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## Patient perceptions of infections & antibiotics: insights from national surveys

TARGET Antibiotics Webinar  
November 2024

Hello everyone

Thank you for joining the TARGET webinar today.

I can't see any of you, but I know we have quite a few people subscribed so are looking forward to an informative evening with some good discussion.

I am Emily Cooper, a researcher and programme manager within the TARGET team.

This is our 9th webinar in a series we have done through the RCGP, where we will be focusing on Patient perceptions of infections & antibiotics using data from national surveys.

Format will be the same as previous webinars. Our speaker(s) will present for around 40 - 45 mins and we will aim to have 15 mins at the end dedicated to Q&A discussion with our panellists.

Panellists will field questions through the webinar and respond to specific questions at the end

Housekeeping

- The chat function is disabled, so please ask questions throughout the presentation using the Q&A function on your screens, you do not need to wait until the end of the talk.
- If you wish to ask your question anonymously, please tick the anonymous box before submitting your question. We will answer as many questions as possible in the allotted time.
- The recording of this webinar will be uploaded to the TARGET toolkit
- You will be sent a link with a brief survey directly to your email shortly after the webinar, please do assist us in improving our webinars by filling this out. Links to sign up to our upcoming webinars in January and March will also be included so do sign up if you're interested.

Click: Next slide

## Introductions – TARGET and RCGP



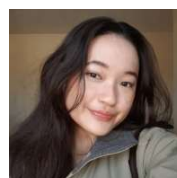
Dr Donna Lecky



Emily Cooper



Catherine Hayes



Ming Lee



Emily Whitehorne



Julie Brooke



Liam Clayton



Joseph Besford



Camilla Stevenson



Dr Dharini Shanmugabavan

Just want to highlight some of the amazing TARGET and RCGP team who are responsible for the work that underpins the TARGET toolkit.

An especially big thank you to Emily, Cath and Camilla, who you won't see today, but worked hard to develop and organise this webinar.

Click – next slide

## Introductions – speakers and panellists



**Dr Donna Lecky**  
Head of the Primary Care &  
Interventions Unit,  
UKHSA  
**Speaker**



**Dr Linda Strettle**  
GP Partner  
The Village Surgery, Rotherham  
**Panellist**



**Dr Dale Weston**  
Principal Behavioural Scientist,  
Behavioural Science and  
Insights Unit (BSIU), UKHSA  
**Panellist**



**Prof Diane Ashiru-Oredope**  
Lead Pharmacist,  
HCAI and AMR Division,  
UKHSA  
**Panellist**

3 November 2024

[www.rcgp.org.uk/TARGETantibiotics](http://www.rcgp.org.uk/TARGETantibiotics)

Next a bit thank you to our speaker and panellists for supporting this event

I will ask them to turn on their cameras and introduce themselves now

Intros and then click to next slide

Click – next slide

## Aims

1. Understand public knowledge, attitudes and behaviours towards antibiotic use for respiratory tract infections.
2. Leverage insights to improve patient understanding and manage expectations regarding common infections and antibiotic use.

### Presenter talk - EC

This webinar theme was chosen based on feedback from TARGET users requesting a webinar focusing on the **patient perspective of how common infections are managed in primary care**.

Through this webinar, participants will be better able to:

1. Understand public knowledge, attitudes and behaviours towards antibiotic use for respiratory tract infections.
2. Leverage insights from these surveys to improve patient understanding and manage expectations regarding common infections and antibiotic use.

### Who is it for?

Medical practitioners in the primary care setting including but not limited to:

1. GPs
2. Nurse prescribers
3. Practice and community pharmacists
4. Those who work to support antimicrobial stewardship in these groups (e.g. those working in regional health boards or trusts)

UKHSA Primary Care and Interventions unit have carried out public surveys since the 90s examining public health seeking behaviours for common infections and to understand

public knowledge about antibiotic use and resistance. This webinar will reveal insights from public survey data (2019 – 2024) covering knowledge of common infections and antibiotics, as well as relevant health-seeking behaviours. We will also review resources and techniques to discuss non-prescribing options with patients, supporting shared decision-making, self-care and safety netting.

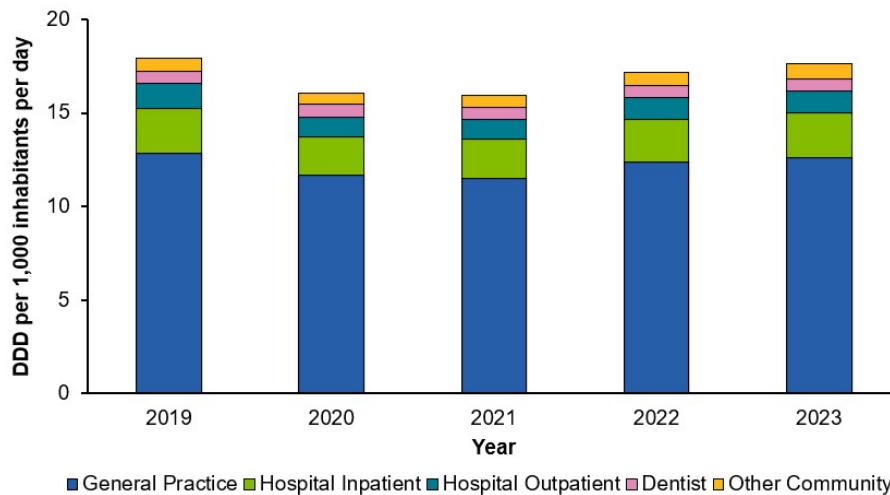
I'll now pass over to Donna who leads on this work

### **References**

1. McNulty C, et al. What the public in England know about antibiotic use and resistance in 2020: a face-to-face questionnaire survey. *BMJ open*. 2022 Apr 1;12(4):e055464.
2. Read B, et al. Changes in public health-seeking behaviours for self-limiting respiratory tract infections across England during the COVID-19 pandemic, *European Journal of Public Health*, Volume 33, Issue 6, December 2023, Pages 987–993, <https://doi.org/10.1093/eurpub/ckad136>

Click

# UK antibiotic prescribing over time



ESPAUR Report 2023-24

5 November 2024

[www.rcgp.org.uk/TARGETantibiotics](http://www.rcgp.org.uk/TARGETantibiotics)

(ESPAUR Report, 2024)

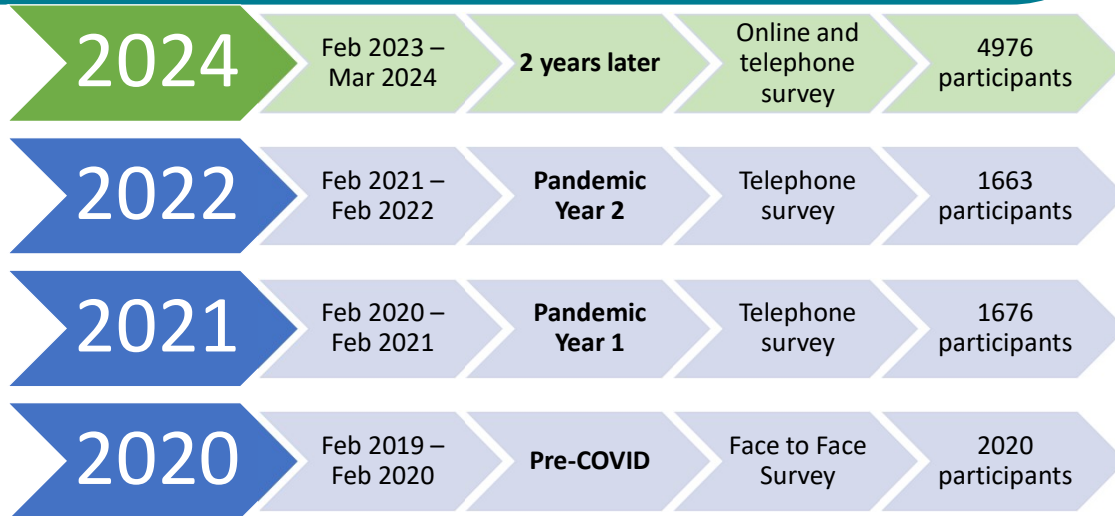
## Presenter Talk

Antibiotic prescribing in primary care setting in England was at a peak in 2014 at over 20 DDD per 1000 population per day, however as you can see here, through a collective effort, we can see a reduction in overall prescribing into 2019 where it was below 14 DDD per 1000 population per day.

The COVID pandemic had a significant impact on prescribing and its across these years that we see the highest decrease in prescribing rates (2020 and 2021) but as we get back to the normal prescribing rates in primary care are starting to increase again and are in fact slightly higher than 2019 levels.

