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Authors	Burrows, Anthony M.;Pilitsis, Julie G.;Levecque, Lynn;Moser, Richard P.;Litwin, Demetrius E. M.
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**Anthony Burrows, Class of 2011**  
**Department of Surgery / Division of Neurosurgery**

**Universal Health Care Coverage in Massachusetts:  
A Follow-up on the Effects on Neurosurgical Practice**

Anthony M Burrows<sup>1</sup> BS, Julie G Pilitsis<sup>1</sup> MD PhD, Lynn Levecque<sup>2</sup> MBA, Richard P Moser<sup>1</sup> MD, Demetrius E Litwin<sup>2</sup> MD MBA

<sup>1</sup>Division of Neurosurgery, <sup>2</sup>Department of Surgery, University of Massachusetts Medical School, Worcester, MA

**Background:**

It has been four years since the introduction of universal health care coverage in Massachusetts. Our initial assessment performed from 2007-2008 demonstrated largely positive results.

**Objectives:**

We performed a follow-up study to assess the long term financial impact of universal health care on hospital charges associated with neurosurgical operative cases at our institution.

**Methods:**

The billing records from July 1, 2009 – June 30, 2010 were compared to those from 2007 and 2008. Records were analyzed for length of stay, case mix, patient age, hospital charge, reimbursement, and procedure.

**Results:**

Case volume increased by 31% and mean acuity increased from 2.3 to 3.1 ( $p < 0.005$ ). Hospital stays lengthened by 1 day ( $p < 0.005$ ). Payor mix changed over this time with Commonwealth Care and Medicaid comprising 2.9% and 12.4%, respectively, of neurosurgical inpatients; neither had significantly different acuity or lengths of stay. Despite an increase in case volume by 31% and significantly increased acuity in 2010, revenue increased 14% over early reform data. When volume was normalized, extrapolations of pre-reform and early reform coverage on current financials demonstrated that the change in payor mix alone had decreased revenue by 30% and 24%, respectively. When modifying 2010 financials by considering 2007 reimbursement rates and 2007 payor mix, these changes together resulted in a revenue reduction of 36%.

**Conclusions:**

Taken together, our data suggests that revenue associated with hospital charges for neurosurgical inpatients has decreased significantly since health care reform went into effect.