# A practice level intervention to reduce antibiotic prescribing for self-limiting infections in primary care

Recruitment status  No longer recruiting	[X] Prospectively registered		
	Protocol		
Overall study status Completed	Statistical analysis plan		
	[X] Results		
Condition category	Individual participant data		
	No longer recruiting  Overall study status  Completed		

#### Plain English summary of protocol

#### Background

Since the discovery of the antibiotic penicillin, people have been prescribed a whole host of antibiotics treat whole host of infections. Different strains of bacteria change (mutate) over time, which can lead to strains which are resistant to antibiotics emerging. Strains of bacteria that are resistant to antibiotics have an advantage over those which are susceptible, and so these strains rapidly multiply. It is thought that the overuse of antibiotics in the past played a key role with the emergence of antibiotic resistant strains. In recent years, health organisations across the world, including the NHS in the UK, have been trying to reduce the amounts of antibiotics prescribed, especially for minor illnesses. It is thought that if antibiotics are only prescribed for serious complaints, then bacteria will have a lower chance of developing resistance as they are not exposed to antibiotics as much. The aim of this study is to try to reduce the amount of serious infections that are resistant to antibiotics by using promotional material in GP surgeries.

#### Who can participate?

General practitioner (GP) surgeries across England that do not take most bookings online and not already doing something similar to what is being tested in the study.

#### What does the study involve?

The first intervention (or test) is to add a message to the answer phone message which is usually played when patients phone up to make an appointment to see a doctor or nurse. The message tells patients that the doctors are committed to appropriate antibiotic prescribing and suggest that for colds and flu patients should first seek advice at their local pharmacy. The second intervention involves asking GPs to commit to appropriate antibiotic prescribing and make this commitment public by displaying a poster with their name and photo saying so. GP practices are randomly allocated to one of 4 groups. For those in group 1, the answer phone message is played. GP practices in group 2 display the posters. GP practices in group 3 play the answer phone message and display the poster. GP practices in group 4 carry on as normal (control group).

What are the possible benefits and risks of participating?

The benefits for the GP practices participating are likely to be reduced demand for appointments and for antibiotics and support to refuse antibiotics where they think it's not appropriate to prescribe them. Patients will need to wait an extra 10 seconds before the phone is answered to book an appointment. The answer phone message will not be played outside of opening hours so that access to emergency numbers is not delayed.

Where is the study run from?

The majority of GP practices participating are from Commissioning Support Unit in the North East of England but other area are also taking part such as Bedfordshire, Kernow and Liverpool.

When is study starting and how long is it expected to run for? February 2015 to March 2016

Who is the main contact?
Anna Sallis

# **Contact information**

Type(s)

Scientific

Contact name

Miss Anna Sallis

Contact details

80 London Road London United Kingdom SE1 6LH

# Additional identifiers

**EudraCT/CTIS** number

IRAS number

ClinicalTrials.gov number

**Secondary identifying numbers** N/A

# Study information

#### Scientific Title

Impact of a mixed patient and GP intervention level intervention on antibiotic prescribing in GP practices in England: A cluster randomised controlled trial

**Study objectives** 

Antibiotic prescribing will be reduced by a call waiting intervention and/or a GP commitment poster compared to usual practice.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

London - Queen Square Research Ethics Committee, 16/09/2015, ref: 15/LO/1662

#### Study design

Cluster randomised controlled trial with a factorial design (3 intervention arms and 1 control arm)

#### Primary study design

Interventional

#### Secondary study design

Cluster randomised trial

#### Study setting(s)

GP practice

#### Study type(s)

Prevention

#### Participant information sheet

Not available in web format, please use contact details to request a participant information sheet

#### Health condition(s) or problem(s) studied

Antimicrobial resistance

#### **Interventions**

Randomisation of GP practices will be stratified by Clinical Commissioning Group (CCG) using an even-split-within-strata method, which ensures numerical balance within each CCG. Regression analysis will be used to check for balance on baseline measures of our outcome measure.

Brief recorded message on the GP surgery answer phone explaining to patients that GPs in this practice are committed to prescribing antibiotics prudently and directing patients to their pharmacy for self-care advice for infections that do not usually require antibiotics. This aims to address patient demand for appointments and ultimately reduce access to antibiotics by facilitating an expectation that inappropriate antibiotics will not be prescribed.

Display a 'commitment poster' in GP consulting rooms with a photo of the GP and a signed statement of their commitment to appropriate prescribing of antibiotics. This aims to provide a tool to support GPs, during the consultation, in their decision not prescribe antibiotics where it is not clinically appropriate and also to strengthen the GPs own commitment to appropriate prescribing through this public commitment.

#### Intervention Type

#### **Behavioural**

#### Primary outcome measure

EPACT data (STARPU adjusted) on filled antibiotic prescriptions per 1000 of the population for a baseline period of 3 months and the 4 month intervention period, and for the same intervention period the previous year.

#### Secondary outcome measures

Percentage of all filled antibiotic prescriptions that are for broad-spectrum antibiotics.

Measured at baseline for a period of 3 months and the 4 month intervention period and for the same intervention period the previous year.

#### Overall study start date

02/02/2015

#### Completion date

31/03/2016

# **Eligibility**

#### Key inclusion criteria

- 1. All or the vast majority of GPs, practice nurses and non-medical prescribers are willing to take part in the study which may involve emailing a photograph and electronic signature
- 2. Can display the personalised posters in the GP consulting rooms
- 3. Can implement or amend an existing automated call-waiting message to record and play the AMR message (ideally first or last) and leave in place for the duration of the study

#### Participant type(s)

Health professional

#### Age group

Adult

#### Sex

Both

#### Target number of participants

175

#### Total final enrolment

196

#### Key exclusion criteria

- 1. Walk-in centres
- 2. More than 20% of our appointments bookings are made online
- 3. Those which already display AMR GP commitment posters or play AMR call waiting messages (other AMR related activity and posters are fine, including antibiotic guardian posters)

#### Date of first enrolment

01/10/2015

# **Date of final enrolment** 01/11/2015

## Locations

#### Countries of recruitment

England

**United Kingdom** 

# Study participating centre North & East London Commissioning Support Unit

75 Worship Street London United Kingdom TS17 6BL

# Study participating centre

NHS Kernow Sedgemoor Centre Priory Road Saint Austell United Kingdom

PL25 5AS

#### Study participating centre Bedfordshire Clinical Commisioning Group

Capability House Bedford United Kingdom MK45 4HR

# Sponsor information

#### Organisation

Public Health England

#### Sponsor details

80 London Road London United Kingdom SE1 6LH

#### Sponsor type

Government

# Funder(s)

#### Funder type

Government

#### **Funder Name**

Public Health England

#### Alternative Name(s)

PHE

#### **Funding Body Type**

Government organisation

#### Funding Body Subtype

National government

#### Location

**United Kingdom** 

# **Results and Publications**

#### Publication and dissemination plan

- 1. Study summaries sent to all participating practices
- 2. Conference presentations
- 3. Academic publication

#### Intention to publish date

31/10/2016

Individual participant data (IPD) sharing plan

#### IPD sharing plan summary

Not expected to be made available

## **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	07/08/2020	17/08/2020	Yes	No
HRA research summary			28/06/2023	No	No