

**Abstract Title:** Cwm Taf University Health Board (CTUHB) and GSK Joint Working Chronic Obstructive Pulmonary Disease (COPD) Project: Working Collaboratively to Improve the Management of COPD, Including Smoking Cessation in CTUHB.

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**Context:** COPD affects up to an estimated three million people in the UK<sup>1</sup>. In 2012, COPD prevalence, smoking prevalence and hospital admissions were the highest in Wales. 8064 residents were diagnosed with COPD, a prevalence of 2.6% (Wales 2.1%)<sup>2</sup>. Smoking prevalence was higher 23% compared to the Welsh prevalence of 21%<sup>3</sup>. In 2011/12, there were 1067 COPD hospital admissions in CTUHB, a rate of 245 per 100,000 population<sup>4</sup>. The British Lung Foundation's Report, "Invisible Lives" identified residents with COPD in Merthyr Tydfil as being at high risk for future COPD related hospital admissions<sup>5</sup>.

**Assessment of the problem/ analysis of its causes:** National guidance is for local provision of COPD services to support the delivery of optimised COPD care. However variation in patient and health care professional (HCP) knowledge, understanding and confidence managing COPD leading to unwarranted variation in COPD patient review, and variation in provision of smoking cessation services may be contributing to poorer outcomes. Addressing unwarranted variation could improve the delivery of optimised local care and potentially lead to reduced longer term complications and consequences for residents of CTUHB with COPD and healthcare systems.

**Project aims:** This project aimed to support the optimisation of local COPD management through:

- a) Increasing the knowledge, confidence and motivation of HCPs', patients and their carers.
- b) Optimising medicines usage in line with NICE guidance.
- c) Increasing the type, availability and delivery of smoking cessations services.
- d) Analysing trends in concurrent local admissions data.

**Interventions:**

- a) Educational programme based on learning needs identified by practices for HCPs including COPD workshops, Shared Experience clinics and Multidisciplinary COPD Case Notes Reviews.
- b) Practice led patient reviews (Lung Check Up) undertaken in line with NICE COPD Guideline 2010<sup>6</sup>. *[NB: GSK were not involved in patient review and had no access to patient identifiable data].*
- c) Smoking Cessation Service: Support offered to patients during all HCP interactions in line with pre-specified criteria (local pharmacy support or National Smoking Cessation support).

**Measurements of improvement:** Jointly agreed measures were assessed using the following:

- a) POINTS<sup>§</sup>, provided by GSK to measure pre-specified, selected changes in COPD parameters, in line with NICE Guidelines<sup>6</sup>. Three reports produced at baseline, interim and project end for each practice. Practice level COPD data discussions were facilitated by GSK for each time-point report. *[NB: GSK were not involved in patient review and had no access to patient identifiable data].*
- b) HCP and Patient Experience Questionnaires provided by GSK, to evaluate the impact of the education. Patient Experience Questionnaires were issued from February 2014 to October 2014 whilst the project's scheduled training of HCPs was ongoing. The HCP Experience Questionnaires were issued from October 2014 to December 2014 once the project's scheduled training programme had been completed.
- c) Hospital admission data provided by CTUHB and analysed by the GSK Health Outcomes Team.
- d) Monitoring implementation of Smoking cessation programme.
- e) Due to time pressures and workload for practice nurses, the carer questionnaire was not implemented.

**Effects of Project Interventions:** 33 of the 48 general practices in CTHB engaged in the project between June 2013 – February 2015. [2 practices did not complete the project.]. The limited summary presented here is in line with key findings identified by Joint Working Steering Project Group at project end.

- **HCP Questionnaires results:** 85% of HCPs reported improved confidence to manage COPD patients, 88% of HCPs reported improved knowledge to manage COPD patients and 88% of HCPs reported increased enthusiasm to manage COPD patients. 93% of HCPs felt that as a result of the training patients under their care would gain added benefit (n=40, of which 39 were practice nurses)<sup>7</sup>.

- **POINTS results:** Recording of data to NICE standards measured as a composite of seven key [selected] parameters; (COPD patient review, exacerbation frequency, self management plan, inhaler technique, FEV1, Medical Research Council (MRC) scores and COPD Assessment Test (CAT)) increased from around 48% to 74% ( n=3378; 5% margin of error)<sup>8</sup>.
- **Patient Questionnaire results:** 85% of patients who responded believed they had a high (score 8-10) understanding of their condition after their lung check up compared with 71% before the lung check up. 49% stated their understanding had increased as a result of the lung check up (n=327)<sup>9</sup>.
- **Smoking Cessation Data:** The majority of patients (91%; n=91) had a discussion with their HCP about the benefits of quitting smoking with regards to their condition. Just over half (54%) of current smokers were referred to smoking cessation services<sup>9</sup>.

**Local admissions data:** Local hospital admission data was analysed for the duration of the project. Due to the complexity of the data and multiple confounding factors, it was not possible or appropriate to draw conclusions. However, there appeared to be a trend in reduction in the rate of COPD admissions for all Cwm Taf practices during the time period over which the project was delivered<sup>10</sup>.

**Lessons learnt:** As a result of this joint working project, improvements were measured in:

- Healthcare professionals' knowledge, confidence and motivation.
- Patient knowledge, understanding and confidence.
- Medication prescribing in line with NICE recommendations.
- Expanded delivery of smoking cessation support services.

**Message for others:** Collaboration between the NHS and the pharmaceutical industry through pooling of resources presented an opportunity to support local patient benefits beyond the scope of working independently.

#### References:

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9. Cwm Taf University Health Board Results; Patient Questionnaire.
10. Hospital Admissions Data (Data on file Cwm Taf COPD Project Results Folder (UK/RESP/0168/15).

\*Employees of CTUHB, # Employees of GlaxoSmithKline UK Ltd., <sup>Δ</sup> Owner of the Primary Care Respiratory Training Centre, contracted to GlaxoSmithKline UK Ltd.

<sup>§</sup> The Patient Outcomes and Information Service (POINTS) audit tool was provided by GSK and was delivered on behalf of GSK by Quintiles. It involved the extraction of anonymous data which could be used by practices for assessment of existing services and did not involve the transfer of any patient identifiable data to GSK or Quintiles.