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PHARMACOTHERAPY USE IN OLDER PATIENTS WITH HEART FAILURE AND REDUCED EJECTION FRACTION LIVING IN SKILLED NURSING FACILITIES

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Background: Little is known about the use of angiotensin-converting enzyme inhibitors (ACEIs) or angiotensin receptor blockers (ARBs) and β-blockers among older adults with heart failure and reduced ejection fraction (HFrEF) in skilled nursing facilities (SNFs).

Methods: Using national data Minimum Data Set 3.0 cross-linked with Medicare data (2011-2012), we studied 31,675 patients with HFrEF (ICD-9 codes: 428.2 or 428.4) aged ≥65 years admitted to 9,659 SNFs. We estimated the prevalence of a Part D claim for ACEIs/ARBs or β-blockers during 3 months before the SNF stay and used log-binomial models to evaluate correlates of use by estimating prevalence ratios (PR) and 95% confidence intervals (CI).

Results: The median age of the study population was 83 years, 60% were women, and 10% and 4% were African Americans and Hispanics, respectively. Approximately 46% had ≥3 important risk factors for HFrEF. Fifty-seven percent received an ACEI/ARB and 47% a β-blocker; 25% received neither. Older age was inversely associated with receipt of these therapies: adjusted PRs were 0.94 (95% CI: 0.91-0.96) for ACEIs/ARBs and 0.86 (95% CI: 0.84-0.89) for β-blockers for patients aged ≥85 years compared with those aged 65-74 years. Compared with Whites, use of these therapies was higher among African Americans (adjusted PRs were 1.07 [95% CI: 1.04-1.10] for ACEIs/ARBs and 1.11 [95% CI: 1.08-1.15] for β-blockers) and Hispanics (adjusted PRs were 1.13 [95% CI: 1.09-1.18] for ACEIs/ARBs and 1.12 [95% CI: 1.07-1.18] for β-blockers). The prevalence of ACEI/ARB use was greater in patients with ≥3 important risk factors than in those with ≤1 factor: adjusted PR was 1.16 (95% CI 1.13-1.19).

Conclusions: Use of guideline-directed medications may be suboptimal in older patients with HFrEF receiving SNF care. Whether this is a result of adverse drug events from prior use or insufficient evidence in vulnerable populations needs to be examined.

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