

0327 **COMPARISON OF MORTALITY FOLLOWING HOSPITALISATION FOR ISOLATED HEAD INJURY IN THE UK AND VICTORIA, AUSTRALIA**

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**Background** Head injury remains a leading cause of death and disability worldwide but advances in trauma systems, pre-hospital care, and critical care have led to improvements in survival.

**Aims** Compare isolated head injury mortality in England/Wales with Victoria, Australia.

**Methods** Population-based, isolated head injury admissions data were available for July 2005 to June 2006. To enable better risk-adjustment, severe isolated head injury (AIS severity >3) data were obtained for the same period from the trauma registries for England/Wales (TARN) and Victoria (VSTR).

**Results** In 2005–2006, there were 7155 isolated head injury admissions in England/Wales and 1217 in Victoria. The in-hospital mortality was 12% for England/Wales and 9% for Victoria. Adjusting for key confounders, the odds of death in England/Wales were higher (AOR 2.0, 95 CI 1.6 to 2.5). 699 severe isolated head injuries were captured by the VSTR, and 575 by TARN over the 12-month period. The in-hospital mortality was 23% for TARN and 17% for VSTR. After adjusting for key confounders, severely isolated head injury patients were more likely to die in England/Wales than Victoria (AOR 1.6, 95% CI 1.1 to 2.3). 72% of TARN cases were managed at a neurosurgical centre compared to 87% of VSTR cases.

**Conclusion** Death following hospitalisation for an isolated head injury was higher for England/Wales when compared to Victoria, Australia. Differences in the rate of care at neurosurgical centres appeared to be a key explanatory factor.