It is well documented that public demand for antibiotics is a contributing factor in prescribing therefore for the rest of this webinar we are going to share insights into public health seeking behaviour for RTIs and their knowledge and attitudes towards antibiotic use and resistance (**next slide**)

## The approach



6 November 2024

[www.rcgp.org.uk/TARGETantibiotics](http://www.rcgp.org.uk/TARGETantibiotics)

### Presenter Talk

As Emily mentioned we have carried out annual surveys with the general public between 2020 and 2024. EXPLAIN THE IMAGE ON THE SCREEN

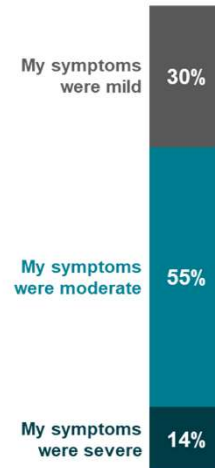
The survey asks people to answer a series of questions about their experiences in the previous 12 months. Topics covered include

- General knowledge and perceptions of antibiotics
- Behaviour and expectations when they had an RTI in the previous 12 months
- Their experiences with antibiotics in the previous 12 months
- Experience, awareness and attitude towards delayed/back up antibiotics
- Associated advice/information they have received about antibiotics (**next slide**)



## Incidence and severity of RTI

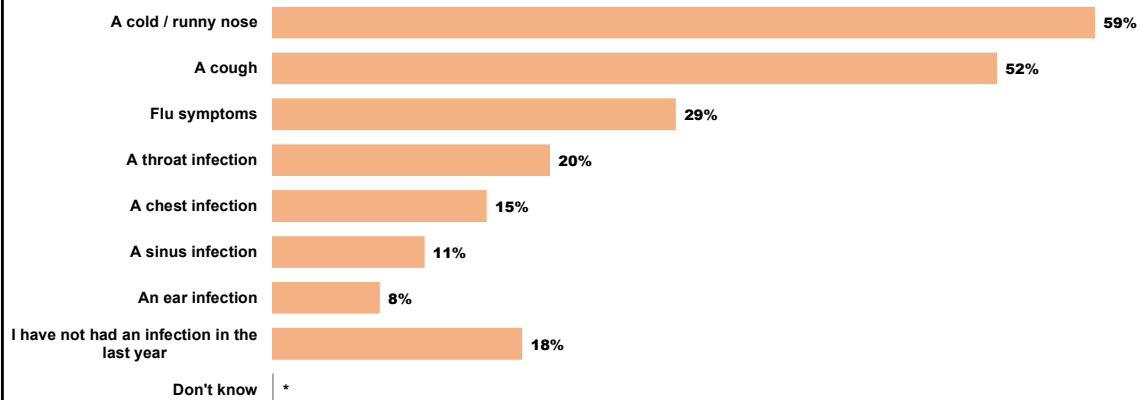
- 4,976 participants surveyed in England
- 71% report having had an RTI / cold in the last 12 months
- The most common RTI symptoms include a cold or cough
- Most cite mild/moderate symptoms



### Presenter Talk

Of the 4,976 participants surveyed in 2024 – 71% reported having an RTI in the past 12 months with the most common symptom being a cold or cough. As you can see from the graph, most ranked the severity of these symptoms as mild to moderate. **(next slide)**

In the last 12 months, since March 2023, which, if any, symptoms or infections have you personally had?



Base: All England participants aged 16+ (n=4976), fieldwork conducted online 15-27 March 2024

All 5% and higher

## Presenter Talk

For those of you who are interested, this is a quick breakdown of the RTIs. **(next slide)**



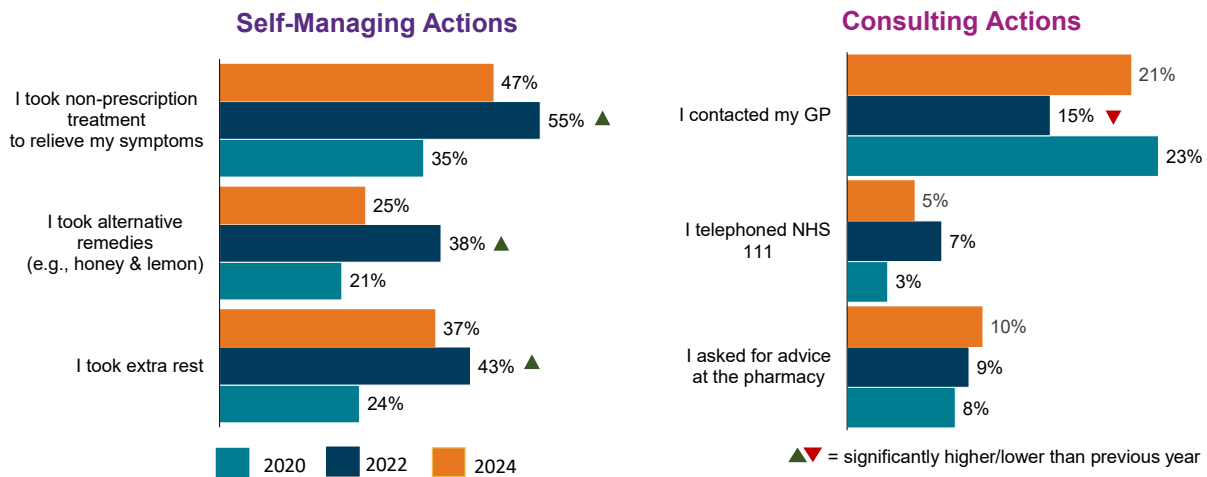
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## Health Seeking Behaviour

For your most recent infection, what actions did you take...

Next we asked participants to consider their most recent infection and asked them what did they do

## Thinking of your most recent infection, which of the following actions, if any, did you take?



Base: All England participants aged 16+ who had an infection (n=3378), fieldwork conducted online 15-27 March 2024

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[www.rcgp.org.uk/TARGETantibiotics](http://www.rcgp.org.uk/TARGETantibiotics)

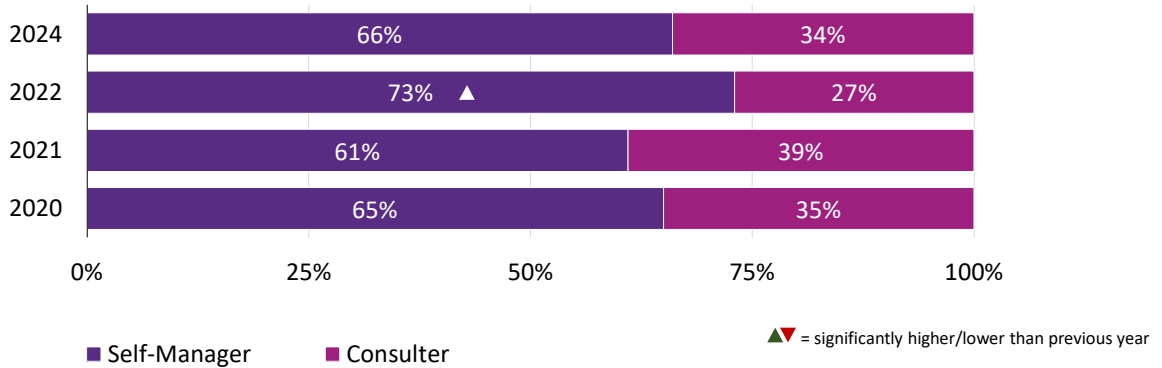
We then asked what actions were taken for their most recent RTI and you can see we have split these according to self-managing actions on the left, and consulting actions where they have spoken with a healthcare professional on the right. On each of the graphs you can see the response based on year

During the COVID pandemic the self-managing actions are occurring more frequently than before the pandemic. Although these actions have reduced quite dramatically in 2024, there are still more self-caring actions in 2024 than 2020. For example, the use of non-prescription treatment to alleviate symptoms has increased from 35% to 55% then back to 47%.

