The purpose of this study is to examine the burden and outcomes of penetrating injury among patients admitted to Queensland hospitals.

Methods: A retrospective examination of linked hospitalisation data was conducted. Data for all patients admitted to Queensland hospitals for acute care related to penetrating injury with separation date between 1 January 2012 to 31 December 2016 were collected. Data were internally linked to enable patient-based analysis. Inpatient clinical costs data were also linked.

Results: Over the five-year period, penetrating injury accounted for 37,491 episodes of care (31,223 distinct patients) in Queensland, which resulted in 67,987 patient bed days. The proportion of patients who died in hospital was 0.12%. 27,819 (74%) of these hospitalisations occurred in male and 9,672 (26%) were in female. Unintentional injury accounted for 81% of hospitalisations (n= 30,317) and were higher in male (n= 23,628, 85%) compared to female (n=6,689, 69%). However, hospitalisations due to intentional self-harm were higher in female (n=2,332, 24%) than male (n=1,959, 7%). Tools and household machinery were identified as the leading cause (n=10,247, 27%) of penetrating injuries. Penetrating injury accounted for almost $239M in public hospital costs over the five-year period.

Conclusions: The findings highlight the significant burden and enormous cost of penetrating injury related hospitalisations in Queensland. Further research is required to better understand the patient outcome of penetrating injury related hospitalisations.

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