

Primary Safety Belt Law and Missouri Medicaid Costs

Summary Compiled by:

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Citation:

Tison, J. and Chaudhary, N.K. (Preusser Research Group, Inc.). (2007). Estimated Minimum Savings to the Medicaid Budget in Missouri by Implementing a Primary Seat Belt Law. Technical Report: DOT HS 810 745. Washington, DC: National Highway Traffic Safety Administration.

Purpose Of Study:

Using 2005 Missouri Hospital Discharge data, the Preusser Research Group examined the minimum estimated savings on direct medical costs paid through Medicaid and other state sources if a primary seat belt law was implemented in Missouri.

Results:

In 2005...

- the total cost to the State of Missouri for treatment of crash-related injuries was \$132.6 million for the first year and \$30.7 million for each subsequent year.
- 517 Medicaid patients with a crash-related traumatic brain injury (TBI) were discharged from a Missouri hospital with charges totaling \$34.2 million.
- 52 Medicaid patients with a crash-related spinal cord injury (SCI) were discharged from a Missouri hospital with charges totaling \$7.4 million.

Researchers from the world-renowned Craig Hospital showed that the proportion of those with TBI on Medicaid doubles during the year following injury, and 25.4% of those with SCI become Medicaid patients within five years of the injury.

Conclusion:

Had a primary safety belt law been enacted in 2007, the state of Missouri could have saved \$6 million of its annual budget for medical costs during the first year of the law, \$43.8 million during the first 5 years, and \$121.9 million over a period of 10 years.

All costs in this study were based on the most conservative values available and did not include increases in health care costs over time. Lost wages, tax revenues, productivity and loss of life costs were not included in this study. A 40% belt use conversion rate developed by NHTSA was used to calculate the increase in belt use among current non-users following the enactment of a primary seat belt law.



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Rehabilitation Costs *Related to Motor Vehicle Injuries*

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Citation:

Miller, T.R., et al. (Pacific Institute for Research and Evaluation). (2006). Rehabilitation Costs and Long-Term Consequences of Motor Vehicle Injuries. Technical Report: DOT HS 810 581. Washington, DC: National Highway Traffic Safety Administration.

Purpose Of Study:

This study was designed to increase knowledge about crash costs and consequences, and provide a more comprehensive estimate of the full cost of motor vehicle-related injuries. The authors developed a model to estimate the cost of inpatient rehabilitation for motor vehicle-related injuries in 2000 using six sources of data (listed below).

Results:

In 2000, it was estimated that \$127.5 million was spent for inpatient rehabilitation of injuries from motor vehicle crashes (in 2002 dollars).

Public funds paid for 26.1% of crash-related inpatient rehabilitation costs.

In 2000, inpatient rehabilitation costs for motor vehicle injuries averaged \$11,265 per patient, ranging from \$9,052 for fractures to \$26,656 for spinal cord injuries (in 2002 dollars).

More than 50% of patients in the workforce at the time of injury changed their vocational status to nonworking or disabled at the time of rehabilitation discharge.

Conclusion:

It is not only the direct dollars spent on the initial treatment of crash injuries that impact the victim and deplete public funds. For many crash survivors, significant health care costs and challenges to employment continue over a lifetime.

Data sources:

American Medical Rehabilitation Provider's Association (AMRPA)

Uniform Data System for Medical Rehabilitation (UDSMR)

Traumatic Brain Injury Model System National Database

Hospital Discharge Survey Census data from 21 states in 1997 or 1998

Health Care Utilization Program 2000 National Inpatient Sample (HCUP-NIS)

Colorado Traumatic Brain Injury Registry and Follow-Up System

Results exclude inpatient rehabilitation costs related to motorcycle injuries.



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