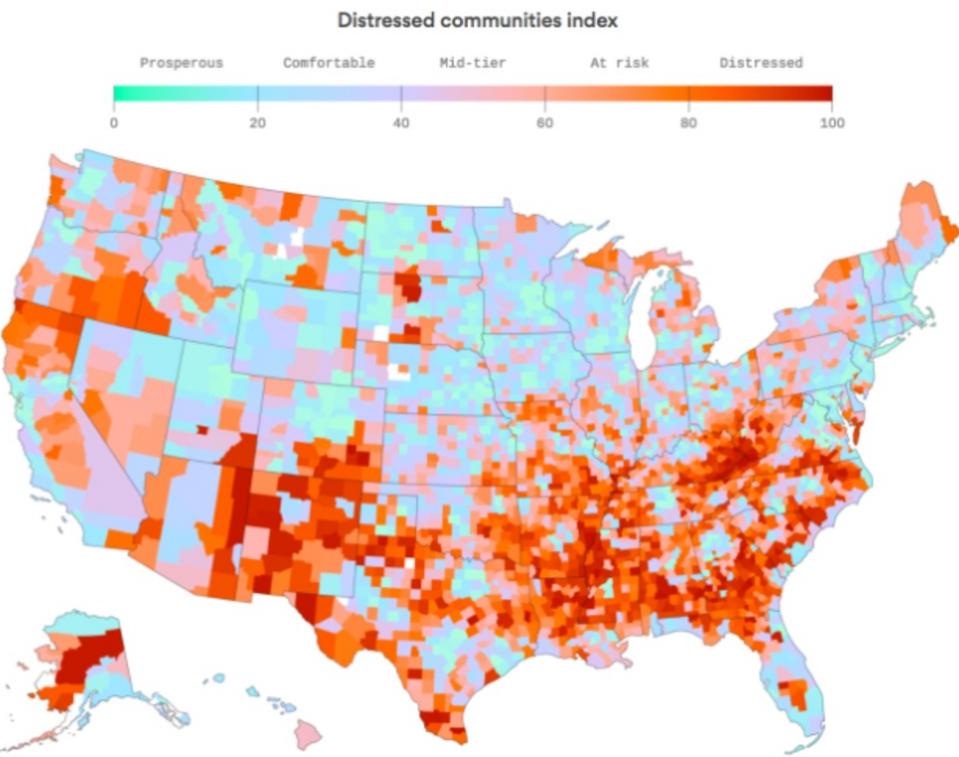


# Neighborhood Distress and PCI outcomes: Do social indices matter?

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## Background

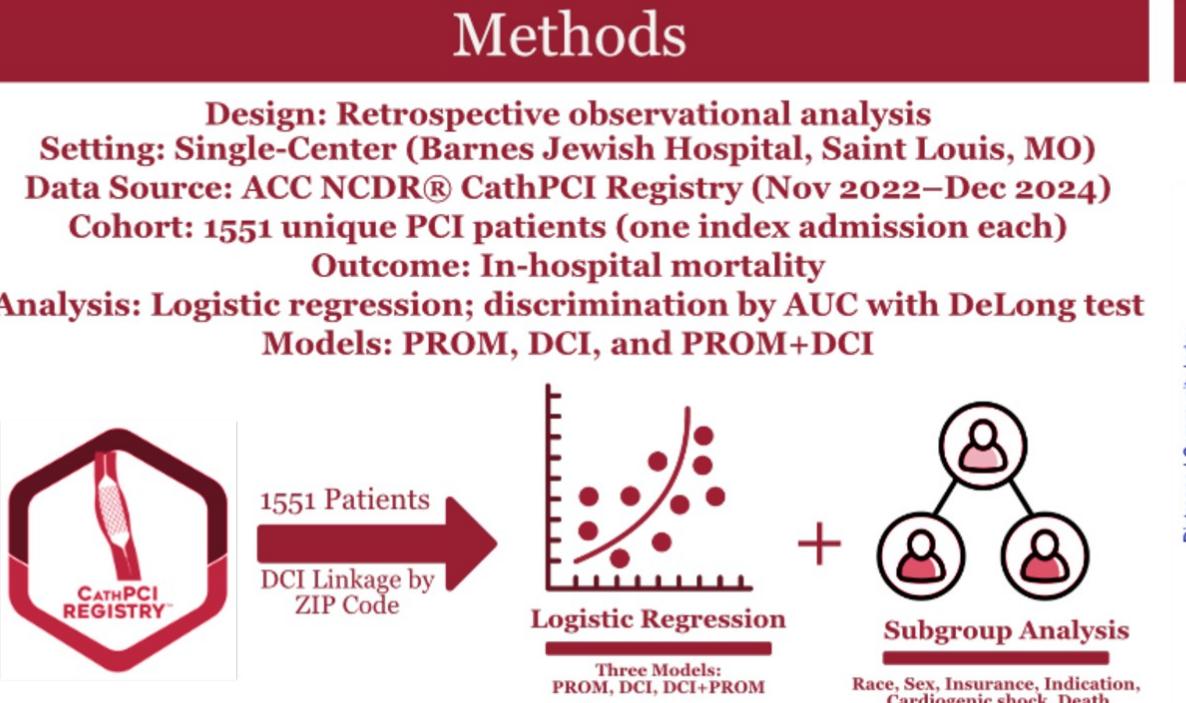


**Neighborhood Distress Indicators\***

- Educational Attainment
- Housing Vacancy
- Labor Participation
- Poverty Rate
- Income Ratio
- Employment Change
- Business Change

