



Racial and Gender Disparities in Heart Failure

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Disclosures

- NHLBI K01 Career Development Award
- Strategic Priorities Faculty Initiative Grant
- Women As One Escalator Award
- University of Arizona Anthony and Mary Zoia Research Award
- AHA GWTG Young Investigator Award



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Highest Heart Failure Prevalence in African Americans Women

❖ African-Americans

- 3.5% men
- 3.9% women

❖ Hispanics

- 2.5% men
- 2.1% women

❖ Whites

- 2.2% men
- 1.9% women

❖ Asians

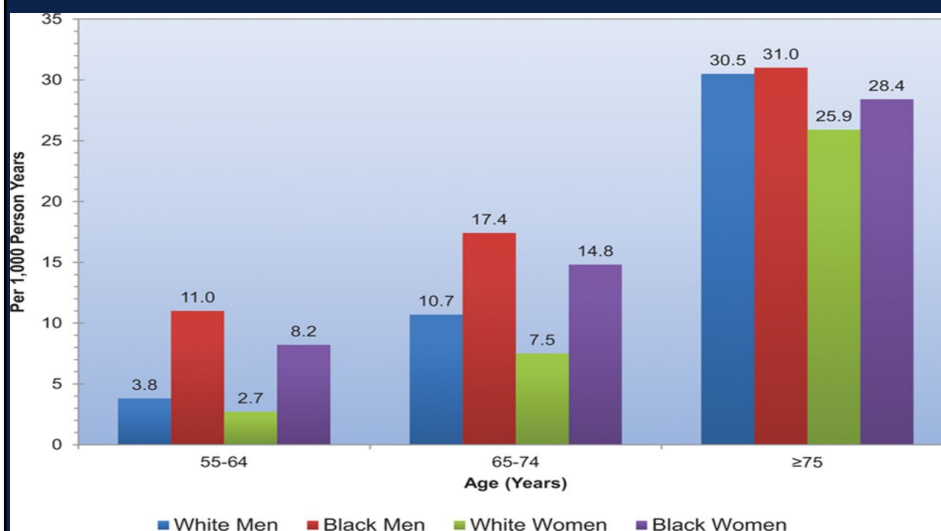
- 1.7% men
- 0.7% women



Virani et al. Circulation 2020

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African-Americans Have the Highest Rates of Heart Failure

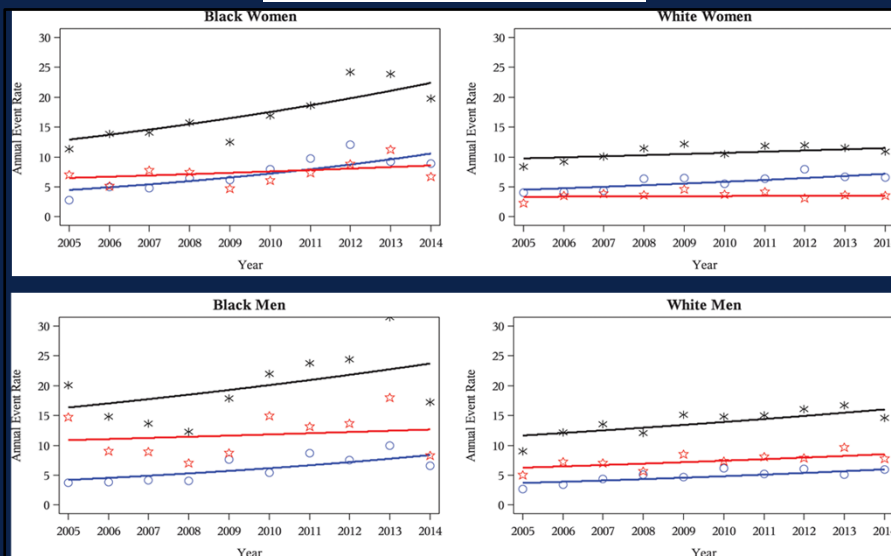


Dariush Mozaffarian et al. Circulation. 2016;133:e38-e360

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Hospitalization Rates Vary by Race/Gender

