09 **VALIDATING EVIDENCE-BASED CRITERIA FOR IDENTIFYING INCIDENT HIP FRACTURES IN THE ABSENCE OF DATE OF INJURY**

doi:10.1136/injuryprev-2012-040580d.9

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Background Hospital discharge data (HDD) in many countries do not capture the date of injury (DOI); the absence of which hinders researchers' ability to distinguish repeat from incident injury admissions. Various approaches have been explored to increase the accuracy of hip fracture incidence estimates but these approaches have not been validated against a data source which contains the DOI.

Objective To determine the accuracy of evidence-based criteria for identifying incident fall-related hip fractures from person-identifying (person-level) HDD in the absence of the DOI.

Methods We analysed fall-related, person-level HDD from New Zealand (NZ) between 1 July 2005 and 30 June 2008 (inclusive) to estimate the incidence of hospital admission for fall-related hip fracture in older people. We defined data containing the DOI as the reference standard, and using standard definitions we calculated measures of accuracy of the following evidence-based criteria: age ≥65, principal diagnosis hip fracture, first listed external cause indicating a fall, admission type emergency, admission source other than a transfer and presence of hip operation code(s).

Results The sensitivity and specificity of the criteria for identifying incident fall-related hip fractures from data not containing the DOI were 96.4% and 99.3%, respectively, compared to the reference standard. The application of these criteria resulted in a slight underestimation of fall-related hip fracture incidence in older people in NZ.

Significance/Contribution to the Field This study demonstrates the utility of evidence-based criteria when the DOI is unavailable.