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Supporting Information

Supplementary methods and results

This appendix was part of the submitted manuscript and has been peer reviewed.
It is posted as supplied by the authors.

Appendix to: Kimmel LA, Simpson PM, Holland AE, et al. Discharge destination and patient-reported outcomes after inpatient treatment for isolated lower limb fractures. *Med J Aust* 2020; doi: 10.5694/mja2.50485.

1. Supplementary methods: imputing missing data

Data were missing for some covariates, resulting in 10% fewer observations in the extended Glasgow Outcomes Scale (GOS-E) score analysis and 8.5% fewer observations in the RTW analysis. These covariates were then imputed using multiple imputation by chained equations. Twenty datasets were produced and all covariates and each outcome were used in the imputation process. After imputation, a propensity score analysis was performed on each imputed dataset[1] and the estimated effects of discharge destination were then combined using Rubin's rules[2] to obtain an overall estimate. Standardised differences were calculated for each imputed dataset and then averaged.

References

1. Leyrat C, Seaman SR, White IR, et al. Propensity score analysis with partially observed covariates: How should multiple imputation be used? Stat Methods Med Res 2019; 28: 3-19.
2. Rubin D. Multiple imputation for non-response surveys. New York: John Wiley, 1987.

2. Distribution of GOS-E scores for 6775 adults 12 months after inpatient treatment for isolated lower limb fractures

GOS-E score	
1	77 (1.1%)
2	1 (< 0.1%)
3	245 (3.6%)
4	228 (3.4%)
5	863 (12.7%)
6	1827 (27.0%)
7	1508 (22.3%)
8	2026 (29.9%)

3. Sensitivity analysis (return to work): odds ratio (with 95% confidence interval band), by confounding function value