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Department of Health and Ageing



The Pharmacy
Guild of Australia

A COLLABORATIVE SCREENING, REFERRAL AND MANAGEMENT PROCESS TO IMPROVE HEALTH OUTCOMES IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

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EXECUTIVE SUMMARY

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Executive Summary (max. 3 pages):

Background

Chronic Obstructive Pulmonary Disease (COPD) is a growing cause of morbidity and mortality worldwide and remains largely unrecognised and under-diagnosed in Australia. The overall prevalence estimates for COPD GOLD stage II or greater is 10.8% of the Australian population over 40. Evidence suggests under-diagnosis of COPD in the general population, with only 50% of Australians with symptomatic COPD (GOLD Stage II-IV) aware that they even have the disease. Early recognition of COPD may have a substantial impact on disease progression, and the potential to positively affect patient outcomes.

The Piko-6 is a lung function screening device which measures FEV1/FEV6 and provides pharmacists with a practical and reliable screening tool for identifying patients at risk of COPD. The FEV1/FEV6 has been shown to be a valid alternative to FEV1/FEV6 for investigating airway obstruction, and is comparable to FEV1/FVC post-bronchodilator. Studies have suggested that early detection of airflow obstruction using spirometry supports smoking cessation education and provides objective data for patient motivation.

The purpose of this pilot study was to evaluate the feasibility and impact of pharmacy's role in initial screening and referral of patients at elevated risk of COPD to their general practitioner for full assessment and diagnosis. The project also aimed to assess the feasibility of pharmacist involvement in the ongoing management of COPD patients as well as to raise COPD awareness in the pharmacy community and general public.

Methods

This project received approval from the University of Sydney's Human Research Ethics Committee.

15 community pharmacists were recruited and trained to screen patients at risk of having COPD using the Piko-6. Training of pharmacists was by way of a COPD Continuing Professional Education distance learning module developed as part of the program. To participate in the program, pharmacists were required to successfully complete the module with a pass mark of 80% or more as well as to attend an interactive training program.

Patients were recruited for screening through promotion by the participating pharmacists.

A combination of opportunistic screening and scheduled screening days was implemented.

Prior to screening, interested patients were asked to complete an Initial Screening Questionnaire (ISQ) to determine their eligibility for screening by identifying risk factors, including history of smoking and exposure to pollutants. The ISQ also asked the patient to identify whether they experienced any of a range of symptoms, including breathlessness and cough with phlegm. Patients identified at risk of having COPD were invited to take a lung function screening test using the Piko-6.

Patients whose results put them in the medium-risk ($FEV1/FEV6 = 0.65$ to 0.75) or high-risk ($FEV1/FEV6, 0.65$) zones of the Piko-6 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 had reported at least one respiratory symptom. GPs were sent a Patient Record Form which recorded details of the patient, including history and Piko-6 results. GPs were asked to follow-up on the patient and complete a short GP Report Form, indicating tests conducted and diagnoses made for return to the pharmacist.

Pharmacists invited back each of the referred patients for two follow-up visits at which the pharmacist checked whether the patient had seen their GP and at which they initiated appropriate interventions.

Pharmacists were remunerated up to a maximum of \$60 per patient screened and followed-up.

The program was analysed qualitatively and quantitatively by entering data on the Patient Record Forms. GP Report Forms and inviting feedback from pharmacists, GPs, the participating Division of General Practice and Patients.

Results

112 patients were screened for COPD. 46 (41%) of these patients were found to be in the medium or high risk zones and were referred on to their GP. 10 patients were in the low risk zone of the Piko-6 but reported at least one respiratory symptom. These patients were also referred to their GP. A total of 56 patients were, therefore, referred to their GP.

20 GP Reports (35.7%) were completed and returned to the Pharmacist. 36 reports (64.3%) were lost to follow-up. Despite the efforts of the project team, affected GPs were not fully engaged in the program. This was reflected in the low return of GP reports.

Of the 20 returned GP reports, a diagnosis of COPD was made in 4 cases. In 4 other cases, a diagnosis of a respiratory disease other than COPD was made, and in 2 cases a diagnosis of a disease other than respiratory was made.

The yield of known diagnosed COPD cases was 7.1% of 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, and half of those (8.7%) received a confirmed diagnosis of COPD.

All 56 referred patients were also followed up by the Pharmacist. 52 (92.8%) of the 56 referred patients came back to the pharmacy for a first follow-up visit and 32 (57.1%) came for a second follow-up visit. Pharmacists were able to initiate appropriate interventions, including smoking cessation and medication counselling and vaccination advice.

Feedback shows a high level of satisfaction with the program from the pharmacists, patients and participating Division of General Practice. Limited feedback was received from participating GPs.

Conclusion

Lung function screening at 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.

The study has further shown that in order to have a greater impact on the collaborative approach to patient management between the pharmacist and the GP, further resources must be dedicated to earlier engagement with the wider general practice team, including the practice manager. Remuneration and GP training would also improve engagement.

Based on the critical success factors of the project, the following next steps are recommended:

Recommendation 1: Deliver a “modified pilot” program in order to prepare for national roll-out of a screening, referral and management program to identify medium and high risk patients of COPD so that they are identified and treated early. The modified pilot should include a program of engagement and training with the wider general practice team.

Recommendation 2: Increase GP engagement and participation by providing adequate training and remuneration for referred patients. Earlier and more intensive communication with GPs (including the practice nurse) at both the Division and individual practice level would also increase participation. This may also include dedicated training days for practice staff where appropriate.

Recommendation 3: Amend screening protocol so that only those patients whose Piko-6 results are in the Red (High risk) or Yellow (Medium risk) zones are referred to their GP.

Recommendation 4: Streamline the level of documentation required for both pharmacists and GPs to limit the amount of information gathered in the patient record form.

Recommendation 5: Review the training program to increase the time allocated to the training component and allow for more time to demonstrate and assess use of the PiKo-6 device and study protocol.

Recommendation 6: Provide in-store support post-training for pharmacists to increase confidence in screening and facilitate early program implementation.

Recommendation 7: Ensure adequate resources are available in the pharmacy to maximise the efficiency of consultations and minimise disruptions. This may include involving other staff in parts of the program (particularly where general data is collected); having an additional pharmacist or intern pharmacist on for screening sessions; having screenings done on dedicated (and advertised days) and/or by appointment. This would involve providing any other staff contributing to the program with adequate training.

Recommendation 8: Remunerate pharmacists for delivering the service for initial screening visits as well as a minimum of one follow up visit.

Recommendation 9: Incentive payments (or possibly CPD points) are considered for general practitioners to remunerate them for the increased work required to communicate with the pharmacist. This as well as COPD training may motivate and engage the GP to participate in the program.

Recommendation 10: Increase resource for COPD Awareness campaign to support screening program.



The University of Sydney