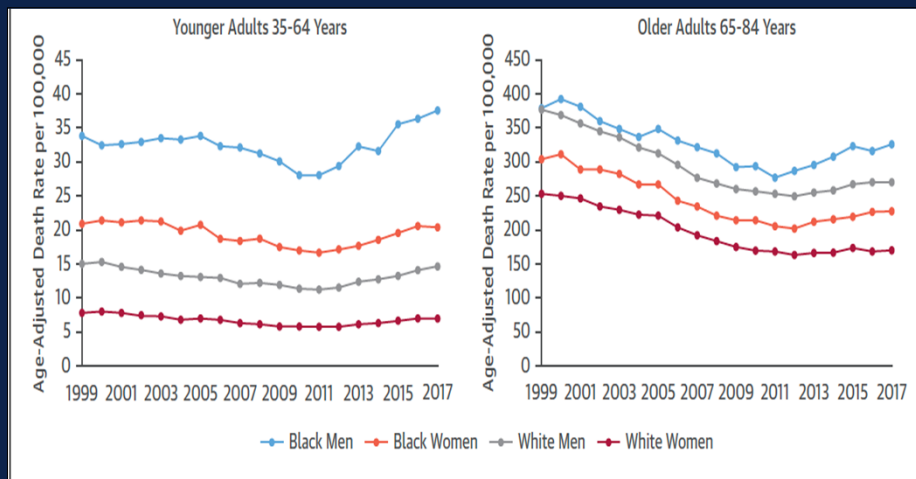
Black= All Red= HFref Blue= HFpEF



Chang et al. Circulation 2018

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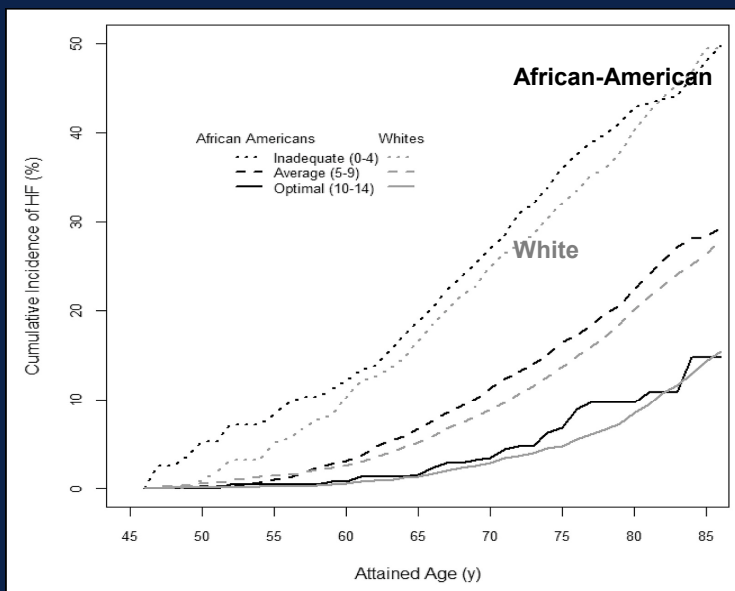
Heart Failure Death Rates Are Increasing in African-Americans



Glynn et al. JACC 2019

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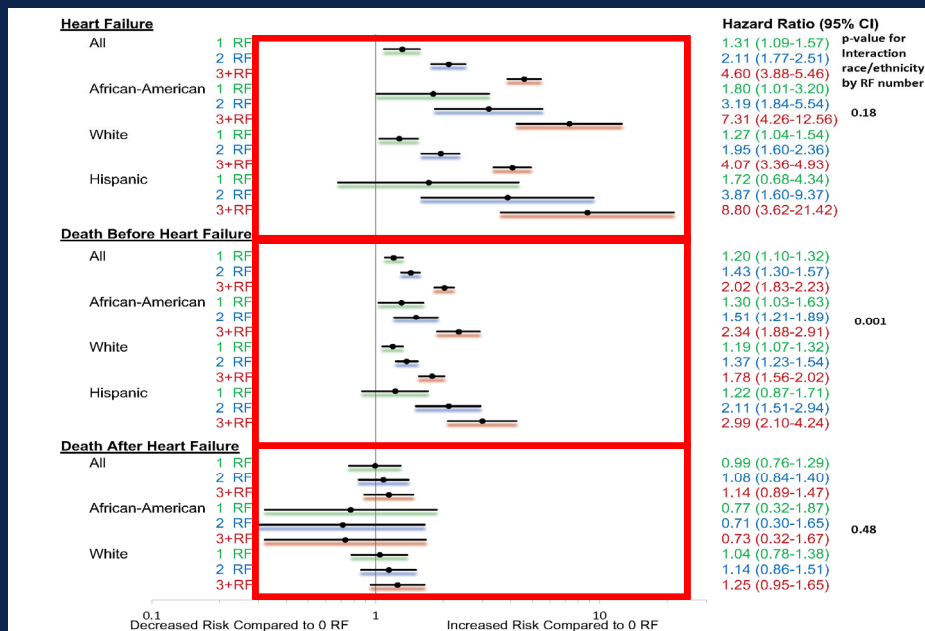
Racial Reduction of HF risk with Optimal Life's Simple 7



