

E.1 Matron or nurse-led care

Study	Graves 2009 ⁵⁵			
Study details	Population & interventions	Costs	Health outcomes	Cost effectiveness
<p>Economic analysis: CUA (health outcome: QALY)</p> <p>Study design: RCT</p> <p>Approach to analysis: Decision analytic model based on a single RCT</p> <p>Perspective: Australian healthcare system</p> <p>Time horizon: 24 weeks</p> <p>Discounting: Costs: n/a; Outcomes: n/a</p>	<p>Population: 65 years or older and admitted with a medical condition At least 1 risk factor for readmission (aged >75, multiple admissions in previous 6 months, multiple comorbidities, lived alone, lacked social support, poor self-rated health, moderate to severe functional impairment, and history of depression).</p> <p>Cohort settings: Start age: 78.8 Male: 37.7%</p> <p>Intervention 1: (n=64) Participants in the control received the routine care, discharge planning and rehabilitation advice normally provided. If in-home follow-up was</p>	<p>Total costs (mean per patient): Incremental (2–1): -£165 (95% CI: -£850 to £564; p=NR)</p> <p>Currency & cost year: 2008 Australian dollars (presented here as 2008 UK pounds)^(a)</p> <p>Cost components incorporated: Physio time, nurse time, stretchy band, pedometer, hospital bed day, community bed day, GP visit</p>	<p>QALYs (mean per patient): Intervention 1: NR Intervention 2: NR Incremental (2–1): 0.118 (95% CI: 0.10 to 0.136; p=NR)</p>	<p>ICER (Intervention 2 versus Intervention 1): Intervention 2 dominates.</p> <p>Analysis of uncertainty: 100% probability the intervention generated health benefits and a 64% chance it saved costs. 95% chance it is cost effective at a £20,000 per QALY threshold.</p>

	<p>necessary, it was organised in the routine manner (for example, referral to community health services).</p> <p>Intervention 2: (n=64) Extended access to nurse and physio care post admission. This included nurse home visit within 48 hours of discharge to assess access availability of support, address transitional concerns, provide advice and support and ensure that the exercise program could be safely undertaken at home. Extra home visits were provided if required.</p>			
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Data sources

Health outcomes: Data collected throughout the RCT conducted by Courtney et al.³² **Quality-of-life weights:** EQ-5D mapped from SF-12 **Cost sources:** mater health services, medical benefits schedule, Australian hospital statistics, economics and health service group

Comments

Source of funding: Australian Research Council **Applicability and limitations:** Australian healthcare system may not accurately portray the UK NHS.UK tariff not used to measure EQ-5D.

RCT-based analysis so from 1 study by definition therefore not reflecting all evidence in area. EQ-5D was mapped from SF-12 and not measured directly. However, these limitations are unlikely to change the conclusions about cost-effectiveness.

Overall applicability^(b): Partially applicable **Overall quality**^(c): Minor limitations

Abbreviations: 95% CI: 95% confidence interval; CUA: cost–utility analysis; 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; SF-12: short-form 12 questionnaire.

(a) Converted using 2008 purchasing power parities.¹⁰⁹

(b) Directly applicable/Partially applicable/Not applicable.

(c) Minor limitations/Potentially serious limitations/Very serious limitations.

