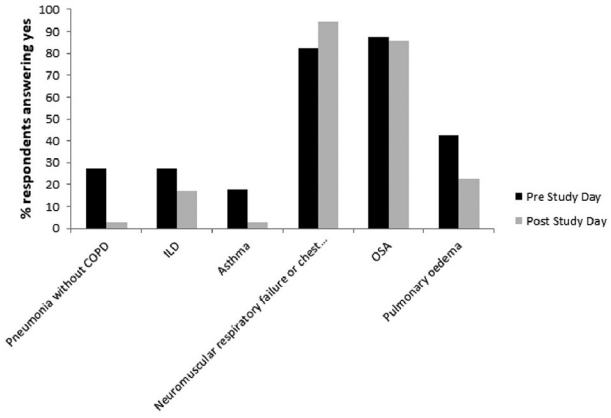

Abstract P41 Figure 1 Comparison of pre and post study day responses regarding appropriate uses of NIV: would you use NIV in the following situations?

Results Forty trainees from a range of non-respiratory specialties participated. Of these 22.5% had received NIV training in the past year. In the pre-course survey, 87% of trainees had limited confidence when using NIV, poor awareness of appropriate indications for NIV as demonstrated in figure 1. 58% lacked confidence in recognising patients who should be managed in in a critical care setting. All participants felt the training day impacted their practice. Following the training day, we demonstrated an increase in overall confidence when using NIV, 97% rated themselves as mostly or fully confident. Better awareness of appropriate indications (Figure 1) and improved understanding of prognostication.

Conclusion Despite clear guidance and standards practice remains below the expected level. Much of the decision making is led by non-specialist trainees, by targeting this group we have demonstrated improved awareness of BTS guidance. Trainee led education is a feasible and successful delivery model to improve standards for NIV.

on behalf of RespTRACT

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P42 DEVELOPMENT OF AN ACUTE NON-INVASIVE VENTILATION TEACHING PROGRAMME FOR TRAINEES IN A DISTRICT GENERAL HOSPITAL FOLLOWING THE NCEPOD REPORT – INSPIRING CHANGE

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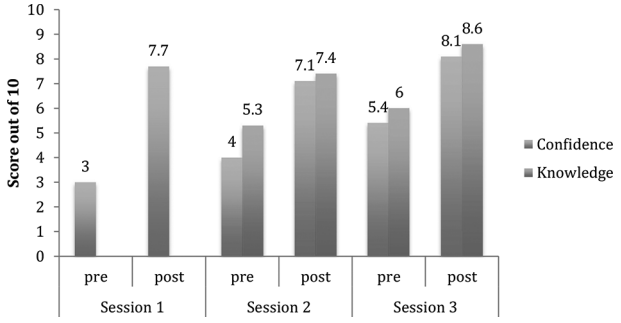
10.1136/thorax-2019-BTSabstracts2019.185

Introduction and Objectives The *Inspiring Change*(NCEPOD 2017) report in to acute Non Invasive Ventilation outlined recommendations to improve acute NIV care through service development and education. Review of our existing DGH service, identified no formal NIV teaching for doctors commencing and managing NIV. We aimed to develop an interactive case-based education programme to improve patient selection, clinical confidence and competence and patient outcomes in our trust.



Abstract P42 Figure 1 Confidence and knowledge ratings pre and post NIV teaching

Method Baseline survey: 90% trainees had attended NIV teaching. 50% had not attended teaching in past 12 months. 70% felt confident in completing treatment escalation plans prior to commencing NIV. Average confidence in initiating NIV was 3/10.

Therefore an interactive, case-based simulation teaching session was developed aimed at ST3+ and CMTs. Following trainee feedback a revised NIV teaching evening was developed and delivered in October 2018 and July 2019 encompassing all training grades.

Results Three teaching sessions were arranged. Feedback found that confidence and knowledge improved across all sessions (figure 1).

