Clinical Perceptions and Reasons for Non-Use of Guideline-directed Medical Therapy for Heart Failure with Reduced Ejection Fraction in the United States

Claudia Gulea¹; Catelyn R. Coyle¹; Lori D. Bash¹; Kathryn W. Tebbs²; Lucy N. Hancock²; Stephen J. Greene³

¹Merck & Co., Inc., Rahway, NJ, USA; ²Adelphi Real World, Bollington, UK; ³Duke Clinical Research Institute, Durham, NC, USA

Background

- Heart failure with reduced ejection fraction (HFrEF) remains undertreated with guideline-directed medical therapy (GDMT) in the United States of America (USA), despite the 2022 ACC/AHA/HFSA Guideline for the Management of Heart Failure
- We explored reasons why physicians did not prescribe components of GDMT from the 2022 ACC guidelines and their perceptions of managing HFrEF

Methods Figure 1. DSP methodology Physicians were invited to complete a physician survey, capturing data on physician attitudes Physician toward HF management and treatment. survey Physicians also reported information Physician perceptions from patient records for the next 10 consecutively consulting patients who visited for routine care. **DSP**TM methodology Patients were then invited to voluntarily complete a self-completed survey **Patient** Patient selfindependent from record forms forms (PSCs) (PRFs) Same patients their physician.

Abbreviations: DSP, Disease Specific Programme™; PRO, patient-reported outcome

• Data were drawn from the Adelphi Real World Heart Failure Disease Specific Programme™, a real-world, cross-sectional survey with retrospective data collection of physicians and their consulting adult patients with HFrEF in the USA, conducted between August 2022 and February 2023

Prospective

- The DSP methodology has been previously validated and published^{1,2,3}
- Physicians completed a survey providing clinical and treatment pattern data for consulting patients with HFrEF (ejection fraction ≤40%). For patients not receiving GDMT, physicians also reported reasons for non-prescription
- Analyses were descriptive in nature

References

- 1. Anderson P, et al. *Curr Med Res Opin*. 2008;24(11):3063-3072.
- 2. Babineaux SM, et al. *BMJ Open*. 2016;6(8):e010352
- 3. Higgins V, et al. *Diabetes Metab Syndr Obes*. 2016;9:371-380
- 4. https://www.ahajournals.org/doi/full/10.1161/CIR.000000000001063

