



TARGET

Keep Antibiotics Working

Using National Antibiotic resources to help improve antibiotic prescribing

“There are few public health issues of potentially greater importance for society than antibiotic resistance”

2013 CMO Prof Dame Sally Davies

Learning in this webinar

Understand

- How and why we prescribe antibiotics
- The evidence showing the link between antibiotic prescribing and resistance in your patients
- how reducing antibiotic prescribing can reduce antibiotic resistance, and also patient consultations
- AMS strategies to use with patients
- Where to find and how to use TARGET materials
- The benefits of exploring your antibiotic prescribing in more detail



TARGET

Keep Antibiotics Working

Actual antibiotic prescribing in Primary Care vs appropriate rates

Condition/syndrome	Actual prescription (UK THIN data)	Ideal prescription: PHE EE median (IQ range)	Ideal prescription: ESAC EE acceptable range
Acute cough	40%	10% (6 – 16%)	
Acute bronchitis	92%	13% (6 – 22%)	0 – 30 %
Acute sore throat	60%	13% (7 – 22%)	0 – 20% (tonsillitis)
Acute rhinosinusitis	92%	11% (5 – 18%)	0 – 20%
Acute otitis media			
6mo – 2yr	96%	19% (9 – 33%)	
2yr – 18yr	94%	17% (8 – 30%)	0 – 20%



TARGET

Keep Antibiotics Working

Evidence: Risk of resistance persists for at least 12 months after your prescribing

	Increased risk of resistant organism (pooled odds ratio)	
	Antibiotic in past 2 months	Antibiotic in past 12 months
RTI 7 studies: n = 2,605	2.4 times (1.4 - 3.9)	2.4 times (1.3 - 4.5)
UTI 5 studies	2.5 times (2.1 - 2.9)	1.33 times (1.2 - 1.5)

A meta analysis of English Primary Care



Why do we prescribe antibiotics?

1. Relief of symptoms
2. Worry about complications/more serious illness
3. Patient pressure



1. Relief of symptoms

TARGET

Symptom benefit from antibiotics

	Total duration untreated	Beneficial effect from antibiotics	NNT for one additional patient to benefit	NNT for one additional adverse effect i.e. NNH
Otitis media	4 -12 days	8-12 hours	18	9
Sore throat	8 days	12-18 hours	6-20	15
Sinusitis	12-15 days	24 hours	18	8
Bronchitis	20-22 days	11-24 hours	10-22	24

How do we communicate this information to patients?

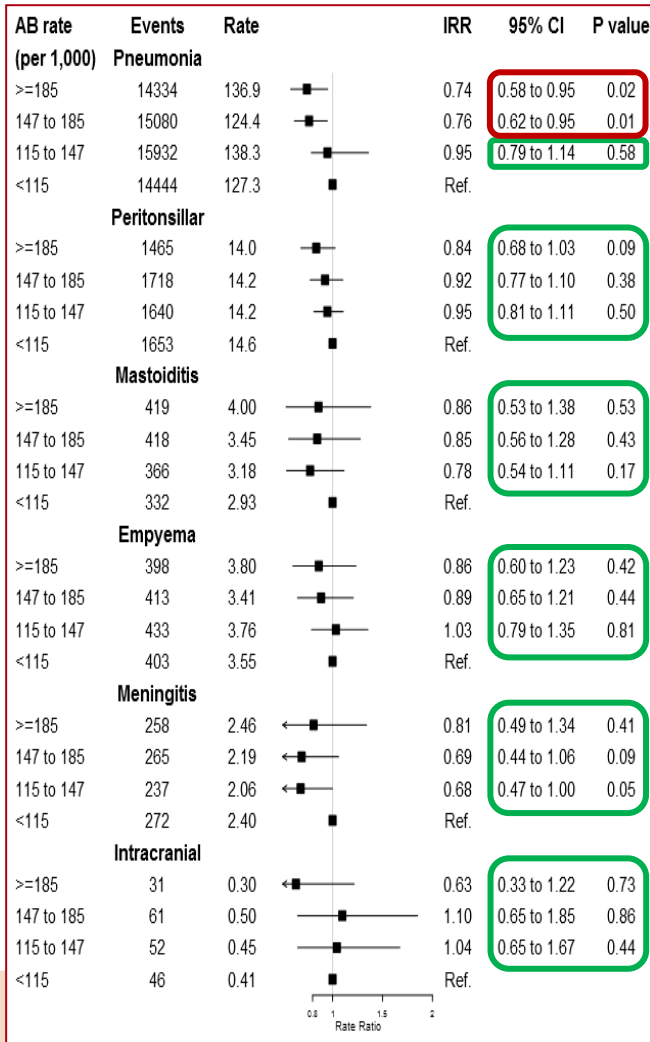


TARGET

Keep Antibiotics Working

2. Worry about complications

Antibiotics and complications



- UK study examined complications in practices with range of antibiotic use
- Majority of infections no significant differences (CI crosses 1, p>0.05)
- Calculated that in a practice of 7,000, a 10% reduction in antibiotic prescribing for RTI might expect:
 - 1 additional pneumonia each year
 - 1 additional peritonsillar abscess each 10 years



TARGET

Keep Antibiotics Working

Reducing complication risk

- Careful clinical assessment, including targeting treatment to those most at risk – using diagnostic flowcharts, symptom scores: FeverPAIN; STARWAVE
- Back-up / delayed antibiotics
- Safety netting including patient information leaflets

TREATING YOUR INFECTION – URINARY TRACT INFECTION (UTI)

For women under 65 years with suspected lower urinary tract infections (UTIs) or lower recurrent UTIs (cystitis or urethritis)

Possible urinary signs & symptoms	The outcome	Recommended care	COVID-19 specific advice
Key signs/symptoms: Dysuria: Burning pain when passing urine (wee) New pus in urine: Needing to pass urine in the night Cloudy urine: Visible cloudy colour when passing urine Other signs/symptoms to consider: Frequency: Passing urine more often than usual Urgency: Feeling the need to pass urine immediately Haematuria: Blood in your urine Suprapubic pain: Pain in your lower tummy Recent sexual history • Inflammation due to sexual activity can feel similar to the symptoms of a UTI • Some sexually transmitted infections (STIs) can have symptoms similar to those of a UTI Changes during menopause • Some changes during the menopause can have symptoms similar to those of a UTI	Non-pregnant women: <input type="checkbox"/> If none or only one of: dysuria, new pus, cloudy urine; AND/OR vaginal discharge • UTI much less likely • You may need a urine test to check for a UTI • Antibiotics less likely to help • Usually lasts 5 to 7 days <hr/> <input type="checkbox"/> If 2 or more of: dysuria, new pus, cloudy urine; AND NO vaginal discharge • UTI more likely, antibiotics should help • You should start to improve within 48 hours • Symptoms usually last 3 days <hr/> Pregnant women: Always request urine culture <input type="checkbox"/> If suspected UTI	<input type="checkbox"/> Self-care and pain relief. • Symptoms may get better on their own <input type="checkbox"/> Delayed or back-up prescription with self-care and pain relief Start antibiotics if symptoms: • Get worse • Do not get a little better with self-care within 48 hours <input type="checkbox"/> Immediate antibiotic prescription plus self-care <input type="checkbox"/> If mild symptoms, delayed or back-up antibiotic prescription plus self-care	Common symptoms of COVID-19 to look out for are: <ul style="list-style-type: none"> A loss of, or change to your sense of smell or taste A high temperature A new continuous cough • If you have any of these symptoms and think you may have a UTI please do not ignore the UTI symptoms. • Book a COVID-19 test and self-isolate for 10 days or until you get a negative test result (www.gov.uk/get-coronavirus-test) AND • Book a remote / online GP appointment to discuss your potential UTI and explain that you have also booked a COVID-19 test. Follow the latest advice on COVID-19 at www.gov.uk/coronavirus and www.nhs.uk

Self-care to help yourself get better more quickly	Options to help prevent a UTI	Antibiotic resistance	When should you get help?
• Drink enough fluids to stop you feeling thirsty. Aim to drink 6 to 8 glasses • Avoid too much alcohol, fizzy drinks or caffeine that can irritate your bladder • Take paracetamol or ibuprofen at regular intervals for pain relief, if you have had no previous side effects • There is currently no evidence to support taking cranberry products or cystitis sachets to improve your symptoms • Consider the risk factors in the 'Options to help prevent UTI' column to reduce future UTIs	It may help you to consider these risk factors: <ul style="list-style-type: none"> Stop bacteria spreading from your bowel into your bladder. Wipe from front (vagina) to back (bottom) after using the toilet. Avoid waiting to pass urine. Pass urine as soon as you need to. Go for a wee after having sex to flush out any bacteria that may be near the opening to the urethra. Wash the external vagina area with water before and after sex to wash away any bacteria that may be near the opening to the urethra. Drink enough fluids to make sure you wee regularly throughout the day, especially during hot weather. If you have a recurrent UTI, the following may help <ul style="list-style-type: none"> Cranberry products and D-mannose: There is some evidence to say that these work to help prevent recurrent UTI After the menopause: Topical hormonal treatment may help, for example, vaginal pessaries. Antibiotics at night or after sex may be considered 	Antibiotics can be lifesaving. But antibiotics are not always needed for urinary symptoms. Antibiotics taken by mouth, for any reason, affect our gut bacteria making some resistant. This may make future UTI more difficult to treat Common side effects to taking antibiotics include thrush, rashes, vomiting and diarrhoea. Seek medical advice if you are worried. Keep antibiotics working; only take them when advised by a health professional. This way they are more likely to work for a future UTI.	The following symptoms are possible signs of serious infection and should be assessed urgently. Phone for advice if you are not sure how urgent the symptoms are: <ol style="list-style-type: none"> You have shivering, chills and muscle pain You feel confused, or are very drowsy You have not passed urine all day You are vomiting You see blood in your urine Your temperature is above 38°C* or less than 36°C You have kidney pain in your back just under the ribs Your symptoms get worse Your symptoms are not starting to improve within 48 hours of taking antibiotics *Temperature above 38°C is also a symptom of COVID-19. Please see COVID-19 specific advice.