Study	Ploeg 2010 ¹¹²			
Study details	Population & interventions	Costs	Health outcomes	Cost effectiveness
<p>Economic analysis: CUA (health outcome: QALY)</p> <p>Study design: RCT</p> <p>Approach to analysis: Within-trial analyses of resource use, with unit costs applied.</p> <p>Perspective: Canadian primary care network.</p> <p>Time horizon: 12 months</p> <p>Discounting: Costs: n/a; Outcomes: n/a</p>	<p>Population: Patients aged >75 years, not already receiving home care services.</p> <p>Cohort settings: Start age: 81 Male: 47%</p> <p>Intervention 1: (n=358) Control group receiving usual care.</p> <p>Intervention 2: (n=361) Experienced home care nurse-led intervention.</p>	<p>Total costs (mean per patient): Intervention 1: £4,204 Intervention 2: £4,039 Incremental (2–1): -£165 (95% CI: NR; p=NR)</p> <p>Currency & cost year: 2006 Canadian dollars (presented here as 2006 UK pounds Error! Reference source not found.)</p> <p>Cost components incorporated: Prescription drugs, visits to physician, hospital admissions, home nursing visits.</p>	<p>QALYs (mean per patient): Intervention 1: 0.5079 Intervention 2: 0.5554 Incremental (2–1): 0.0475 (95% CI: NR; p=NR)</p>	<p>ICER (Intervention 2 versus Intervention 1): Intervention 2 dominates.</p> <p>Analysis of uncertainty: No sensitivity analysis reported.</p>
Data sources				
Health outcomes: Data collected through the health and social service utilization survey. Quality-of-life weights: HUI3 Cost sources: Based on local costs; Ontario Canada.				
Comments				
Source of funding: Ontario Ministry of Health and Long Term Care, Primary Health Care Transition Fund Applicability and limitations: Some uncertainty regarding the applicability of resource use and unit costs from Canada to the current NHS context. QALYs obtained through HUI3 rather than preferred EQ-5D. RCT-based analysis so from 1 study by definition therefore not reflecting all evidence in area. Local unit costs used may not be representative of national costs. No sensitivity analysis reported.				
Overall applicability ^(a) : Partially applicable Overall quality ^(b) : Minor limitations				

Abbreviations: 95% CI: 95% confidence interval; CUA: cost–utility analysis; EQ-5D: Euroqol 5 dimensions (scale: 0.0 [death] to 1.0 [full health], negative values mean worse than death); HUI3: health utility index mark 3; ICER: incremental cost-effectiveness ratio; NR: not reported; QALYs: quality-adjusted life years.

(a) Converted using 2006 purchasing power parities.¹⁰⁹

(b) Directly applicable/Partially applicable/Not applicable.

(c) Minor limitations/Potentially serious limitations/Very serious limitations.

Study	Turner 2008 ¹³⁶			
Study details	Population & interventions	Costs	Health outcomes	Cost effectiveness
<p>Economic analysis: CUA (health outcome: QALY)</p> <p>Study design: Economic evaluation alongside a cluster randomised control trial</p> <p>Approach to analysis: Analysis of individual level data for QALYs and resource use with unit costs applied.</p> <p>Perspective: UK NHS</p> <p>Follow-up: 12 months</p> <p>Discounting: Costs: n/a; Outcomes: n/a</p>	<p>Population: Patients with coronary heart disease or chronic heart failure.</p> <p>Cohort settings: Start age: 70 Male: 63%</p> <p>Intervention 1: Control group; standard general practice care.</p> <p>Intervention 2: Specialist nurse-led disease management programme.</p>	<p>Total costs (mean per patient): Intervention 1: £660 Intervention 2: £1,107 Incremental (2–1): £447 (95% CI: NR; p=NR)</p> <p>Currency & cost year: 2003-2004 UK pounds</p> <p>Cost components incorporated: Medication, contact with GP, contact with practice nurse, visits to nurse-led disease management, home visits, outpatient visits, inpatient visits.</p>	<p>QALYs (mean per patient): Intervention 1: 0.60 Intervention 2: 0.63 Incremental (2–1): 0.03 (95% CI: NR; p=NR)</p>	<p>ICER (Intervention 2 versus Intervention 1): £14,900 per QALY gained (pa) 95% CI: NR Probability Intervention 2 cost-effective (£20K/30K threshold): 80%/90%</p> <p>Analysis of uncertainty: The study developed a cost-effectiveness acceptability curve, showing how likely the intervention is cost-effective at a range of thresholds.</p>
Data sources				
Health outcomes: Baseline and follow-up resource use data taken from general practice records. Quality-of-life weights: EQ-5D UK tariff. Cost sources: NHS reference costs, PSSRU, BNF.				
Comments				
Source of funding: The Trent NHS Executive, UK. The Trent Research and Development Support Unit (RDSU). Applicability and limitations: RCT-based analysis so from 1 study by definition therefore not reflecting all evidence in area. 12 month time horizon may not be sufficient.				
Overall applicability ^(a) Directly applicable Overall quality ^(b) : Minor limitations				

Abbreviations: 95% CI: 95% confidence interval; BNF: British national formulary; CUA: cost–utility analysis; 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; PSSRU: personal social services research unit; QALYs: quality-adjusted life years.

(d) Directly applicable/Partially applicable/Not applicable.

(e) Minor limitations/Potentially serious limitations/Very serious limitations.