On the right you will also see a reduction in those contacting their general practitioner, or GP, in 2022 (15% of the sample in 2022, compared to 25% in 2021) whilst however this now appears to have returned to pre pandemic levels. **(next slide)**

## Thinking of your most recent infection, which of the following actions, if any, did you take?

Proportion of respondents who did (not) consult a Health Care Professional (HCP) for their most recent RTI

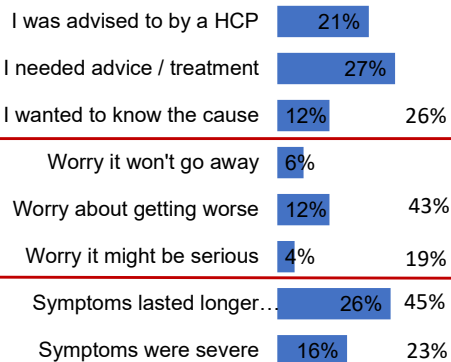


Base: All England participants aged 16+ who had an infection (n=3378), fieldwork conducted online 15-27 March 2024

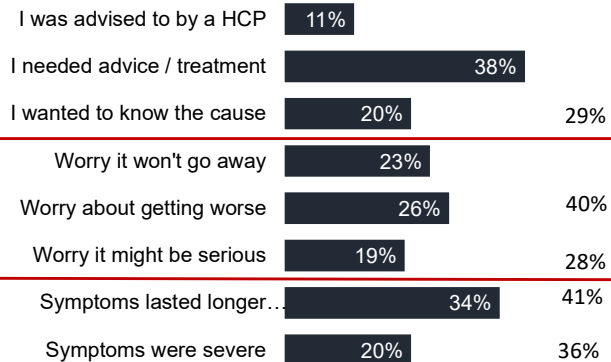
If we look at this as a proportion, we can see that self-care, the purple bar, has increased since the start of the pandemic. I discuss this more in the implications slides, but self-care should be encouraged for self-limiting infections such as RTIs. **(next slide)**

## Why did you go to a Pharmacist or doctor's surgery/ NHS walk-in / minor urgent care / minor injuries / GP OOH for your RTI?

### Pharmacist (n=341)



### Doctor's surgery (n=795)



Base: All England participants aged 16+ who consulted a pharmacy or GP/walk in centre. Fieldwork conducted online 15-27 March 2024

NB. Limited differences across sub-groups

12 November 2024

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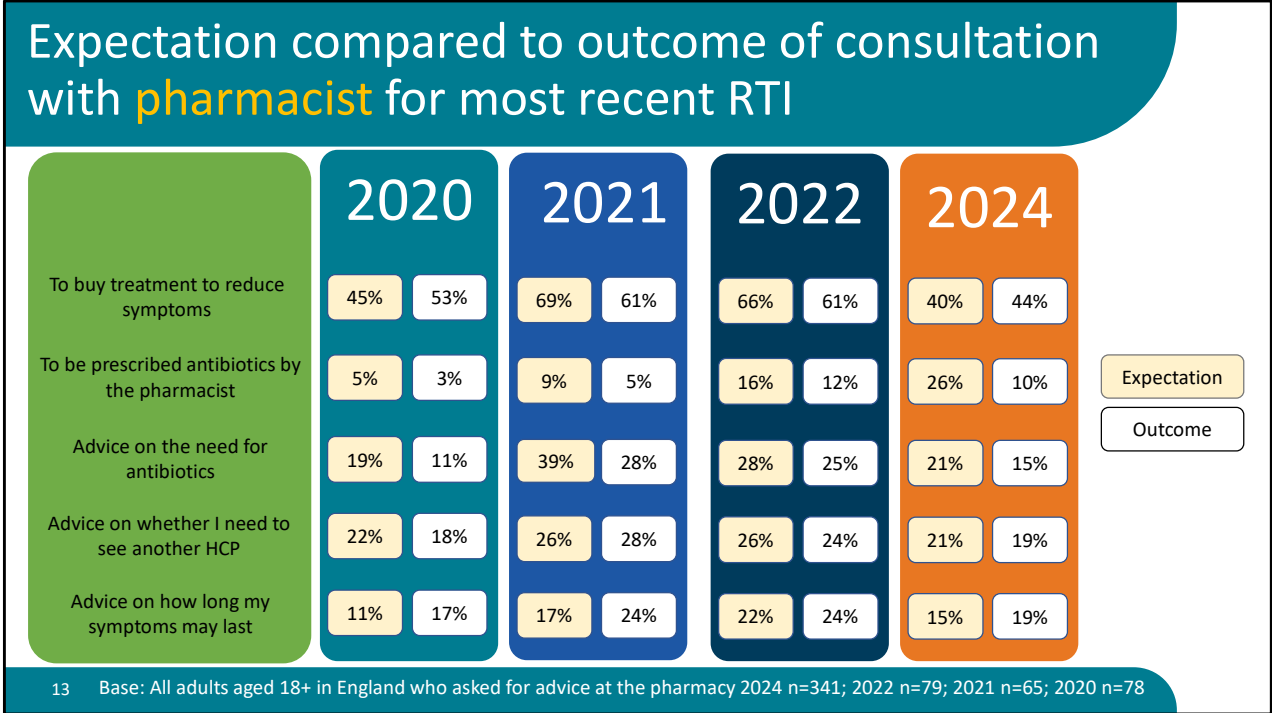
Question Type:  
Prompted / Multi-code

We observe that overall more patients are visiting their GP for RTIs as opposed to the community pharmacy. However, this survey was conducted at the very start of the Pharmacy First scheme which cover many RTIs, so it will be interesting to see how the results change next year.

You can see here the main reasons selected for consulting centred around the need for advice or treatment, worry, and symptom duration.

Unsurprisingly during the COVID pandemic the percentage of people consulting due to worry increased significantly. (press for animation) This is the percentages who reported in 2022.

In the next few slides we will review reported patient expectation during their visit (**next slide**)



Clarification – we are aware that pharmacists do not prescribe antibiotics, they supply antibiotics via PGD however the majority of the general public do not understand this difference therefore for the purpose of this survey we stated prescribed and that's the word I will use moving forward.

Of those who consulted a pharmacist with their most recent RTI – which was around 10% of those with an RTI so baseline numbers here are quite small – what they expected from the consultation, shown in cream colour boxes, and what happened during the consultation, shown in white.

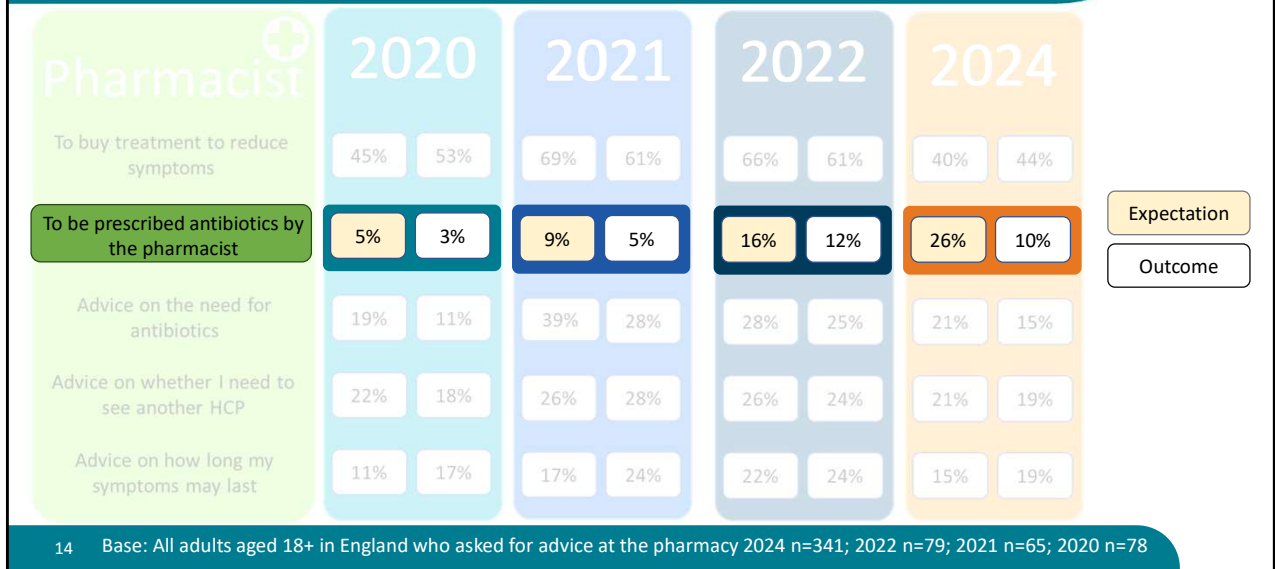
Although interesting, there is nothing really surprising here

- throughout the pandemic we observe an increase in expectations across the board but in 2024 we see this settle back to pre pandemic levels give or take a few percentage points. For example, buy treatment to reduce symptoms
- again for the most part pharmacists are meeting or exceeding patient expectations. Slight exception is perhaps advice on the need for antibiotics, however pre 2024 (**and Pharmacy First**) the **main** remit of the **community** pharmacists was to either direct to general practice or **assess prescriptions and dispense**

