

Rates of Insurance for Injured Patients before and after Health Care Reform in Massachusetts: another case of double jeopardy?

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Background

As a result of healthcare reform (HCR), insurance rates among Massachusetts (MA) residents increased from 86.6% (2006) to 94.4% (2010) and conferred a 7.6% higher probability of being insured compared to neighboring states. The effect of an individual mandate on insurance rates among trauma patients is unknown.

Methods

This was retrospective analysis of adult (18-64yrs) trauma patients from MA and surrounding states (NH, RI, CT, NY, VT) treated at our level 1 trauma center in central MA before (2004-2005) and after (2009-2010) MA-HCR. We estimated changes in insurance rates across time-periods and state-residence.

Results

Before MA-HCR, 76.7% (1647/2,148) of injured MA residents had insurance compared to 84.3% (2088/2477) post-HCR ($p<0.0001$). Out-of-state residents experienced similar but non-significant increases (77.4% (206/266) before compared to 83.2% (223/268) after, $p=0.09$). Uninsured patients were younger (median age 29 (IQR23-40) vs. 39 (IQR25-50)) and more likely to be male (85.7% vs. 70.7%, $p<0.0001$), non-white (29.8% vs. 15.3%, $p<0.0001$), and injured due to penetrating trauma (14.9% vs. 7.9%, $p<0.0001$). In multivariable models, male sex (OR2.4 (2.0,2.9)), non-white race (OR2.2 (1.7,2.8)), penetrating injury (OR1.2 (1.0,1.4)), and time period (OR1.6 (1.4,1.8)) increased odds of insurance at the time of injury but state-residence did not.

Conclusions

In this single center study, time rather than HCR resulted in modest increases in insurance rates. However, MA-HCR was ineffectual at increasing insurance among trauma patients to levels comparable to the general public, suggesting certain factors may place certain subgroups in “double jeopardy” by simultaneously increasing risk of injury and precluding compliance with an individual mandate.

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