



Alcohol Interventions for Trauma Patients Treated in Emergency Departments and Hospitals: A Cost-Benefit Analysis

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Research Highlight

POLICY PERSPECTIVE

EMERGENCY DEPARTMENT (ED) SCREENINGS FOR ALCOHOL PROBLEMS AND INTERVENTIONS CAN LEAD TO REDUCED HEALTH CARE COSTS. GIVEN THE POTENTIAL COST SAVINGS ASSOCIATED WITH SUCH SCREENINGS, WORK TO SUPPORT SUCH PRACTICES IN ED AND OTHER HEALTH CARE SETTINGS IS RECOMMENDED.

Background

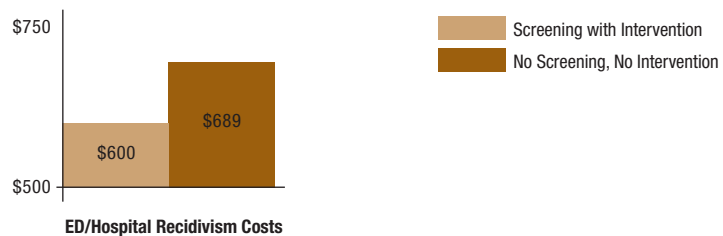
Alcohol intoxication is a leading risk factor for injury. Although interventions to reduce alcohol intake and injury recidivism have been implemented in many trauma centers, it has not been determined if economic savings are associated with these interventions.

In their article, *Alcohol Interventions for Trauma Patients Treated in Emergency Departments and Hospitals: A Cost Benefit Analysis*,¹ Larry M. Gentilello, M.D., and colleagues use a cost-benefit methodology to determine if alcohol interventions in trauma centers can reduce the direct cost of health care related to injury. The study population included individuals who were injured, treated and released from the Emergency Department (ED), or were more seriously injured and admitted to the trauma center. Cost-benefit assumptions were derived from searches of nationwide databases, and epidemiologic and clinical trial data.

Key Findings

- Alcohol disorders are present in 27 percent of injured adults treated in the ED. In the study, about 7 percent of those treated for injuries in the ED were intoxicated, while another 20 percent screened positive for problem drinking. Without an intervention, 28 percent of patients with drinking problems will return to the hospital for treatment of another injury within one year.

Average Costs for Screened and Unscreened Patients Who Received Brief Intervention and did not Receive Intervention Over a Three-Year Period



1 Gentilello LM, Ebel BE, Wickizer TM, Salkever DS and Rivara. *FP Annals of Surgery*, 241(4): 541-550, 2005 <http://www.annalsofsurgery.com/pt/re/annos/abstract.00000658-200504000-00001.htm;jsessionid=F9JTk9msZj9c3nL8yKVhb2D2GGrL.GndHyDXjrG0p2yRrvbhgsKL9!2030273863!-949856145!8091!-1>

- Screening and brief interventions for alcohol problems in acute injury settings are effective in reducing health care costs. The estimated cost of ED visits and hospitalization associated with screening and brief interventions for alcohol use is less than the cost of not receiving screenings and brief interventions over the three years after the intervention occurs (\$689 vs. \$600, respectively). Thus, the estimated cost savings for each injured patient screened is \$89. Further, screening and intervention programs result in estimated savings of \$3.81 for every dollar spent. Overall, each intervention results in an average of \$330 in net savings by reducing the risk of subsequent injuries.
- ED screening for alcohol problems followed by brief interventions results in substantial cost savings. More than 20 million injured patients are treated in EDs each year. If screenings and interventions were offered routinely, the net savings could approach \$1.82 billion annually.

—Deanna Lewis

Deanna Lewis is a Rutgers/Robert Wood Johnson Foundation Policy Fellow.