**prescribed antibiotics** – not advise on whether antibiotics were needed. (next slide)



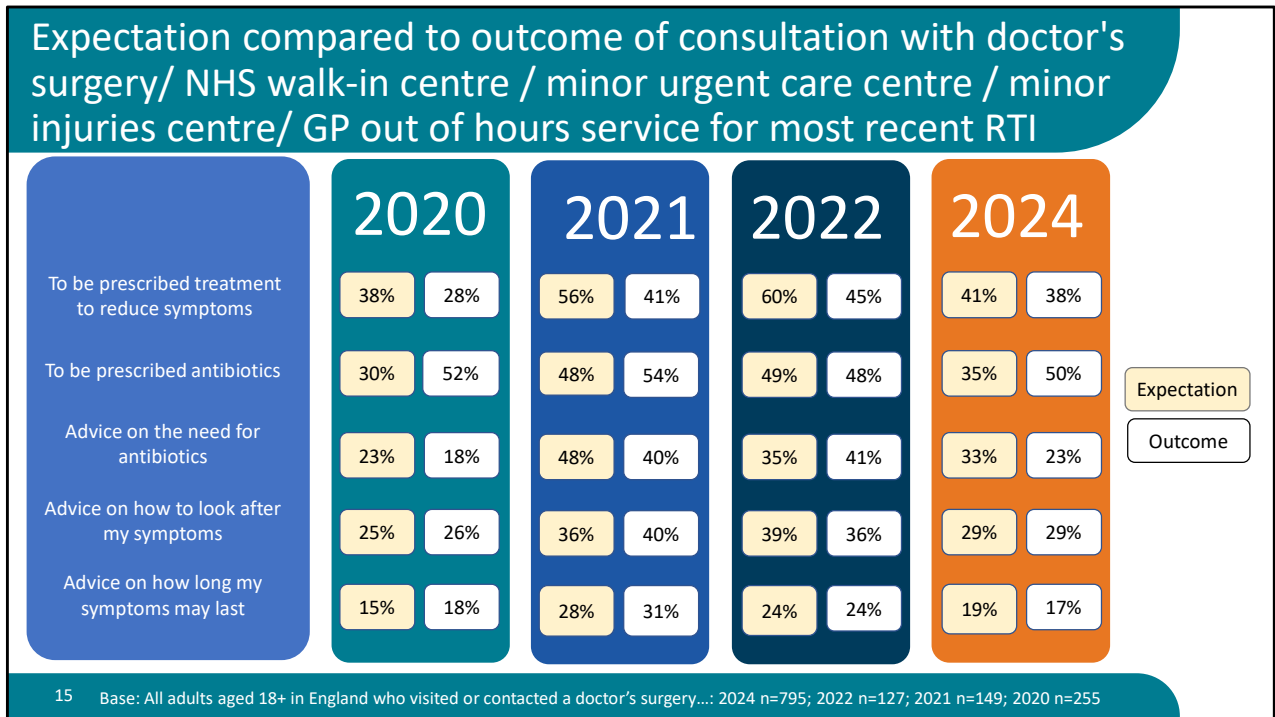
## Expectation compared to outcome of consultation with pharmacist for most recent RTI



### Presenter Talk

- what is interesting here is the huge increase in the proportion of patients who stated they expected to be prescribed an antibiotic by a pharmacist – although this is likely to be because of the introduction of pharmacy first in January 2024, it does not necessarily explain the increase in 2022. **(next slide)**

**Of those who went to a pharmacist expecting to be prescribed antibiotics (small base size here), 32% had also expected advice about an antibiotic prescription for the illness.**



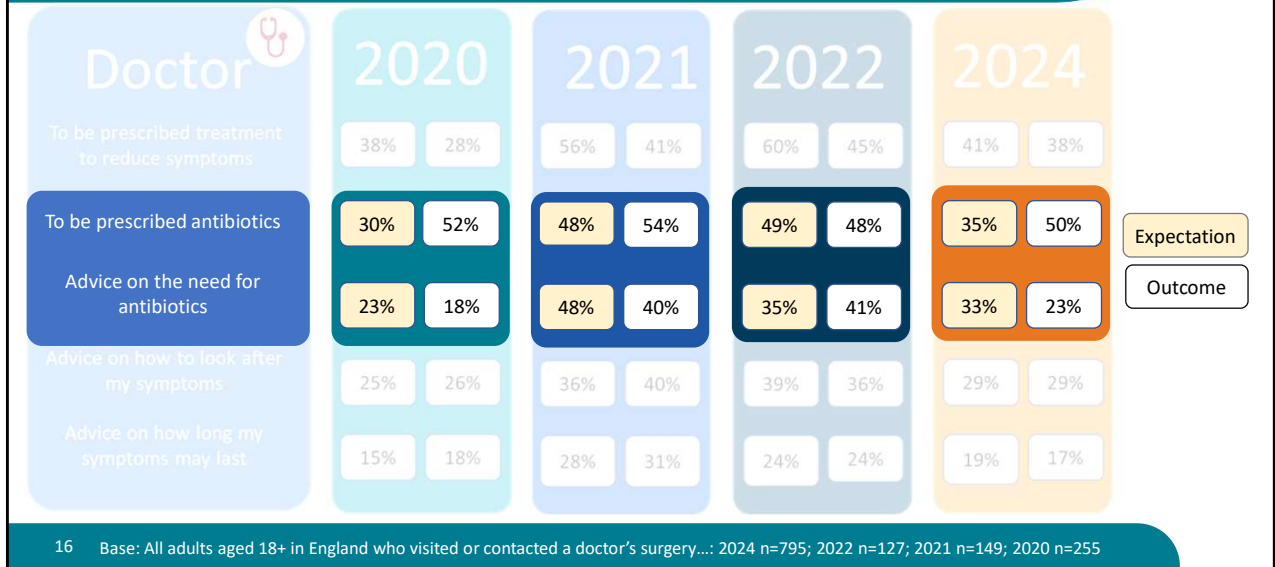
In a similar manner, we asked those consulting a doctor's surgery for an RTI in the last 12 months, which was around 27% of those with an RTI, what they expected from the consultation shown in cream, and what happened, shown in white.

The trend is similar to the pharmacist slide where patient expectations increased during the COVID pandemic and are now starting to settle back to pre pandemic levels.

**(next slide)**

**Of those who went to a GP expecting to be prescribed antibiotics, 37% had also expected advice about whether they needed the antibiotics.**

## Expectation compared to outcome of consultation with doctor's surgery/ NHS walk-in centre / minor urgent care centre / minor injuries centre/ GP out of hours service for most recent RTI

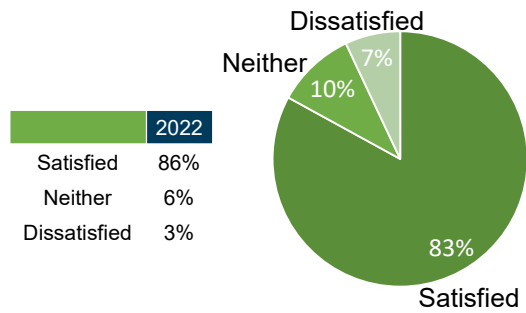


Looking more closely at antibiotics – patient expectation to be prescribed an antibiotic has increased however prescribing rates have not.

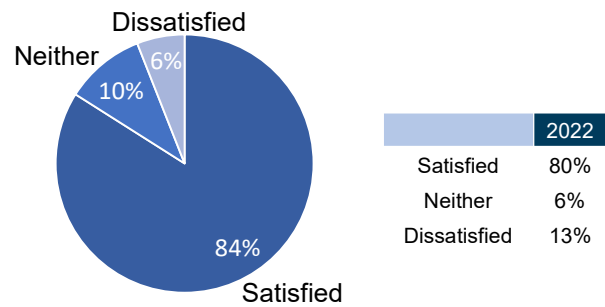
What is worth noting here is that more people expected advice on the need for antibiotics than those who received this advice. Of those who went to a GP expecting to be prescribed antibiotics, 37% had also expected advice about whether they needed the antibiotics.

## Patient satisfaction in 2024

### Community Pharmacy



### doctor's surgery/ NHS walk-in / minor urgent care / minor injuries / GP OOH



Base: All England participants aged 16+ who had consultation with pharmacy or general practice, fieldwork conducted online 15-27 March 2024

Regardless of expectation and outcome, over 80% of patients were reported being satisfied with their consultation; less than 10% were dissatisfied. **(next slide)**

## Implications: Health Seeking Behaviour

- Self-care is prevalent– even among those with severe RTI symptoms.
- Increased expectations observed during COVID have not fully gone back to pre-pandemic levels
- In general, people are getting what they expected from healthcare professionals and levels of satisfaction are high.
- Although patients may appear to want an antibiotic, a proportion of these also want advice on whether that antibiotic is needed

18 November 2024 [www.rcgp.org.uk/TARGETantibiotics](http://www.rcgp.org.uk/TARGETantibiotics)

**So what does all of this mean:** The prevalence of self-care is high, even those who perceive their symptoms to be severe are self-managing some of their symptoms.

