Antimicrobial stewardship in primary care: developing a local action plan

Cliodna McNulty and Rebecca Owens
Public Health England Primary Care Unit
The workshop:

Short presentation covering

- Surveys around the public's attitudes to and use of antibiotics
- Evidence for approaches to reducing antibiotic use
- Thinking about how to improve responsible antibiotic use by: influencing personal attitudes, social norms and perceived barriers

Discussions around

- Barriers to implementation and overcoming them
**Perceptions are correct**

Most coughs, colds, and sore throats get better on their own without antibiotics
- **86%** agree
- **9%** disagree
- **5%** unsure

You don’t need to finish a course of antibiotics if you are feeling better
- **13%** agree
- **8%** disagree
- **79%** unsure

**Lack of knowledge**

Taking antibiotics weakens your immune system
- **50%** agree
- **28%** disagree
- **22%** unsure

Bacteria that are resistant to antibiotics spread easily from person to person
- **54%** agree
- **35%** disagree
- **11%** unsure

Healthy people carry antibiotic resistant bacteria
- **45%** agree
- **40%** disagree
- **15%** unsure
COLD? FLU?

WITH ANTIBIOTICS

Antibiotics don’t work on most coughs & sore throats.

UNFORTUNATELY NO AMOUNT OF ANTIBiotic WILL GET RID OF YOUR COLD.

WEATHER, ANTIBIOTICS AREN’T GOING TO HELP.

Antibiotics don’t work on colds, most coughs or sore throats. The best way to treat them is plenty of fluid and rest. For more information talk to your pharmacist or doctor.

NHS
Prescribing: Consultations, and amoxicillin prescribing for acute cough and cold is increasing.

537 UK GP practices
1995-2011

Hawker et al J AC 2014;
The Patient Perspective: What did they do?

1,767 ≥15y in England

58% had RTI in last 6 months

What did they do?

- 60% took OTC (50%) or alternative medicine (21%) for symptoms
- 37% took extra rest
- **20%** Contacted or visited GP surgery
- 6% asked pharmacy for advice
- 1.4% used NHS Direct
- 0.4% took leftover antibiotics
- 0% visited NHS walk in centre

McNulty, Nichols, French, Joshi & Butler. British Journal of General Practice, 2013 e429)
The Patient Perspective:
They visited their GP if they were worried

- 51% Symptoms severe
- 47% Symptoms not improved after several days
- 14% family or friends suggestion
- 11% Other health problem
- 9% I usually visit GP with these symptoms
- 5% Worried will infect others who may get very ill

What did they expect?

- 53% Expected antibiotics
- 24% Advice about self-care
- 7% Information about illness duration
- 3% For referral to hospital/specialist
- 22% Other treatment for symptoms
- 12% Rule out more serious illness
- 6% A sick/fit note for work
- 3% For Tamiflu

93% who asked, got an antibiotic

McNulty, Nichols, French, Joshi & Butler. British Journal of General Practice, 2013 e429)
Evidence for GP based interventions

Booklet to share with patients
Antibiotic prescription 20% v 40%
Intention to reconsult 55% v 76%

CRP and communication skills
Antibiotics in usual care 68%
communication 33%
CRP 39%
Both 23%

Francis et al BMJ 2010, Cals et al BMJ 2009;338:1374,
The patient: Back-up / delayed prescribing can reduce antibiotic use & patient expectations

English RCT comparing three treatment strategies for sore throat (n=582)

- Better by day 3
- Satisfied patients
- Think antibiotics are effective
- Would visit GP again for similar symptoms

Possible Answers

How can we fit together this evidence and change behaviour during consultation with patients to improve antibiotic prescribing?
TARGET: The TARGET antibiotic toolkit

This toolkit is here to help clinicians and commissioners to use antibiotics responsibility and meet CQC requirements.

Background information
Resources for commissioners
Leaflets to share with patients
Audit Toolkits
National Antibiotic Management Guidance
Training resources
Resources for clinical and waiting areas
Self assessment checklist
Useful links

www.rcgp.org.uk/TARGETantibiotics
Theory of Planned Behaviour

- Personal Attitude
- Subjective Norms (peers values)
- Perceived Behavioural Controls (Barriers)

Intention

Behaviour

“I want to use antibiotics responsibly”
"My responsible use of antibiotics will make a difference to patients"

It’s important!
“If I prescribe responsibly – I will be rewarded for it”

Clinicians: lower consultations, reputation

1. Outcome beliefs
2. Normative beliefs
3. Motivation to comply
4. Self efficacy
5. External factors

Rewards of behaviour

1. Attitude
2. Subjective norms
3. Perceived Behavioural Control

Intention → Behaviour
“My peers also believe in responsible prescribing”
Importance of the team approach

Whole practice team invited to TARGET workshops

Out of hours
Dentists
Vets
Nationally
EU and Worldwide
“I want to prescribe responsibly because my peers would want me to”

