



PHARMACEUTICAL CARE NETWORK EUROPE

Working Conference 2013 – Abstract

Collaborative pharmaceutical care in research and practice

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The above mentioned participant in the PCNE WC 2013 wishes to submit following abstract for a poster or oral communication. If accepted and presented, the abstract will be published in the International Journal of Clinical Pharmacy. Please make sure the abstract is no longer than 350 words, excl. author-details.

Title Cost-effectiveness of a community pharmacist-led sleep apnea screening program - a Markov model.
Author(s) C. Perraudin, M. Le Vaillant, N. Pelletier-Fleury
Type of abstract <input checked="" type="checkbox"/> Research <input type="checkbox"/> Practice development <input type="checkbox"/> Practice implementation
Aim of project/study To estimate the quality of life, costs and cost-effectiveness of three screening strategies among patients who are at risk of having moderate to severe Obstructive Sleep Apnea Syndrome (OSAS) in primary care.
Method We constructed a decision-analytic Markov model with published data. <u>Target population:</u> Hypothetical cohort of 50-year-old male patients with symptoms highly evocative of OSAS. <u>Time horizon:</u> The 5 years after initial evaluation for OSAS. <u>Perspective:</u> Societal. <u>Interventions:</u> <ol style="list-style-type: none"> (1) “Screening strategy without CP”: we assumed that 15% of patients who were at risk of OSAS who visited a GP were referred to a sleep specialist [1]. (2) “Screening strategy with CP”: patients were screened for OSAS by the CP before visiting their GP. They were informed of an OSAS screening program through flyers that were placed on the counter. The CP program involved i) a discussion with the patient on the risks and comorbidities associated with untreated OSAS and ii) 2 validated questionnaires for OSAS screening, including the Berlin Questionnaire and the Epworth Sleepiness Scale [2,3]. Patients were asked to communicate their scores to the GP to encourage a referral to a sleep specialist. The CP could also call the doctor. We assumed that some of the patients who received a CP program did not communicate their scores to the GP. This source of uncertainty was taken into account in the different screening rates that were further tested in the model. (3) “No Screening”

Outcomes measures: Quality of life, survival and costs for each screening strategy

Result(s)

Results of base-case analysis: Under almost all modeled conditions, the involvement of CPs in OSAS screening is cost effective. The maximal incremental cost for “*screening strategy with CP*” was about 456€per QALY gained.

Results of sensitivity analysis: Our results were robust but primarily sensitive to the treatment costs by continuous positive airway pressure, and the costs of untreated OSAS. The probabilistic sensitivity analysis showed that the “*screening strategy with CP*” was dominant in 80% of cases. It was more effective and less costly in 47% of cases, and within the cost-effective range -maximum incremental cost effectiveness ratio at €186.67/QALY - in 33% of cases.

Implications:

To our knowledge, this study is the first to evaluate the CP involvement to improve OSAS screening, in collaboration with GPs, in at-risk individuals. CP program in OSAS screening is a cost-effective strategy. This result is consistent with the trend in Europe and the United States to extend the practices and responsibilities of the pharmacist in primary care and might be helpful to make further health policy decision.

+++ NB: PhD students still pay the early bird fee for their abstract if their abstract is accepted ++++