

Building Rapid Interventions to reduce antimicrobial resisTance and over-prescribing of antibiotics (BRIT)



Status report May 2018

Our analysts have written six papers using national anonymised primary care records that are submitted or close to being submitted. We hope they will be published soon.

In these research papers we have found that GP practices that prescribe a lot of antibiotics tend to be:

- Close to other practices that prescribe a lot,
- Very pushed for time seeing many patients, and
- Prescribe a lot of other drugs.

We also found some GP practices being very different from others:

- Some practices prescribe antibiotics to patients with a cold just 10% of the time, while other practices prescribe 80% of the time.
- The likelihood of getting an antibiotic is not related to the risk of hospital admission in the next 30 days. Many patients at low risk of these complications are being prescribed antibiotics while patients at high risk are left untreated.

Existing interventions are partly working; rates of prescribing of potentially inappropriate types of antibiotics decreased between 2000 and 2015. However, inappropriate prescribing remains high for some infectious conditions. We want to tackle this by developing new interventions.

Knowing these trends helps guide our design of new interventions. For example, a one-size-fits-all approach is not going to work. Instead we will show GPs how their prescribing differs from those around them, and help them to explore what symptoms, diseases and other characteristics patients at their practice tend to have.

We are also interviewing GPs about their views on antibiotic prescribing and how they communicate with their patients. We are comparing the views of GPs in practices that prescribe high, mean or low levels of antibiotics. We are close to interviewing our target of 30 doctors, and the results will inform the design of the new interventions.

The focus for the BRIT project now is developing and implementing an online knowledge sharing platform. Here we are responding to the call by Dame Sally Davies, the Chief Medical Officer in England to build an early warning system that monitors prescribing patterns and optimises antibiotic prescribing.

Our system allows doctors and nurses to securely view anonymised data analysed by the BRIT team by logging in to the Trustworthy Research Environment at The University of Manchester. We have had stakeholder meetings and surveys about the design and

functionalities of the platform. We recently gained ethical approval to do this research and are in the process of recruiting GP practices ready to roll out in May-June 2018. By using this new platform GPs will be able to find answers to questions like:

1. How does my practice compare to others?
2. What should my practice keep doing and what can it improve with greatest impact?
3. Which kinds of patients may need to be given antibiotics more frequently, and which kinds of patients have very low risks of hospital admissions?
4. Has my practice been improving over time?