

Motivational Interviewing and COPD Health Status Project 4 July-30 December 2016

Project Overview

Applying the principles of motivational interviewing to everyday patient interactions has proven effective in eliciting behaviour change that contributes to positive health outcomes and improved communication with patients. Furthermore, recently the Lung Foundation recognised the important role of pharmacy in the community and across the primary care continuum. *Pharmacists play an integral role in managing patients with COPD. Open communication between pharmacists and patients is crucial because studies have shown that patients who feel they are informed and part of the decision-making process are more likely to adhere to a treatment regimen and actively manage their disease.*¹ This project explored the potential for pharmacies in the BSPHN area to apply the principles of Motivational Interviewing to chronic disease self-management for people with Chronic Obstructive Pulmonary Disease (COPD); use a CAT COPD Assessment test to measure the impact that COPD is having on a patient's wellbeing, and identify patients who would benefit from COPD support services such as smoking cessation, medication compliance support and Medication Review services. The approach was designed to explore the opportunity for pharmacists to offer a risk assessment, coaching and referral service for people with COPD to assist them to actively engage in self-management.

Aims:

- 1) To motivate patients with COPD to apply Chronic Disease Management skills in the use of medication – to improve adherence to medication regimes, consider attendance at self-management courses and use COPD action plans
- 2) To assist pharmacies/pharmacists in their ability to encourage and support patients in relation to smoking cessation and influenza vaccination uptake.
- 3) To educate pharmacists/ pharmacies in the use of Home Medicines Reviews (HMR) as an instrument for increasing compliance around COPD management.
- 4) To increase knowledge among pharmacists in relation to the use of a COPD risk assessment tool (CAT COPD) and strategies for embedding its use within routine pharmacy services.
- 5) To enhance the skills of Pharmacists in relation to undertaking a Quality Improvement activity through use of a COPD data collection template
- 6) To increase the number of pharmacist initiated referrals of patients with COPD to general practitioners and Pulmonary Rehabilitation services.

Key Activities

In June 2016, pharmacists in the Brisbane South PHN area were invited to express interest in undertaking the Motivational Interviewing and COPD Health Status Project. Ten expressions of interest were received, however some pharmacists decided not to proceed with the project. Six pharmacists/pharmacies participated with support by the Brisbane South PHN's Pharmacy Engagement Co-Ordinator. Three types of pharmacy models of service delivery were represented in the cohort-community (4), independent consultancy (1) and a pharmacist working within a general practice.

A project MOU was compiled for project pharmacies to complete that outlined agreed deliverables. They included the need for participating pharmacists/pharmacies to:

- conduct 15 CAT Assessments
- Identify the need for 3 Home Medicine Reviews with in a 3 month timeframe
- show evidence of identification of patients eligible for COPD support services - smoking cessation , influenza vaccination, inhaler technique and COPD Action Plans.
- All project participants have a representative present at two project training workshops.

Stakeholder Report

A project training package was completed that included data collection templates, guides to undertaking CAT COPD assessments and Best Practice Clinical Guidelines to COPD management. The BSPHN External Engagement Team were trained in relation to package contents prior to these being distributed in the field to project participants to enable them to provide support if required.

Pharmacists were trained in relation to the CAT COPD Assessment test. This is a short, simple, questionnaire that measures overall impact COPD is having on a patient's wellbeing, activities of daily life and health status (holistic measure). This tool has undergone rigorous scientific development having been used in COPD studies in Europe, USA and Asia.

Data was collected from pharmacists/pharmacies for a 3 month period in relation to completed CAT Assessments, pharmacist lead identification of patients eligible for COPD support services (including inhaler technique and COPD Action Plans), smoking cessation, influenza vaccination and Home Medicines Review (HMR).

Baseline and Post Project Evaluations were distributed to project pharmacists/pharmacies to complete around their level of activity around their COPD patient management.

Results

Training: Cohort pharmacists were trained in the use of Motivational Interviewing with application to the CAT COPD Health Assessment at two training workshops. There was 100% attendance at these workshops which were highly regarded by attendees based on workshop evaluations.

CAT assessments: The number of CAT assessments achieved was variable between project pharmacists. The final project cohort achieved 83 CAT assessments in a relatively short 3 month time frame.

