

BETA-BLOCKER INITIATION AND ADHERENCE AFTER HOSPITALIZATION FOR ACUTE MYOCARDIAL INFARCTION

Vittorio Maio, PharmD, MS, MSPH,¹ Massimiliano Marino, PhD,² Mary Robeson, MS³ Joshua J Gagne, PharmD, MS,^{4,5}

1. School of Population Health, Thomas Jefferson University, Philadelphia, PA, USA
2. Clinical Governance, Regional Health Care Agency, Emilia-Romagna, Bologna, Italy
3. Center for Medical Education and Health Care Research, Jefferson Medical College, Philadelphia, PA, USA
4. Division of Pharmacoepidemiology and Pharmacoeconomics, Brigham and Women's Hospital and Harvard Medical School, Boston, MA, USA
5. Department of Epidemiology, Harvard School of Public Health, Boston, MA, USA

Corresponding author:

Vittorio Maio, PharmD, MS, MSPH
School of Population Health
Thomas Jefferson University
1015 Walnut Street
Suite 115
Philadelphia, PA 19107
(T): 215-955-1821
(F): 215-923-7583
(E): vittorio.maio@jefferson.edu

ABSTRACT

AIMS: We sought to (1) estimate the proportion of patients who initiated beta-blocker therapy after acute myocardial infarction (AMI) in Regione Emilia-Romagna (RER); (2) examine predictors of post-AMI beta-blocker initiation; and (3) assess adherence to such therapy.

METHODS AND RESULTS: Using healthcare claims data covering all of RER, we identified a cohort of 24,367 patients with a hospitalization for AMI between 2004 and 2007, who were discharged from the hospital alive and without contraindications to beta-blocker therapy. We estimated the proportion of eligible patients with at least one prescription for a beta-blocker following discharge and performed a multivariable logistic regression analysis to identify independent predictors of post-AMI beta-blocker use. We computed the proportion of days covered (PCD) as a measure of medication adherence at 6 and 12 months post-discharge. Following discharge, 16,383 (67%) cohort members initiated beta-blocker therapy. Independent predictors of beta-blocker use included age, receipt of invasive procedures during hospitalization, such as coronary artery bypass graft surgery (odds ratio [OR], 2.37; 95% confidence interval [CI], 2.00-2.81), percutaneous transluminal coronary angioplasty (OR, 1.42; 95% CI, 1.31-1.54), and cardiac catheterization (OR, 1.14; 95% CI, 1.11-1.32). Among initiators, adherence to beta-blocker treatment at 6 and 12 months was low and decreased in each study year.

CONCLUSION: Overall, use of and adherence to post-AMI beta-blocker therapy was suboptimal in RER between 2004 and 2007. Older patients and those with indicators of frailty were less likely to initiate therapy. The proportion of patients who were adherent to therapy decreased over time.