TREATING YOUR INFECTION – RESPIRATORY TRACT INFECTION (RTI)

Your infection	Most are better by	How to look after yourself and your family	When to get help
<input type="checkbox"/> Middle-ear infection	8 days	• Have plenty of rest • Drink enough fluids to avoid feeling thirsty. • Ask your local pharmacist to recommend medicines to help your symptoms or pain (or both). • Fever is a sign the body is fighting the infection and usually gets better by itself in most cases. You can use paracetamol if you or your child are uncomfortable as a result of a fever. • Use a tissue and wash your hands with soap to help prevent spread of your infection to your family, friends and others you meet.	If you or your child has any of these symptoms, are getting worse or are sicker than you would expect (even if your/their temperature falls), trust your instincts and seek medical advice urgently from NHS 111 or your GP. If a child under the age of 5 has any of symptoms 1-3 go to A&E immediately or call 999. <ol style="list-style-type: none"> If your skin is very cold or has a strange colour, or you develop an unusual rash. If you have new feelings of confusion or drowsiness, or have slurred speech. If you have difficulty breathing. Signs that suggest breathing problems can be: <ul style="list-style-type: none"> breathing quickly turning blue around the lips and the skin below the mouth skin between and above the ribs getting sucked or pulled in with every breath. If you develop a severe headache and are sick. If you develop chest pain. If you have difficulty swallowing or are drooling. If you cough up blood. If you are passing little to no urine. If you are feeling a lot worse. Less serious signs that can usually wait until the next available appointment: <ol style="list-style-type: none"> If you are not starting to improve a little by the time given in 'Most are better by' Children with middle-ear infection: if fluid is coming out of their ears or they have new deafness. Mild side effects such as diarrhea: seek medical attention if you are concerned.
<input type="checkbox"/> Sore throat	7-8 days		
<input type="checkbox"/> Sinusitis	14-21 days		
<input type="checkbox"/> Common cold	14 days		
<input type="checkbox"/> Cough or bronchitis	21 days (a cough caused by COVID-19 may differ)		
Other infection: days		

If you develop these symptoms, consider if you may have COVID-19

Common symptoms of COVID-19 to look out for are:

- A loss of, or change to your sense of smell or taste
- A high temperature (over 38°C, feeling hot to touch on chest or back)
- A new continuous cough (coughing a lot for more than an hour, or three or more coughing episodes within 24 hours)

• If you have any of these symptoms book a COVID-19 test, stay at home and self-isolate for 10 days or until you get a negative test result (www.gov.uk/get-coronavirus-test)

• Anyone you live with, and anyone in your support bubble, must also stay at home for 14 days from the start of your symptoms, or until you get a negative test result.

• Call 111 or visit www.111.nhs.uk/covid-19 if you are worried or not sure what to do.

Visit www.gov.uk/coronavirus or www.nhs.uk for more information

Back-up antibiotic prescription to be collected after days only if you are not starting to feel a little better or you feel worse, from:

• 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.
 • Taking any antibiotics makes bacteria that live inside your body more resistant. This means that antibiotics may not work when you really need them.
 • 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.
 • Find out more about how you can make better use of antibiotics and help keep this vital treatment effective by visiting www.nhs.uk/keepantibioticsworking

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

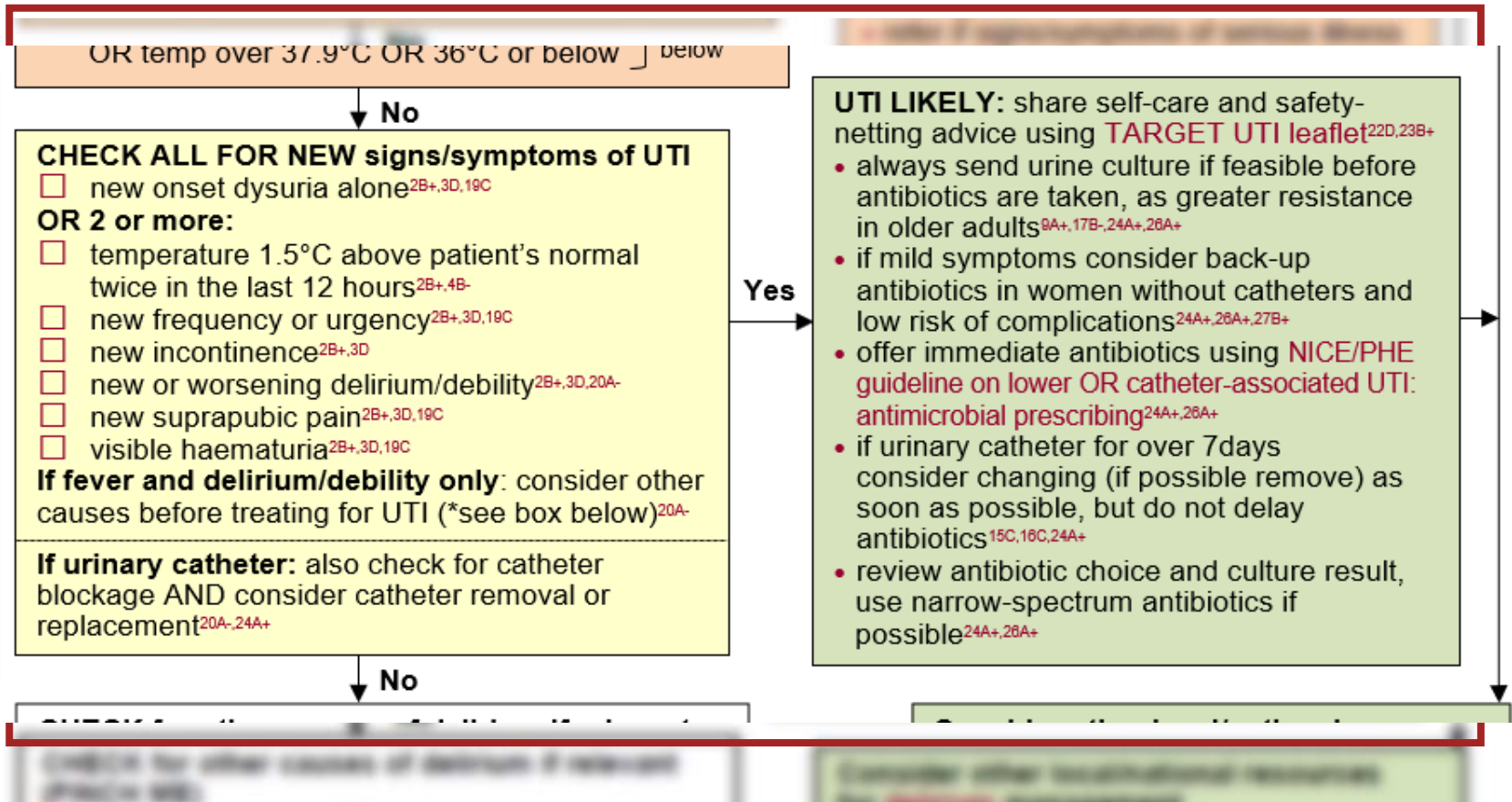
Keep Antibiotics Working



TARGET

Keep Antibiotics Working

PHE UTI Diagnostic Tool: Diagnostic Flowchart over 65s



[Link to Diagnostic Flowchart over 65s](#)



