

# Current Use of and Effect of Guideline-Directed Medical Therapies in Outcomes

Patients with HFrEF have an estimated **2-year mortality rate**

of



**without guideline-directed medical therapy (GDMT)**

## Magnitude of Benefit of GDMT

Demonstrated in Randomized Controlled Trials

GDMT	RR Reduction in Mortality	2-Year Mortality	NNT for Mortality Reduction (Standardized to 36 mo)	RR Reduction in HF Hospitalization
None	—	35%	—	—
ARNi*	16%	25%	27	21%
ACE inhibitor or ARB	17%	16%	26	31%
Beta Blocker	35%	16%	9	41%
MRA	30%	12%	6	35%
SGLT2i	17%	10%	22	31%

**Current use of GDMT in patients with HFrEF remains suboptimal, with only a low percentage of patients being treated with all the indicated medical therapies at target or maximally tolerated doses**

Optimal implementation of GDMT in the US could prevent an additional

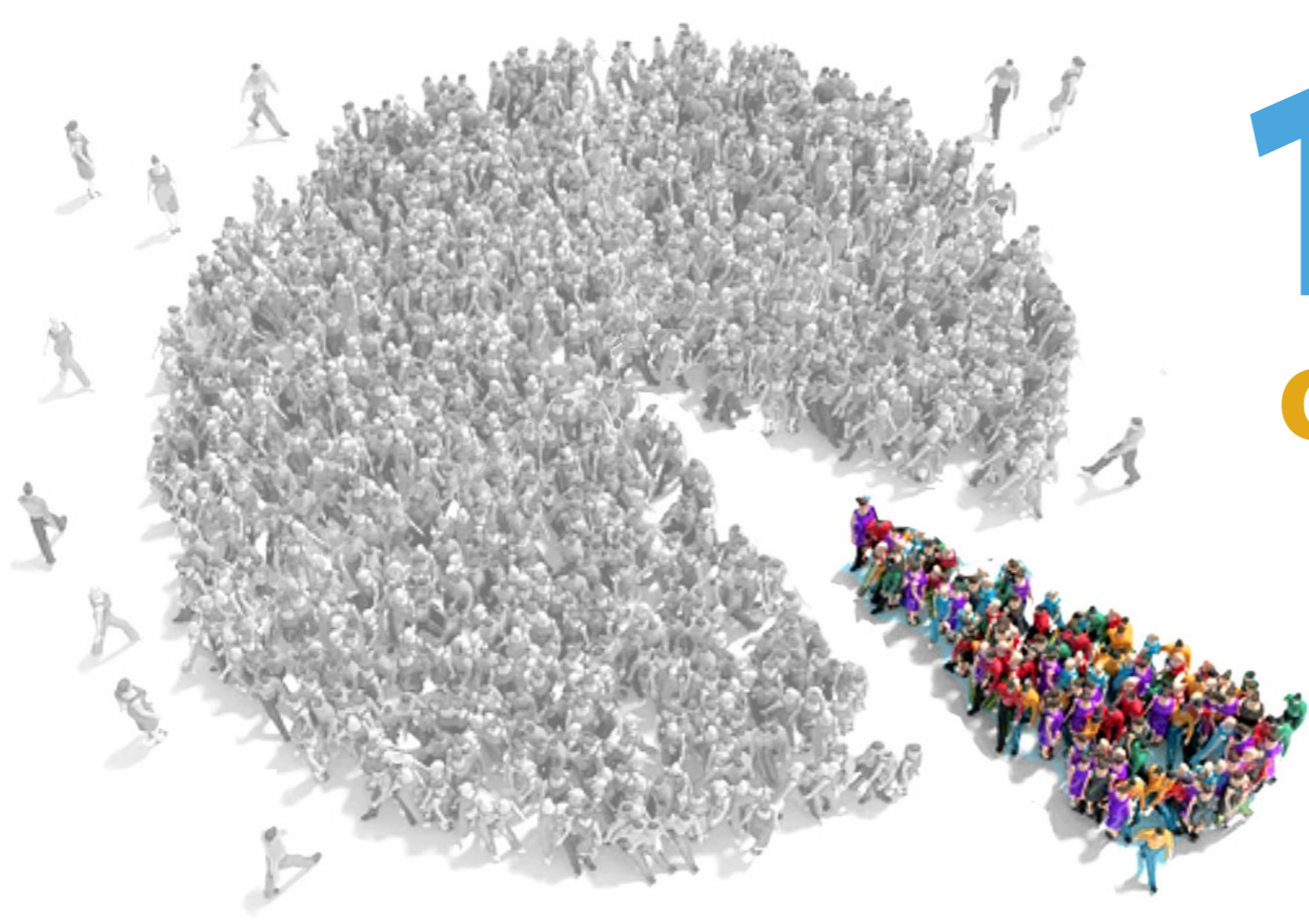
**100,000** deaths per year

Black individuals are receiving heart transplants at rates that are disproportionately lower than patients of other racial groups, particularly in the context of their higher mortality rate from HF



**10%-12%** of eligible patients

receive implantable cardioverter-defibrillators or cardiac resynchronization therapy