Folsom et al. American Journal of Medicine 2015

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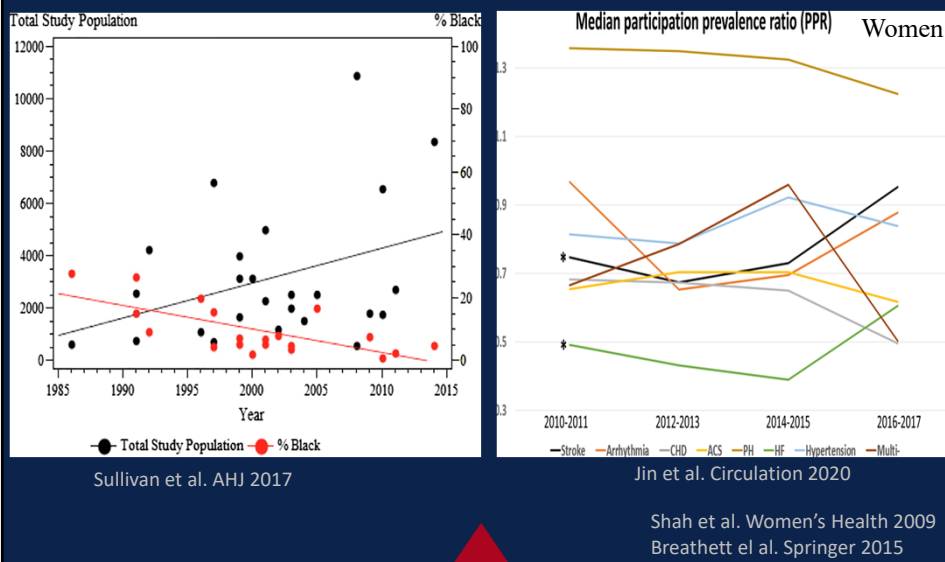
Number of Risk Factors Not Linked to Death after HF



Breathett et al. Circ HF 2018

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Low HF Trial Enrollment of African-Americans and Women



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Unequal Treatment: Women





- ❖ 25% less likely to receive beta blockers
- ❖ 24% less likely to receive ACE inhibitors
- ❖ 40% less likely to receive defibrillator
- ❖ 25% receive heart transplants and LVAD

Shah et al. Women's Health 2009

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Race Disparities in HF Treatment

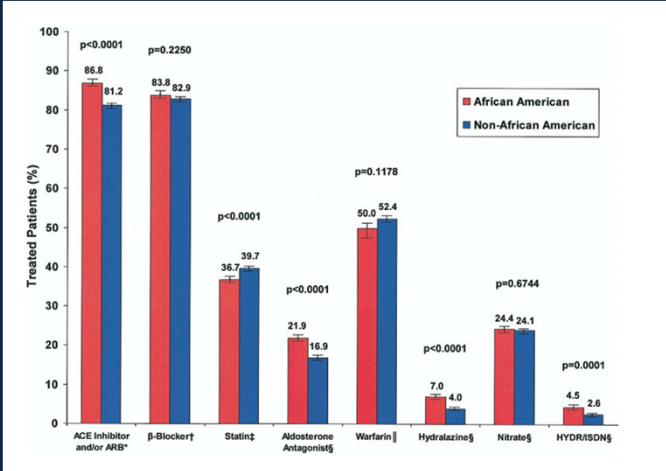



**OR 0.84
(0.75-0.95)**

Farmer et al. J. Heart Rhythm Society, 2009;
Chan JACC 2010; Vivo JACC 2009

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Race Disparities in HF Treatment Improved with Performance Program