Identification for COPD support services: All project pharmacists identified patients eligible for COPD support services. This was evident from data submissions received which indicated that:

1. 55 patients were referred to a GP to review maintenance therapy
2. 55 patients were referred to a GP to action a Chronic Disease Management Care Plan
3. 40 patients (48% of the COPD patient cohort) were referred to a GP to discuss Pulmonary Rehabilitation
4. 65 patients (78% of the COPD patient cohort) were identified for Fluvax/Pneumovax
5. 33 patient's received Motivational Interviewing counselling sessions in relation to Smoking Cessation
6. 74 patients (89% of the COPD patient cohort) received a session in relation to COPD inhaler technique
7. 58 patients (70% of the COPD patient cohort) Other clinical interventions (58 patients) -70% of patient cohort

Home Medicine Reviews: One of the key deliverables for the project: namely the need for three HMRs to be identified with a conversion to patient consent for referral in a three month timeframe, was too difficult to achieve for one community pharmacy. This was primarily due to the fact that they did not have an on-site consultant pharmacist to undertake the HMR process. Patients who undertook the CAT COPD Assessment with this pharmacy were reported to be uncomfortable with being interviewed for a HMR by a pharmacist who was a relative stranger. One of the project consultant pharmacists also experienced difficulty in identifying the need for HMRs with conversion to patient consent for referral as patients are generally referred to them by GPs in order to conduct an HMR, therefore their patients did not require another HMR. Future projects related to HMR activity will need to take the pharmacist's current HMR service delivery arrangements into account.

Project evaluations: 100% baseline evaluations and 5/6 post project evaluations were returned. Analysis of this feedback is contained in the report *Appendix*.

Discussion

Pharmacists are highly qualified health professionals yet their skills, knowledge and expertise are often under-recognised and under-utilised. Australia now has a large and growing pharmacist workforce that is highly trained and with a much younger age-profile than most other health professions; as such there is great potential for the workforce to contribute to emerging and innovative models of care. ⁱⁱ Attendance levels (100%) at training and highly positive feedback from participating pharmacists in this project indicates a high level of interest by pharmacists in offering a risk assessment, coaching and referral service for people with COPD to assist them to actively engage in self-management.

Time Frames: The project was designed to be delivered in a short time frame. Therefore the project resource pack had to be designed and delivered in consultation with the clinical leads with a certain degree of urgency. Despite this project constraint the final product was of a high quality and outcomes were positive, this judgement being based on positive stakeholder feedback. A future project of this nature would benefit from more lead in time to recruit project pharmacists and to refine project resource pack design.

Project cohort: Upon reflection the expansion of project cohort to include consultant pharmacists (alongside community pharmacists) may have been too ambitious. Recruitment of consultant pharmacists to the project was minimal as was the number of CAT COPD assessments completed by consultant pharmacists in comparison to community pharmacists. Consultant pharmacists rely on GP identified patient referral opportunities, unplanned patient encounters are minimal in comparison to community pharmacy.

Training: The training workshops were highly regarded by project pharmacists as evident from the evaluations done at these two events. The quality of speakers and clinical lead participation were well regarded. Every pharmacist involved in the project was represented at the training workshops. Pharmacists working within the BSPHN area constantly request evidence based clinical updates around COPD/Asthma, projects of this nature clearly satisfy this stakeholder requirement.

Agreed Deliverables: Mindful of what was still achieved in the project the need for 3 HMRs to be identified with patient accepted GP referral in a 3 month timeframe appeared to be too difficult to achieve for 2 project pharmacists. This Key Deliverable would need to be refined or removed for a future project involving HMR to give due consideration to the federal government capping of number of HMRs that can now be delivered. All other deliverables achieved strong outcome and would be retained for a future project of this nature.

Referrals: The project was designed to encourage patient flow into general practice initiated by pharmacist driven referral. The design of the project was however restricted as there was no formal tracking of the referrals or allowance for tracking of outcomes of these referrals. Should a further project of this nature be attempted more formal tracking mechanisms of patient referral outcomes should be incorporated into project design. This would ensure improved conversion to outcomes for patients resulting from the referral.

