

# Do patients with end-stage chronic obstructive pulmonary disease on maximal pharmacological therapy<sup>1</sup> with specialist respiratory care benefit from Pharmacy Technician led medication review?

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**Introduction:** John Taylor Hospice runs a 9 week Fatigue, Anxiety & Breathlessness (F.A.B.) self management programme for patients with end-stage chronic obstructive pulmonary disease (COPD) or severe symptoms on maximal pharmacological therapy.<sup>1</sup>

The programme includes exercise and relaxation classes and features a different health care professional led education session each week. Group participation and discussion are actively encouraged.

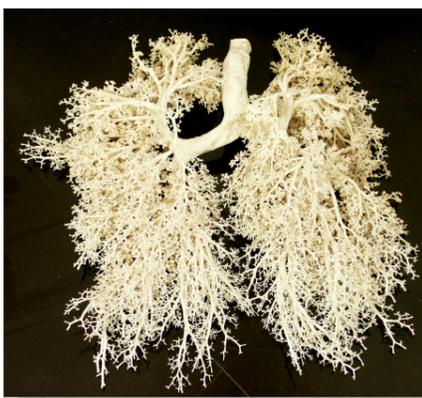
One 2 hour session is led by a Clinical Pharmacist.

The F.A.B. programme is proven to reduce GP visits and hospital admissions for those completing it.

**Aims and objectives:** To ascertain if offering a Pharmacy Technician led medication review in the patients' home in addition to the Pharmacy education session would make a measurable difference to patient outcomes?

- Would it result in patients taking fewer medicines?
- Better symptom control?
- Improved patient understanding?
- Cost effectiveness?
- Does the location of the review matter?
- Should all patients be offered a review or should it be targeted?

**Patient demographic:** Five male and one female patient, age range 47-84 years. All current or ex smokers except one individual. One patient with Alpha-1-antitrypsin deficiency.



## Results:

- 6 medication reviews completed: 4 in domiciliary setting, 2 at Hospice
- 30 interventions identified: 13 dealt with at time of review, 17 required escalation
- Main categories of intervention were: Adherence/counselling and prescription issues
- 20 interventions were related to COPD, 10 were in relation to other conditions
- Patient evaluation results: 100% stated medication review was helpful, 100% stated they now felt more confident managing their medication
- Review took on average 1 hour per person
- For those patients not offered a review 100% of them stated "yes they would have found a medication review useful"
- Drug cost savings demonstrated: approximately £560<sup>2</sup> over 6 months

## Issues were escalated to a wide variety of professionals:

- Respiratory Consultants
- Community Pharmacists
- Clinical Pharmacist
- Respiratory Physiotherapist
- Community Matrons
- General Practitioners
- Equipment manufacturer, representative
- Pharmaceutical company, Medicines Information

## Conclusion:

Despite input from a variety of professionals our results have demonstrated that all of this group of patients with end-stage COPD on maximal pharmacological therapy still benefited from a Pharmacy Technician led medication review.

Reviews performed in the patient's home with access to all of their medication resulted in the majority of interventions compared to those held in the Hospice.

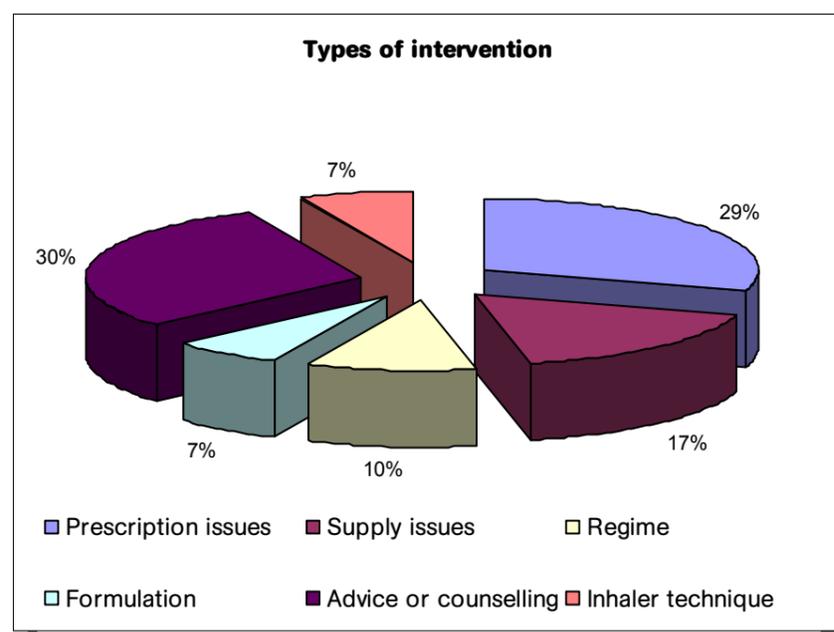
Based on the measurable savings made from two of the patients, considerable cost savings could be made in future patients.

## Further work:

12 month follow up data required to ascertain if the group of patients who had a medication review have less GP visits and Hospital admissions than those who did not.

Present results to commissioners of the F.A.B. programme and obtain funding for pharmacy technician led domiciliary reviews for all future F.A.B. patients.<sup>3</sup>

**"She was very competent and helpful, answering all of my questions."**



**References:** <sup>1</sup> National Institute for Health and Clinical Excellence 2010. Chronic Obstructive Pulmonary Disease (Update) Guideline. CG101. London. <sup>2</sup> Based on drug tariff price as listed July 2012. <sup>3</sup> National Prescribing Centre: A guide to Medication Review 2008.

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