Welcome!
We want to extend a special thank you to all of those working primary care for playing a key role in keeping people safe and healthy during the ongoing coronavirus (COVID-19) pandemic. The work of GPs, nurses, pharmacists, receptionists, cleaning staff and everyone else involved is hugely appreciated. In just four months, the COVID-19 pandemic has had an extraordinary impact on medical practice, research and our day to day lives. Although it may appear that the world’s focus is on the SARS-CoV-2 virus, the threat from antimicrobial resistance persists and we must not lose sight of antimicrobial stewardship.

TARGET Resource Development and Updates
It’s been a busy few months in the TARGET offices, click on the links below to see some of our updates:
- TARGET Train the Trainer Workshops
- Updated TARGET website
- Antimicrobial prescribing guidance updates
- Urinary Tract Infection audits

COVID-19 Information and Guidance
TARGET have been involved in the COVID-19 response through helping produce information and guidance. Click on the links below for COVID-19 information:
- GOV.UK COVID-19 Guidance
- Daily Evidence Digest on COVID-19
- Antimicrobial Stewardship During COVID-19 Pandemic
- Mis-Labelling Serious Bacterial Infection in Children as COVID-19
- COVID-19 and Other Relevant Training Materials

Current TARGET Research—would you like to be involved?
Ongoing Research
- Treating Your Infection Self Care Patient Information Leaflet
- TARGET Audit Review

Due to the focus on COVID-19 much of our research is currently on pause, however the studies above are still running.

Recent TARGET Publications
- What resources do NHS commissioning organisations use to support antimicrobial stewardship in primary care in England?
- Optimising management of UTIs in primary care: a qualitative study of patient and GP perspectives to inform the development of an evidence-based, shared decision-making resource.
- Local implementation of national guidance on management of common infections in primary care in England: findings of a mixed-methods national questionnaire.

To remove your name from our mailing list, please click here.
Questions or comments? E-mail us at TARGETantibiotics@phe.gov.uk
Ongoing TARGET Research

Treating Your Infection Self Care Leaflet
The TARGET team are developing a leaflet on how patients can manage common infections (such as colds, flu and winter vomiting bugs); this includes:

- Types, symptoms and durations of common infections
- Ways to make yourself feel better / self-care actions
- Safety netting / signs of serious illness
- Where to get help
- Ways to prevent the spread of infections

This leaflet will be suitable for use in primary care settings with the aim to empower patients and carers to be able to self-care when suffering from a common infection.

We are seeking feedback from healthcare professionals (general practitioners, community pharmacists and primary care nurses) on this leaflet. We would really value your input. Please:

- Fill in our survey by clicking [here](#). This will take approximately 10 minutes to complete and upon completion you will be entered into our prize draw to win 1,000 ‘Managing your Infection’ leaflets for your pharmacy or practice.
  Or
- Email Cath to arrange a 45 minute skype interview. You will be reimbursed £25 for your time.

TARGET Audit Review
The TARGET audits have been developed to enable self-assessment of your prescribing and development of antimicrobial stewardship action plans. TARGET audits are designed for your use and can only be improved based on your valuable feedback. Please complete the TARGET audit survey [here](#) to help us improve our resources for you.

TARGET Resource Development and Updates

TARGET Train the Trainer Workshops
We ran four successful TARGET Train the Trainer antimicrobial stewardship workshops from September 2019 to February 2020 (Gloucester, London, Shrewsbury).

The workshops aim to develop individuals to become accredited TARGET antimicrobial stewardship trainers by covering the following topics:

- Self-assessment: assess best practice in antibiotic prescribing
- Practice level data: prescribing and sensitivity rates
- Evidence: findings from studies
- Clinical scenarios: to encourage debate and interaction
- TARGET resources: audits, leaflets and more
- Action planning: for your personal practice and team

To date, eight people have received TARGET trainer status.
TARGET Resource Development and Updates

Updated TARGET Website
October 2019 saw the redesign and relaunch of the TARGET website. The main page URL remains the same and can still be accessed [here](www.rcgp.org.uk/TARGETantibiotics/).
New short URLs for quick access:

- **TARGET Guides, Updates and News**
- **UTI Resource Suite**
- **Leaflets to Share with Patients**
- **Resources for Clinical and Waiting Areas**
- **Audit Toolkits, Self Assessment and Action Planning**
- **Antibiotic and Diagnostic Quick Reference Tools**
- **Training Resources**
- **TARGET Trainers and Training**
- **Information for Commissioners**

Please [email](mailto:us your thoughts on the TARGET website, we would be happy to hear from you.