Case Study NHS BANES ToDipOrNotToDip

TARGET

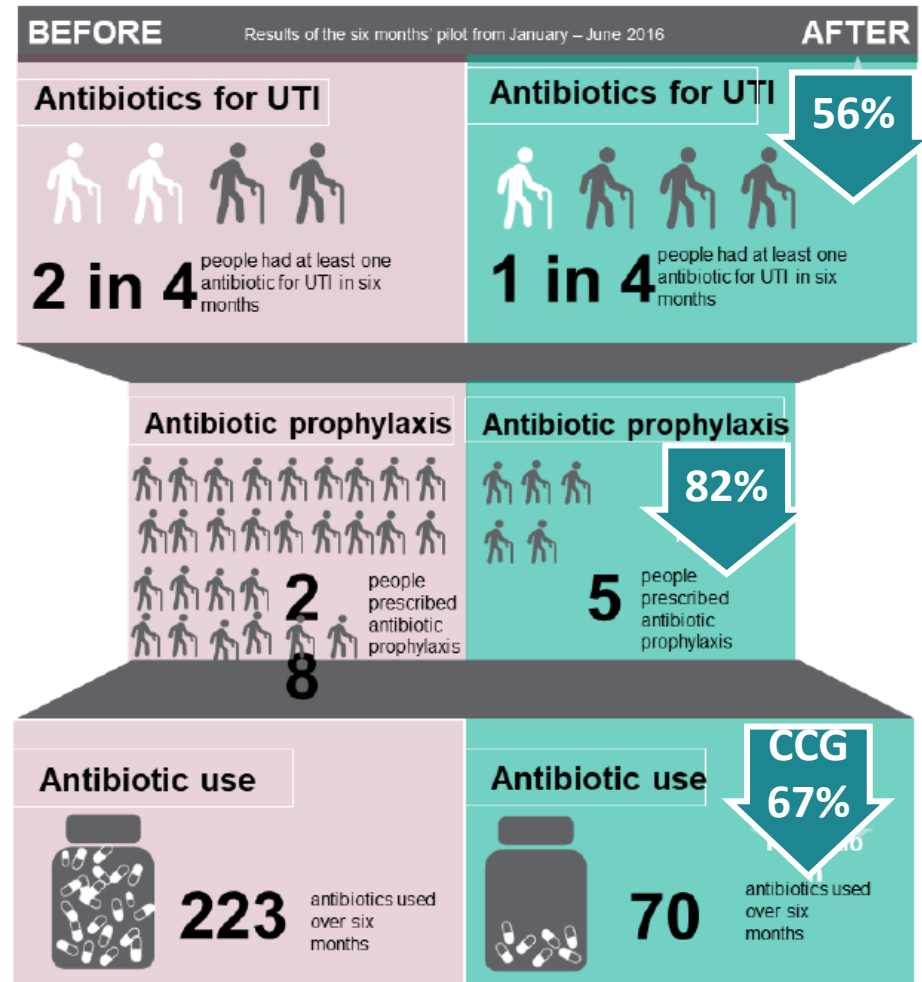
Keep Antibiotics Working

Improvement programme focused on:

- Improved diagnosis of UTI with reduced dipsticks
- Improved GP practice /care home communication
- good hydration / avoiding acute kidney injury (AKI)
- Improving antibiotic use)

Results:

- Reduced calls to GP practices for inappropriately diagnosed UTI





TARGET

Keep Antibiotics Working

Patient Information Leaflets

Public Health England **TARGET**

How can I manage my common infection?

A leaflet for adults aged 16 years and over

1. What are the symptoms of a common infection?

- 1. Eyes**
 - Sticky eyes
- 2. Ears, nose and throat**
 - Pain or soreness
 - Runny nose
 - Swollen tonsils
- 3. Chest**
 - Cough
 - Shortness of breath
 - Green or yellow mucus
- 4. Gut**
 - Vomiting
 - Diarrhoea**
- 5. Skin**
 - Infected blisters
 - Redness or swelling around a wound
 - Athlete's foot (an itchy rash between the toes)
- 6. Genital and urinary**
 - Pain on passing urine
 - Passing urine more often at night
 - Cloudy urine
 - Discharge
 - Pain in lower tummy

2. What if I think I have coronavirus (Covid-19)?

Common symptoms of Covid-19 to look out for are:

- a loss of, or change to, your sense of smell or taste
- a high temperature, and
- a new, continuous cough.

For more advice about Covid-19 visit www.gov.uk/coronavirus or call your regional medical helpline (see back of leaflet).

3. How can I treat a common infection?

- Zzz** Get plenty of rest until you feel better.
- Pain relief** Take pain relief if you need to (make sure you follow the instructions).
- Fluids** Drink plenty of fluids (6 to 8 drinks, or 2 litres) so that you pass pale-coloured urine regularly.
- Coughs** For coughs, try honey and cough medicines. For sore throats, try medicated lozenges and pain relief.
- Eye infections** Soothe the eye infections with a clean warm or cold damp flannel.
- Outer ear infection** For an outer ear infection, apply local heat (such as a warm flannel).

4. How long could my infection last?

Cough 21 days	Sore throat or earache 7 to 8 days	Common cold 14 days	Norovirus (winter vomiting) 2 to 3 days	Sinus infection 14 to 21 days
-------------------------	--	-------------------------------	---	---

Contact your GP if your symptoms are getting worse or if

URINARY TRACT INFECTIONS

A leaflet for older adults and carers.

WHAT IS A URINE INFECTION?

A urine infection occurs when bacteria in any part of the urine system cause symptoms.

If a urine test finds bacteria but you are otherwise well, do not worry, this is common, and antibiotics are not usually needed. However, severe urine infections can be life threatening.

WHAT YOU CAN DO TO HELP PREVENT A URINE INFECTION?

Are you drinking enough? Look at the colour of your urine.

- Drink enough fluid (6-8 glasses) so that you pass pale coloured urine regularly during the day, and to avoid feeling thirsty, especially during hot weather.
- Avoid drinking too many fizzy drinks or alcohol.
- There is no proven benefit of cranberry products or cystitis sachets.
- Prevent constipation. Ask for advice if needed.
- Maintain good control of diabetes.

Stop bacteria spreading from your bowel into your bladder:

- Wipe genitals from front to back after using the toilet.
- Change pads and clean genitalia if soiled.
- Keep the genital area clean and dry; avoid scented soaps.
- Wash with water before and after sex.

Speak to your pharmacist about referral to a GP or other treatments.

WHAT SIGNS AND SYMPTOMS SHOULD YOU LOOK OUT FOR?

Consider these symptoms if you have a urinary catheter:

- Shivering or shaking
- High or low temperature
- Kidney pain in your back just under the ribs

New or worsening signs of urine infection in all people:

- Pain or burning when passing urine
- High or low temperature
- Shivering or shaking
- Urgency (feeling the need to urinate immediately)
- Pain in your lower tummy above public area
- Inconvenience (wetting yourself more often than usual)
- Passing urine more often than usual
- Cloudy urine, or visible blood in your urine
- Confusion, change in behaviour, or unsteadiness on feet

ALTHOUGH CONFUSION IS CAUSED BY URINE INFECTION, CONSIDER OTHER THINGS THAT MAY ALSO CAUSE CONFUSION

- Pain
- Constipation
- Fear sleep
- Low mood
- Not drinking enough
- Side effects of medicine
- Other infection
- Change in your routine or home environment
- Poor diet

WHAT CAN YOU DO TO HELP FEEL BETTER?

- Drink enough fluid so that you pass urine regularly during the day, especially during hot weather.
- Take paracetamol regularly, up to 4 times daily to relieve fever and pain.

WHAT MIGHT YOUR PHARMACIST / NURSE / DOCTOR DO?

- If your symptoms are likely to get better on their own you may receive self-care advice and pain relief.
- Ask you to drink more fluids.
- Ask you for a urine sample.
- You may be given an antibiotic that you can use if your symptoms don't improve or you start to feel worse.

ALWAYS TRUST YOUR PHARMACIST'S / NURSE'S / DOCTOR'S ADVICE ABOUT ANTIBIOTICS

- Antibiotics can be life saving for serious urine infections.
- But antibiotics are not always needed for urinary symptoms.
- Common side effects of taking antibiotics include thrush, rashes, vomiting and diarrhoea; ask for advice if you are worried.
- Antibiotics affect the bacteria in your bowel, which may make them resistant to antibiotics for at least a year.
- Always antibiotics working, only take them when your doctor/nurse advises them.

WHEN SHOULD YOU GET HELP?

The following symptoms are possible and should be assessed urgently:

Contact your GP Practice or call NHS 24 (Scotland dial 111, NHS or GP practice (NI))

- Shivering, chills and muscle pain
- Nit passing urine all day
- Trouble breathing
- Visible blood in your urine

Symptoms are getting a lot worse, or 2 days of starting antibiotics.

Trust your instincts, ask for advice if you are worried.

RESPIRATORY TRACT INFECTION

A step-by-step guide on how to manage your infection.

SELF-CARE STEPS

- How to help make yourself better
- Check how long your symptoms last
- Look out for serious symptoms
- Where to get help

For more information, visit the NHS website www.nhs.uk

1. HOW TO HELP MAKE YOURSELF BETTER

Whatever your infection, you can do the following to help:

- Take paracetamol to reduce a fever, always follow the instructions.
- Get plenty of rest until you feel better.
- Use tissues when you sneeze to help stop infections spreading.
- Ask your pharmacist for advice on reducing your symptoms.
- Drink enough fluids to avoid feeling thirsty.
- Wash your hands to help stop infections spreading.

2. CHECK HOW LONG YOUR SYMPTOMS LAST

Ears Must get better by 8 days	
Sore throat Must get better by 7-8 days	
Cold Must get better by 14 days	
Cough Must get better by 21 days	

If you are not starting to improve a little by the times given above, seek advice from your GP practice.

If you are feeling a lot worse, phone NHS 111, NHS Direct Wales or NHS 24 (see step 4).