Those who are consulting have higher expectations than pre-pandemic, although these are expectations are generally, being met. There is a particularly high increase in patient expectation on community pharmacists to administer antibiotics therefore it is important that we continue to support community pharmacy teams with AMS tools and resources

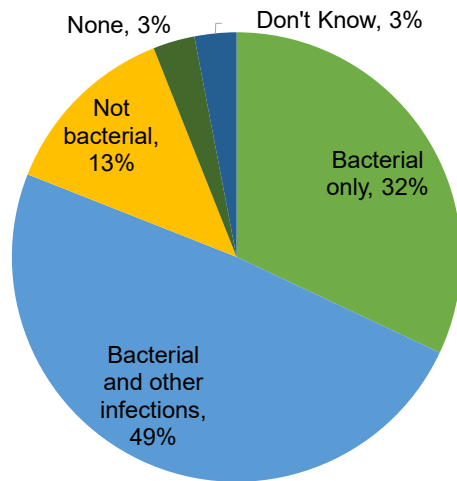
Finally, Although patients may appear to want an antibiotic, a proportion of these also want advice on whether that antibiotic is needed so it is worth having these discussions  
**(next slide)**



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## General knowledge/ perceptions of antibiotics

Which of the following conditions, if any, do you think can be effectively treated by antibiotics?



Just under 1/3 of the public knew that antibiotics only treat bacterial infections

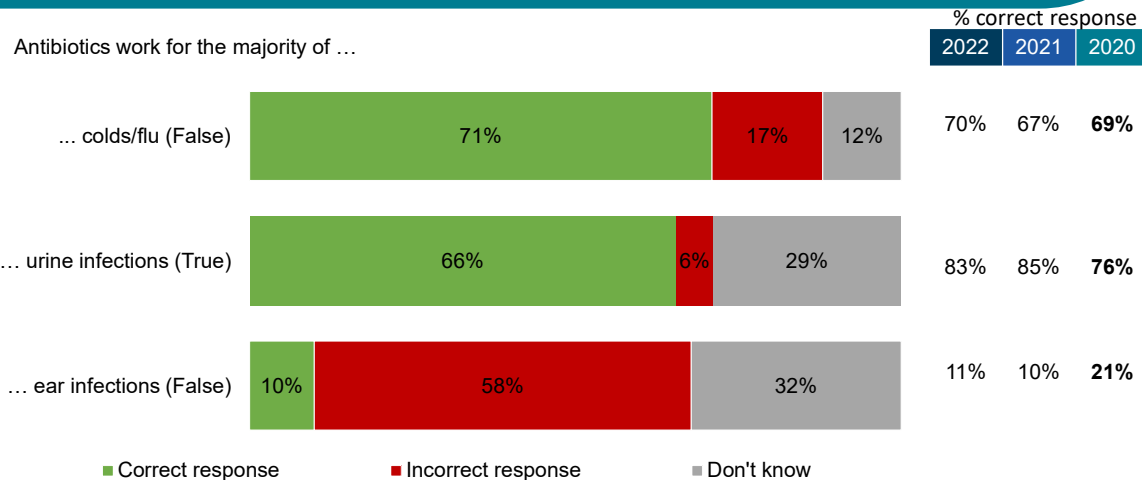
Base: 2024: All England participants aged 16+ (n=4976), fieldwork conducted online 15-27 March 2024

20 November 2024 [www.rcgp.org.uk/TARGETantibiotics](http://www.rcgp.org.uk/TARGETantibiotics)

Knowledge of what antibiotics should be used to treat is low – whilst 80% of the public were aware that antibiotics were used to treat bacterial infections, many also thought they were used to treat inflammation, and other ailments.

Just under 1/3 of the public were aware that antibiotics only treat bacterial infections

## Perceptions towards antibiotics remain relatively unchanged



Base: All England participants aged 16+ (n=4976), fieldwork conducted online 15-27 March 2024

21 November 2024

[www.rcgp.org.uk/TARGETantibiotics](http://www.rcgp.org.uk/TARGETantibiotics)

### Presenter Talk

Participants were further asked whether they agreed or disagreed with several statements about antibiotic use and their effectiveness for different conditions.

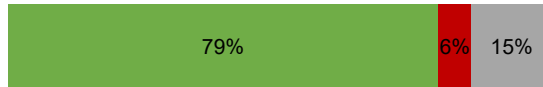
Most respondents, 71%, correctly stated that antibiotics do not treat the majority of cold and flu infections, and this has remained consistent since pre pandemic.

However for other conditions we see that the percentage correct response has dropped although interestingly, its not the incorrect box that has increased – more people are stating they don't know – so there is an opportunity to educate patients here

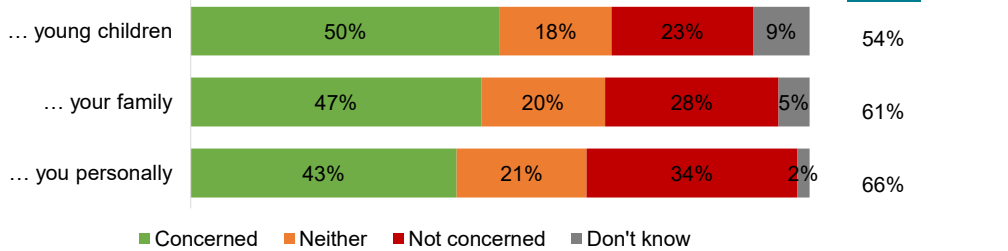


# What do the public think about antibiotic resistance?

Many infections are becoming increasingly resistant to antibiotics (True)



How concerned, if at all, are you about antibiotic resistance for



Base: All England participants aged 16+ (n=4976), fieldwork conducted online 15-27 March 2024

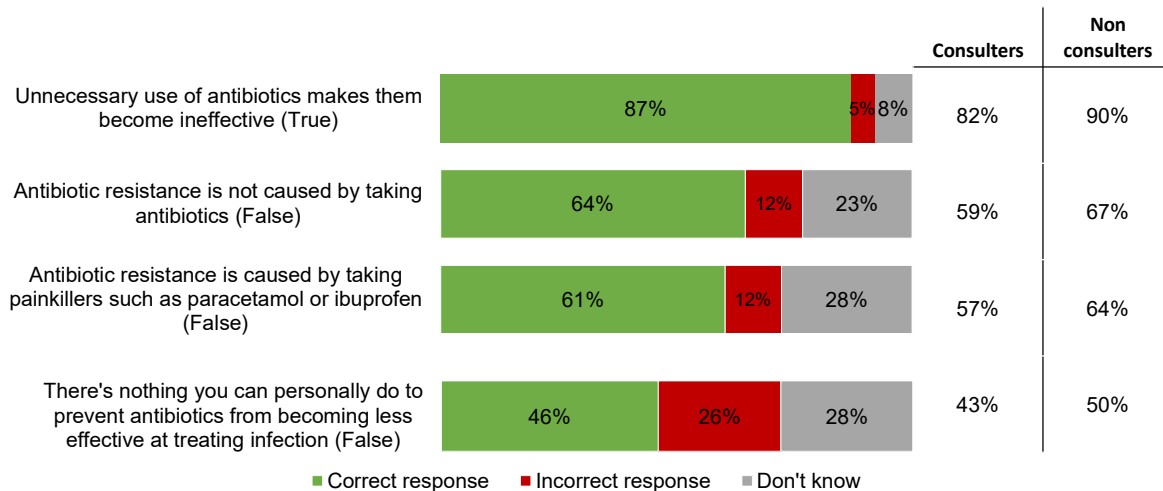
22 November 2024

[www.rcgp.org.uk/TARGETantibiotics](http://www.rcgp.org.uk/TARGETantibiotics)

## Presenter Talk

When we look a bit more closely at antibiotic resistance we see that the public, for the most part, have an awareness of antibiotics resistance and over half are concerned about it. But levels of concern have decreased since 2020, with around 1/5 being ambivalent

## What do the public know about antibiotic resistance?



23

Base: All England participants aged 16+ (n=4976), fieldwork conducted online 15-27 March 2024

A closer look into what the public actually know about AMR.

