Appendix E: Health economic evidence tables

Study	Tadros 2013[56] and Parsonage 2011[44]			
Study details	**Population & interventions**	**Costs**	**Health outcomes**	**Cost effectiveness**
Economic analysis: CCA **Study design:** Retrospective before and after cohort analysis. **Approach to analysis:** Data was analysed to measure the effect of the intervention on patient length of stay, readmission rates and patient survival post discharge. Case matching was used to control for confounders. Subgroups were analysed by those who had been referred to the intervention and those who were not referred but were managed while the new service was in place and therefore were considered to be influenced by the service. **Perspective:** UK NHS **Time horizon:** 12 months **Treatment effect duration:** Data were measured over 8 months and extrapolated to 12 months. **Discounting:** Costs: NR; Outcomes: NR	**Population:** All emergency admissions aged over 16 with a mental health diagnosis and a length of stay greater than 1 day. **Cohort settings:** N (intervention 1): 2873 N (intervention 2): 3540 Mean age: 36.4 Male: 53% **Intervention 1:** No psychiatric liaison. **Intervention 2:** Rapid Assessment, Interface and Discharge (RAID)	**Total costs (mean per year):** Incremental (2–1)[(a)]: Intervention +£0.8m Bed days: -£3.5m Total: -£2.7m **Currency & cost year:** UK pounds. Year not reported. **Cost components incorporated:** Cost of RAID service and bed days.	**Length of stay (mean per patient):** Incremental (2–1): Saves 38 beds per day. (95% CI: 21 to 42; p=NR) **Length of stay for readmissions (mean per patient):** Incremental (2–1): Saves 22 beds per day. (95% CI: NR; p=NR) **Readmission (RAID referrals only):** Intervention 1: 15 per 100 patients Intervention 2: 4 per 100 patients. Incremental (2–1): Saves 11 admissions per 100 patients. **Readmission (RAID influenced group only):** Intervention 1: 15 per 100 patients Intervention 2: 12 per 100 patients. Incremental (2–1): Saves 3 admissions per 100 patients.	**ICER:** n/a **Analysis of uncertainty:** Monte Carlo sampling was used to estimate a 95% confidence interval of bed days saved. The lower estimate was used as a conservative estimate in the analysis presented. This included bed days saved from readmissions
Data sources				
Health outcomes: Length of hospital stay and readmissions measured using data from City Hospital, Birmingham. **Cost sources:** NR				
Comments				
Source of funding: NR **Applicability and limitations:** Based on a single observational study. The cost analysis results were referenced from another paper, which was not accessible. The number of bed days used in their calculations is reported but cost sources are not. Time horizon is only 1 year and is based on				

extrapolating effects from data captured over 8 months. Mortality and quality of life were not measured and so health benefits are not measured using QALYs.

Overall applicability:[c] Partially applicable   **Overall quality**[d] Potentially serious limitations

Abbreviations: CCA: cost-consequence analysis; 95% CI: 95% confidence interval; ICER: incremental cost-effectiveness ratio; NR: not reported; QALYs: quality-adjusted life years.
(a) Based on annual bed day savings of £3.5 million and the annual cost of the service of £800,000.
(b) Directly applicable/Partially applicable/Not applicable.
(c) Minor limitations/Potentially serious limitations/Very serious limitations.