

GEMs offer brief updates from general practice research tackling the challenges of front-line practice.

Using CRP to improve antibiotic prescribing for acute exacerbations of COPD

Nick Francis

The clinical problem tackled by this research

People with COPD are at risk of complications, hospitalisation and long-term deterioration when they experience an acute exacerbation. Overuse of antibiotics contributes to the development of antimicrobial resistance, which can be particularly problematic for people with chronic conditions such as COPD. How can clinicians reduce unnecessary use of antibiotics without exposing people with acute exacerbations of COPD to increased risk of deterioration?

What this research tells us about this problem

- Patients seen in primary care with an acute exacerbation of COPD randomised to have a CRP point of care finger-prick blood test to guide antibiotic prescribing decisions were significantly less likely to consume antibiotics in the four weeks following presentation (57% vs 77%).
- The group who received CRP-guided treatment were no worse off in their COPD-related health after two weeks' follow-up than those who received usual care alone.
- Use of the CRP-guided strategy was broadly acceptable to patients and clinicians, and there were no associated harms identified in the trial.

The research team (*are GPs)

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Where you can read more about this work

Butler CC, Gillespie D, White P, Bates J, Lowe R, Thomas-Jones E, Wootton M, Hood K, Phillips R, Melbye H, Llor C, Cals J, Naik G, Kirby N, Gal M, Riga E, Francis NA. C-Reactive Protein Testing to Guide Antibiotic Prescribing for COPD Exacerbations. *New England Journal of Medicine*. 2019 Jul 11;381(2):111-20.

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