Clinicians, CCGs, hospitals, countries: respect, audits, cost, patient outcomes
TARGET: Audit materials – information for action

TARGET website templates for:
- Sore Throat Audit
- UTI Audit

A self assessment checklist

What most practices should aim to do soon

Is there a GP within your practice who takes a lead for antibiotic stewardship in the practice?  ○ Yes  ○ No

Do you analyse and discuss antibiotic prescribing at your surgery in comparison to local targets at least once a year?  ○ Yes  ○ No

Do you keep a written record and surgery action plan resulting from antibiotic audits?  ○ Yes  ○ No
Outcome beliefs → Attitude → Intention → Behaviour

Rewards of outcome

Normative beliefs → Subjective norms

Motivation to comply

Self efficacy

External factors

Perceived Behavioural Control

“I have the confidence to prescribe antibiotics responsibly”

Clinicians: knowledge, guidance

www.rcgp.org.uk/TARGETantibiotics
TARGET: 
Antibiotic Management Guidance

Make available to ALL in practice and out of hours,

So patients do not go to another GP 
Or out of hours
TARGET: Training Resources

Managing Acute Respiratory Tract Infections

Managing Urinary Tract Infections

TARGET on-line module

Training resources

Self assessment checklist and audit

Antibiotic management guidance

Patient information leaflets

Resources for clinicians

External clinical resources

www.rcgp.org.uk/TARGETantibiotics
Outcome beliefs

Rewards of outcome

Normative beliefs

Motivation to comply

Self efficacy

External factors

Attitude

Subjective norms

Intention

Behaviour

Patients: “I have the confidence to use antibiotics responsibly” knowledge of signs of severity, fear, self-care of symptoms

www.rcgp.org.uk/TARGETantibiotics
TARGET:
Patient Information Leaflets

Antibiotic Information Leaflet

Treating your infection

Your doctor or nurse recommends that you self-care [ ] Back-up antibiotic prescription issued [ ]

<table>
<thead>
<tr>
<th>Infection</th>
<th>Usually lasts</th>
<th>How to seek your doctor for these infections, now and next time</th>
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<tr>
<td>Middle-ear infection</td>
<td>4 days</td>
<td>• Have plenty of rest. • Drink enough fluids to avoid feeling thirsty.</td>
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<tr>
<td>Sore throat</td>
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<td>• Ask your local pharmacist to recommend medicines to help your symptoms or pain (or both).</td>
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<td>Common cold</td>
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<td>• Fever is a sign the body is fighting the infection and usually gets better by itself in most cases. You can use paracetamol (or ibuprofen) if you or your child are uncomfortable as a result of a fever.</td>
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When should you get help:

1. to 8. are possible signs of serious illness and should be assessed urgently. Phone for advice if you are not sure how urgent the symptoms are.
2. If you develop a severe headache and are sick.
3. If your skin is very cold or has a strange colour, or you develop an unusual rash.
4. If you feel confused or have slurred speech or are very drowsy.
5. If you have difficulty breathing. Signs can include:
   o breathing quickly
   o turning blue around the lips and the skin below the mouth
   o skin between or above the ribs getting sucked or pulled in with every breath.
6. If you develop chest pain.
7. If you have difficulty swallowing or are drooling.
8. If you cough up blood.
9. If you are feeling a lot worse.

Less serious signs that can usually wait until the next available GP appointment:

10. If you are not improving by the time given in the ‘Usually lasts’ column.
11. In children with middle-ear infection: If fluid is coming out of their ears or if they have new deafness.

Back-up antibiotic prescription ONLY to be collected in [ ] days if you do not feel better or feel worse.

Collect from: [ ] GP reception [ ] GP or nurse [ ] Pharmacy

- Colds, most coughs, sinusitis, ear infections, sore throats, and other infections often get better without antibiotics, as your body can usually fight these infections on its own.
- The more we use antibiotics, the greater the chance that bacteria will become resistant to them so that they no longer work on our infections.
- Antibiotics can cause side effects such as rashes, thrush, stomach pains, diarrhoea, reactions to sunlight, other symptoms, or being sick if you drink alcohol with metronidazole.

Never share antibiotics and always return any unused antibiotics to a pharmacy for safe disposal.

