



## Service Priorities and Programmes Electronic Presentations

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**A Comparison of Functional Outcome in patients sustaining major trauma: a multicentre, international, prospective international study**

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**Introduction**

Trauma outcome was usually measured using mortality in the past, but functional outcome was increasing being used as a tool to measure service quality in trauma.

**Objectives**

The purpose of this study was to compare six and 12 month health status and functional outcomes between regional major trauma registries in Hong Kong and Victoria, Australia.

**Methodology**

This multicentre, prospective cohort study utilized data from trauma registries of three regional trauma centers in Hong Kong, and from the Victoria State trauma system in Australia. The main outcome measures were the Extended Glasgow Outcome Scale (GOSE) functional outcome and risk-adjusted Short-Form 12 (SF-12) health status at 6 and 12 months after injury. Trauma patients meeting major trauma criteria (ISS $\geq$ 16) and aged  $\geq$ 18 years were included.

**Result**

Results: 261 cases from Hong Kong and 1955 cases captured by the VSTR met the study inclusion criteria. Adjusting for age, sex, ISS, comorbidity, injury mechanism and GCS: the odds of a better functional outcome for Hong Kong patients relative to Victorian patients at six months was 0.88 (95% CI: 0.66, 1.17), and at 12 months was 0.83 (95% CI: 0.60, 1.12); patients in Hong Kong demonstrated comparable mean PCS-12 scores at 6-months (adjusted mean difference: -1.2, 95% CI: -1.2, -3.6) and 12-months (adjusted mean difference: 0.4, 95% CI: -3.2, 2.4) with patients from Victoria. MCS-12 scores between Hong Kong patients and Victorian patients were similar at 6-months (adjusted mean difference: 0.4, 95% CI: -2.1, 2.8) or 12-months

(adjusted mean difference: 1.8, 95% CI: -0.8, 4.5). Conclusion: This study found no significant differences in quality of life and functional outcome after major trauma between Hong Kong and Victoria State, Australia.