**UTI Audits**
The TARGET team have been working with a local GP to develop three new urinary tract infection (UTI) audits:

- UTI in older adults
- Uncomplicated UTI
- Catheter associated UTI

The UTI audit for older adults has recently been published on the TARGET website, and the uncomplicated UTI audit and UTI audit for catheterised patients are due to be published shortly.

**New Audit Formats**: These new audits will be provided in both Word and Excel documents to provide health professionals with a choice for their preferred method of auditing. The Excel version of the new UTI audits have been developed using macros, meaning that many of the cells auto calculate, saving time.

**Audit Content**: The content of each audit has been developed in line with the new Public Health England diagnostic tools and the PHE/National Institute for Health and Care Excellence (NICE) antibiotic management guidance; covering diagnostic criteria, management decisions, advice giving and treatment. At the end of each audit we encourage clinicians to reflect on areas for improvement and consider ways to implement positive change.
TARGET Resource Development and Updates

Antibiotic Prescribing Guidance Updates

The National Institute for Health and Care Excellence (NICE) and Public Health England produce joint antimicrobial prescribing guidance that is hosted on the NICE website. Since the last publication of this newsletter, there have been six new guidance documents published. These include:

- **Pneumonia** (hospital acquired) – Sep 2019
- **Pneumonia** (community-acquired) – Sep 2019
- **Cellulitis** – Sep 2019
- **Diabetic foot infection** – Oct 2019
- **Leg ulcer infection** – Oct 2019
- **Impetigo** – Feb 2020

Management of Common Infections Summary Table

Based on the production/review of new guidance topics and changes to current recommendations the management of common infection summary table has been updated. These updates include:

- The following new topics have been added: Bronchiectasis (Jul 2019), Diabetic foot infection (Oct 2019), and Acute diverticulitis (Feb 2020)
- The following topics have replaced older content: Pneumonia (Sep 2019), Cellulitis and erysipelas (Oct 2019), Impetigo (Feb 2020), and Leg ulcer infection (Feb 2020)
- The following topics have had key updates to their wording:
  - **Acute sore throat**: update to explain penicillin duration
  - **Otitis externa**: update regarding safety of neomycin and corticosteroid drops
  - **Updated wording to cover new restrictions/precautions around fluoroquinolones**: chronic obstructive pulmonary disease, bronchiectasis, prostatitis, and *H. Pylori*
  - **Urinary tract infection (UTI)**: additional dosing option for Nitrofurantoin for lower and catheterised UTI
  - **Pyelonephritis**: wording about the avoidance of antibiotics that don’t achieve adequate levels in renal tissue
  - **Lyme disease**: guidance on prophylaxis removed
  - **Chlamydia**: clarification of wording around re-testing and advice around sexual abstinence after treatment
  - **Bites**: clarified wording and treatment recommendations

Handover of the table topic rows to NICE is planned over the coming two years, which will mean that existing and newly developed NICE guidance will cover the content in many rows that have been previously supported by Public Health England.
COVID-19 Information and Guidance

GOV.UK COVID-19 Guidance

COVID-19 guidance for the public, healthcare professionals and non-clinical settings can be found on GOV.UK. Developed by Public Health England and other government agencies, it provides comprehensive, up-to-date guidance on areas such as:

- Investigation and initial clinical management of possible cases
- Infection prevention and control (e.g. personal protective equipment for different care settings)
- Primary care
- Rapid tests for use in community pharmacies or at home

Public Health England International Epidemiology Daily Evidence Digest on COVID-19

The Public Health England COVID-19 Response Team produces a daily evidence digest, which contains evidence from journal articles, both published and in press/preprints. Please note that preprints are preliminary reports of work that have NOT been peer-reviewed. They should not be relied on to guide clinical practice or health-related behaviour and should NOT be reported in news media as established information. The evidence is categorised into the following themes:

- Diagnostics
- Genomics
- Epidemiology and clinical—children and pregnancy
- Epidemiology and clinical—risk factors
- Epidemiology and clinical—other
- Infection control
- Treatment
- Social sciences
- Miscellaneous
- Modelling
- Guidance, consensus statements and hospital resources (no digest)
- Overviews, comments and editorials (no digest)

The digest is available to the public and can be accessed here.

