Massachusetts Health Care Reform: Its Effect on the Percentage of Uninsured Patients and the Reimbursement for Provider Services at Academic Urban Level I Trauma Centers

R. James Toussaint, M.D.1, Michael J. Weaver, M.D.1, Paul Tornetta, III, M.D.2, Mark S. Vrahas, M.D.1, Mitchel B. Harris, M.D.1

1Brigham and Women’s Hospital, 2Boston Medical Center, Boston, MA, USA

Background/Purpose: On April 12, 2006, the Massachusetts legislature approved its landmark health care reform law (also known as Chapter 58 of the Acts of 2006 or “Mass Health Reform” [MHR]) to provide health insurance coverage for all of its residents. MHR sought not only to provide uninsured residents with insurance coverage, but also to appropriately compensate hospitals and providers for their services. The purpose of this study is to evaluate the demographic and economic effects of Chapter 58 on the orthopaedic trauma population of three metropolitan Level I trauma centers.

Methods: We performed an IRB-approved retrospective review of all non–spine fracture and dislocation cases for patients less than 65 years old treated by the orthopaedic trauma services of three of the four Level I trauma centers in a major metropolitan area from 2003 to 2010. All out-of-state patients were excluded since they are not under the jurisdiction of MHR. The years 2006 and 2007 were excluded in order to remove the effects of volatility in the insurance market during the enrollment period. The population was divided into two groups: Group 1 included cases from January 2003 to December 2005 and consisted of patients treated for fractures and dislocations prior to the enactment of MHR; Group 2 consisted of patients from January 2008 to December 2010 who were treated subsequent to MHR. Relative Value Unit (RVU) data, CPT codes, financial data, and patient insurance classification were compared between the two groups.

Results: The final study cohort included 12,955 patients (5318 in Group 1 and 7637 in Group 2, a 43.6% increase). There were 18,210 procedures (.462 in Group 1 and 10,748 in Group 2, a 44.0% increase). The percentage of patients who were uninsured in Group 1 was 27.4%; the percentage of uninsured patients in Group 2 decreased to 17.3%. There was a 44.0% increase in RVUs from Group 1 to Group 2. After analyzing two-thirds of the available data, the annual growth rate in revenue collections per RVU was 1.0% from Group 1 to Group 2 compared to 2.2% for the Medicare Economic Index during the same period.

Conclusion: Massachusetts health care reform has resulted in a 36.8% decrease in the percentage of uninsured patients treated for fractures and dislocations at three of four Level I trauma centers in a major metropolitan area. Despite this improvement, nearly one out of five trauma patients at the urban trauma centers did not have health insurance. During this same time period, the Medicare Economic Index grew at a pace over twice that of the centers’ collections per RVU.

Current Faculty and Residents

28th Annual Meeting of The Orthopaedic Trauma Association
October 3-6, 2012, Minneapolis, MN