Leaftet developed in collaboration with these professional societies:

Public Health England RC GP Royal College of General Practitioners
The British Society for Antimicrobial Chemotherapy NHS Scotland
Royal College of Nursing Royal Pharmaceutical Society
Infections Prevention Society
BIAAS

Read codes: Delayed:8CAk, Leaflet: 8CE

www.rcgp.org.uk/TARGETAntibiotics
TARGET:
Resources for clinical and waiting areas

Posters for Display

Videos for patient waiting areas

www.rcgp.org.uk/TARGETantibiotics
"I can overcome other barriers preventing me using antibiotics responsibly"

**Clinicians:** time, forgetfulness, computers, prescriptions, regulations

**Patients:** cost, work
Outcome beliefs

Rewards of outcome

Normative beliefs

Motivation to comply

Self efficacy

External factors

Attitude

Subjective norms

Perceived Behavioural Control

Intention

Behaviour

Tactics to improve prescribing must therefore be multifactorial

www.rcgp.org.uk/TARGETantibiotics
Planning the delivery of the TARGET antibiotics toolkit
The TARGET guide to resources

The TARGET Antibiotics Toolkit
(Treat Antibiotics Responsibly
Guidance, Education and Tools)

- Interactive Workshop Presentation
- Leaflets to Share with Patients
- Audit Toolkits
- National Antibiotic Management Guidance
- Training Resources
- Resources for Clinical and Waiting Areas
- Self Assessment Checklist

www.rcgp.org.uk/TARGETantibiotics
Planning delivery of TARGET Toolkit

Step 1: Analyse current antibiotic prescribing practice at CCG and practice level alongside key indicators and targets

Step 2: Develop implementation plan at CCG level & select components of Toolkit.

Step 3: Support practices in developing individual action plans

Step 4: Visit practices and discuss practice use of Toolkit resources

Step 5: Practice and CCG monitoring of antibiotic use and effectiveness review of Toolkit implementation
Planning delivery of TARGET toolkit

**Step 1:** Analyse current antibiotic prescribing practice at CCG and practice level alongside key indicators and targets

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Step 2: Developing CCG plan & selecting components of Toolkit

Discuss in groups advantages and disadvantages of each mode of delivery of materials

1. Workshops with groups of practices
2. Individual practice workshops
3. Workshop with voice-over presentation
4. On-line RCGP module followed by action planning

Delivery by either:
- expert in antibiotic use,
- GP champion
- medicine manager
- other
Feedback: advantages & disadvantages of each mode of delivery of materials

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Delivery by
1. expert in antibiotic use,
2. GP champion or
3. medicine manager
Planning delivery of TARGET toolkit

Step 3: Support practices in developing individual action plans

Step 4: Visit practices and discuss practice use of Toolkit resources
Which TARGET materials?

1. TARGET interactive presentation or eModule
2. Leaflets to share with patients
3. Audit toolkits
4. Antibiotic guidance
5. Self-assessment checklist
6. Posters
7. Targets set at meeting
8. Computer prompts
9. Delayed prescribing
10. E Modules on RTI, UTI, skin
11. Laboratory susceptibility reporting

**Personal Attitude**
The belief that resistance is important. The belief that changes in prescribing will make a difference to resistance. Any personal rewards for responsible prescribing.

**Subjective norms**
Peers’ opinions about antibiotic prescribing. Pressure to prescribe responsibly from society or CCG.

**Perceived behavioural controls**
Confidence to use antibiotics responsibly. Other barriers such as time, computers and cost influencing prescribing behaviour.

**Measurable outcome**
Which TARGET materials?

1. Interactive presentations
2. Practice targets
3. Delayed prescribing
4. Computer prompts
5. Leaflets to share with patients
6. Audit toolkits
7. Self-assessment checklist
8. eModules on RTI, UTI, skin
9. Posters
10. Antibiotic guidance
11. Laboratory antibiotic reporting

Prioritise and discuss how you will implement the chosen resources

www.rcgp.org.uk/TARGETantibiotics
TARGET Patient Information Leaflet how to implement

Antibiotic Information Leaflet

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“Usually lasts” section educates patients about when to consult

][1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11.]

Safety netting

Back-up prescription

Information about antibiotics & resistance

Back-up antibiotic prescription ONLY to be collected in [ ] days if you do not feel better or feel worse.

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IPPS Infections Prevention Society
BIAM British Infection Association

Read codes: Delayed:8CAk, Leaflet: 8CE

www.rcgp.org.uk/TARGETantibiotics
Actions: Developing priorities for you & this CCG

Reduce *Clostridium difficile* in the community

**HOW**

Reduce use of
- Ciprofloxacin
- Cephalosporins
- Co-amoxiclav

Increase use of
- Nitrofurantoin
- Trimethoprim
- Pivmecillinam

**Co-amoxiclav ONLY recommended for:**
- Pyelonephritis in pregnancy
- Facial cellulitis or prophylaxis post dog or human bites
- Diverticulitis

NHS Organisation Targets for *C. difficile* infections:
Actions:
Developing priorities for you & this CCG

Aim to roll back to prescribing in 2010 (12%)
Reducing total antibiotics by about 1% annually

HOW
1. Use the leaflets to reduce patient expectations
2. Develop computer prompt or use patient.co.uk to increase use of leaflet
3. Use back-up/delayed prescribing (the leaflet will help)
4. Refer to the posters to introduce antibiotics
5. Make sure everyone has access to antibiotic guidance
6. Do an antibiotic audit
7. Give an individual responsibility of taking these forward
Many thanks to:

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