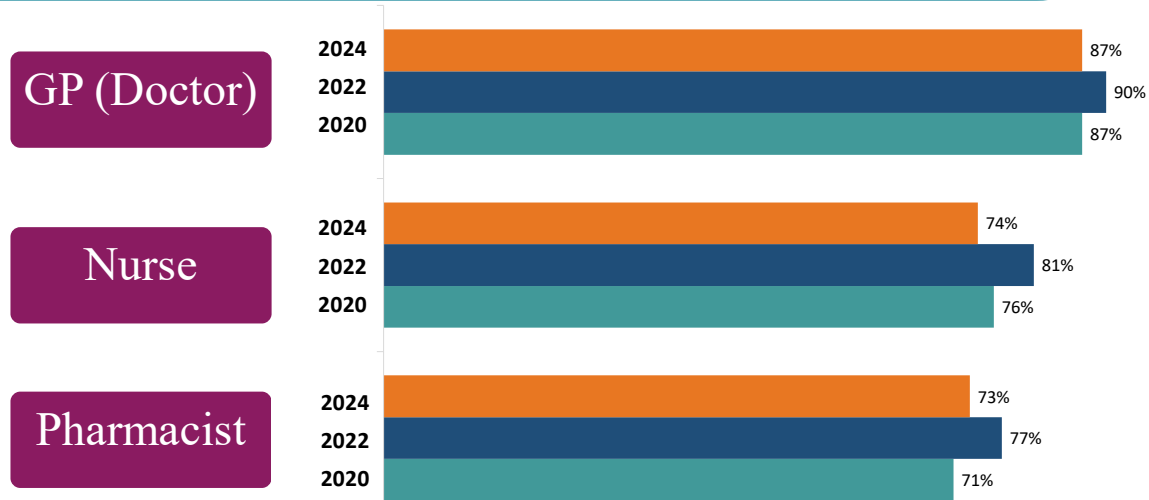
Almost 90% of respondents were aware that unnecessary use of antibiotics makes them become ineffective however knowledge was lower (%age correct answers) for some of the more indepth questions and we see a lot of the public responding with “I don’t know” suggesting that more education is needed.

And this is important because behavioural research has shown that those with higher knowledge exhibit more positive attitudes

When we look at response rate split responses by consultors versus non consulters – non consulters gave more correct answers – so in this case, increasing patient knowledge could results in fewer unnecessary consultations

## Patients generally trust advice from a health professional

Please tell me to what extent you agree or disagree with the following? I trust my .... as to whether I need antibiotics or not



Base: All adults aged 18+ in England: 2024 n = 4976; 2022 n=1663; 2021 n=1676; 2020 n=2022

### Presenter Talk

And its important to emphasise that patients place high trust their Health are professional

### Presenter Notes

### Slide references

## Implications

- Public knowledge is low
- Trust in HCP is high
- Can you help educate your patients?

[www.rcgp.org.uk/TARGETantibiotics](http://www.rcgp.org.uk/TARGETantibiotics)

Public knowledge is low – both knowledge on what antibiotics should be used to treat and AMR

BUT knowledge is linked to attitudes

There is high trust in HCP

If possible, you can play a role in educating patients which may lead to positive attitude changes.

# Actions

- Self-care
  - TARGET
  - (treat antibiotics responsibly guidance education and tools)
  - leaflets and resources
- Expectations of consultations
  - TARGET antibiotic checklist
- Antibiotic knowledge
  - Key demographic groups



**TREATING YOUR RESPIRATORY TRACT INFECTION (RTI)**

**Your infection**

- Sore throat: 7-10 days
- Cough: 10-14 days
- Cough or bronchitis: 10-14 days
- Other infection: 10-14 days

**Most are better by**

- 7-10 days
- 10-14 days
- 10-14 days
- 10-14 days

**When to get help**

- If you have a fever of 38°C or higher
- If you have a cough that lasts more than 3 weeks
- If you have a cough that is worse at night
- If you have a cough that is worse when you lie down
- If you have a cough that is worse when you exercise
- If you have a cough that is worse when you are stressed
- If you have a cough that is worse when you are around other people
- If you have a cough that is worse when you are in a public place
- If you have a cough that is worse when you are in a crowded place
- If you have a cough that is worse when you are in a public place
- If you have a cough that is worse when you are in a crowded place

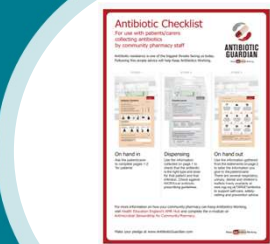
**How to look after yourself and your family**

- Stay at home if you are unwell
- Cover your mouth and nose when you cough or sneeze
- Wash your hands regularly
- Avoid close contact with other people
- Avoid public places
- Avoid public transport
- Avoid public places
- Avoid public transport
- Avoid public places
- Avoid public transport

**Back-up antibiotic collection**

**Why it's important to take antibiotics as prescribed**

**Antibiotic checklist**



## Presenter Talk

The TARGET team have developed a series of tools to help educate patients without adding to your workload.

This leads into the heightened expectations during consultations. TARGET have also produced an antibiotic checklist for prescribers to use with patients to facilitate discussions around antibiotics.

Finally, knowledge around antibiotics remains relatively unchanged compared to pre-pandemic. Whilst we may have hoped for improvements in knowledge, I feel that this can be viewed positively as there were concerns that antimicrobial stewardship may have been deprioritised as the pandemic dominated the healthcare messages received by the public.

## Presenter Notes

## Slide references

# There is an opportunity for healthcare professionals to educate patients on self-care...

**TARGET self-care leaflet**

27 November 2024 [www.rcgp.org.uk/TARGETantibiotics](http://www.rcgp.org.uk/TARGETantibiotics)

Patient information leaflets designed to be used during the consultation and are available in both the general [practice and community pharmacy settings., and are available in several languages and as electronic versions

Our data show more self-care for respiratory tract infections, which, as a self-limiting illness, should be encouraged. However, we must make sure there are resources available to support this and to avoid any unintentional consequences of self-care. My colleagues in the TARGET team have worked to produce self-care leaflets and which are available in several languages and as electronic versions.

The Managing Your Common Infection (self-care) leaflet can be used as a tool for the public and communities to increase awareness and change behaviour around antibiotic use by increasing individuals' confidence and knowledge on how to self-care for their own infections and subsequently reducing inappropriate antibiotic use.

## Presenter Notes

What are the aims of the Managing Your Common Infection leaflet?

The leaflet aims to give information, in line with NICE 63 guidance on:

- Increase awareness and change behaviour around hygiene, self-care and subsequently antibiotic use
- The natural course of self-limiting infections
- How people can self-care
- Explicit advice when to seek medical help
- Simple advice to wash their hands to reduce the spread of infection

The leaflet is found on the TARGET website in “Leaflets to discuss with patients”

**Slide references**

# Opportunity to educate patients: TARGET patient information leaflets

**TREATING YOUR  
RESPIRATORY TRACT INFECTION (RTI)**

**Your infection**

Middle-ear infection

Sore throat

Sinusitis

Common cold

Cough or bronchitis

Other infection \_\_\_\_\_ Days \_\_\_\_\_

**Most are better by**

7 to 8 days

7 to 8 days

14 to 21 days

14 days

3 to 4 weeks

\_\_\_\_\_ Days \_\_\_\_\_

**When to get help**

If any of the below apply to you or your child, get an urgent assessment from a healthcare professional. If your child is under the age of 5, go to A&E immediately or call 999.

- Your skin is very cold or has a strange colour, or you develop an unusual rash
- You have new feelings of confusion or drowsiness or have slurred speech
- You have difficulty breathing. Signs that suggest breathing problems include:
  - breathing quickly
  - turning blue around the lips and the skin below the mouth
  - skin between or above the ribs getting sucked or pulled in with every breath

**Less serious signs that can usually wait until you visit a pharmacist or your next available appointment**

- You are not starting to improve a little by the time given in the 'Most are better by' column in the table above
- You have mild side effects such as diarrhoea. Get advice from a healthcare professional if concerned

**'Most are better by' section to help patients know when to (re) consult**

**Safety netting**

**Back-up prescription**

**Information about antibiotics & AMR**

28 November 2024

[www.rcgp.org.uk/TARGETantibiotics](http://www.rcgp.org.uk/TARGETantibiotics)

## Presenter Talk

It can be difficult having the to prescribe or not to prescribe discussion with patient. The treating your infection leaflet has been developed through extensive feedback with patients and clinicians over the last 2 years. It is designed to be shared with the patient and completed with them during the consultation. Its aim is to increase the patients confidence to self-care, and to facilitate the use of back-up antibiotics, but it also allows the patients to go away with something, so ending the consultation on a positive note.

