

Engaging Doctors in Improving Care for Paediatric Community Acquired Pneumonia

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Aim

Improve the quality of care for children with community acquired pneumonia (CAP) in a district general hospital (DGH) paediatric emergency department (PED), by increasing the percentage prescribed the British Thoracic Society (BTS) recommended antibiotic and ensuring that all requiring supplemental oxygen receive it.

Methods

We employed the Model for Change.

Diagnostics: The 2017 BTS Paediatric CAP Audit of guideline concordance in a DGH revealed that no children had been prescribed the recommended first line antibiotic (oral amoxicillin), and 14% of those children requiring supplemental oxygen had not received it. Clinicians cited lack of awareness as the greatest reason (37%) for not following the guidelines.

Measurements:

- i) Subjective awareness – percentage of doctors self-reporting awareness of the BTS paediatric CAP guidelines
- ii) Objective awareness – percentage of doctors correctly prescribing oral amoxicillin and oxygen in a paediatric CAP scenario
- iii) Balancing measures – number of wheezing or septic children inappropriately managed as CAP.

Change ideas: Engage PED clinicians in a feedback questionnaire on a paediatric CAP proforma, educating them whilst co-producing the proforma as a method of sustainably embedding change.

Test: Iterative plan/do/study/act (PDSA) cycles between November 2018 and February 2019 (Figure 1).

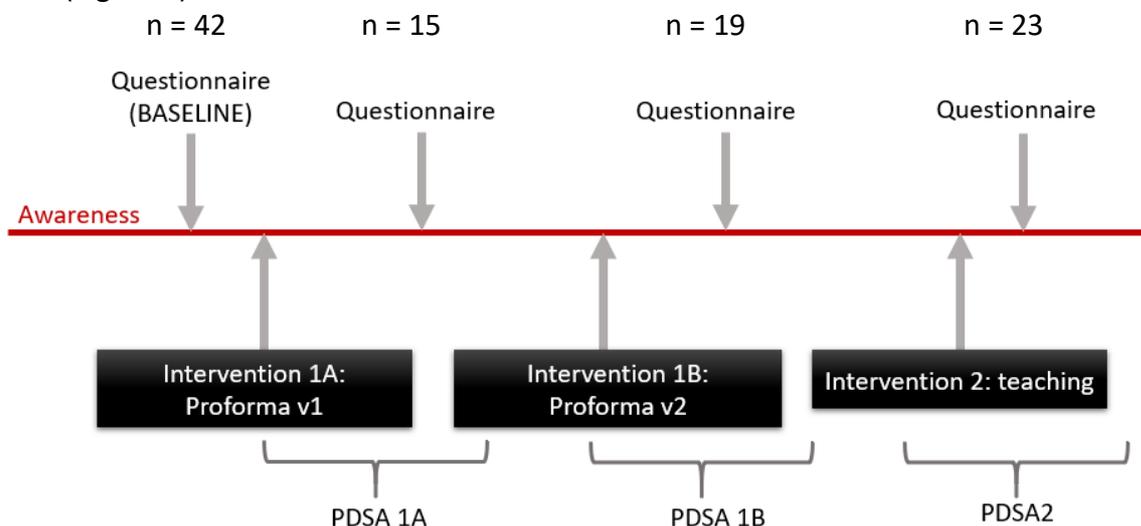


Figure 1.

Results

Mean objective awareness increased to 95% for oxygen administration and 85% for amoxicillin prescribing, however mean subjective awareness fluctuated (figure 2). Balancing measures showed no adverse effects.

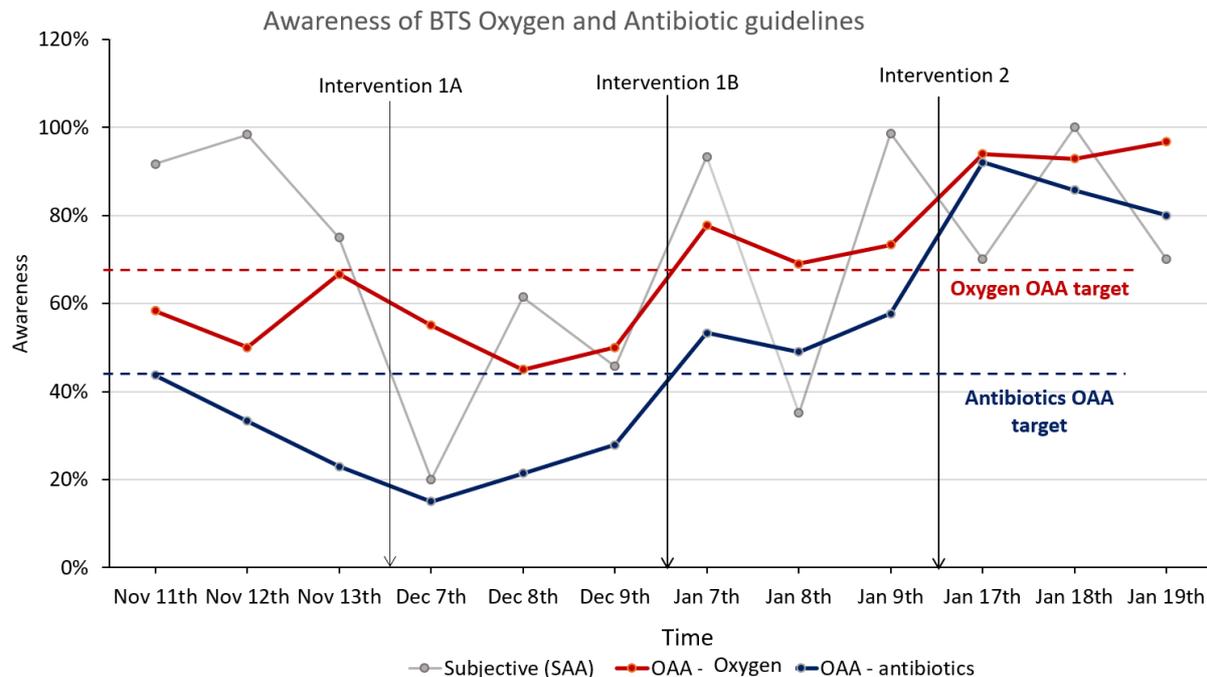


Figure 2. Run chart displaying percentages of subjective assessed awareness (grey), and objective assessed awareness of amoxicillin prescribing (blue) and oxygen administration (red).

Conclusion

The objective quality of care of children with CAP was improved. This differs from previous studies where introducing guidelines without engaging clinicians caused an increase in subjective but not objective awareness and adherence, suggesting co-production is crucial [1].

1. Zhou F, Chandra K, Sohi D, Robertson C, Fraser J, Scoville J, DeSousa N, Vaillancourt C, Atkinson PR. Do Guidelines Influence Emergency Department Staff Behaviours and Improve Patient Outcomes? Evaluation of a Multifaceted Intervention for the Implementation of Local Acute Exacerbations of Chronic Obstructive Pulmonary Disease Guidelines. *Cureus* 2018; 10(11): e3588.