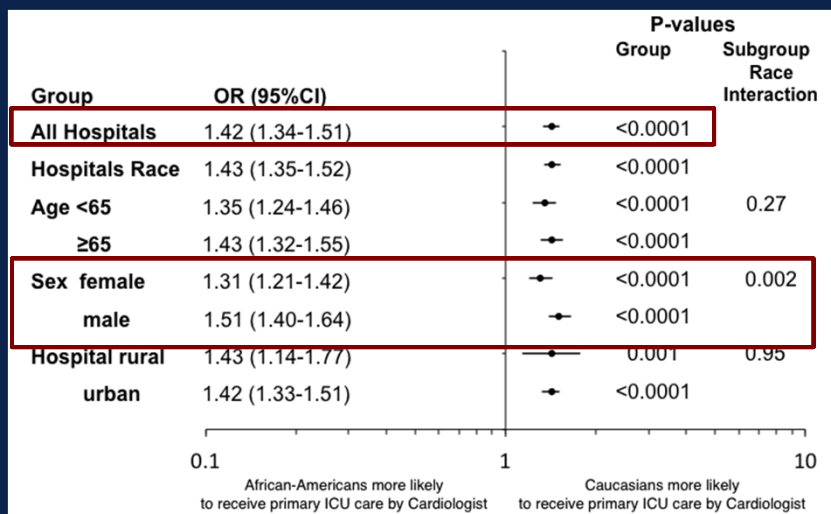


Treatment	African American (%)	Non-African American (%)	p-value
ACE Inhibitor and/or ARB*	86.8	81.2	p<0.0001
β-Blocker†	83.9	82.9	p=0.2250
Statins‡	36.7	39.7	p<0.0001
Aldosterone Antagonists§	21.9	16.9	p<0.0001
Warfarin	50.0	52.4	p=0.1178
Hydralazine§§	7.0	4.0	p<0.0001
Nitrate§§§	24.4	24.1	p=0.6744
HYDRALISIN§§§§	4.5	2.6	p=0.0001

Yancy et al. JACC 2008

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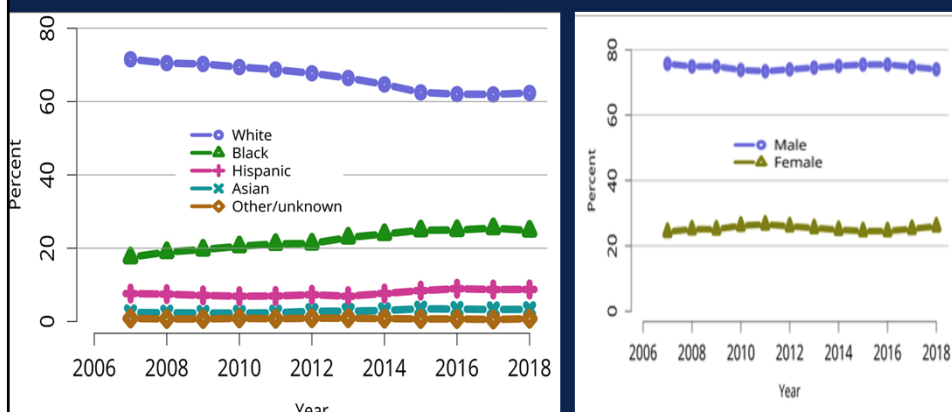
African-Americans Are Less Likely To Receive Care By A Cardiologist



Breathett et al. JACC: HF 2018

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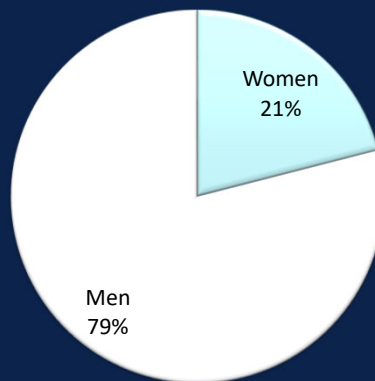
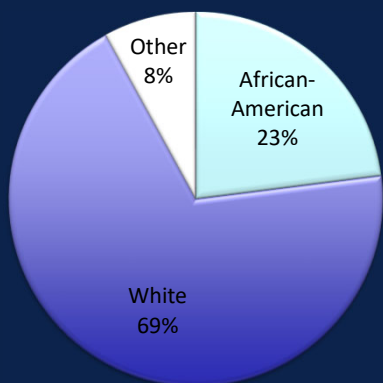
Access to Heart Transplants Is Not Equal Across Race and Sex