All leaflets are now available in HTML format and can be sent to patients via SMS using AccuRx



## CHESTSSS can help frame discussions about antibiotics

**C:** Ask specifically about **concerns**

**H:** Discuss **history and exam results/findings**

**E:** Ask specifically about **expectations**

**S:** Explain the cause of **symptoms**

First 5 min of the consultation

**T:** Be specific about illness **timeline**/usual course

**S:** Explain **shortcomings** of antibiotics

**S:** **Self-care** advice

**S:** **Safety-netting** advice

Covered in the TARGET patient information leaflets

### Presenter talk

So what can you do in a short consultation to discuss management of infection with a patient? The CHESTSSS acronym was developed and tested in a randomised-controlled trial [1] which resulted in improved antibiotic prescribing and patient satisfaction when used by experienced GPs in the UK.

We do not have the time to go through this in detail however we have delivered a webinar on this which is available on the RCGP website (cheeky plug to go view the other webinars) so do please review this for more information

## TARGET: Additional supportive tools

Posters for display  
in clinical and  
waiting areas



Videos for patient  
waiting areas



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[www.rcgp.org.uk/TARGETantibiotics](http://www.rcgp.org.uk/TARGETantibiotics)

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- These posters and videos may make a difference to patient expectations about when to expect antibiotics, IF used in the waiting room where patients can see them and IF they have the time to digest the information. In 2014 25% of the general public surveyed remembered seeing the first poster and 95% of these correctly answered that antibiotics don't help most coughs and colds. Used alone without any other strategies posters will make little difference to patients expectations for antibiotics, but they can be used to reduce expectations and can be used as a prompt for dialogue – “you may have seen from the posters or videos in the waiting room that we in this practice encourage responsible antibiotic prescribing”
- The videos were developed with patients and each animal cartoon video appealed to different people. A small survey of their use showed that those patients who saw them remembered the messages – however often the video sound was muted, chairs were pointing in the wrong direction or the video screen was off. If you intend to use them please don't make this mistake.

### Presenter Notes

### Slide references

# TARGET Antibiotic Checklist for community pharmacy

Patient provides information on their infection and antibiotic knowledge → Pharmacy team provide tailored advice

The screenshot shows the 'Antibiotic Checklist' form, which is divided into two main sections: 'for Patients' and 'for Pharmacy team'.

**for Patients:**

- Antibiotic Checklist:** Includes questions about whether the patient has taken antibiotics in the last 3 months, if they are allergic to any antibiotics, and if they have had a flu vaccine this year.
- Common Infections:** A grid of icons representing common infections: chest, throat, ear, urine, tooth, skin, and joint.
- Checklist points (Patient side):** A grid of statements for the patient to tick 'yes' or 'no':
  - I know what to do if I miss a dose of my antibiotics.
  - I know whether my antibiotics should be taken with or without food.
  - I know why I must take my antibiotics as advised by my doctor, nurse or pharmacist.
  - I know about the side effects that might get from my antibiotics.
  - I know whether I need to avoid alcohol whilst I am taking my antibiotics.
  - I know why I must never share my antibiotics or keep for later use.
  - I know how long my symptoms are likely to last.
  - I know when I should seek further help with my infection.
  - I know why I must return any unused antibiotics to the pharmacy.

**for Pharmacy team:**

- Checklist points:** A section for the pharmacy team to tick 'yes', 'no', or 'n/a' for various criteria:
  - Date the checklist was completed.
  - Assessing the antibiotic prescription (allergies, risk factors, other medication interactions, treatment with the same antibiotics in the previous 3 months, information collected from page 1, antibiotic against local guidance, appropriateness for infection, dose correctness, duration correctness).
  - Have contacted the prescriber about this antibiotic prescription.
  - The following antibiotics have been dispensed (None, Amoxicillin, Flucloxacillin, Nitrofurantoin, Doxycycline, Clindamycin, Phenoxymethylpenicillin (Penicillin V), Metronidazole, Trimethoprim, Co-Amoxiclav, other).
  - Giving advice on antibiotics.
  - Discussed antibiotic resistance with the patient/carer.
  - Checked Patient responses to statements on checklist.
- Reasons for incomplete checklist:** A section for the pharmacy team to provide reasons if the checklist has not been fully completed, such as 'patient representative did not know the information' or 'antibiotics already dispensed'.

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The TARGET antibiotic checklist is for community pharmacy staff to use with patients or carers collecting antibiotics. The checklist should be completed by patients and pharmacists, to facilitate individualised advice to the patient.

## Presenter Notes

## Slide references

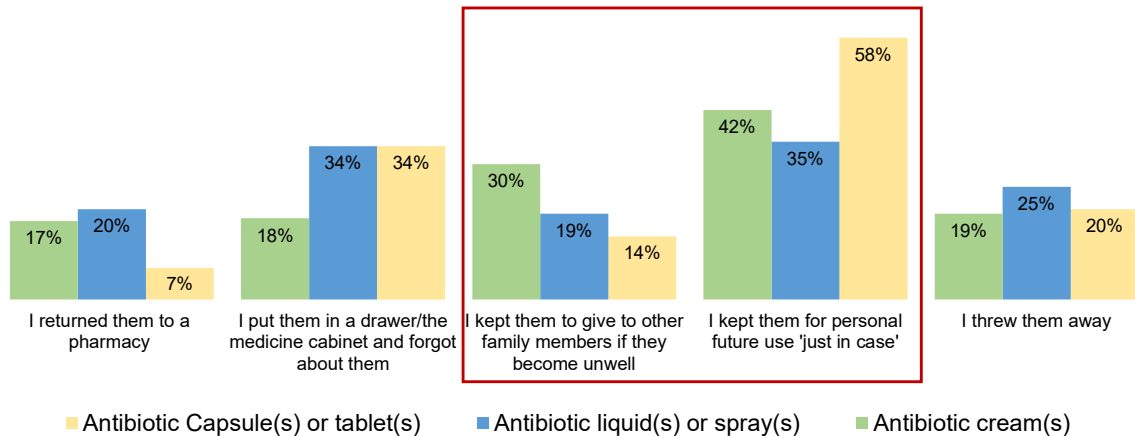


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## Experience of antibiotic use

So far we have covered public health seeking behaviours when they have an RTI, and public knowledge around Antibiotic use and AMR. Next we want to share some insights into the public experience of antibiotic use

## Leftover antibiotics?



Base: All England participants who had the following antibiotics left over: Antibiotic capsule(s)/tablet(s):390, Antibiotic liquid(s) or spray(s):270, Antibiotic cream(s):142, fieldwork conducted online 15-27 March 2024

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We asked those who had taken any antibiotic in the past 12 months FOR ANY INFECTION (Not just RTIs) if there were any leftover antibiotic capsules, liquids or creams? And what they did with them?

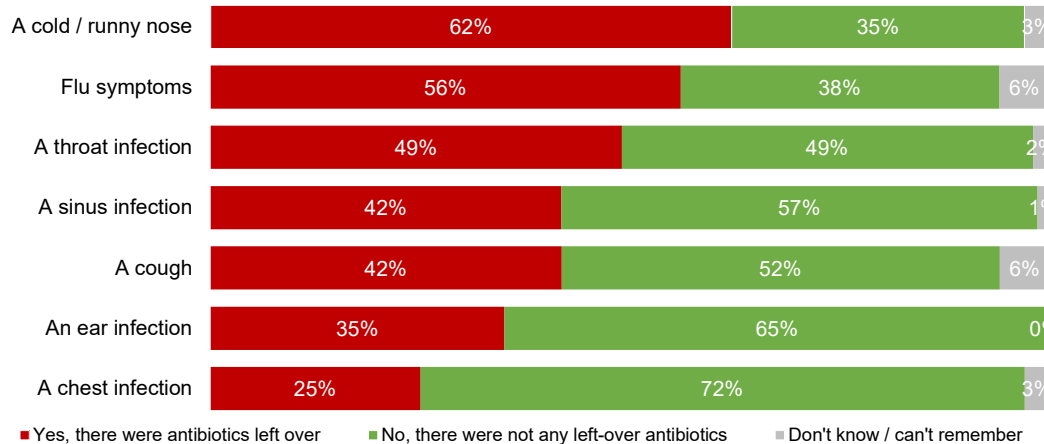
You can see here only a small proportion of these are leftovers are being returned to the pharmacy.

At the opposite end of the graph you can see that just as many people reported throwing these away

However, the majority are being kept for future use

How does this related to RTIs?