UTI-RTI pictorial leaflet – simplified version



TARGET

Keep Antibiotics Working

Using STARWAVE to predict hospitalisation in children

STARWAVE was developed from 8,394 UK children aged 3m-16y, presenting to GP practice with acute (≤ 28 d) **COUGH & RTI**

The seven symptoms and signs are:

- S** short duration of illness (≤ 3 days)
- T** Parent reported fever in the previous 24 hours or **temperature** $\geq 37.8^\circ\text{C}$ at presentation
- A** age < 2 years
- R** clinician reported inter/subcostal **recession**
- W** clinician reported **wheeze** on auscultation
- A** current diagnosis of **asthma**
- V** parent reported moderate/severe **vomiting** in the previous 24 hours

Children with score

- **0-1 (67%): very low risk** (around 1:320) of future admission so can use 'no' antibiotic strategy
- **2-3 (30%) 'normal' risk** of future admission (around 1:70). Suggest no or delayed antibiotic
- **4 or more (3% of all children) should be closely monitored for signs of deterioration**, as 11.7%, $\sim 1:9$ admitted. Prescribe immediate antibiotic. Arrange same-day or next-day follow-up



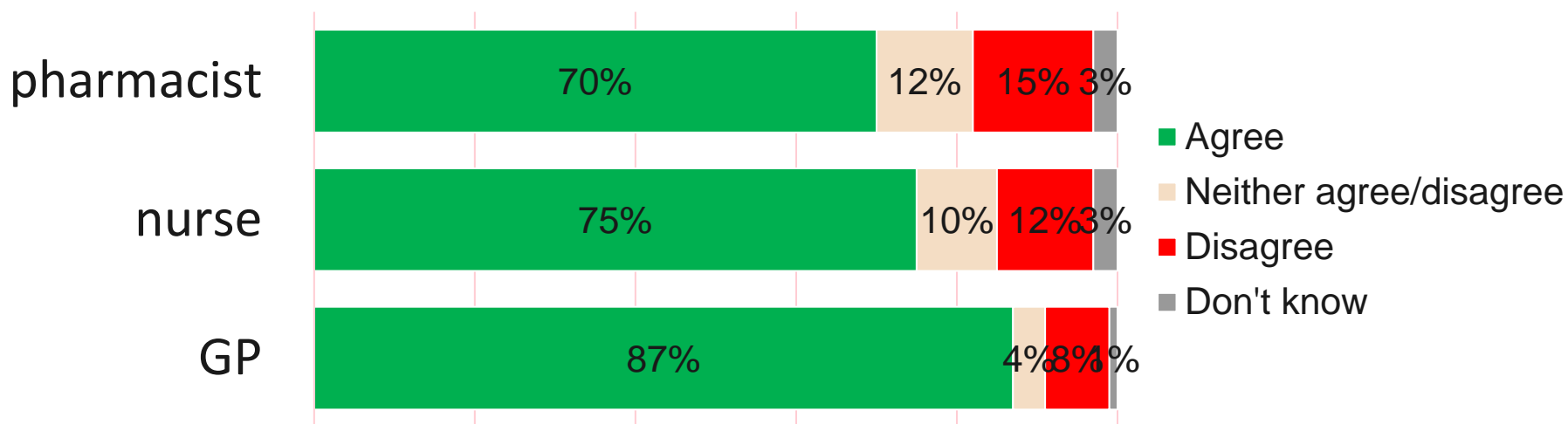
TARGET

Keep Antibiotics Working

3. Patient Pressure

The patient perspective: A 2020 survey showed patients trust their HCP's advice

I trust my...

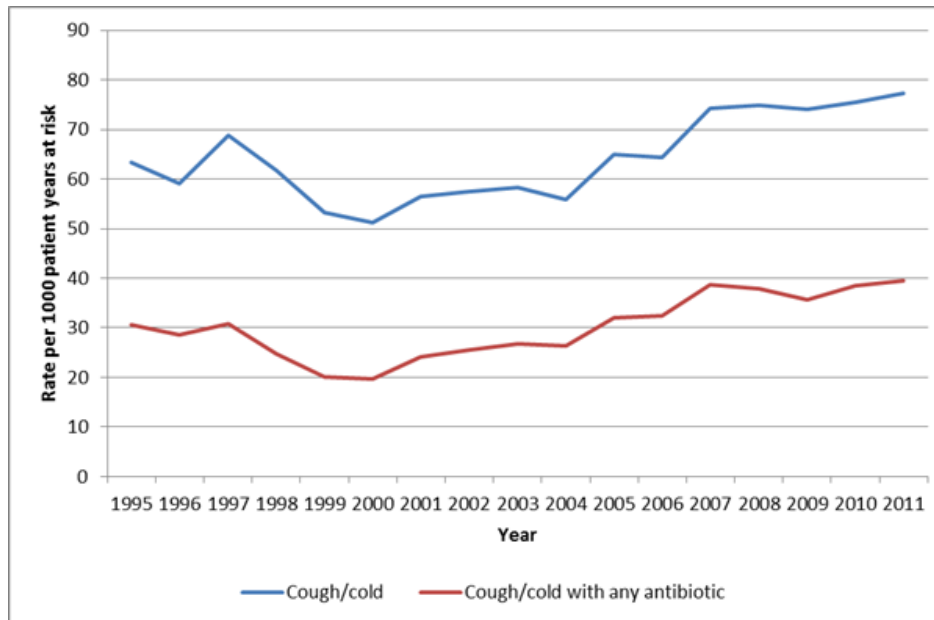


...advice as to whether or not I need an antibiotic



Prescribing: Consultation rates related to acute cough & cold

**537 UK GP practices
1995-2011**



In a longitudinal study, practices who reduced prescribing experienced a reduced consultation rate

Thus patients can be retrained not to expect antibiotics reducing your consultations



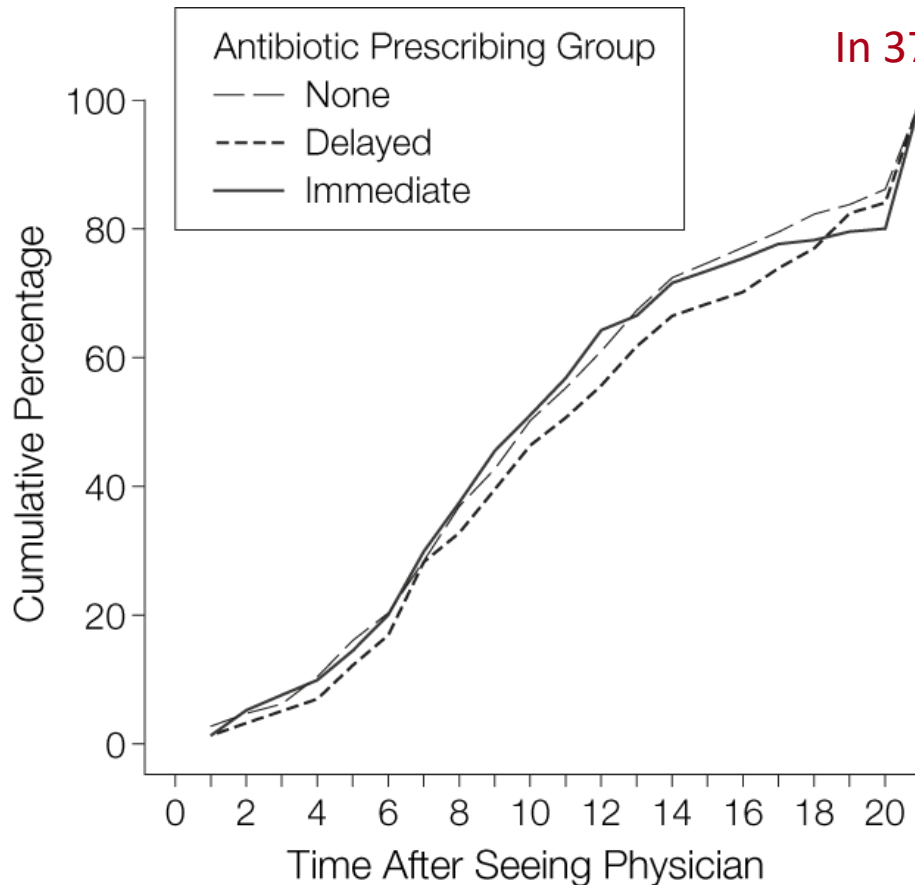
TARGET

Keep Antibiotics Working

Back-up / delayed prescribing

The evidence

Duration of Cough After Physician Visit Until Patient Is Feeling Better



Patient satisfaction with treatment

Treatment Choice

Patients

No antibiotic

130/181 (72%)

Delayed antibiotic

147/190 (77%)

Immediate antibiotics

166/194 (86%)