July 2018 SIM teaching (ST3+): Attendees liked the small group teaching, use of NIV machines and realistic cases; however, they felt the simulation aspect of the session did not add to experience and recommended the session was delivered out of hours. 66% felt NIV teaching should be mandatory.

October 2018 NIV teaching evening(20 CMTs and ST3+): Attendees praised the small group aspect and liked the interactive use of machines. All attendees felt it should be part of their training curriculum.

Feedback was used to develop the session further and was repeated in July 2019

July 2019 (14 F1s and CMTs): This most recent data suggests further improvements with the biggest development in the F1 confidence (2.7 to 6.9/10).

Conclusion Development of a formal interactive case-based teaching programme has improved trainee confidence and knowledge of managing patients on acute NIV. This, along with other measures to optimise our acute NIV service, has reduced inpatient NIV mortality from 30% to 6%. The trust will now offer a bi-annual interactive teaching programme.

P43 AN INTEGRATED AND SUSTAINABLE EDUCATION PROGRAMME IMPROVES KNOWLEDGE, LEADERSHIP AND CONFIDENCE IN ACUTE NON INVASIVE VENTILATION (NIV) IN LINE WITH THE BTS QUALITY STANDARDS

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10.1136/thorax-2019-BTSabstracts2019.186

Introduction Inspiring Change, the 2017 NCEPOD report on NIV demonstrated that improvement in clinical and/or organisational care was required in 73.2% of patients. Many hospitals (45.4%) did not maintain a record of competency for

Abstract P43 Table 1 Pre and post-simulation median results (Likert Scale). Wilcoxon matched-pairs signed-rank test used to test significance

	Pre-simulation median	Post-simulation median	Significance (p value)
Anxious about undertaking the simulations	3	3	Not significant
My clinical knowledge is appropriate for my level	3	4	<0.01
I have effective leadership skills in emergency situations	3	4	0<0.01
I am able to communicate effectively in emergency situations	4	4.5	<0.001
Knowledge of the Indications for NIV	3.5	4	<0.01
Initiating NIV	3	4	<0.001
Reviewing a patient on NIV	2.5	4	<0.001

staff delivering acute NIV care. BTS Quality Standards state that staff initiating or making changes to acute NIV treatment must be competent and a register should be maintained. At Sherwood Forest Hospitals, we maintained a log of competency for Band 6 acute NIV nurses but did not record evidence of training for rotating doctors or ward nurses.

Methods We developed a multifaceted, multi-disciplinary, integrated and sustainable education programme for all staff with responsibility for managing acute NIV. This comprised an E-learning package; a low-fidelity (lo-fi), in-situ simulation training and quarterly update sessions referencing our BTS NIV QI toolkit Acute NIV prescription; and posters featuring a newly created treatment acronym: 'BREATHE'. Feedback from E-learning is electronically sought, and a register maintained through the package's final assessment.

The simulation employed a 'Resusci Annie' manikin as patient, a side-room or treatment room on our acute NIV ward, and mock notes and drug card. Faculty comprised one facilitator and a respiratory specialist nurse. Junior doctors were trained in-hours during induction to the respiratory department. Pre- and post-simulation questionnaires, using a 5-point Likert scale, were completed and results analysed using a Wilcoxon signed-rank test.

Results 14 junior doctors undertook the lo-fi, in-situ simulation, and questionnaire responses demonstrated statistically significant (Table 1) improvements in knowledge, confidence, leadership and escalation.

32 staff, including 13 nurses and 19 junior doctors, completed the E-learning package within the first 2 months. Feedback was universally positive with all staff reporting that the knowledge gained will improve their work and the assessment consolidated their learning.

