primary studies - published RCT

Health care costs related to home spirometry in the eICE randomized trial.

Code: PM33715993 **Year:** 2022 **Date:** **Author:** Franz N

Study design (if review, criteria of inclusion for studies)

Multi-center randomized controlled trial

Participants

Review of healthcare resource utilization of all 267 eICE participants at least 14 years old, from 14 centers)

Interventions

An intervention directed toward early detection of pulmonary exacerbations using home spirometry and symptom monitoring (electronically twice per week). Participants in the usual care arm were seen every 3 months and were asked to contact the site if they were concerned about worsening pulmonary symptoms.

Outcome measures

Healthcare resource utilization of eICE participants, including outpatient visits, antibiotics and hospitalizations. Prices were identified in the IBM/Watson MarketScan(â“‡) Commercial Claims and Encounters Databases and averaged over the 2014-2017 period. Using total healthcare utilization costs, the authors generated summary statistics by intervention and protocol arm (total cost, mean cost, standard deviation).

Main results

Outpatient visit costs were significantly higher by 13% in the Early Intervention (EI) than in the usual care (UC) arm ($3,345 vs. $2,966). We found no significant differences in outpatient antibiotic, hospitalization, or total health care costs between the arms.

Authors' conclusions

Within the context of the eICE trial, outpatient visits were significantly higher in those with experimental home spirometry care, but that did not translate into statistically significant differences of overall health care costs between the two arms.

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See also

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Keywords

Adult; Child; Home Care Services; non pharmacological intervention - psyco-soc-edu-org; Organization;