EE611

Economic evaluation of person-centred care using a digital platform and structure telephone support for people with chronic heart failure and/or chronic obstructive pulmonary disease

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Background

Chronic heart failure (CHF) and chronic obstructive pulmonary disease (COPD) are amongst the leading causes of morbidity and mortality globally. An increasing disease trajectory means that decision-makers are under greater pressure to manage both the health and economic burden of these diseases. Optimising care through person-centred care (PCC) interventions can improve disease-specific management whilst addressing the needs of people living with CHF and/or COPD.

Aim

The aim of the study was to evaluate the cost-effectiveness of a remote PCC add-on intervention compared with usual care alone for people with CHF and/or COPD. This intervention has previously been reported to improve self-efficacy.

Method

Eligible patients from 9 primary care centres were randomised into either the intervention group (n=110) or control group (n=112). The intervention group participated in a PCC add-on through a digital platform and telephone support, both groups received care as usual through their primary care centres. Used resources were identified over a 2-year time horizon. Time data from the trial and register data, including direct healthcare costs, labour market costs and drug costs were included in the analysis. Health system costs were calculated using national statistics and analysed descriptively by components. Societal costs were calculated based of productivity loss from both work absenteeism and time spent participating the trial.

Table 1. Distributional Healthcare Costs, Intervention and Control Group

Healthcare type	mean (CI) Control (n = 112)	mean (CI) Intervention (n =110)
PRIMARY CARE	35211 SEK (30328 - 39776)	36785 SEK (31846 - 41148)
INPATIENT	64899 SEK (40025 - 85934)	44950 SEK (27902 - 61111)
SPECIALIZED OUTPATIENT CARE	53539 SEK (40386 - 64991)	41642 SEK (33173 - 49084)
POLYCLINICAL CARE	377 SEK (0.0 - 1131.3)	12533 SEK (897 - 34154)
DRUGS	24383 SEK (15695 - 30393)	23290 SEK (15582 - 28394)
SICK LEAVE	89785 SEK (25148 - 142217)	40776 SEK (404 - 70747)
INTERVENTION COSTS (Healthcare)		1603 SEK (1485 - 1722)
INTERVENTION COSTS (Patient)		1470 SEK (1164 - 1749)

Exchange rates 2021:
1 USD = 8.57 SEK
1 EURO = 10.14 SEK

TAKE HOME MESSAGE

COPD and/or CHF patients receiving PCC via a digital platform and telephone support in a primary care setting increases access and involvement in preventative care. This can result in economic benefits through less care utilisation outside of primary care.

Results

The intervention group had lower costs for inpatient care, specialised outpatient care, drug use and absenteeism due to sick leave. Polyclinical care, although significantly higher in the intervention group, was skewed by a single surgical procedure. The preliminary results of this cost-effectiveness analysis show incremental effects of 0.11 quality-adjusted life years (QALY) and incremental costs of -95 088 SEK (Swedish crowns). The PCC alternative was both more effective and resulted in lower healthcare costs compared with care as usual. i.e., PCC was dominant.

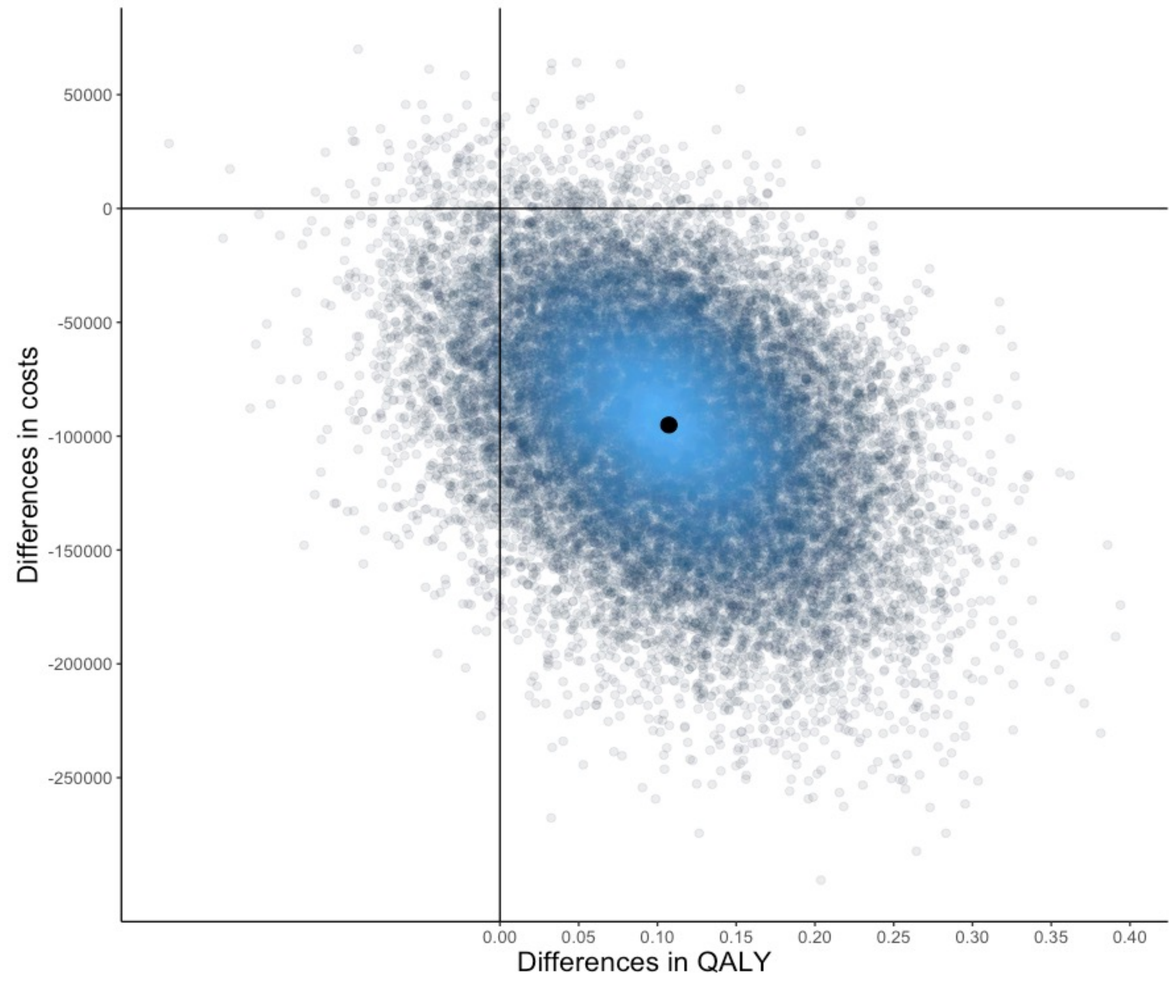

Figure 1. CEA plane with incremental costs and effects

Conclusion

Based on the preliminary results a remote PCC add-on intervention for people with COPD and/or CHF had lower healthcare costs and higher health-related quality of life compared to usual care alone.

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