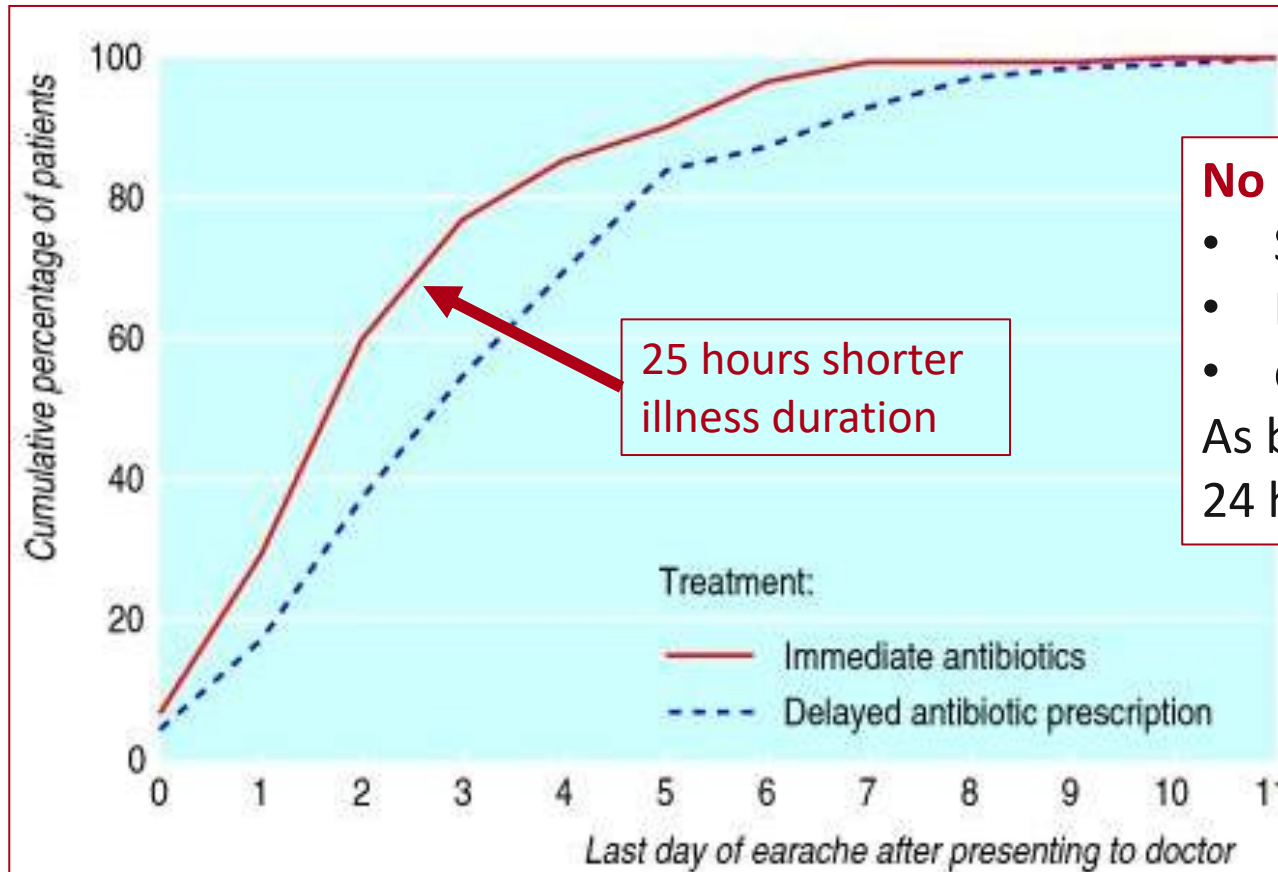
TARGET

Keep Antibiotics Working

Duration of symptoms of AOM in children after seeing doctor

Immediate versus delayed antibiotics:

Clinical Scenario
Acute Otitis Media



No difference in:

- School absence
- Pain
- distress scores

As benefits mainly AFTER 24 hours when pain less



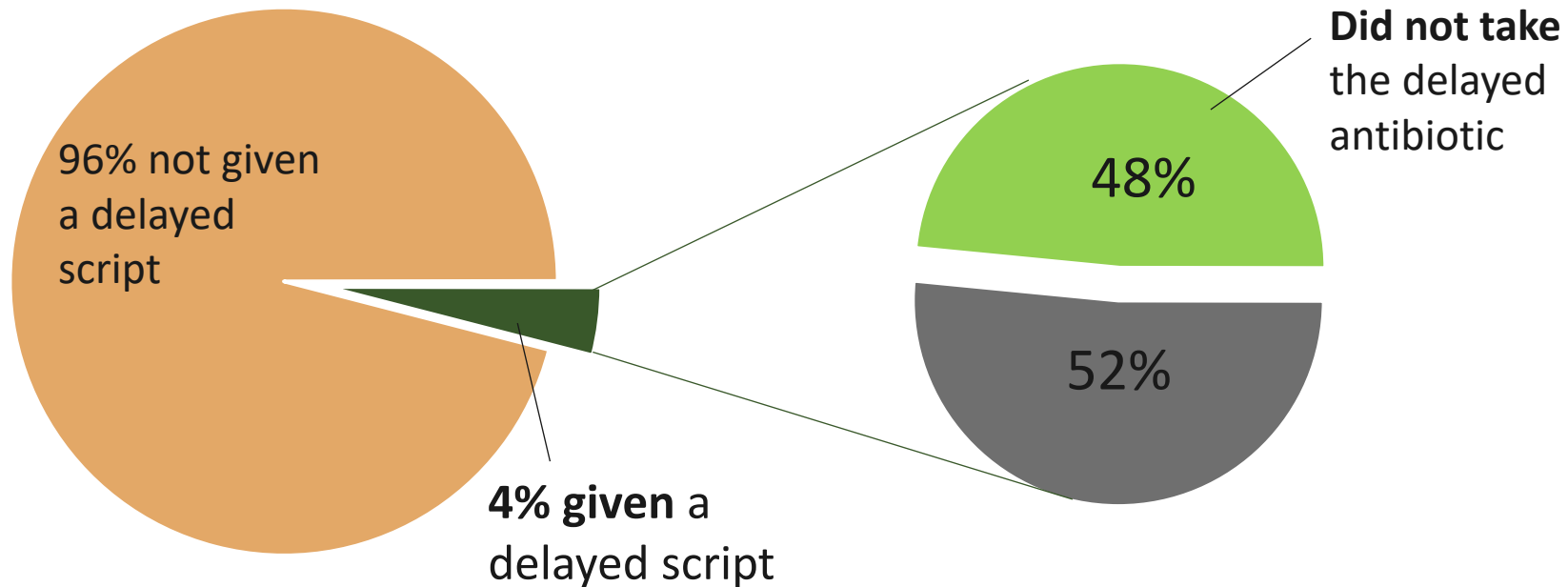
TARGET

Keep Antibiotics Working

Back up/delayed prescribing

The Patient Perspective:

What patients do when given a delayed script?



77% of all respondents felt that it was acceptable to be offered a delayed script by their GP



TARGET

Keep Antibiotics Working

HOW TO DO IT: II

? Re contact

? Post date

? Ask to collect

? Give it

WHICH WAY TO DELAY?

PIPS TRIAL

	No Ab	Re contact	Postdate	Collect	Patient-led	LR chip
Sx Severity	1.62	1.60	1.82	1.68	1.75	0.6
Duration days mod bad Symps (median)	3	4	4	4	4	0.3
Belief in Abs	71%	74%	73%	72%	66%	0.8
Ab Use	26%	37%	37%	33%	39%	0.3
Vsatisfied	79%	74%	80%	88%	89%	0.8

Symptom severity¹ outcome: 0 = no problem...6 as bad as it could be; alpha 0.71-0.79; srm 1.6

It is not as effective as no offer of a prescription?

- Yes slightly higher rates of antibiotic use, but fine
- It will reduce number of patients who come back to see you by 1/3

Medico-legal consequences?: complications

- Similar reduction in complications compared with an immediate antibiotics
- Two very large cohorts to show that this the case

It takes more time?

- Most of the 6 Rs you should be doing anyway
- The key difference is advice about when to consider cashing in

Paul Little's advice: Try it: patients like it and you will get quicker

It's easy, but do it properly (and will then reduce antibiotic use)

Remember the 6Rs (most of which are simply good practice!):

Reassurance;

Reasons not to use antibiotics

Relief: paracetamol (v limited NSAIDs)

Realistic natural history 1/2 week (OM), 1 wk. (throat), 2 wks. (sinus) 3 wks. (chest)

Reinforce key message: **ONLY use if getting worse or not even STARTING to settle in the expected average time**

Rescue (Safety netting)

Aim to keep it for the 20-30% where you are unsure

Audit to check how often you are using it

It will reduce complications and save you time

Fewer complications than no prescription;

Fewer repeat consultations compared with no prescription or immediate



The TARGET Website

Keep **Antibiotics** Working

<p>TARGET Guides, Updates and News</p> <p>Find out more</p>	<p>UTI Resource Suite</p> <p>Find out more</p>	<p>Leaflets to Share with Patients</p> <p>Find out more</p>
<p>Resources for Clinical and Waiting Areas</p> <p>Find out more</p>	<p>Audit Toolkits, Self Assessment and Action Planning</p> <p>Find out more</p>	<p>Antibiotic and Diagnostic Quick Reference Tools</p> <p>Find out more</p>
<p>Training Resources</p> <p>Find out more</p>	<p>TARGET Trainers and Training</p> <p>Find out more</p>	<p>Information for Commissioners</p> <p>Find out more</p>

Self Assessment Checklist to complete whilst waiting for whole team

SELF ASSESSMENT CHECKLIST

What would be good practice now?

1. Do you use national or local antibiotic guidance when considering how to treat common infections? Yes No

You should be using local antibiotic guidance – this is usually based on national guidance produced by [National Institute for Clinical Excellence \(NICE\) and Public Health England \(PHE\)](#) and may be modified locally by commissioners and microbiologists to localise the antibiotic guidance in accordance with local resistance and susceptibility patterns. This should be consistently used by all staff in your practice and out-of-hours services. The [Summary of antimicrobial prescribing summary tables](#) are available on the NICE website. A document containing full information on the rationale for each management decision and antibiotic choice specific to PHE content is hosted on the [PHE website](#) – this will be very useful for trainees or for your further professional development.

2. Do you analyse and discuss antibiotic prescribing at your practice in comparison to local indicators at least once a year? Yes No

Analysing antibiotic prescribing figures against set indicators during the audit process enables the surgery to benchmark itself and determine whether there is a need to review their antibiotic prescribing practices. It is good practice to keep these figures and re-audit annually. [Tackling antimicrobial resistance 2019–2024 – the UK’s five-year national action plan](#) aims to halve healthcare associated gram negative bloodstream infections by 2024 and reduce the number of specific drug-resistant infections in people by 10% by 2025. Use national prescribing data on [fingertips](#) to compare antibiotic prescribing in your practice to local levels.