Antimicrobial Stewardship During the COVID-19 Outbreak

Antimicrobial stewardship remains as important as ever during the ongoing COVID-19 pandemic. Common bacterial infections and other illnesses (some more severe than others) will continue to occur and local antimicrobial stewardship guidelines must be adhered to. See interim advice from the Scottish Antimicrobial Prescribing Group for clinical teams to ensure maintenance of AMS during the COVID-19 pandemic. This includes guidance on supporting usual antimicrobial stewardship practices, and COVID-19 and antimicrobial prescribing. The National Institute for Health and Care Excellence (NICE) have also prepared rapid guidelines and evidence summaries for COVID-19.

So far during the COVID-19 outbreak, a remarkable response has been observed, with teams collaborating on both national and international levels across all disciplines, whether it be developing therapeutics and diagnostics, or publishing guidance on care. This global collaboration and action can be applied to tackling antimicrobial resistance. Continuing to act now will help safeguard for the future.
COVID-19 Information and Guidance

Mis-Labelling Serious Bacterial Infection in Children as COVID-19

It has become evident that in some cases, serious bacterial infection in children (and adults) is being mis-labelled as COVID-19. Dr Sanjay Patel (@doctorsanjay), consultant at University Hospital Southampton and a specialist in infectious diseases provided the following,

"It is really important to remember that COVID-19 is unlikely to cause severe illness in children (data from China, Italy, UK so far) - so don't assume that the child with prolonged fever or the unwell child has COVID-19 (they may have COVID but the majority of children are likely to be barely symptomatic with it).

Please consider using the Remote Assessment Tool produced by the Healthier Together Team, led by Dr Sanjay Patel, Consultant at University Hospital Southampton and a specialist in infectious diseases.

Robust safety netting is crucial at this time. If children have amber features, they should still be ‘seen’ by a healthcare professional, either in primary care or in ED (paediatricians are very happy if you have a lower threshold to send children to ED if you have concerns about a child and they are amber on remote assessment pathway - you can contact them via their baton phones). Use your discretion to decide if a video consult is likely to provide you with enough information to decide whether a watchful waiting approach can be continued.

Please consider sending a text message to all parents articulating that COVID-19 isn’t making children particularly unwell, the importance of them not assuming that all febrile episodes are due to COVID-19 and most importantly, the need for them to look out for signs of severe illness if their child has a fever. I would suggest you recommend that parents seek information from the Healthier Together website."

COVID-19 and Other Relevant Training Materials

TARGET COVID-19 eModules

This course has been developed by Professor Cliodna McNulty and Dr Tessa Lewis, our GP advisor, for primary care and out of hours healthcare staff. It summarises COVID-19 government guidance, helping you put it into practice. It will be available on the Royal College of General Practitioners (RCGP) website over the coming weeks. All RCGP eLearning content is freely accessible to non-members until 30 June 2020. The course consists of three modules:

♦ 1: What we know. For all staff, covers general information about SARS-CoV-2, how it arose, the outbreak so far, patient outcomes and transmission.
♦ 2: Managing COVID-19 in general practice and out of hours. How to manage COVID-19 in practice, not forgetting other common respiratory tract infections.
♦ 3: Controlling the COVID-19 outbreak. SARS-CoV-2 transmission; how the public and healthcare staff can help prevent transmission through hygiene, disinfectants and social distancing; and the basis of vaccines and antivirals.

Free Access to RCGP eLearning Content

The Royal College of General Practitioners (RCGP) are making their entire eLearning content freely accessible to non-members until 30 June 2020 to support all returning GPs and primary healthcare professionals during this challenging time. This includes the COVID-19 Resource Hub and our TARGET modules covering:

- Skin Infections; Managing Urinary Tract Infections; Managing Infectious Diarrhoea; Sexual Health in Primary Care; and Common Infections in Primary Care: Urinary Tract Infection and Sinusitis.
COVID-19 and Other Relevant Training Materials

FutureLearn: COVID-19: Tackling the Novel Coronavirus

We have seen collaboration at all levels to investigate and inform the public and healthcare professionals about COVID-19. The London School of Hygiene and Tropical Medicine (LSHTM) and the UK Public Health Rapid Support Team have developed a free 3-week online course, ‘COVID-19: Tackling the Novel Coronavirus’. Presented by international experts, the course is suitable for those working in or around health or anyone interested in the outbreak. It covers:

- The emergence and identification of COVID-19
- How COVID-19 spreads
- Public health measures worldwide to tackle COVID-19
- What is needed to address COVID-19 going forward

FutureLearn: e-Bug Health Educator Training

In collaboration with the British Society for Antimicrobial Chemotherapy (BSAC) we have developed an e-Learning course for educators and community members who teach children and young people. The course aims to improve knowledge and confidence to teach children and young people about microbes, preventing spread of infection and antibiotic use in an engaging, age-appropriate way.

