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Economic evaluation of the British Lung Foundation Active Steps service

Background: Active Steps (AS) is a telephone-based health coaching intervention developed to support inactive adults with chronic lung conditions to become and stay physically active.
Aim: To conduct an economic evaluation of AS.
Method: Incremental analysis was used to compare, in 2018-19 prices, AS to standard care (independent control, IC) for adults with chronic lung conditions from the perspective of the National Health Service (NHS) and personal social services in the UK. Two instruments were used over a 12-month period to collect economic data: EQ-5D-5L and a bespoke questionnaire designed to elicit usage of NHS resources. Quality adjusted life years (QALY) were calculated using area under the curve. Interest lies with the use of AS targeted to patients functionally disabled by breathlessness and awaiting pulmonary rehabilitation, indicated by MRC Dyspnoea grade 3 or higher.
Results:

MRC Dyspnoea 3-5

	Aggregate cost (£)	Costed years	Total cost (£ pa)	Total QALY	Life years	QALY (QALY pa)	ICER (£/QALY)
AS (n=63)	67,940	30.1	2,254	20.7	37.8	0.547	
IC (n=51)	84,671	38.5	2,200	20.9	39.9	0.523	
difference			53			0.024	2,237

In patients with MRC Dyspnoea 3-5, AS improves health but does so at increased cost to the NHS. Implementing AS is expected to be cost-effective against standard care provided the NHS is prepared to pay at least £2,237 to achieve an additional year of full health. Incorporating uncertainty, at a willingness to pay threshold of £10,000 per QALY there is a 60% chance that AS will be cost-effective over standard care.
Conclusion: Active Steps can be cost-effective against standard care provided it is delivered to adults with chronic lung conditions who consider themselves to be functionally disabled by breathlessness.