

# PRE-INJURY AND INJURY-RELATED PREDICTORS OF DISABILITY 3 AND 12 MONTHS AFTER INJURY: HOSPITALISED AND NON-HOSPITALISED

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**Background** Most studies of injury outcome are restricted to hospitalised people. Little is known about outcomes for those not hospitalised, and few studies have used validated measures of disability.

**Aims** We identify factors associated with disability among hospitalised and non-hospitalised people, 3- and 12-months after injury.

**Methods** The Prospective Outcomes of Injury Study recruited participants (n=2856) via New Zealand's no-fault injury compensation insurer (ACC) database. A wide range of pre-injury demographic, health and injury-related characteristics were collected at interview. Injury severity scores (NISS) and 12 injury categories were derived from ICD-10 codes. The World Health Organisation's WHODAS 12-item instrument was used to assess disability. Multivariable analyses examine relationships between explanatory variables and disability at both time-points.

**Results** Disability was prevalent among hospitalised and non-hospitalised participants, 3-months after injury (54% and 39% respectively). In both groups pre-injury disability, obesity and more severe injuries were associated with increased odds of post-injury disability. A range of other pre-injury demographic, health and injury-related factors were associated with disability, but only in one group for example, female (OR=1.78), ≥2 chronic conditions (OR=1.92) or leg fracture (OR=3.50) among hospitalised; age 35–54 years (OR=1.40), trouble accessing healthcare (OR=1.92), spine sprains/strains (OR=2.21) and assault (OR=3.04) among non-hospitalised.

**Significance** Post-injury disability is prevalent, regardless of being hospitalised or not. Apart from pre-injury disability, obesity and

higher injury severity, factors associated with increased odds of disability were not common to both groups. Where possible, studies which include both hospitalised, and non-hospitalised, are likely to increase our understanding of disability outcomes.