The FutureLearn website will host the visual and interactive e-Learning course covering three two-hour sessions:

- Session 1: Microbes, hand and respiratory hygiene
- Session 2: Food hygiene and oral hygiene
- Session 3: Antibiotics and self-care

The course is currently underway, follow this link to register now.

‘Antibiotic Guardian’ Youth Programme

The ‘Antibiotic Guardian’ youth programme provides a unified source of activities that are suitable for ages 5 to 18 and are designed to be fun and active. Activities can be executed easily at home with minimal equipment and link with key curriculum areas including science, design and technology, PSHE and even art and design; providing a well-rounded programme for home-schooling.

Resources focus on three main topics:

- Microbes
- Preventing the spread of infection
- Antibiotics and antibiotic resistance

Germ Defence

We are letting you know about GermDefence.org – a website with simple advice on steps to reduce viruses, including COVID-19. It’s an online intervention proven to reduce transmission of infections in the home, by helping people to use behaviour change techniques such as personalised goal setting.

- Germ Defence advice was developed by health experts and reduced illness in a study of over 20,000 people.
- People who followed the advice were less likely to catch pandemic flu or other viruses and less likely to pass it on to members of their family.
- If you’re interested in finding out about disseminating Germ Defence, the University of Southampton has this information.

There are many translated versions available and more being developed.
What Resources do NHS Commissioning Organisations Use to Support Antimicrobial Stewardship in Primary Care in England?

Abstract: Professional education and public engagement are fundamental components of any antimicrobial stewardship (AMS) strategy. The National Institute for Health and Care Excellence (NICE), Public Health England (PHE), Health Education England (HEE) and other professional organisations, develop and publish resources to support AMS activity in primary care settings. The aim of this study was to explore the adoption and use of education/training and supporting AMS resources within NHS primary care in England. Questionnaires were sent to the medicines management teams of all 209 Clinical Commissioning Groups (CCGs) in England, in 2017. Primary care practitioners in 168/175 (96%) CCGs received AMS education in the last two years. Respondents in 184/186 (99%) CCGs reported actively promoting the TARGET Toolkit to their primary care practitioners; although 137/176 (78%) did not know what percentage of primary care practitioners used the TARGET toolkit. All respondents were aware of Antibiotic Guardian and 132/167 (79%) reported promoting the campaign. Promotion of AMS resources to general practices is currently excellent, but as evaluation of uptake or effect is poor, this should be encouraged by resource providers and through quality improvement programmes. Trainers should be encouraged to promote and highlight the importance of action planning within their AMS training. AMS resources, such as leaflets and education, should be promoted across the whole health economy, including Out of Hours and care homes. Primary care practitioners should continue to be encouraged to display a signed Antibiotic Guardian poster as well as general AMS posters and videos in practice, as patients find them useful and noticeable.


Optimising management of UTIs in primary care: a qualitative study of patient and GP perspectives to inform the development of an evidence-based, shared decision-making resource

Abstract: Urinary tract infections (UTIs) are one of the most common bacterial infections managed in general practice. Many women with symptoms of uncomplicated UTI may not benefit meaningfully from antibiotic treatment, but the evidence base is complex and there is no suitable shared decision-making resource to guide antibiotic treatment and symptomatic care for use in general practice consultations.

Aim: To develop an evidence-based, shared decision-making intervention leaflet to optimise management of uncomplicated UTI for women aged <65 years in the primary care setting.

Design and setting: Qualitative telephone interviews with GPs and patient focus group interviews.

Method: In-depth interviews were conducted to explore how consultation discussions around diagnosis, antibiotic use, self-care, safety netting, and prevention of UTI could be improved. Interview schedules were based on the Theoretical Domains Framework.

Results: Barriers to an effective joint consultation and appropriate prescribing included: lack of GP time, misunderstanding of depth of knowledge and miscommunication between the patient and the GP, nature of the consults (such as telephone consultations), and a history of previous antibiotic therapy.

