

Appendix E: Economic evidence tables

Study	Yao 2012 ¹²⁶			
Study details	Population & interventions	Costs	Health outcomes	Cost effectiveness
<p>Economic analysis: CUA (health outcome: QALY)</p> <p>Study design: Retrospective cohort analysis without multivariate regression</p> <p>Approach to analysis: Analysis on effect of structured patient handover on preventable adverse events. QoL was assigned by grouping adverse events by severity</p> <p>Perspective: Netherlands health system</p> <p>Time horizon: 1 year</p> <p>Treatment effect duration^(a): 1 year</p> <p>Discounting: Costs: n/a ; Outcomes: n/a</p>	<p>Population: Patients discharged from hospital to the community</p> <p>Cohort settings: Start age: n/a Male: n/a</p> <p>Intervention 1: Usual care</p> <p>Intervention 2: Structured patient handover between hospital and community (HANDOVER project)</p>	<p>Total costs (per patient discharge):</p> <p>Intervention 1: Intervention 2: Incremental (2–1): £1.86 (95% CI: NR; p=NR)</p> <p>Currency & cost year: 2011 Euros (presented here as 2011 UK pounds^(b))</p> <p>Cost components incorporated: Intervention cost (HANDOVER), admission and readmission associated with adverse event to ED, GP visit</p>	<p>QALYs (per patient discharge):</p> <p>Intervention 1: Intervention 2: Incremental (2–1): 0.0103 (95% CI: NR; p=NR)</p>	<p>ICER (Intervention 2 versus Intervention 1): £180.34 per QALY gained</p> <p>Analysis of uncertainty: The study looked at a base case of 21% effectiveness of the intervention whereby it is 21% effective at reducing preventable adverse events. The intervention was found to be dominant at 100% effectiveness, increase in QALYs and cost saving. The study also found that this dominance is lost when effectiveness drops below 24.3% and is no longer cost-effective, at a €20,000 threshold, if the effectiveness of the intervention drops below 1.6%.</p>
Data sources				
<p>Health outcomes: EQ-5D scores were estimated by categorising adverse events into groups and assigning the groups to an indicative state. Quality-of-life weights: EQ-5D UK tariff Cost sources: Published sources (to be added to references).</p>				
Comments				
<p>Source of funding: Framework Programme of the European Commission; National Institute of Health Research (NIHR); ESFRC MATCH project; NIHR Collaborations for Leadership in Applied Health Research and Care (CLAHRC) for Birmingham and Black Country Applicability and limitations: Some uncertainty regarding the applicability</p>				

of resource use and costs from the Netherlands (2011) to current NHS context. Costs from multiple published studies. No discounting reported. Quality-of-life estimated by categorising adverse events and allocating to an indicative state from the EQ-5D. Health outcomes based on estimates and assumptions of preventable adverse events. Effectiveness of the intervention elicited from experts. **Other:** Converting the threshold from Euros to UK pounds would show greater favour for the intervention with the current €20,000 threshold used in the analysis converting to £16,853, less than the £20,000 threshold used.

Overall applicability^(c): Partially applicable **Overall quality^(d):** Potentially serious limitations

Abbreviations: CUA: cost-utility analysis; 95% CI: 95% confidence interval; EQ-5D: Euroqol 5 dimensions (scale: 0.0 [death] to 1.0 [full health], negative values mean worse than death); ICER: incremental cost-effectiveness ratio; NR: not reported; QALYs: quality-adjusted life years; QoL: Quality-of-life.

- (a) For studies where the time horizon is longer than the treatment duration, an assumption needs to be made about the continuation of the study effect. For example, does a difference in utility between groups during treatment continue beyond the end of treatment and if so for how long?*
- (b) Converted using 2011 purchasing power parities.⁸¹*
- (c) Directly applicable/Partially applicable/Not applicable.*
- (d) Minor limitations/Potentially serious limitations/Very serious limitations.*