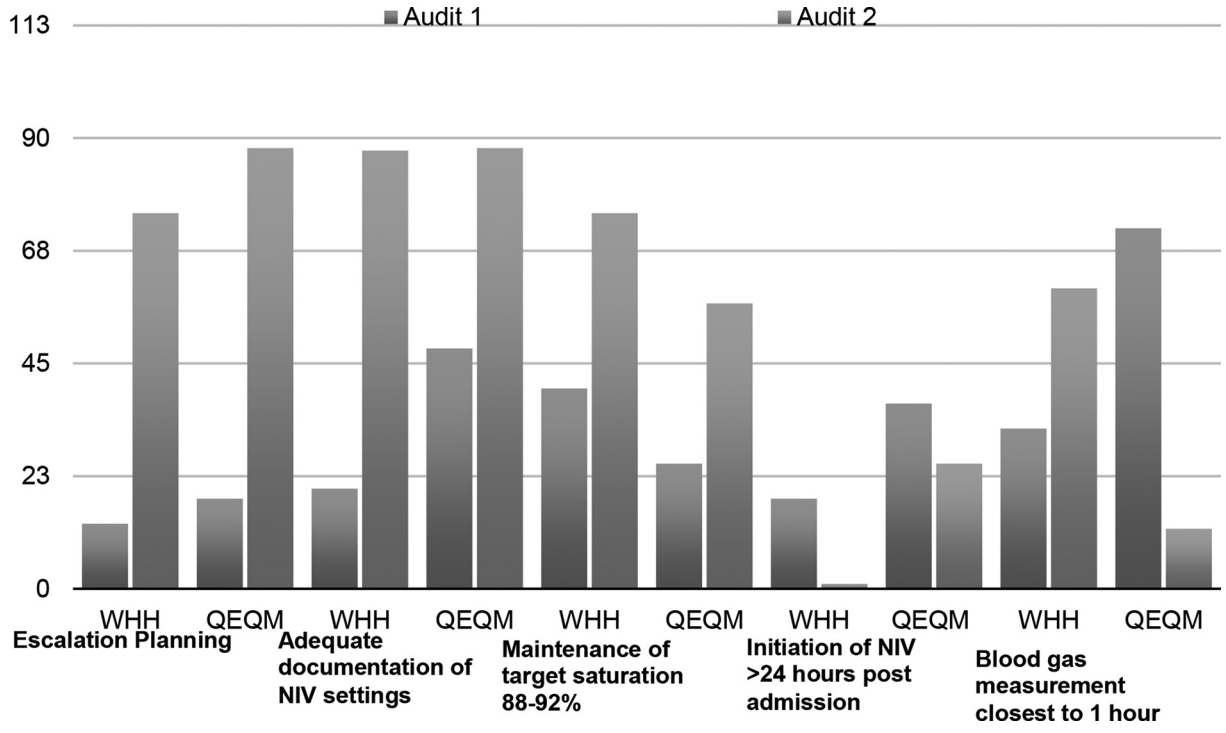
Conclusion Appropriate training and registration for all staff involved in acute NIV care is essential in line with BTS Quality Standards. The multidisciplinary in-situ simulation is reproducible and delivers similar outcomes to more formalised training in an expensive simulation centre. An E-learning programme is a sustainable method of integrating clinical documentation and assessments allowing a contemporaneous register of staff competency and training.

P44 NIV PRESCRIPTION PROFORMA–DOES IT IMPROVE PATIENT CARE?

[1]A Dhara, [1]P Bandipalyam, [2]J Patel, [2]A Ladva, [2]A Maheswaran, [2]S Srivastava. *[1]East Kent University Hospitals NHS Trust, Ashford, UK; [2]King's College, London, UK*

10.1136/thorax-2019-BTSabstracts2019.187

Introduction Respiratory Failure in COPD patients is the second most common reason for hospital admissions and the fifth-biggest killer in the UK. Non - Invasive Ventilation (NIV) has revolutionised the management of this condition but



Abstract P44 Figure 1

Correction: *British Thoracic Society Winter Meeting 2019*

British Thoracic Society Winter Meeting 2019.*Thorax* 2019;74(Suppl 2):A1–A249. https://thorax.bmj.com/content/74/Suppl_2

