

University of Massachusetts Medical School

eScholarship@UMMS

UMass Center for Clinical and Translational
Science Research Retreat

2014 UMass Center for Clinical and
Translational Science Research Retreat

May 20th, 12:30 PM


In-hospital Depression Predicts Early Hospital Readmission after an Acute Coronary Syndrome: Preliminary Data from TRACE-CORE

David D. McManus
University of Massachusetts Medical School

Et al.

Let us know how access to this document benefits you.

Follow this and additional works at: https://escholarship.umassmed.edu/cts_retreat

 Part of the [Cardiology Commons](#), [Cardiovascular Diseases Commons](#), [Health Psychology Commons](#), [Health Services Administration Commons](#), [Health Services Research Commons](#), [Mental Disorders Commons](#), [Psychiatric and Mental Health Commons](#), and the [Translational Medical Research Commons](#)

McManus DD, Saczynski JS, Waring ME, Anatchkova MD, McManus RH, Goldberg RJ, Allison JJ, Parish DC, Awad HH, Gurwitz JH, Ash AS, Kiefe CI. (2014). In-hospital Depression Predicts Early Hospital Readmission after an Acute Coronary Syndrome: Preliminary Data from TRACE-CORE. UMass Center for Clinical and Translational Science Research Retreat. Retrieved from https://escholarship.umassmed.edu/cts_retreat/2014/posters/100

Creative Commons License



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 3.0 License](#). This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in UMass Center for Clinical and Translational Science Research Retreat by an authorized administrator of eScholarship@UMMS. For more information, please contact Lisa.Palmer@umassmed.edu.

In-hospital Depression Predicts Early Hospital Readmission after an Acute Coronary Syndrome: Preliminary Data from TRACE-CORE

David D. McManus, MD ScM^{1,2,3}, Jane S. Saczynski, PhD^{1,2,3}, Molly E. Waring, PhD¹, Milena Anatchkova, PhD^{1,3}, Richard McManus, MPH^{1,3}, Robert J. Goldberg, PhD^{1,2,3}, Jeroan Allison, MD MS^{1,2,3}, David C. Parish MD⁴, Hamza H Awad PhD MD⁴, Jerry Gurwitz MD^{1,2,3}, Arlene Ash, PhD^{1,3}, Catarina I. Kiefe, PhD MD^{1,3}

¹Department of Quantitative Health Sciences; ²Department of Medicine; and ³Meyers Primary Care Institute, University of Massachusetts Medical School, Worcester, MA, United States; ⁴Department of Internal Medicine, Mercer University School of Medicine, Macon, GA, United States

Background: Hospital systems, patients and providers seek to avert rehospitalizations within 30 days for patients admitted with an acute coronary syndrome (ACS). Rehospitalizations within 30 days of discharge are often considered preventable and to reflect poor in-hospital management or discharge practices. However, independent associations of psychosocial factors with early rehospitalization in patients admitted with an ACS have not been examined.

Methods: A multi-racial cohort of 1,540 patients admitted with an ACS reported psychosocial factors via standardized questionnaires in an in-hospital interview. One month following discharge, patients were interviewed via phone and

reported hospital readmissions. We used logistic regression models to estimate odds ratios (ORs) and 95% confidence intervals (CIs) of the association between in-hospital psychosocial characteristics (depression, anxiety, and perceived stress), health literacy and numeracy, and cognitive status, with self-reported readmission within 30 days.

Results: Participants were 34% female and 17% non-white, with a mean age of 62 years and a mean length of stay of 4.1 days. Rehospitalization was reported for 14% (n=208) of participants, 77% of which were due to CVD. In univariate analyses, in-hospital severe depression, anxiety, and high stress were associated with higher odds of early readmission, whereas low health numeracy was associated with lower odds of early readmission. Severe depression remained associated with higher odds and low health numeracy remained associated with lower odds of early readmission in a multivariable model including covariates associated on univariate testing with rehospitalization.

Conclusions: Early readmission after hospitalization for an ACS was common and associated with in-hospital depression and health numeracy. Notably, depression and health numeracy were the only predictors independently associated with readmission in multivariable analyses. We speculate that the lower likelihood of readmission for those with low numeracy may be related to less engagement with the healthcare system. In-hospital screening for depression and characterization of health numeracy may help stratify risk for early rehospitalization after an ACS.