3. Do you use patient focused strategies to highlight the importance of responsible antibiotic use? For example, videos and posters in clinical and waiting areas. Yes No

There are [patient facing materials](#) available in the TARGET toolkit that can be used in the surgery waiting areas or in the consultation to improve patient awareness and to facilitate communication around responsible antibiotic use, antibiotic resistance and patient self-care of infections. You can refer to posters and videos during your consultations to highlight that there is a national strategy to tackle resistance and inappropriate antibiotic use.



Sources to visualise primary care antibiotic prescribing data

- PrescQIPP
- PHE Fingertips
- Open Prescribing
- NHS England Dashboard
- ePACT2

AMS Visual Analytics to support NHS antimicrobial stewardship improvement 2020/21

In the visualisation linked below, you will find PrescQIPP reports produced as part of our collaboration with NHS England and NHS Improvement to support delivery of the UK UK 5-year action plan for antimicrobial resistance 2019 to 2024.

Data is taken from the NHSBSA EPD data set via the open data portal.

▼ < Introduction Commissioner scatterplot & b... GP scatterplot Commissioner interactive maps Commissioner time period table Commissi >



Antimicrobial Stewardship visual analytics to support NHS antimicrobial stewardship improvement 2020/21 – AMR metric reporting

Data source: NHSBSA EPD data set via the open data portal

AMS Visual Analytics to support NHS antimicrobial stewardship improvement 2020/21



Commissioner scatterplot & b...

GP scatterplot

Commissioner interactive maps

GP scatter plot & bar chart showing 12 months rolling data to Sep-20

Select country:
England only

Select commissioner grouping:
STP GREATER MANCHESTER HEALT..

Select commissioner(s):
All

PCN/Cluster:
All

Select 12m rolling period to:
Sep-20

Highlight commissioner(s):

- NHS BOLTON CCG
- NHS BURY CCG
- NHS HEYWOOD, MIDDLETON &..
- NHS MANCHESTER CCG
- NHS OLDHAM CCG
- NHS SALFORD CCG
- NHS STOCKPORT CCG
- NHS TAMESIDE AND GLOSSOP ..
- NHS TRAFFORD CCG
- NHS WIGAN BOROUGH CCG



www.rcgp.org.uk/targetantibiotics

● CCG □ PCN ▲ Practice

AMS Visual Analytics to support NHS antimicrobial stewardship improvement 2020/21

In the visualisation linked below, you will find PrescQIPP reports produced as part of our collaboration with NHS England and NHS Improvement to support delivery of the UK UK 5-year action plan for antimicrobial resistance 2019 to 2024.

Data is taken from the NHSBSA LPD data set via the open data portal.

PCN time period table | **PCN time period trends** | **PCN bar charts** | Practice scatter plot & bar chart | Practice inter



NHS England and NHS Improvement



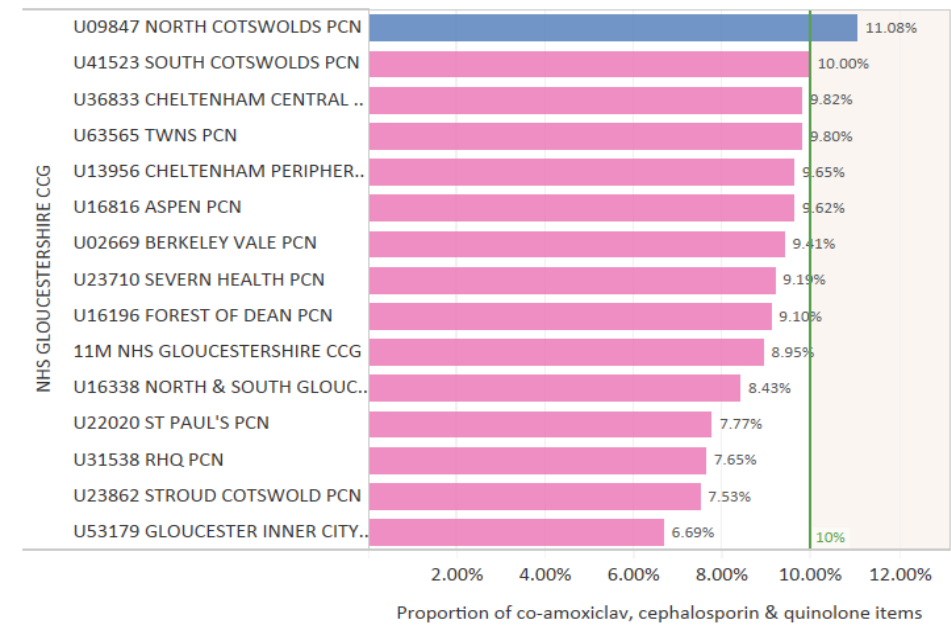
Antimicrobial Stewardship data reporting against NHS AMR metrics 2020/21

Select commissioner grouping:
STP GLOUCESTERSHIRE

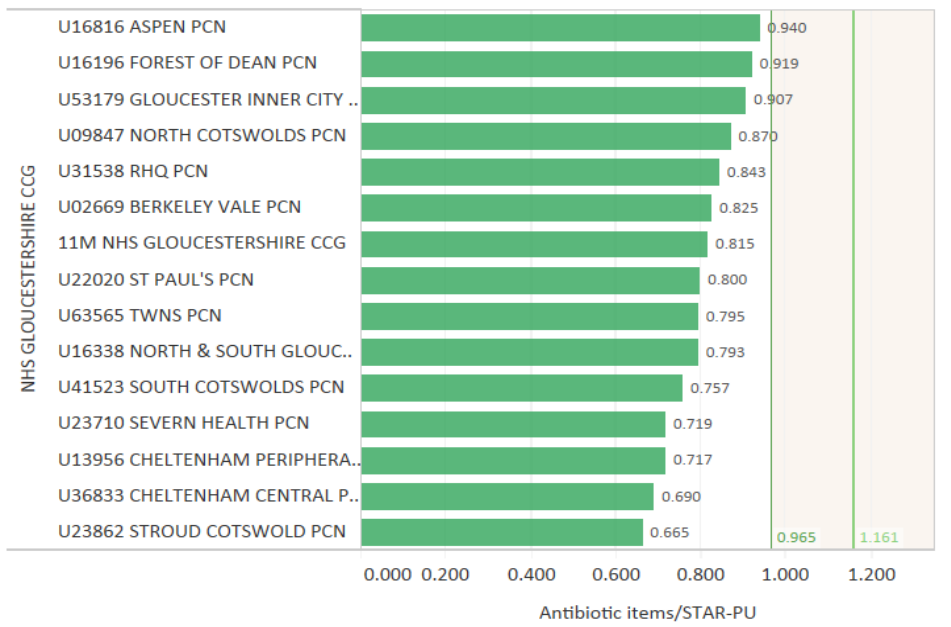
Select commissioner:
NHS GLOUCESTERSHIRE CCG

Sep-20
Select 12m rolling period to:

PCN bar charts proportion of co-amoxiclav, cephalosporin & quinolone items showing 12 months rolling data to Sep-20



PCN bar charts Antibacterial items/STAR-PU showing 12 months rolling data to Sep-20

