



ABSTRACT

A Collaborative Screening, Referral and Management Process to Improve Health Outcomes in Chronic Obstructive Pulmonary Disease (COPD)

Researchers: Ms Heather Allan, Ms Simone Diamandis, Dr Bandana Saini, Mr David Marshall, Dr Guy Gavagna, Dr Geraldine Peterson-Clark

Abstract (250 words):

Background: Chronic Obstructive Pulmonary Disease (COPD) is a growing cause of morbidity and mortality worldwide and remains largely unrecognised and under-diagnosed in Australia. This project aimed to assess the feasibility and impact of pharmacist involvement in the early detection, referral and ongoing management of COPD.

Methods: 15 pharmacists were recruited to screen and refer patients at risk of COPD to their GP. Patients were identified using a screening questionnaire and lung function was measured using the PiKo-6 device (which measures FEV1/FEV6) in patients who received a questionnaire score ≥ 3 . Patients whose PiKo-6 results were in the medium-risk (FEV1/FEV6 0.65 to 0.75) or high-risk (FEV1/FEV6 < 0.65) zones were referred to their GP for full assessment, diagnosis and management. A modification to the screening protocol also included referral of low risk patients who reported at least one respiratory symptom.

GPs were asked to complete a short report and return this to the Pharmacist summarising their findings and any action taken. Pharmacists also invited referred patients back to the pharmacy for two follow-up visits, where lung function was tracked and appropriate counselling and management advice was provided. Patient data on outcomes and interventions was collected by both the GP and Pharmacist. Qualitative data was also collected on the impact of the program on the pharmacy, patient and collaborative relationship between the Pharmacist and GP.

Results: 112 patients were screened for COPD. 56 (50.0%) patients were referred to their GP. Of these, 46 patients (41.1%) had some degree of airflow obstruction and were in the medium to high risk category and 10 patients were in the low risk category but reported having at least one respiratory symptom.

20 GP Reports (35.7%) were completed and returned to the Pharmacist, and 36 GP reports (64.3%) were lost to follow up. Of the 20 returned GP Reports, COPD was diagnosed in 4 cases (20%); a respiratory disease other than COPD in 4 cases (20%) and a diagnosis of a disease not respiratory related in 2 cases (10%). The yield of diagnosed COPD cases was 7.1 % based on total referrals (56). Once the yield is adjusted based on medium and high risk patients referred (46), 17.4% received a diagnosis of a respiratory condition, with half of those (8.7%) receiving a confirmed diagnosis of COPD.

Of the 56 patients referred to their GP, 52 (92.8%) returned for their first follow-up pharmacy visit and 32 (57.1%) returned for their second follow-up visit where pharmacists were able to initiate appropriate interventions, including smoking cessation, medication counselling and vaccination advice.

Feedback demonstrates a high level of satisfaction with the program from the pharmacists and patients. Limited feedback was received from participating GPs.

Conclusion: Lung function screening in community pharmacy has been shown to be feasible (with appropriate support) and has been shown to have a positive impact on: early intervention for at-risk patients; the pharmacist/patient relationship; and pharmacist awareness of COPD. To improve early identification of patients and increase the overall impact of the program, modifications to the screening protocol should be made to focus on medium and high risk patients only. A low return of GP Reports indicated low GP engagement in the program. To enhance general practice engagement earlier, targeted and tailored communication and training should be provided to the wider general practice team, including the practice manager and an incentive considered to remunerate GPs for their participation.