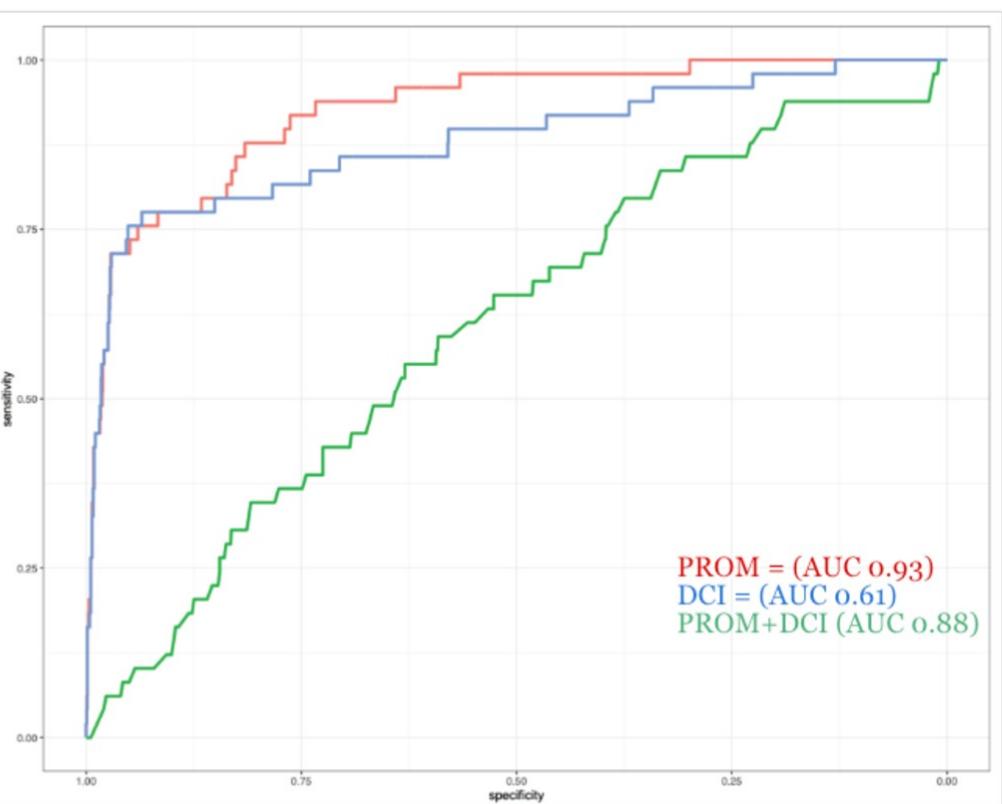
## Question

Does neighborhood socioeconomic distress, measured by the Distressed Communities Index (DCI), improve prediction of in-hospital mortality after PCI beyond the Predicted Risk of Mortality model (PROM)?