Sustainability: Project pharmacists were asked to indicate the main priorities they had in support of their COPD patient cohort into 2017, these are contained in the *Appendix*. A number of these were self-sustainable i.e. ability to conduct Motivational Interviews utilising project developed materials. Additional priorities included additional staff training for participation with COPD management, using CAT to rescore patients on representation and patient group sessions on inhaler device technique. The later addressing the National Asthma Council (NAC) concern that 90% of Australians do not use their inhalers correctly. ⁱⁱⁱ

Change management: The cohort was asked to provide an example of changes made within practice prompted by participation in this project. Responses are contained in the *Appendix*. Of particular interest was the emphasis on rescoring patients on re-presentation which fits well into the Best practice guidelines for utilising the CAT Assessment test as well as support of the patient's motivation to undertake lifestyle change around their COPD. The project cohort at point of baseline survey were not undertaking CAT assessments this changed throughout project duration allowing them to use a clinical tool not previously utilised in support of patient care. This project enabled 40 patients the opportunity to access referral to GP to discuss Pulmonary Rehabilitation. Pharmacists were also introduced to Pulmonary Rehabilitation as one of the most effective interventions in COPD enhancing the patient's emotional function, coping strategies and self-confidence.

Project Results-Appendix

Patient Demographics:

Male	43	52%
Female	40	48%
Smoker	31	37%
Ex - smoker	41	50%
Non - smoker	11	13%

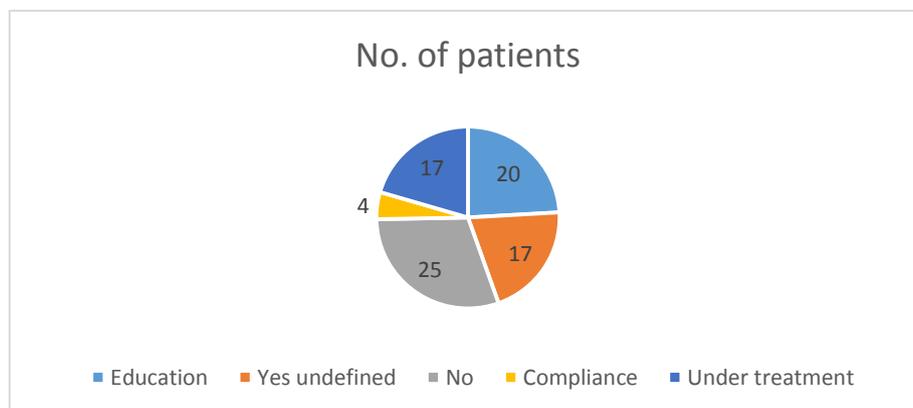
Average Age of patient: 71

Age Range	No. of patients
38-47	2
48-57	5
58-67	25
68-77	26
78-87	25
	83

Data:

- Total CAT Assessments completed: (83)
- Need for HMRs identified: (28)
- Evidence of identification of patients eligible for COPD support services, smoking cessation and influenza vaccination.
 - Referred to GP to review maintenance therapy (55 patients)
 - Referred to GP to action CDM Care Plan (55 patients)
 - Referral to GP to discuss Pulmonary Rehabilitation(40 patients) -48% of patient cohort
 - Fluvax/Pneumovax Identification (65 patients) -78% of patent cohort
 - Smoking Cessation Counselling (33 counselling sessions)
 - COPD inhaler technique (74 sessions) -89% of patient cohort
 - Other clinical interventions (58 patients) -70% of patient cohort –Graphical depiction below

Graph: Types of clinical interventions offered to patients:



Stakeholder Report

Clinical interventions classification was based on *Standards & Guidelines for pharmacists performing clinical interventions* released by the Pharmaceutical Society of Australia with specific adaptation to this project^{iv}. “Compliance” was defined as a pharmacist effectively showing patients how to use their inhalers correctly. Over reliance on salbutamol (i.e. *Ventolin*) was defined as “Under treatment. “Education” was coded when patient presented with noncompliance or poor adherence to COPD medications. If no clinical intervention was utilised this was coded as “No” and if an alternate pharmacy selected intervention was utilised this was coded as “Yes-undefined”.