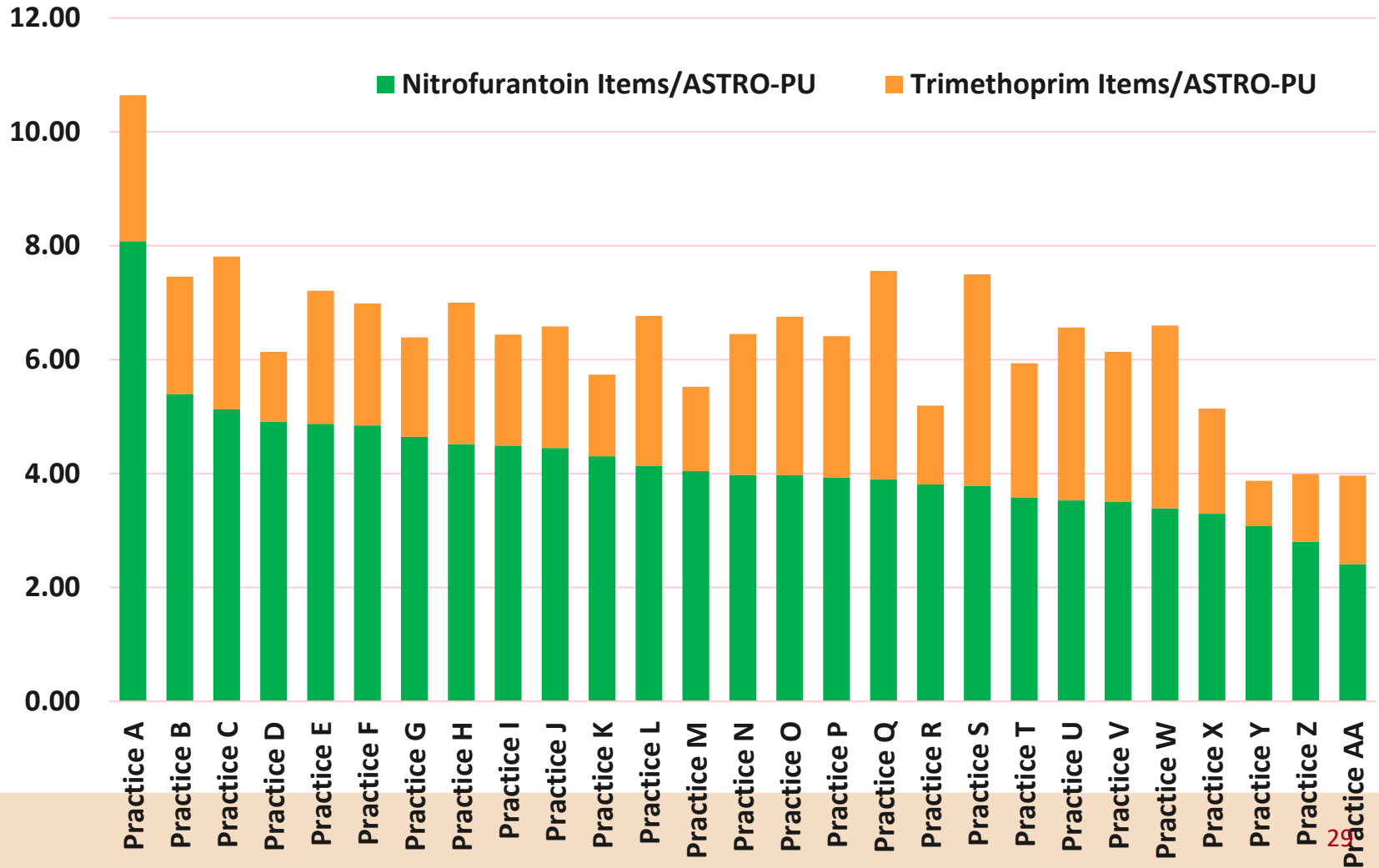




TARGET

Keep Antibiotics Working

Nitrofurantoin & Trimethoprim Items per 1,000 ASTRO-PU August 2019 to July 2020





TARGET

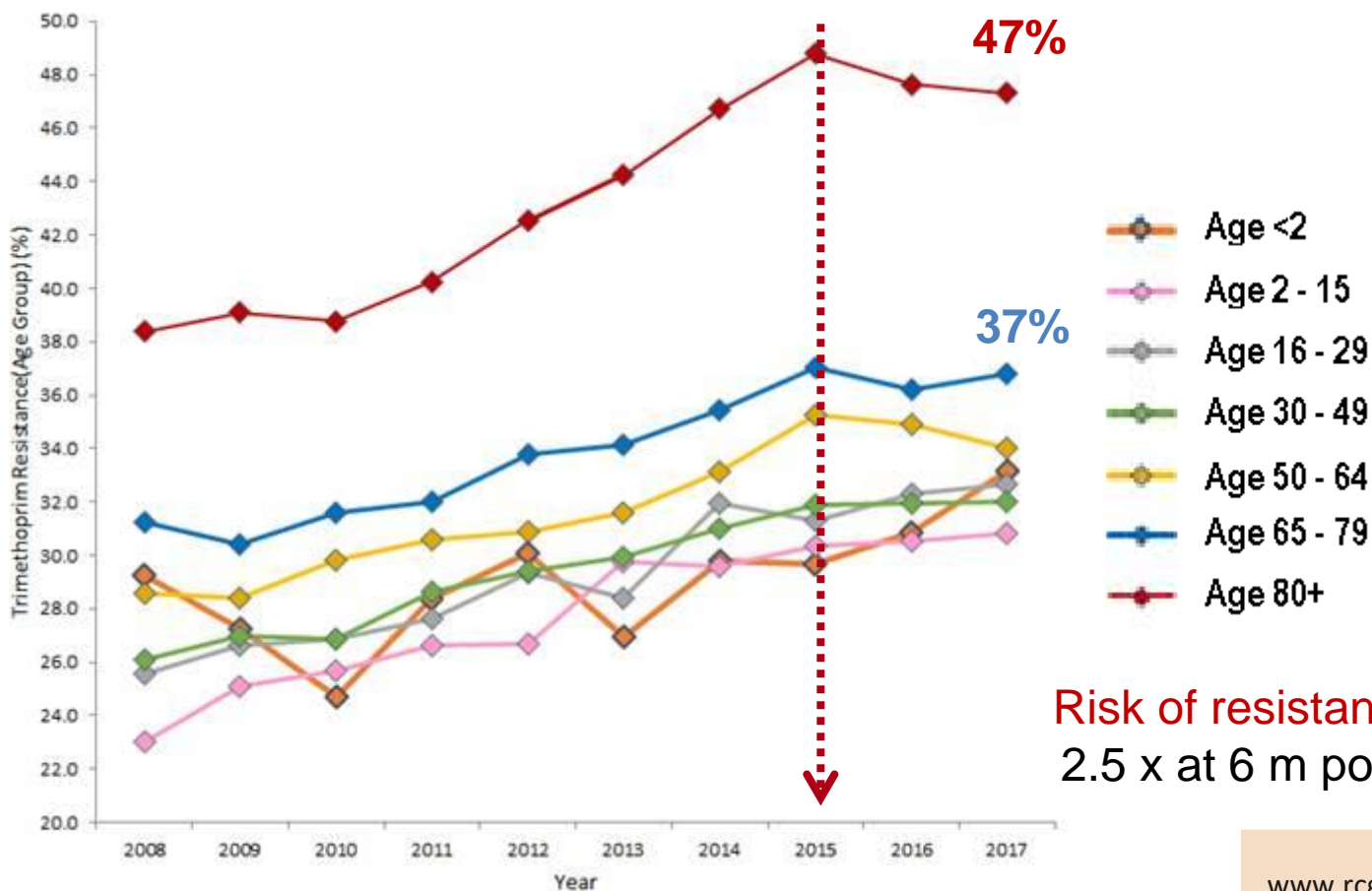
Keep Antibiotics Working

Why nitrofurantoin first-line?

Trimethoprim resistance is very high

Nitrofurantoin replaced trimethoprim as 1st line in PHE guidance December 2014

Clinical Scenario
Urinary Tract Infection



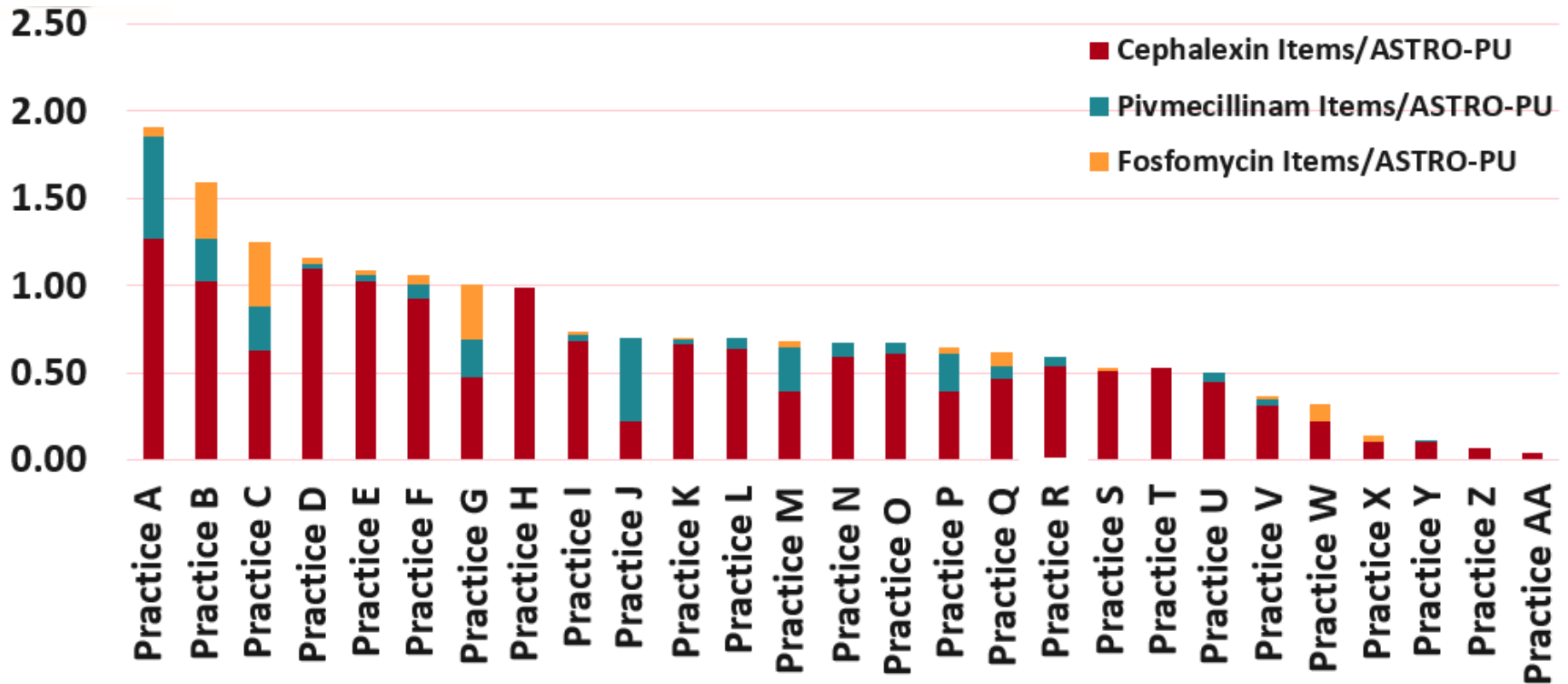
Risk of resistance remains
2.5 x at 6 m post antibiotic