Conclusion: Consultation time pressures combined with late symptom presentation are a challenge for even the most experienced of GPs: however, it is clear that enhanced patient–clinician shared decision making is urgently required when it comes to UTIs. This communication should incorporate the provision of self-care, safety netting, and preventive advice to help guide patients when to consult. A shared decision-making information leaflet was iteratively co-produced with patients, clinicians, and researchers at Public Health England using study data.

Local implementation of national guidance on management of common infections in primary care in England: findings of a mixed-methods national questionnaire

Abstract

Introduction: Evidence-based infection guidance outlines how healthcare professionals should meet their antimicrobial stewardship (AMS) responsibilities. In 2017, the National Institute for Health and Care Excellence (NICE) commenced development of new infection management guidance for primary and secondary care.

Aim: To determine how antimicrobial guidance was produced and implemented by medicines management teams (MMTs) in the English primary care setting in 2017, prior to the launch of joint Public Health England (PHE) and NICE guidance on the management of common infections.

Methodology: Qualitative interviews and questionnaires of MMTs representing clinical commissioning groups (CCGs) in England were conducted to explore their local AMS activity in 2015–2017.

Results: A total of 11 MMT AMS leads were interviewed, representing a range of the 209 CCGs, based on antimicrobial prescribing data. The majority of AMS leads interviewed reported that their local guidance was adapted from the PHE summary tables.

Of the 209 CCGs in England at the time, 187 (89%) responded to the questionnaire, with various respondents choosing to leave some answer fields blank, resulting in varied total numbers for each question. MMTs representing 146/181 (81%) CCGs reported having an antimicrobial committee or process that develops local primary care antimicrobial guidelines. Overall, 149/180 (83%) CCGs reported localising the 2017 PHE managing common infections guidance, while 41/180 (23%) CCGs signposted directly to the PHE guidance. Questions about use of NICE guidance, clinical knowledge summaries (CKS) and Scottish Intercollegiate Guidelines Network (SIGN) guidance were not directly asked, but in free-text comments, four MMTs reported using CKS to develop local guidance; three reported using relevant parts of NICE guidance; and none used SIGN guidance.

MMTs representing 120/128 (94%) CCGs indicated that the 2017 PHE managing common infections guidance was ‘useful’ or ‘very useful’, while 146/172 (85%) CCGs did not know how many primary care practitioners used local antimicrobial guidance. MMTs reported that they were not always informed when national guidance is updated and changes are not always obvious.

Conclusion: In 2017, the majority of MMTs developed and reviewed local antimicrobial guidelines for primary care using the PHE managing common infections guidance, owing to comprehensive inclusion in the same document. MMTs should be informed when national guidance is updated, and changes should be highlighted, so that the MMTs can review local guidance in a timely manner. The impact of local antimicrobial guidance needs evaluation; a fifth of CCGs do not have an antimicrobial committee or equivalent process that develops and reviews local antimicrobial guidelines for primary care and may find such a committee useful.

TARGET Peer Reviewed Publications


Abstract

Objectives: To describe public understanding and use of antibiotics.

Design: Ipsos MORI Capibus survey of randomly-selected households.


Participants: 2283 adults (≥15 years) including 777 parents of children <5 years old.

Data collection and analysis: The main survey was undertaken in January 2017 (n=1691); data from an additional sample of parents were collected in April 2017 (n=592). Analyses were weighted to obtain estimates representative of the population.

Main outcome measures: Responses to questions about antibiotics (awareness and perceptions), recent illness (expectations and experience), delayed and leftover antibiotics, and child illness stratified by demographic and socioeconomic characteristics.

Results: Most respondents (83% (1404/1691)) recognised that antibiotics kill bacteria/treat bacterial infections, but a sizeable minority (35% (592/1691)) thought that antibiotics kill viruses/treat viral infections. Overall levels of understanding have not changed substantially since similar surveys in 2003 and 2008/2009. One sixth of respondents who were prescribed antibiotics reported having leftovers (14% (64/498)) and 33% (22/64) kept these for possible future use. 1.3% of all respondents (23/1691) reported taking leftover antibiotics in the past year and 1.6% (26/1691) reported taking antibiotics obtained without a prescription. Higher social grade and educational qualifications were strongly positively associated with antibiotic knowledge; youngest (15-24 years), oldest (65+ years) and black, Asian and minority ethnic adults were less knowledgeable. Among 1319 respondents who had an infection or antibiotics within the past year, 43% (568/1319) said that they had not received any advice or information about antibiotics.