Disclosure

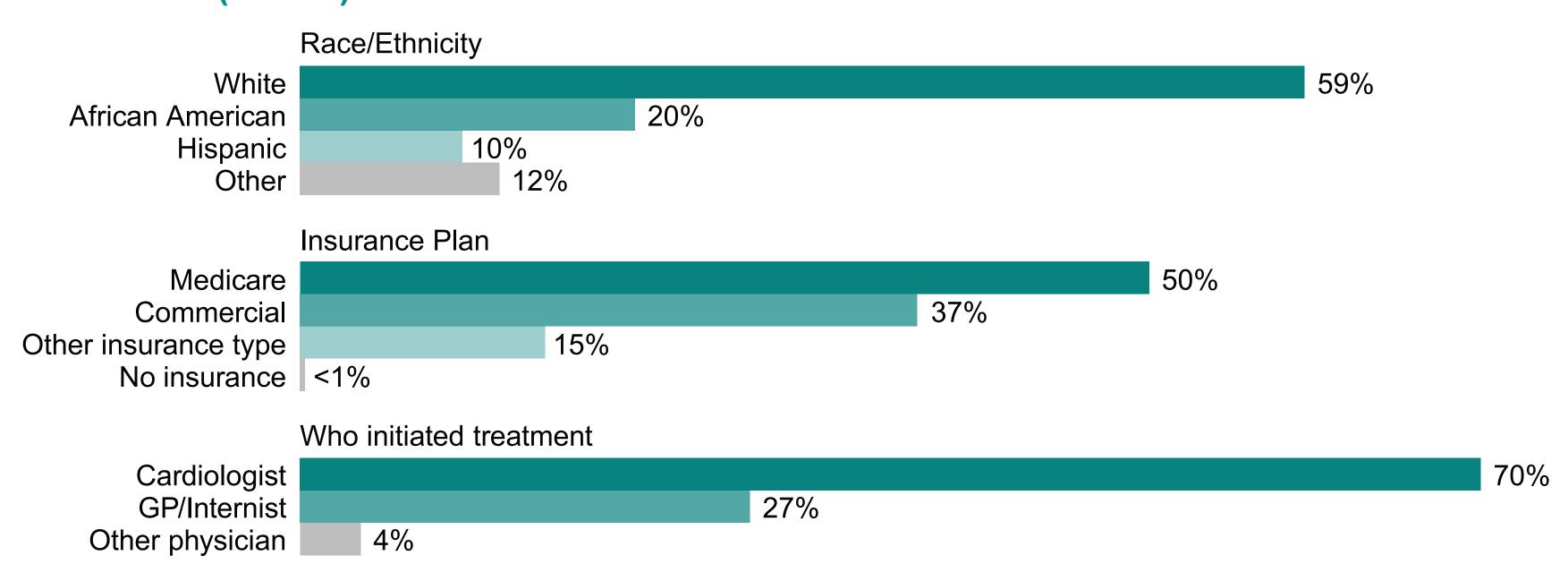
This study was sponsored by Merck Sharp & Dohme LLC, a subsidiary of Merck & Co., Inc., Rahway, NJ, USA. Data used in this study are from the Adelphi Real World HF DSP. The DSP is a wholly owned Adelphi Real World product. Merck Sharp & Dohme LLC, a subsidiary of Merck & Co., Inc., Rahway, NJ, USA is one of multiple subscribers to the DSP.

Contact Information

Stephen Greene: stephen.greene@duke.edu

Results

Figure 2. Patient characteristics and GDMT prescriptions among patients with HFrEF in the USA (N=323)

