Driving quality improvement through education and training

P38 'GETTING IT RIGHT FIRST TIME' (GIRFT) IN THE MANAGEMENT OF COPD

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Background GIRFT identifies medicine optimisation to improve efficiencies and cost savings. Reducing prescription of High dose inhaled corticosteroids (HD-ICS) in chronic obstructive pulmonary disease (COPD) helps improve patient care by reducing the incidence of pneumonia. A previous work carried out by this group showed an association between HD-ICS prescriptions and the incidence of pneumonia in COPD patients locally, at the primary care level (Ibrahim J et al,Thorax 2018;73:A114-A115). Following this work, a protected learning time event was held in October 2017 for the region's general practitioners to highlight the local COPD guidelines, role of community respiratory MDT and a protocol for weaning COPD patients from HD-ICS inhalers.

Aim Primary aim was to demonstrate an achievement in cost savings from reduction in pneumonia admissions coupled with reduced HD-ICS prescriptions. Hence, we compared the incidence of pneumonia in COPD patients and HD-ICS prescriptions between April-September of 2017 (P1) and 2018 (P2) in the region of Telford and Wrekin clinical commissioning group.

Method Data were obtained on all hospital admissions for pneumonia between April-September 2018 with a secondary diagnosis code J44 indicating COPD, from the information desk of the clinical commissioning group. For the purpose of comparison, we had the data from previous year for the same time period. We obtained data on HD-ICS prescriptions from *openprescribing.net*

Results There were 97 pneumonia admissions in P2 v 123 in P1, thereby indicating an absolute reduction of 21%. The total cost of pneumonia admissions in P2 was £337,233 v £463,779 in P1, thereby achieving cost savings of £126,546 over a period of 6 months.

There were 300 less HD-ICS prescriptions in the 14 general practices during P2 as compared to P1.

4 practices with the highest proportion of COPD patients, achieved most reductions in HD-ICS prescriptions (reduction by 281 prescriptions) and at the same time accounting for 32 less pneumonia admissions.

Conclusion GIRFT objectives can be achieved through engagement with primary care. In this respect, it is important to achieve integration as we have done in our area. Our effort fully supports development of new care models to achieve efficiencies within the local health economy

P39 ACUTE NON- INVASIVE VENTILATION (NIV) DELIVERY IN WARD SETTINGS – IMPROVING NURSING COMPETENCY IMPROVES OUTCOMES IN NCEPOD RECOMMENDATIONS

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Introduction Acute NIV reduces mortality from 20% to 10% when compared to standard care in decompensated respiratory failure in COPD[1]. BTS national audit data identified an increase in acute NIV-associated mortality 2013–2016, despite its increased use across acute trusts/hospitals since 2000. The NCEPOD report (2017) 'inspiring change' highlighted areas where delivery of acute NIV could be optimised to reduce mortality. A key recommendation is for NIV delivery within environments with minimum safe levels of staff competencies (45.4% hospitals NIV delivered by non-NIV competent staff).

Objectives and methods Trust-wide monthly NIV training with incorporated competency self-assessments were introduced from 2017 across two sites. NIV is primarily delivered on wards in this trust. Training included 6 hours of lectures and simulation delivered by NIV nurse lead (critical care background). Local audit data from 2017 were compared to 2019 and NCEPOD data to see if there was an objective improvement in standard of care delivered, and whether this correlated with an increase in nursing competency levels and self-assessment scores. Specifically NCEPOD recommendations 12&13 focusing on nursing care (documentation of vital signs/ventilation settings and using a standardised pro-forma) were examined by collecting data in both 2017&2019 BTS audit periods for all acute NIV episodes identified through coding.

232 non-NIV competent nurses completed self-assessment (score 0–10) before and after training in 'using NIV' and 'analysing arterial blood gases' (ABGs).

Results After one year of training days, 49% non-NIV competent nurses, had attended training. Confidence scoring results showed significant improvement in both using NIV (3.5 increased to 8/10) and analysing ABGs (4.9 increased to 7.9/10) p-value=0.03.

Local audit (2019) showed significantly higher levels than NCEPOD data for recommendation 13 p-value=0.002.

Abstract P39 Table 1 2019 result of audit of NCEPOD recommendations 12 and 13 in 2017 and 2019

	Trust 2017 (%) n=45	Trust 2019(%) n=29	NCEPOD 2017 (%) n=678	p-value comparing 2019 Data with NCEPOD 2017
Hourly vital signs documented: (NCEPOD recommendation 12)	80	80	67	p-value>0.05
Ventilator settings documented: (NCEPOD recommendation 13)	69	80	49	**p-value=0.002**
Using a standardised pro forma: (recommendation 13)	90	86	69	p-value>0.05

Conclusions Investing specialist time in training nurses delivering NIV care outside the critical care environment has increased confidence and standards of care for NCEPOD NIV recommendations 12&13. Further work is required to evaluate the impact this makes upon other recommendations such as mortality, reducing inappropriate NIV prescribing and ensuring early initiation of NIV.

REFERENCE

1. Plant PK, *et al*. Early use of NIV for acute exacerbations of COPD on general respiratory wards: multicentre RCT. *Lancet* 2000 June 3;**355**(9219):1931–5.