## Thinking about the antibiotics you have taken within the last 12 months for ..., were there any left-over?



Base= All England participants who have had antibiotics for the following illnesses in last 12 months: Cold/runny nose:262, Throat infection:324, Sinus infection:155, Flu Symptoms:237, Cough:393, Ear infection:157, Chest infection:346, fieldwork conducted online 15-27 March 2024

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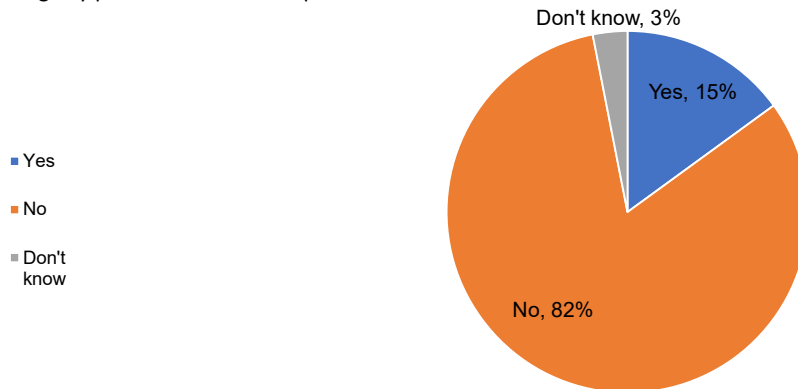
We asked those who had taken any antibiotic in the past 12 months if there were any leftovers for the following RTI conditions.

And as we can see in the red bars - there are quite a lot of left overs

And the percentage of leftover antibiotics varied by condition – there were more left-over antibiotics for cold and flu than chest infections. On average 44% of antibiotics prescribed for these conditions were left over

## Do you currently have any antibiotics stored at home, for example, in a medicine cupboard or tin?

\*Not including any prescribed as 'rescue pack' antibiotics



Base: All England participants aged 16+ (n=4976), fieldwork conducted online 15-27 March 2024

If we look at the entire population – 15% of the public surveyed stated they had left over antibiotics at home

## Implications

- Left over antibiotics may not be suitable for other to use
- Allergic reactions or side effects
- The antibiotic may not be suitable for another infection
- Contribute to antimicrobial resistance
- Left over antibiotics may have expired

There are some quite serious implications

- Left over antibiotics may not be suitable for others to use – concerns around dose or duration
- Allergic reactions or side effects -
- The antibiotic may not be suitable for another infection -
- Future infections may be more difficult to treat because overuse of antibiotics drives the development of antibiotic resistance
- Left over antibiotics may have expired – Once the expiration date of a medicine has passed there's no guarantee that it will be either safe or effective.







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## Delayed/back-up antibiotics

Can also consider issuing a delayed / back up antibiotic prescription

## Why use back-up antibiotic prescriptions?

1. Reduce patient use of antibiotics
2. Useful if unsure whether immediate antibiotic is needed
3. Little difference in symptomatic benefit with immediate vs. back-up antibiotics
4. Increase patient's ability to self-manage infections
5. Prevent complications
6. Reduce re-consultations

# Why use back-up antibiotic prescriptions?

**Prevent complications** (as effectively as immediate antibiotic) & **reduce re-consultations** ('doctor shopping'/visits to OOH, A&E)

Little/no difference in:

- Re-consultation
- Adverse effect
- Complications



Delayed antibiotic prescriptions for respiratory infections (Review)

Spurling GKP, Del Mar CB, Dooley L, Clark J, Askew DA

Spurling GKP, et al. 2017  
DOI: 10.1002/14651858.CD004417.pub5.

There has been much discussion about the use of giving delayed/back-up antibiotic prescriptions in acute uncomplicated infections, to reduce antibiotic use and reduce patient expectations. **A 2017 Cochrane review has recently shown the benefits of this approach, without increasing complications in patients.**

The review of 11 studies has shown that:

**Comparing delayed vs immediate antibiotics, there was no difference in re-consultation rates**

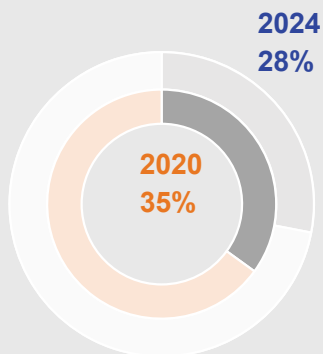
**Compared to no antibiotics, delayed antibiotics led to a small reduction in how long pain, fever, and cough persisted in people with colds.**

**There was little difference in antibiotic adverse effects, and no significant difference in complications.**

But what do the public think?

# Delayed antibiotics Awareness and acceptability

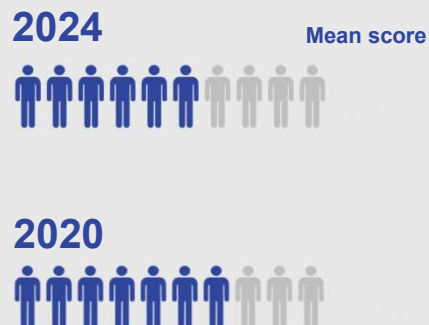
Aware of what a delayed/ back-up antibiotic is



Do you support delayed antibiotics for the following infections



How acceptable the delayed/ back-up antibiotic was



Base: All England participants aged 16+ (n=4976), fieldwork conducted online 15-27 March 2024

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- 58% of all respondents felt that it was acceptable to be offered a delayed script by their GP
- 7% were offered a delayed script in 2024

# TARGET resources: back-up/delayed antibiotic prescriptions

The TARGET website has **evidence-based resources** to help you in discussing back-up/delayed antibiotics with patients.

[www.rcgp.org.uk/  
TARGETantibiotics](http://www.rcgp.org.uk/TARGETantibiotics)



Discussing antibiotics with patients



Learning resources for prescribers



## Discussing back-up/delayed antibiotic prescriptions

Using back-up/delayed antibiotic prescriptions is recommended in NICE guidelines, and when used appropriately can be a useful antimicrobial stewardship tool.

Two key points that patients want to know about back-up/delayed prescription

Two examples of miscommunication around delayed prescription

Five ways to issue a back-up/delayed antibiotic prescription

Ways to capture data on back-up/delayed antibiotic prescriptions



## Presenter Talk

- The TARGET website describes an **evidence-based approach** to help you in discussing back-up/delayed antibiotics with patients.
- There is a webinar covering why and how to use back-up/delayed antibiotics

## Presenter Notes

## Slide references

# Clinical coding for back-up/delayed antibiotic prescriptions

\*\*\*Don't forget to code your treatment choice\*\*\*

READ codes (Emis, Vision)	SNOMED code (System One)	Definition
8BP0	2549788011	Deferred antibiotic therapy
8CAk	406111000000113	Patient advised to delay filling of prescription
8OAN	2462831000000113	Provision of <u>TARGET Managing Your Common Infection (Self-Care) Leaflet</u> with back-up antibiotic prescription issued

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Don't forget to code your treatment choice. Much of the evidence presented today use Read/Snomed codes to trawl the data, if you haven't coded its makes it difficult for researchers to understand the benefit or not of any treatment.

The Read/Snomed codes for delayed prescriptions are outlined in this table and you can these slides will be freely available on the TARGET website following this presentation.

## Presenter Notes

## Slide references

## Key take home points

- Patients reason for consulting vary
- High public expectations
- Low public knowledge on antibiotic use and AMR
- **Opportunity to educate your patients**
- Many report receiving antibiotics for RTIs, on average half of these don't finish the course
- **Consider discussion around the need for antibiotics** – link to duration of illness
- **Consider issuing a delayed antibiotic**

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- Patients reason for consulting vary however the main reasons centre around advice or treatment, worry, and symptom duration
- High public expectations for both antibiotics and advice on whether or not these are needed
- Low public knowledge on antibiotic use and AMR
- **Opportunity to educate your patients and TARGET have some useful resources to help facilitate this**
- Many report receiving antibiotics for RTIs, on average half of these don't finish the course
- **Consider discussion around the need for antibiotics** – link to duration of illness
- **Consider issuing a delayed antibiotic**



# Acknowledgements

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# Thank you for listening

**Please complete the feedback survey and let us know what topic you would like next!**

Sign up for our next webinars or recommend to colleagues:

**Navigating antimicrobial stewardship for new and early career prescribers**

Wednesday 29 January 2025 | 18:30 - 19:30 | Online

**Managing recurrent UTI and reviewing long-term and repeat antibiotic therapy**

Wednesday 19 March 2025 | 18:30 - 19:30 | Online

Visit [www.rcgp.org.uk/TARGETantibiotics](http://www.rcgp.org.uk/TARGETantibiotics) to find out more



[TARGETAntibiotics@ukhsa.gov.uk](mailto:TARGETAntibiotics@ukhsa.gov.uk)



@TARGETabx

## Panel discussion



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