Colvin-Adams et al. OPTN/SRTR 2020

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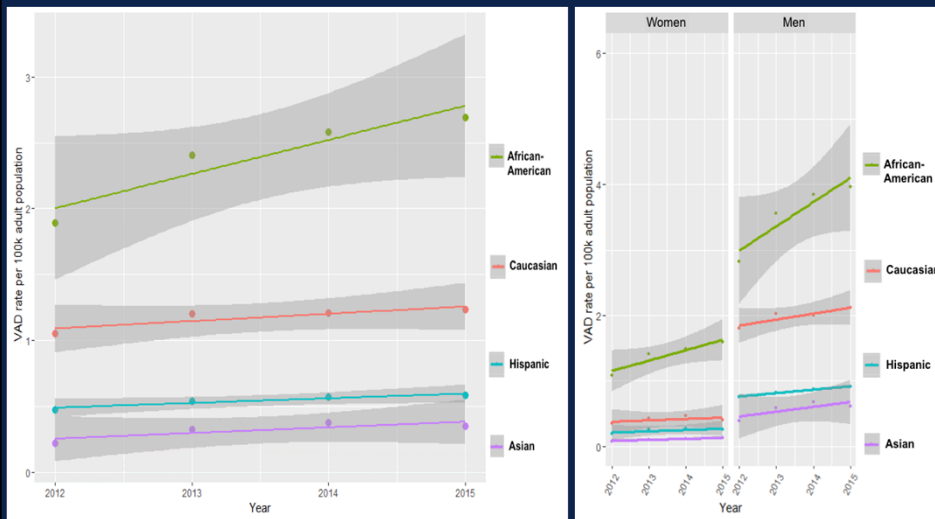
Access to LVADs Is Not Equal Across Race and Sex



INTERMACS 2012-2015 Quarterly Report

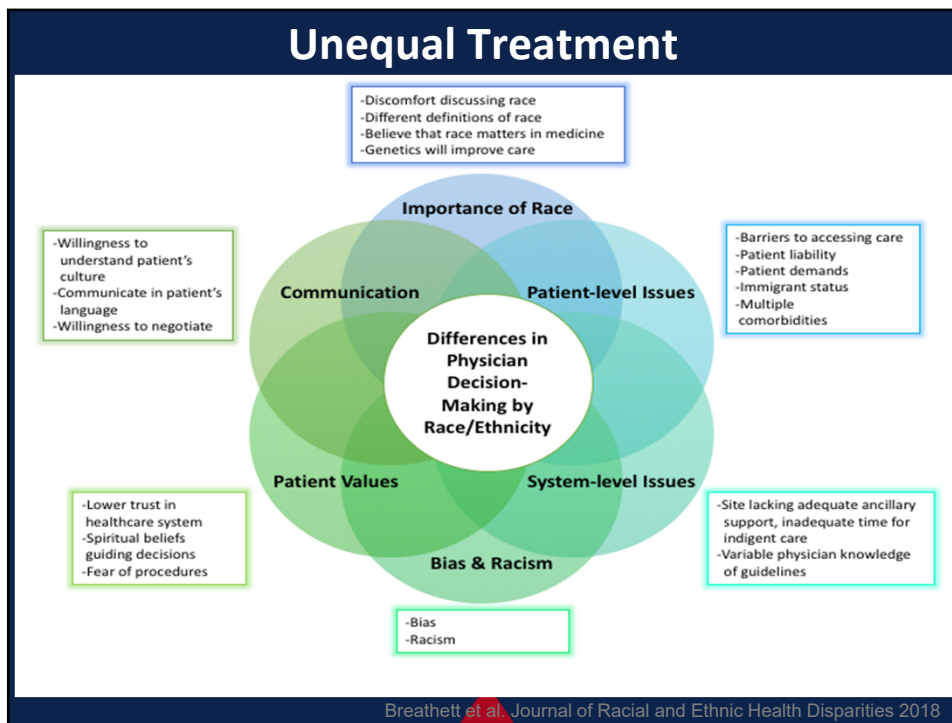
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Increasing Ventricular Assist Device Rates Among African-Americans



Breathett et al. Circulation HF 2018

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Strategies for Equity

- ❖ Target Simple 7 Early in Lifespan
- ❖ Prescribe GDMT
- ❖ HF Trial enrollment
- ❖ Intervene upon SDOH (insurance, bias)
- ❖ Engage Stakeholders
- ❖ Develop Implementation Plan for Equity

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“Of all the forms of inequality, injustice in health care is the most shocking and inhumane”



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