TARGET

Keep Antibiotics Working

Cephalexin, Pivmecillinam & Fosfomycin Items per 1,000 ASTRO-PU August 2019 to July 2020





Fingertips AMR Local Indicators

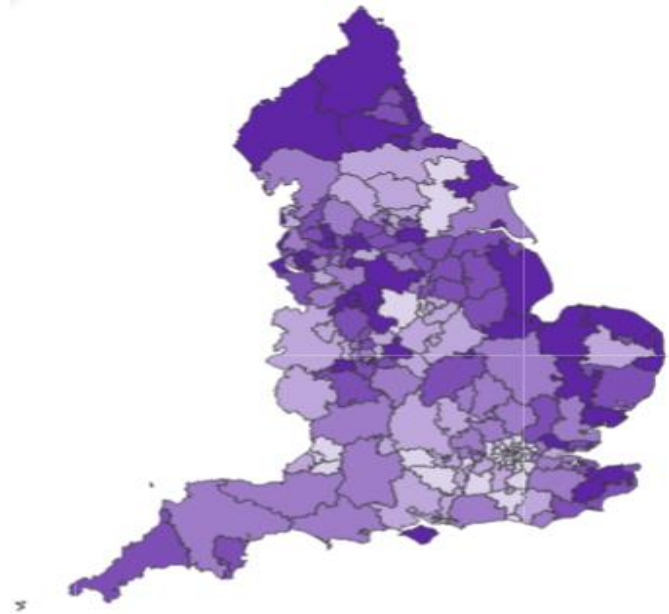
<https://fingertips.phe.org.uk/profile/amr-local-indicators>

Since April 2016 146 indicators launched in six domains:

- Antimicrobial Resistance (AMR)
- Antibiotic Prescribing
- Healthcare-Associated Infections (HCAI)
- Infection Prevention and Control (IPC)
- Antimicrobial stewardship (AMS)
- Supporting NHS England Initiatives

By

- CCG, General Practice,
- NHS acute Trust, lab



AMR local indicators

Supporting NHS England Initiatives

Antimicrobial Resistance

Antibiotic Prescribing

Health Care Associated Infection

Infection Prevention and Control

Antimicrobial Stewardship

All Trust

All Clinical Commissioning Group

Overview
Compare indicators
Map
Trends
Compare areas
Area profiles
Definitions
Download

Area type

Areas grouped by

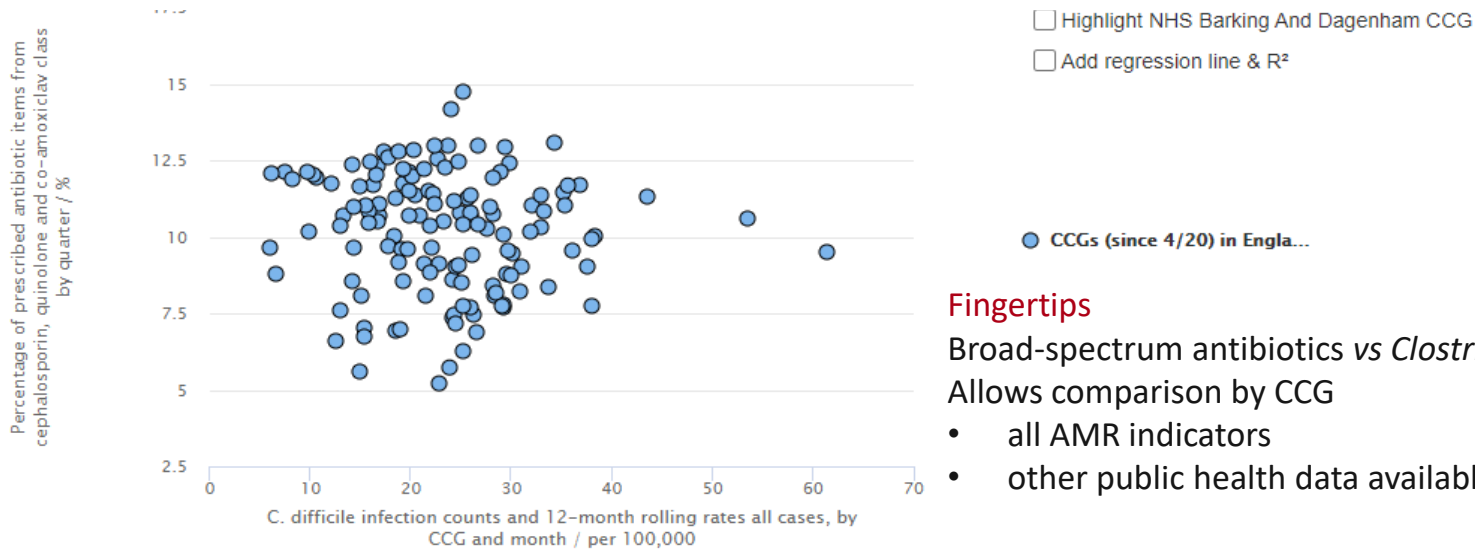
Area

[Search for an area](#)

[10 most similar CCGs to NHS Barking And Dagenham CCG](#)

[Filter indicators](#)

Indicator



Fingertips

Broad-spectrum antibiotics vs *Clostridium difficile* rates
Allows comparison by CCG

- all AMR indicators
- other public health data available

AMR local indicators

Search for indicators

- Supporting NHS England Initiatives
- Antimicrobial Resistance
- Antibiotic Prescribing
- Health Care Associated Infection
- Infection Prevention and Control
- Antimicrobial Stewardship
- All Trust
- All Clinical Commissioning Group

Overview Compare indicators Map Trends Compare areas Area profiles Definitions Download

Area type: CCGs (2019/20) | Areas grouped by: England | Benchmark: England

Area: NHS Barking And Dagenham [Search for an area](#) [Filter indicators](#)

Indicator: Percentage of community E. coli (or coliform) urine specimens non-sus [Hide legend](#)

Quintiles: Best Worst Not applicable

* a note is attached to the value, hover over to see more details

Areas All in England Display Table Table and chart

Percentage of community E. coli (or coliform) urine specimens non-susceptible to trimethoprim; by quarter

2020 Q1 Proportion - %

Export table as image Export table as CSV file

Area	Count	Value	95% Lower CI	95% Upper CI
England	25,322	24.7*	24.4	25.0
NHS Warwickshire North CCG	30	60.0	-	-
NHS Coventry And Rugby CCG	45	47.4	-	-
NHS South Warwickshire CCG	44	42.7	-	-
NHS Bradford City CCG	47	41.6	-	-
NHS Southend CCG	140	34.5	-	-
NHS Greenwich CCG	164	33.1	-	-
NHS Crawley CCG	56	32.2	-	-
NHS Wandsworth CCG	25	32.1	-	-
NHS Islington CCG	110	31.6	-	-
NHS Bexley CCG	160	31.6	-	-
NHS Bradford Districts CCG	219	31.4	-	-
NHS Tower Hamlets CCG	172	31.1	-	-
NHS Sandwell And West Birmingham CCG	181	30.8	-	-
NHS Haringey CCG	162	30.8	-	-
NHS Barnet CCG	309	30.7	-	-
NHS Thurrock CCG	77	30.4	-	-
NHS Isle Of Wight CCG	7	30.4	-	-
NHS Lewisham CCG	196	30.2	-	-
NHS Berkshire West CCG	108	30.2	-	-
NHS Camden CCG	349	30.1	-	-
NHS Bromley CCG	162	29.9	-	-

Percentage of community E. coli (or coliform) urine specimens non-susceptible to trimethoprim; by quarter



Key 2020 antibiotic prescribing messages

- Back-up prescribing works
- Reducing prescribing helps reduce workload
- The benefit achieved from prescribing antibiotics in otitis media in children is small
- **Do not** dipstick over 65s
- Prescribe doxycycline for acute cough
- Prescribe cefalexin for pyelonephritis
- Develop an action plan on how to use the diagnostic flowcharts, leaflets and audits



Action planning:

Developing priorities, for you now

Aim: to improve antibiotic use and help control resistance

HOW

Pause the webinar and spend a few minutes noting what you can do in your practice to help improve

- Your antibiotic use
- Antibiotic prescribing in your practice

Please note

- who will do it
- How it will be attained
- When it will be attained by



Action planning:

Developing priorities, for you now

Aim: to improve antibiotic use and help control resistance

HOW

1. Make sure everyone has access to antibiotic guidance
2. Use the diagnostic flowcharts to help patient triage
3. Use back-up/delayed prescribing (the leaflet will help)
4. Use leaflets to safety net and increase patient understanding
5. Develop computer prompts to increase use of leaflets and flowcharts – use Accurix or Ardens
6. Use Fingertips or PrescQipp to monitor usage
7. Do an antibiotic audit with action planning

Decide now who will be responsible for each of these agreed actions



Many thanks to everyone at the RCGP and in the PCIU for facilitating this webinar

Please complete the evaluation form bit.ly/TARGETcascaded to receive your CPD certificate.

If you have any queries, please contact TARGETAntibiotics@phe.gov.uk