**Despite the high prevalence of HF among Black and Hispanic populations, patients of color are frequently underprescribed GDMT.**



Contributing factors to expanding gaps in health equity are:

- **Clinical inertia**
- **Financial toxicity**
- **Under-representation of minoritized patients in clinical trials**
- **Nontrustworthy medical systems**
- **Bias and structural racism**

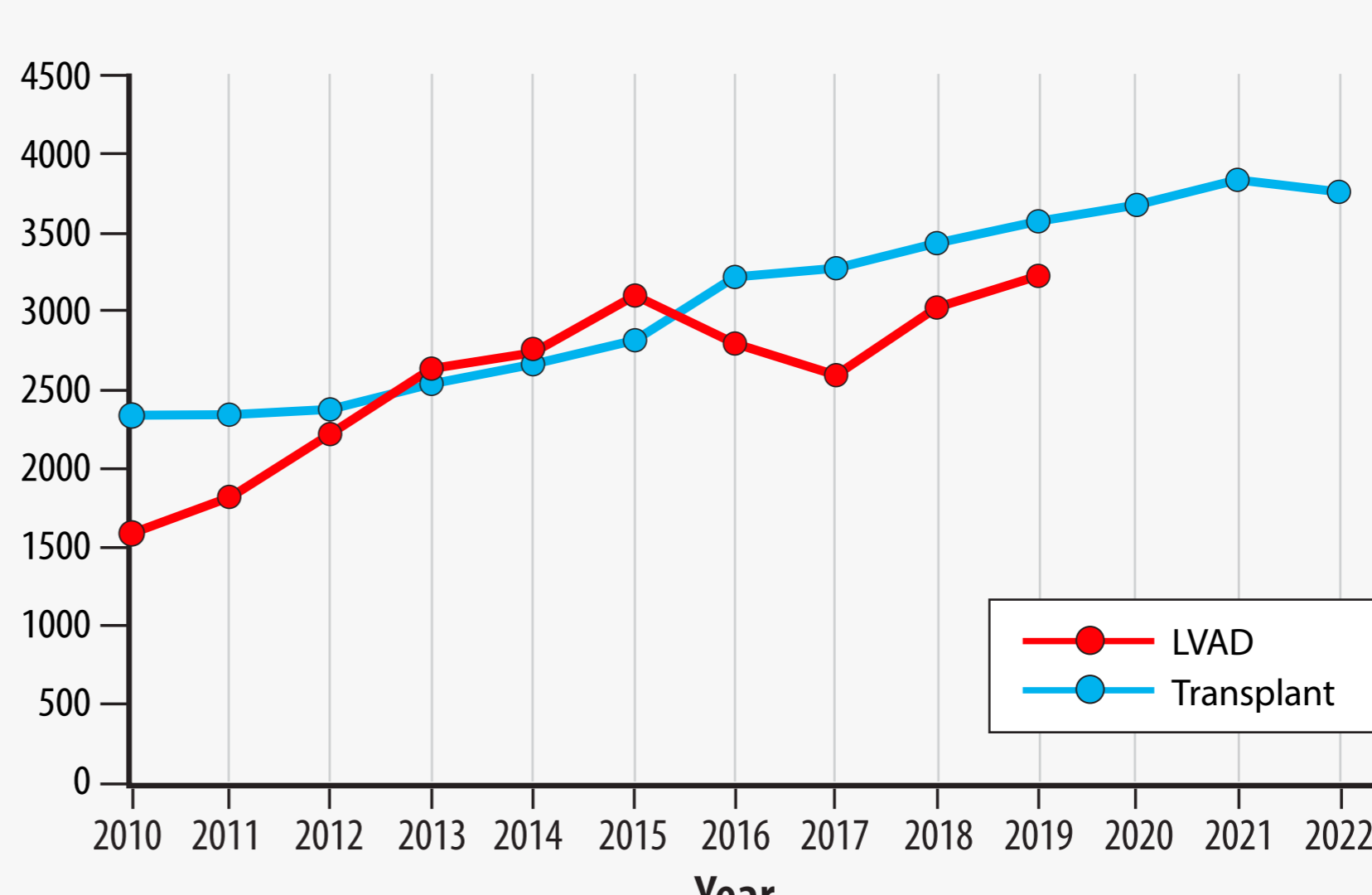
- Black and Hispanic patients are less likely to receive implantable cardioverter-defibrillators or cardiac resynchronization therapy than White patients
- Diagnostic and therapeutic approaches for structural cardiac disease and valvular heart disease are also not equitable across different races, ethnicities, and sex

There have been increases in the use of advanced therapies such as:

- Durable mechanical circulatory support
- Heart transplantation
- Structural interventions

**However the use of these therapies in indicated patients remains low**

LVAD and Heart Transplant Volumes, 2010-2022



- There are significant disparities and health inequities in access to and use of these advanced therapies. Women, Black, and Hispanic patients have lower rates of use of advanced therapies despite evidence of indications and benefit

All information, including graphics, tables, and text in this infographic are from the report published in the *Journal of Cardiac Failure*, and should be referenced as follows: *J Card Fail.* 2023; 29 P1412-1451