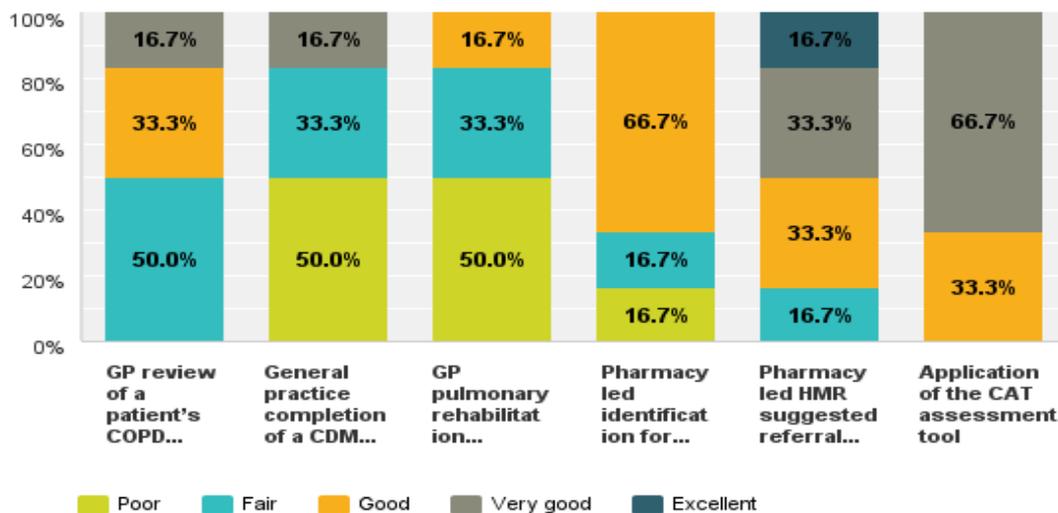
Pre/Post Project evaluation:

Pre and Post project evaluations were conducted for the project cohort. Results are presented below. Standard questions were used as a comparator to measure degree of change with additional questions posed in the post project evaluation about changes made in primary care practice and future support needs.

Baseline results Q1 (6 pharmacists):

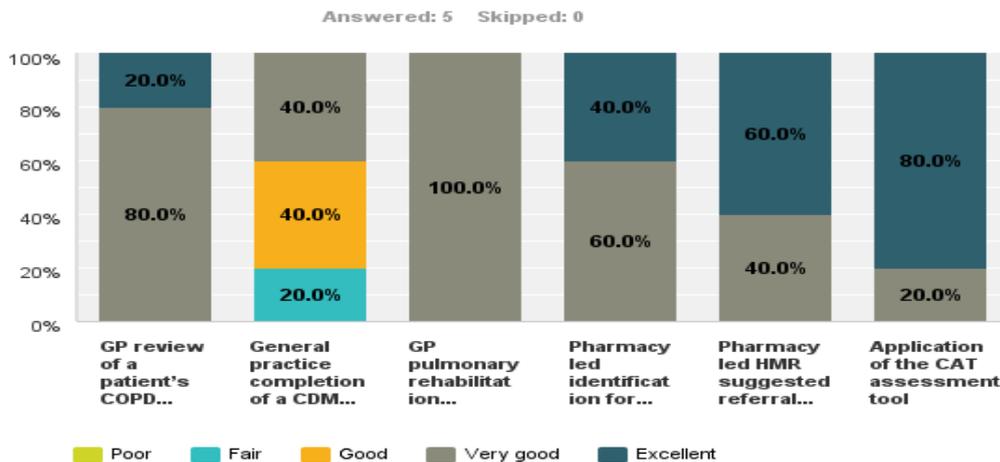
Q1 In order to attain baseline data please rate your current knowledge and activity as requested below:

Answered: 6 Skipped: 0



Post Project results Q1: (5 pharmacists)

Q1 In order to attain feedback around project implementation please rate your current knowledge and activity on a scale from 1 to 5 (5 being the highest) as requested below:

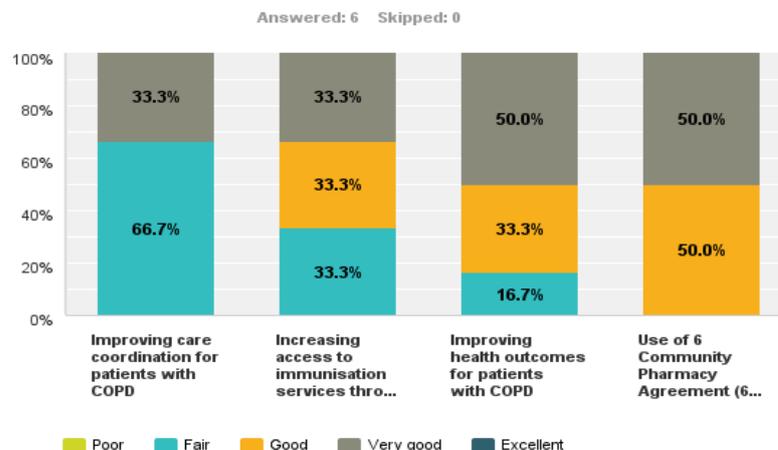


Evaluation analysis: (Current Knowledge and activity Q1)

Main areas of need identified at baseline (by 50% of cohort) as information /training on General Practice Completion of a CDM Plan and GP Pulmonary Rehabilitation referral. These were therefore incorporated into the training workshops as areas of focus. As can be seen from graphical comparisons there were significant improvements in all areas of knowledge and activity around the 6 core areas of 1. GP Review of a patients COPD maintenance therapy 2. General Practice completion of a CDM Care Plan 3. GP Pulmonary Rehabilitation Referral 4. Pharmacy led identification for Fluvax/ Pneumovax 5. Pharmacy led HMR suggested referral for patient with COPD and 6. Application of the CAT Assessment tool.