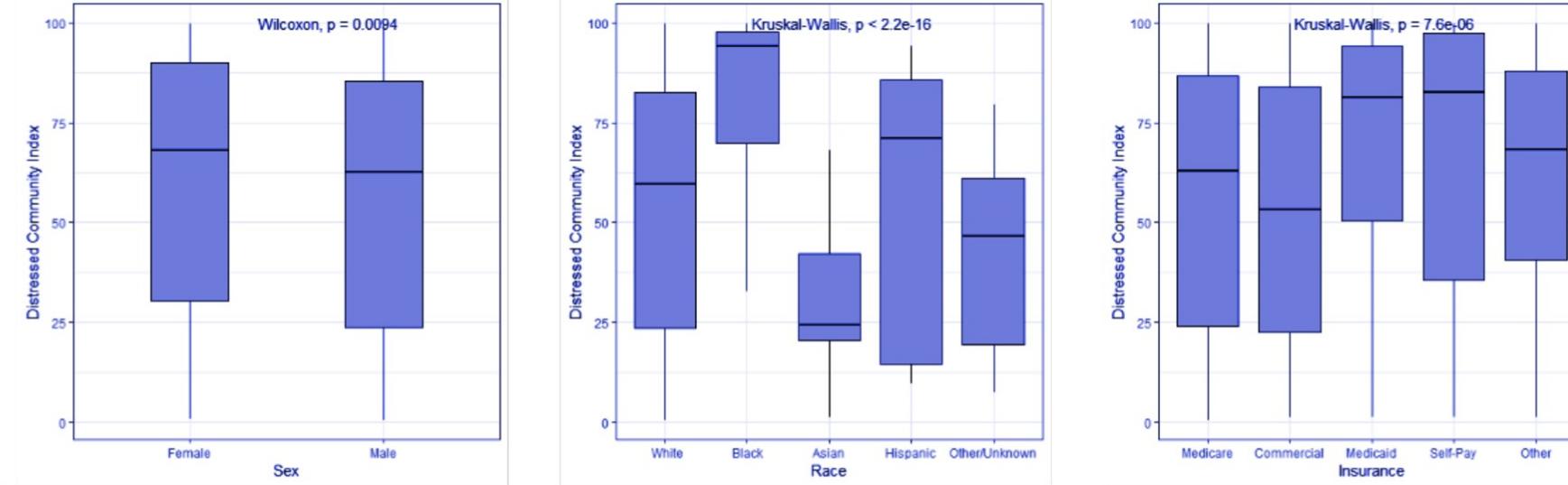
## Results: Mortality Prediction

In-hospital mortality after PCI (3.5%; N=1551). PROM showed excellent discrimination (AUC 0.93). DCI alone had poor discrimination (AUC 0.61). Adding DCI to PROM reduced performance (AUC 0.88). PROM alone remained superior to both DCI alone and PROM+DCI ( $p < 0.05$ )

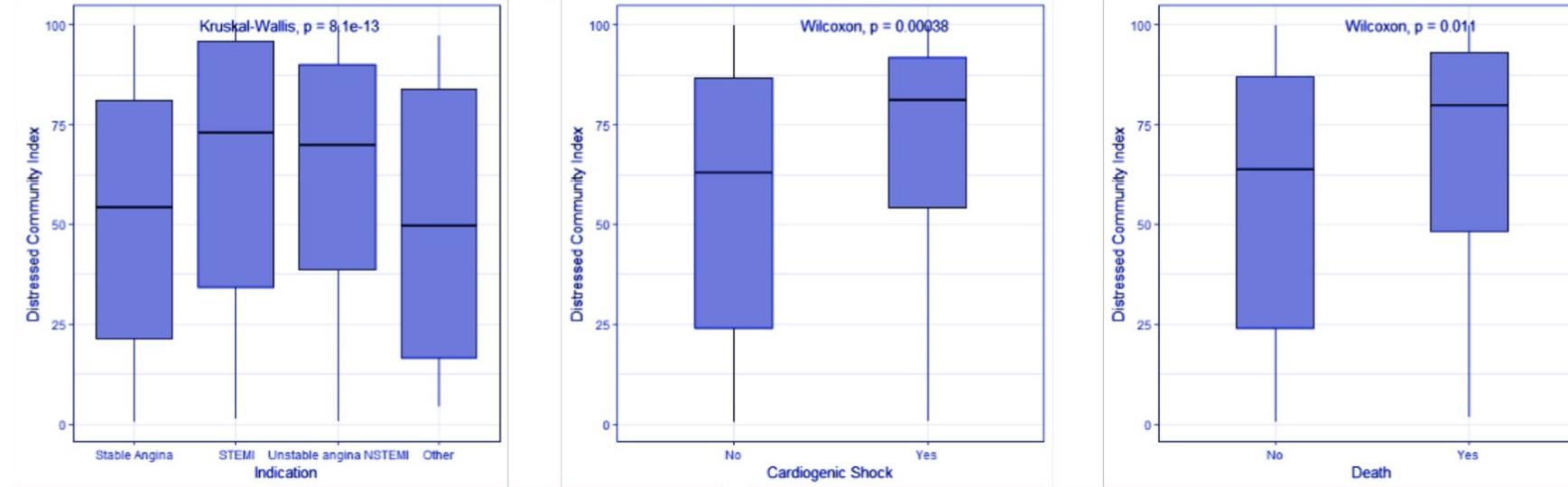


## Methods

**Patients from more distressed neighborhoods were more likely to have Medicaid or no insurance, to be women, and from racial minorities**



**Patients from more distressed neighborhoods were more likely to present with acute coronary syndromes, cardiogenic shock, and to die in hospital**



## Value Proposition

Patients: Highlighting vulnerable populations  
Providers: Informing intervention planning  
Society: Reducing healthcare disparities

## Disclosures

Alan Zajarias is a consultant for Edwards Medtronic and Anteris Technologies

## Take Home Message

Neighborhood distress is better suited to guide equity-focused interventions rather than prediction of short term mortality after PCI; Future work should evaluate impact on longer term outcomes

## References

\*Economic Innovation Group. Distressed Communities Index: 2022 methodology. Available at: <https://eig.org/distressed-communities/2022-dci-methodology/>. Accessed August 11, 2025.