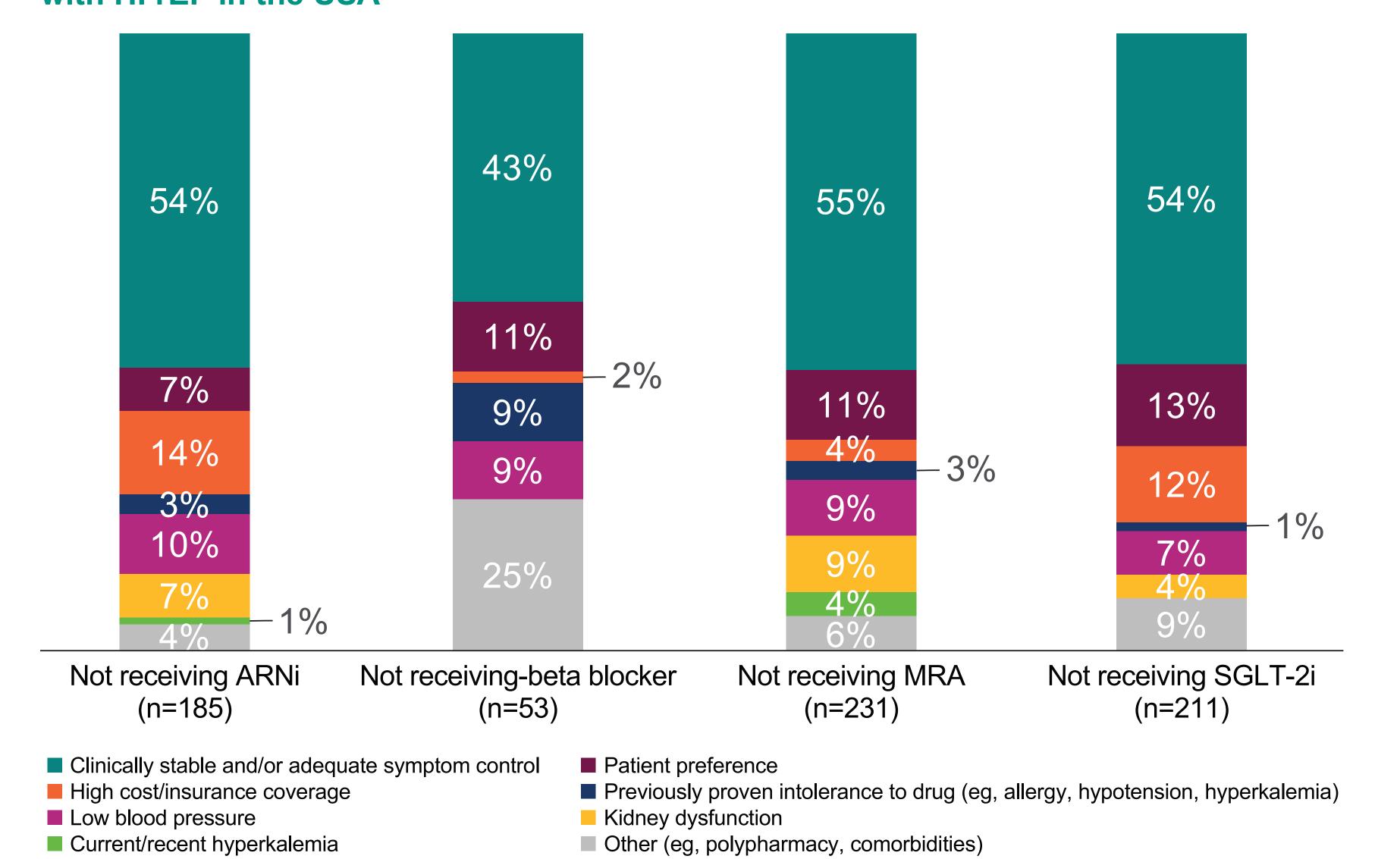


- Median age (IQR), years: 67 (56,74)
- Male sex: 61%

Matched data

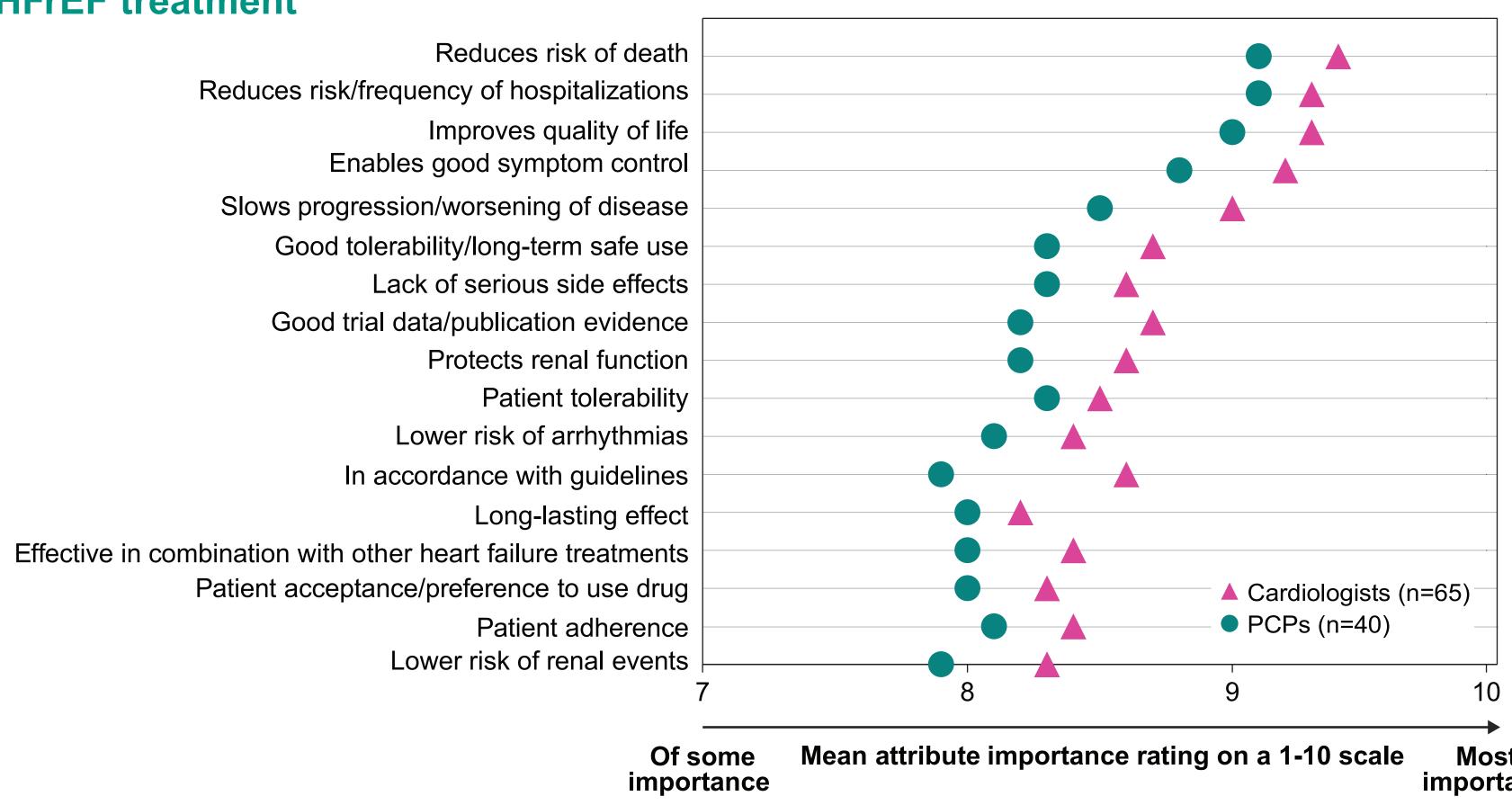
Quadruple therapy: 15%

Figure 3. Physician-reported reasons for non-use of GDMT among patients (n=323) with HFrEF in the USA



Abbreviations: HFrEF, heart failure with reduced ejection fraction; PCP, primary care practitioner

Figure 4. Physician-perceived importance of different attributes when prescribing HFrEF treatment



Abbreviations: ARNi, angiotensin receptor/neprilysin inhibitors; HFrEF, heart failure with reduced ejection fraction; GDMT, guideline-directed medical therapy; MRA, mineralocorticoid receptor antagonists; SGLT-2i, sodium-glucose co-transporter-2 inhibitors; USA, United States of America

- 15% received quadruple therapy for HFrEF (Figure 2)
- Among patients with HFrEF, 57% (n=185) were not prescribed angiotensin receptor/neprilysin inhibitors (ARNI), 16% (n=53) were not prescribed a beta-blocker, 72% (n=231) were not prescribed MRA, and 65% (n=211) were not prescribed SGLT-2 inhibitors (SGLT-2i)
- Among patients not receiving GDMT, the most frequently reported physician reason for non-use of ARNIs (54%), beta-blockers (43%), MRAs (55%), or SGLT-2is (54%) was the physician considering the patient to be clinically stable (**Figure 3**)
- Cardiologists and PCPs placed most importance on reducing risk of death or hospitalization and improving quality of life when selecting treatments for HFrEF (Figure 4)
- Most physicians (94%) reported being satisfied with treatment prescribed to their patients with HFrEF

Limitations

Results

 Due to the nature of the design and sample size of the DSP, neither patient nor physician samples are likely to be nationally representative and may be prone to selection bias

Conclusions

- Only 15% of patients with HFrEF were treated with quadruple therapy
- For all 4 foundational GDMTs, perceived clinical stability was the most common reason physicians decided not to initiate therapy
- These data suggest the need for strategies to address clinical inertia and improve the urgency with which clinicians prescribe GDMT for patients with HFrEF