Since initial publication of these abstracts there are some changes and additions required as follows:

10.1136/thorax-2019-BTSabstracts2019.46
Abstract withdrawn — not presented at the meeting

10.1136/thorax-2019-BTSabstracts2019.213
Abstract withdrawn — not presented at the meeting

10.1136/thorax-2019-BTSabstracts2019.387
Abstract withdrawn — not presented at the meeting

10.1136/thorax-2019-BTSabstracts2019.425
Abstract withdrawn — not presented at the meeting

10.1136/thorax-2019-BTSabstracts2019.433
Abstract withdrawn — not presented at the meeting

10.1136/thorax-2019-BTSabstracts2019.421
The incorrect version of the conclusion was published and the reference was omitted. See updates below:

Over a twelve-month period, one-third of referrals were diagnosed with IPF by the NILDS MDT consensus. One-third of patients with IPF were started on AFM. A disparity in the choice of AFM is evident with the majority of patients receiving Nintedanib for treatment of their IPF.

The majority of patients are above the therapeutic threshold at the time of MDT review. Monitoring FVC at regular follow-up is therefore vital to ensure treatment initiation at earliest opportunity.

Reference:

1. National Institute for Health and Care Excellence (2013). Idiopathic pulmonary fibrosis in adults: diagnosis and management. (NICE Clinical Guideline 163)

10.1136/thorax-2019-BTSabstracts2019.372
There was an amendment to the Results paragraph. See corrected version below:

Results: A total of 894 patients initiating FF/VI were matched to 3433 patients initiating BDP/FM. A higher proportion of patients persisted with FF/VI vs BDP/FM over 12 months (Kaplan-Meier analysis; **Figure**). The likelihood of discontinuing treatment within 12 months after initiation was 31% lower for FF/VI than BDP/FM (index year-adjusted, HR=0.69; 95% CI 0.60 to 0.80; p<0.001). Mean (SD) PDC was 78.2 (25.1) for FF/VI and 71.0 (26.0) for BDP/FM (p<0.0001), with median 89.2 vs 75.9 and significantly higher odds of achieving ≥50% and ≥80% PDC for FF/VI vs BDP/FM (747/893 [83.7%] vs 2600/3433 [75.7%]; OR=1.50; 95% CI 1.23 to 1.83; p<0.001 and 526/893 [58.9%] vs 1571/3433 [45.8%]; OR=1.57; 95% CI 1.35 to 1.83; p<0.001, respectively; per-protocol analyses). Annualised rescue use was numerically similar for FF/VI (4.6) vs BDP/FM (4.7).

10.1136/thorax-2019-BTSabstracts2019.373
There was an amendment to the Results paragraph. See corrected version below:

Results: A total of 937 patients initiating FF/VI were matched to 3232 patients initiating BUD/FM. A higher proportion of patients persisted with FF/VI vs BUD/FM over 12 months (Kaplan-Meier analysis; **Figure**). The likelihood of discontinuing treatment within 12 months after initiation was 35% lower for FF/VI than BUD/FM (index year-adjusted, HR=0.65; 95% CI 0.56 to 0.75; p<0.001). Mean (SD) PDC was 77.7 (25.3) for FF/VI and 72.4 (26.1) for BUD/FM (p<0.0001), with median 88.2 vs 77.7 and significantly higher odds of achieving ≥50% and ≥80% PDC for FF/VI vs BUD/FM (779/936 [83.2%] vs 2447/3232 [75.7%];

OR=1.35; 95% CI 1.09 to 1.67; p=0.006 and 544/936 [58.1%] vs 1562/3232 [48.3%]; OR=1.28; 95% CI 1.08 to 1.52; p=0.004, respectively; per-protocol analyses). Annualised rescue use was numerically similar for FF/VI (4.7) vs BUD/FM (4.2).

10.1136/thorax-2019-BTSabstracts2019.186
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Thorax 2020;**75**:e2. doi:10.1136/thorax-2019-BTSabstracts-corr