Home-based pulmonary rehabilitation for COPD using minimal resources: An economic analysis

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Setting the scene:
This study aimed to compare the cost-effectiveness and cost-utility of home and centre-based pulmonary rehabilitation for adults with stable chronic obstructive pulmonary disease (COPD).

What did they do?
Prospective economic analyses were undertaken from a health system perspective alongside a randomized controlled equivalence trial in which participants referred to pulmonary rehabilitation undertook a standard 8-week outpatient centre-based or a new home-based programme. Participants underwent clinical assessment prior to programme commencement, immediately following completion and 12 months following programme completion. They provided data for utility (quality-adjusted life years (QALY) and effectiveness (change in distance walked on 6-min walk test (Δ6MWD) following pulmonary rehabilitation). Individual-level cost data for the 12 months following programme completion was sourced from healthcare administration and government databases. Cost-utility analyses demonstrated 63% of estimates falling in the dominant southeast quadrant and the probability that the new home-based model was cost-effective at a $0 threshold for willingness to pay was 78%.

Takeaway message:
Home-based pulmonary rehabilitation provides a cost-effective alternative model for people with COPD who cannot access traditional centre-based programmes.