Conclusions: Despite many campaigns, public understanding of antibiotics in England continues to combine correct basic knowledge held by most people with less prevalent but persistent and potentially harmful misunderstandings. These could be addressed through active provision of advice and information during primary and secondary care consultations and more effective public health interventions.

Antibiotic Awareness Campaigns

Stay Alert To Stay Safe
We as individuals can take important action when it comes to fighting COVID-19, as emphasised by the ‘Stay Alert To Stay Safe’ campaign. Use the ‘Stay Alert To Stay Safe’ resource suite developed by Public Health England Partnerships to spread the message across your communication channels and social networks. The resources include posters, social media resources and digital screens with advice on staying safe by social distancing and practicing good hand hygiene. These resources are downloadable and are suitable for a variety of settings such as ports, travel hubs and social networks. Please note these assets are cleared for use in England only. Other countries will have their own campaign resources.

Antibiotic Guardian
The Antibiotic Guardian campaign asks you to become antibiotic guardians by choosing one simple pledge about how you’ll make better use of antibiotics to help save these vital medicines from becoming obsolete.

Pre-worded pledges are available in the following categories
♦ Health or social care professional or leader
♦ Member of the public
♦ Student, educator or scientist

Or alternatively, you can make your own pledge.

Antibiotic Guardian supports the UK antimicrobial strategy, European Antibiotic Awareness Day (18th November) and World Antibiotic Awareness Week (13—19 November 2017).

Keep Antibiotics Working
Support the new campaign Keep Antibiotics Working launched in England on October 23rd to raise public awareness and understanding of the dangers antibiotic resistance.

The campaign delivers a simple messages that resonate with the public: Taking antibiotics when you don’t need them puts you and your family at risk. Taking antibiotics encourages harmful bacteria that live inside you to become resistant. That means that antibiotics may not work when you really need them. This puts you and your family at risk of a more severe or longer illness.

By increasing the public’s awareness of the risks of taking antibiotics when they don’t need them, the campaign supports the efforts of local doctors, nurses and other healthcare practitioners in reducing inappropriate prescribing due to patient pressure. The campaign encourages those who typically ask for antibiotics to take their doctor or nurse’s advice.

If you don’t already have campaign materials on display and wish to Keep Antibiotics Working you can order resources free of charge from the PHE Campaign Resource Centre.
The TARGET Team

Professor Cliodna McNulty, TARGET Programme Lead

Cliodna, a clinical microbiologist, leads the Public Health England Primary Care Unit. She has led numerous large surveys on the public’s use of and attitudes to antibiotics and resistance and is an expert advisor to the ECDC Advisory Committee on AMR and HCAIs.

Dr Donna Lecky, TARGET Programme Manager

Donna has a background in microbiology research, programme management and resource development having previously managed the development of the e-Bug educational resources for school aged children, the PHE stool collection leaflet and the TARGET Urinary Tract Infection leaflet for patients.

Emily Cooper, TARGET Project Manager

Emily has a background in nursing and public health. She works part time supporting resource development projects within TARGET and is currently involved in activities that focus on prevention and management of urinary tract infections in older adults.

Bláthnaid Mahon, TARGET Project Support Officer

Bláthnaid has a background in microbiology and biomedical science. She is currently working on the development of a self-care leaflet for managing common infections. She is also a member of PHE’s COVID-19 Literature Digest team which produces PHE’s International Epidemiology Daily Evidence Digest on COVID-19.

Leah Jones, TARGET Project Support Officer

Leah has a background in Psychology and is currently studying for a Professional Doctorate in Health Psychology. Leah’s current work includes the development of a urinary tract infection patient leaflet for older adults, and exploratory work in community pharmacies with the view of developing resources for the pharmacy setting.

Cath Hayes TARGET Project Support Officer

Cath has a background in biomedical science, public health and designing and developing educational interventions. She will be leading on projects within community pharmacy, is a TARGET Train-the-Trainer workshop presenter and will be working to update the TARGET patient leaflets on GP systems and improve accessibility.

Eirwen Sides, TARGET Research Assistant

With a background in biomedical sciences, Eirwen’s current work focuses on maintenance and monitoring of the TARGET website, development of an audit for specific antibiotics and evaluation of the TARGET Train the Trainer Workshops.

Rosie Alouat, RCGP Project Manager

Rosie is a Project Manager for the RCGP’s Clinical Innovation and Research Centre, focusing on the College’s quality improvement projects. Her portfolio of work includes the maintenance of the TARGET Toolkit on the RCGP website and managing QI Ready.