

Guideline-led prescribing to ambulatory heart failure patients in a cardiology outpatient service

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Abstract

Background Guidelines recommend heart failure (HF) patients be treated with multiple medications at doses proven to improve clinical outcomes. Objective To study guideline-led prescribing in an Irish outpatient HF population. Setting Cardiology Outpatient Clinic, Mercy University Hospital, Cork, Ireland. Methods Guideline-led prescribing was assessed using the Guideline Adherence Index (GAI-3), that considered the prescribing of ACE inhibitors and angiotensin receptor blockers; beta-blockers and mineralocorticoid receptor antagonists. The GAI-based target dose was calculated based on the prescription of $\times 50\%$ of the guideline-recommended target dose of each of the three GAI medications to HF patients with ejection fraction $\leq 40\%$. High-GAI was achieved by prescription of $\times 2$ GAI medicines. Potentially inappropriate prescribing was assessed using a HF-specific tool. Main outcome measure Heart failure guideline-led prescribing assessed using the GAI-3. Results A total of 127 HF patients, mean age 71.7 ± 13.1 years, were identified in the study. Seventy-one patients had ejection fraction $\leq 40\%$. Population mean GAI-3 was 65.8%. When contraindications to therapy are considered, the adjusted GAI-3 increased to 72.9%. The target dose GAI was 18.5%. High-GAI management was prescribed to 54 patients (76.1%). A potentially inappropriate medicine in HF was prescribed to 14 (19.7%) patients. Conclusion Most HF patients with ejection fraction $\leq 40\%$ in this setting received optimal guideline-led prescribing however the proportion of patients achieving the target doses of these agents was suboptimal.

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