

Abstract 42017

Modeled Health Economic Benefits Of A "Real Life" Computer Guided Review In COPD

Type: Scientific Abstract

Category: 09.07 - COPD: General (CP)

Authors: E.B. Thompson¹, M.G. Pearson¹, L. Davies², A. Trusdale³, E. McKnight³, K. Sergeant³, R.M. Angus²;

1. University of Liverpool - Liverpool/UK, 2. Aintree University Hospitals NHS Trust - Liverpool/UK, 3. NSHI - Dartford/UK

Abstract Body

Introduction:

In 2012 we described a pilot of a computer-guided consultation, with algorithms based on NICE guidance, and estimated that an average UK locality of 330000 people (9000 COPD patients (2.7%)) were to deploy this, the potential saving was around 800,000 pounds sterling/year. The software has been deployed in 13 practices in the same area and now we report actual changes in real life clinical use.

Methods:

417 patients on COPD registers had computerised consultations of whom 338 had spirometry confirmed COPD. Their mean (SD) age was 68.9(9.4) years with 184 male (54%) male. 79 (18%) did not have obstructive spirometry. We describe cost changes in the same conservative format as a year ago.

Results:

All UK COPD patients should be reviewed annually usually by nurses. The computer-guided consultation may double the initial time leading to an additional cost including software of 149,000 pounds sterling. But not needing to review of 18% of those on COPD registers saves 23,000 pounds sterling of appointments and a further 226,000 pounds sterling of inhaled medications that cannot help non-obstructive disease. Several medications are cost effective LAMA and ICS/LABA; particularly by reducing admissions. 7/11 with severe/very severe COPD not on an ICS/LABA combination had it added, but the saving was balanced by added costs of giving ICS/LABA to 7/95 of patients with a greater FEV1 - no net saving claimed. However 27 of the 226 already on a combination were switched from MDI to DPI with a cost saving of 115,000 pounds sterling per annum (presuming collection of 8 scripts /year). 17/165 (10%) of those not on a LAMA had it added rising to 33% of those with severe and very severe disease which also likely to be cost saving. No patients were referred for oxygen assessments without hypoxia. Only 7.5% of those eligible for pulmonary rehabilitation, were referred so benefits were modest, but would still yield a net gain of 7,000 pounds sterling when admissions saved are balanced against program costs.

Conclusion:

Rolling out a pilot study into real life practice does not lead to all the projected gains immediately. The changes in diagnosis were just as impressive but the changes in drug use, pulmonary rehabilitation and oxygen referrals less so. Nevertheless the total savings would still amount to more than 370,000 pounds sterling in a local area comfortably exceeding the cost of the program with the opportunity to achieve more in subsequent visits with continued computerized prompting.