

07-INJ-01

Committee: ENV/OH/INJ

Title: Improving External Cause Coding in Hospital Discharge Data

Statement of the problem:

Injuries, both unintentional and intentional, remain one of the most neglected and costly public health problems in our society.^{1,2} Surveillance is the basis for the public health approach to assessing, preventing and controlling injuries,¹ and statewide hospital discharge databases are a core dataset recommended for injury surveillance by state health departments.³

Hospital discharge data are coded using the International Classification of Diseases Clinical Modification, revision 9 (ICD-9-CM), which provides codes to specify both the nature of the injury (e.g. skull fracture) and the mechanism or external cause (e.g. bike collision with motor vehicle).⁴ Improved external cause of injury coding helps planners identify and address issues involving patient safety, elderly falls, motor vehicle crashes, suicide attempts and other injuries that present a significant economic burden to the health care system.^{2,5, 6}

Presently, hospitals routinely code injury according to the nature of the injury while the external cause code is not consistently or uniformly included in hospital discharge databases.^{1,7,8} Limited progress has been made on this issue since 1990; as of 2005 only 26 states currently have a mandate for external cause coding, and in states that have evaluated their systems, only 55% of statewide hospital emergency department datasets have an external cause code for more than 90% of injury records.⁹ Even when external cause codes are present, the use of non-specific codes greatly limits their utility.¹⁰

Both Healthy People 2010 Objectives and the Patient Safety Indicators promulgated by the Agency for Healthcare Research and Quality require external cause-coded data,^{5, 11} and organizations such as the Council of State and Territorial Epidemiologists,¹² the State and Territorial Injury Prevention Directors Association,¹³ the American Academy of Pediatrics¹⁴ and the Suicide Prevention Action Network⁶ currently endorse improvements in external cause of injury coding.

The costs of fully implementing external cause coding as part of hospital discharge data are minimal.¹⁵ Federal data systems (UHDDS) and uniform billing (UB) procedures mandate the submission of data to statewide hospital discharge databases, but these procedures do not currently require the submission of external cause codes.

Statement of the desired action(s) to be taken:

CSTE recommends:

- The Centers for Disease Control and Prevention National Center for Injury Prevention and Control and National Center for Health Statistics lead a national effort to develop a strategy to improve the completeness and specificity of external cause coding in hospital discharge databases. This strategy should include:
 1. Facilitation of a unified federal effort involving agencies affected by this issue, such as the Agency for Healthcare Research and Quality, the Center for Medicaid and Medicare Services, and the National Highway Traffic Safety Administration
 2. Exploration of the use of federal data systems (UHDDS) and uniform billing (UB) procedures as a tool to address this issue
 3. Promotion of the assessment of external cause coding completeness and specificity in statewide hospital discharge databases.
- The organization that oversees the collection of hospital discharge data in each state assure that external cause of injury codes be recorded in the hospital discharge data for each hospital discharge having an injury diagnosis.
- Other professional organizations such as the American Public Health Association (APHA), the State and Territorial Injury Prevention Directors Association, and the American Academy of Pediatrics and the Suicide Prevention Action Network join with CSTE in endorsing the importance of complete and specific external cause coding in statewide hospital discharge databases.

Public Health Impact:

1. Evaluation and accountability for enhanced public health surveillance funding
2. More efficient use of public funding for surveillance for injury and violence prevention
3. More effective surveillance resulting in decreased morbidity and mortality
4. Prioritization of funding to projects and initiatives with positive public health outcomes, or with a reasonable expectation of such.

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