Baseline results Q2 (6 pharmacists)

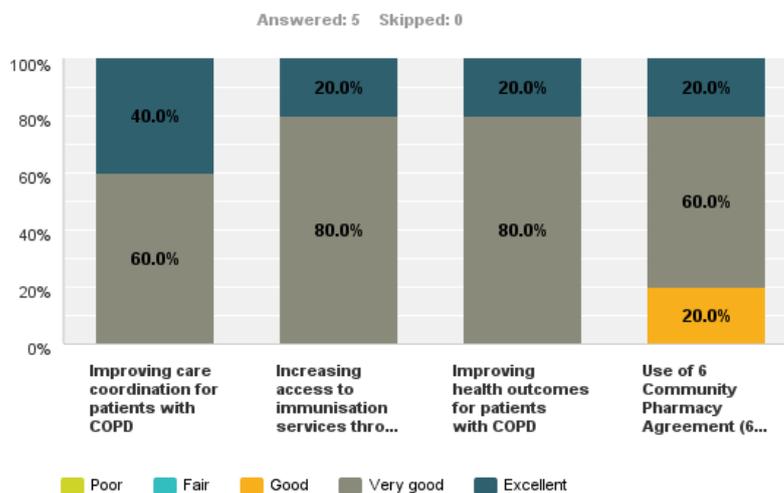
Q2 Please rate your current activity of the following:



Stakeholder Report

Post project results Q2 (5 pharmacists)

Q2 Please rate your current activity on a scale from 1 to 5 (5 being the highest) of the following:



Evaluation analysis (Current activity Q2)

As can be seen from graphical comparisons there were significant improvements in all areas of activity around the 4 core areas of 1. Improving care co-ordination for patients with COPD 2. Increasing access to immunisation services through community pharmacy 2. Improving outcomes for patients with COPD and 4. Use of 6 CPA clinical interventions in COPD.

Sustainability (Q4) Project pharmacists were asked to indicate the two main priorities they have in support of their COPD patient cohort into 2017, which may benefit from additional BSPHN support. Response are listed below:

1. Continued CAT Assessment
2. Ongoing support via telephone consult
3. Additional staff training for participation with COPD management
4. Using CAT to rescore patients on representation
5. Patient group sessions on inhaler device technique
6. Continued referral to action
7. Smoking cessation support
8. Development and integration of support services into counselling patients
9. Becoming part of the care team
10. GP-pharmacist education sessions

Change management: (Q5)

The cohort was asked to provide an example of changes made within practice prompted by participation in this project. Responses are below:

1. More focus on patients' needs around COPD- Gold standard evidence based COPD management
2. Increased awareness of CAT assessment
3. Using CAT tool as not previously utilised to identify patients for support services
4. Using CAT to rescore patients on re-representation
5. I have learnt a lot about pulmonary rehabilitation referrals and am more active now discussing during HMRs and making referrals. I would value an opportunity to observe a session
6. An excellent project around change management.

Stakeholder Report

Project Improvement: (Q6)

Only one response were received around how the project could have been improved namely that more data submissions would have been of use. This could be applied if a future project of this nature has an extended scope of implementation.

References:

ⁱ **Pharmacist's Role in the Management of Chronic Obstructive Pulmonary Disease.** *US Pharm.* 2016;41 (7):42-46.

ⁱⁱ **The role of pharmacists in Australian health care reform-improving outcomes through cost effective primary care. Federal Budget Submission.** *Pharmaceutical Society of Australia Ltd*, 2016.

ⁱⁱⁱ **Asthma Inhalers-do you know how to use yours? Infographic:** *National Asthma Council.* Sourced 12/01/2017 at <https://www.nationalasthma.org.au/living-with-asthma/resources/health-professionals/infographics/infographic-asthma-inhalers-do-you-know-how-to-use-yours>

^{iv} **DOCUMENT classification flow chart. Appendix 9. Standards & Guidelines for pharmacists performing clinical interventions:** *Pharmaceutical Society of Australia*, p 27, March 2011