Q&A for Appropriate Prescribing of Antimicrobials

Four Foundations of Good Antimicrobial Stewardship (AMS)

1. Reduce unnecessary antibiotic prescribing in adults and children
2. Avoid inappropriate use of broad-spectrum antibiotics when narrow-spectrum options are suitable
3. Limit antibiotic courses to the shortest effective duration
4. Reserve quinolones for use only when other antibiotics are inappropriate

1. What does the 2025/26 ECF indicator include?

The Pharmacy and Medicines Optimisation Team (PMOT) Medicines Optimisation Enhanced Commissioning Framework (ECF) Quality Scheme 2025/26 will include an element focused on reducing the prescribing of inappropriate antimicrobials. There are two metrics in the NHS Oversight Framework[1] related to antibiotic prescribing in primary care and these are included within the ECF.

- Practices will work to reduce total antibacterial drug prescribing to below or equal to the national threshold of 0.871 (items per STAR-PU based on 12 months rolling data).
- Practices will work to reduce broad spectrum antibacterial prescribing as a percentage of total antibacterial prescribing to below or equal to the national threshold of 10% (based on 12 months rolling data).

Practices with the highest potential for movement towards target will be asked to work on these indicators in '25/'26.

2. Why are these metrics included in the ECF?

The data shows that the Herts and West Essex (HWE) ICB is not currently achieving national threshold set for total antimicrobial prescribing (0.871 items/STAR-PU) (figure 1). The current prescribing of total antimicrobials is 0.945 items/STAR-PU.

Open prescribing data also suggests that the HWE ICB has relatively high prescribing of broad-spectrum antimicrobials compared to other ICBs Nationally (figure 2).

Figure 1: Total antimicrobial prescribing HWE ICB

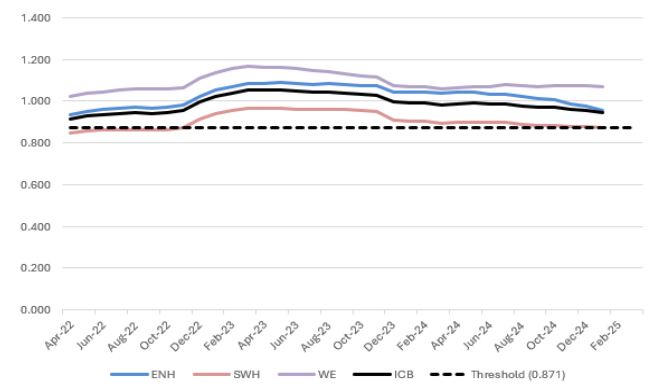
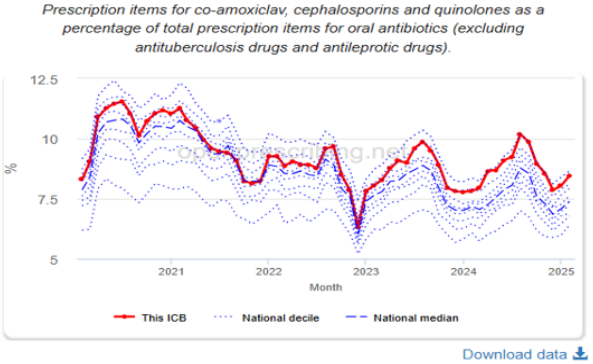


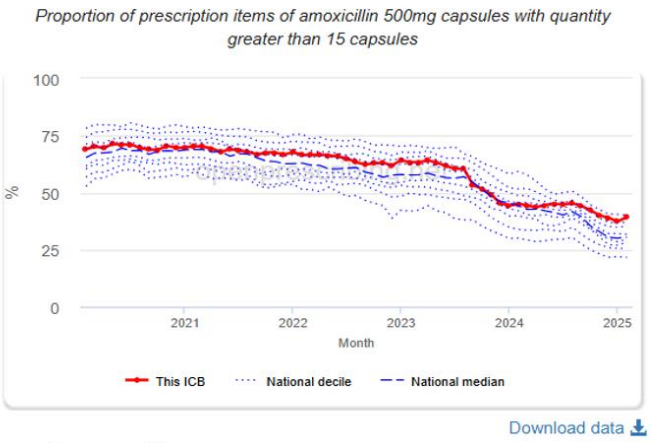
Figure 2: Broad-spectrum antimicrobial prescribing HWE ICB



Source: OpenPrescribing

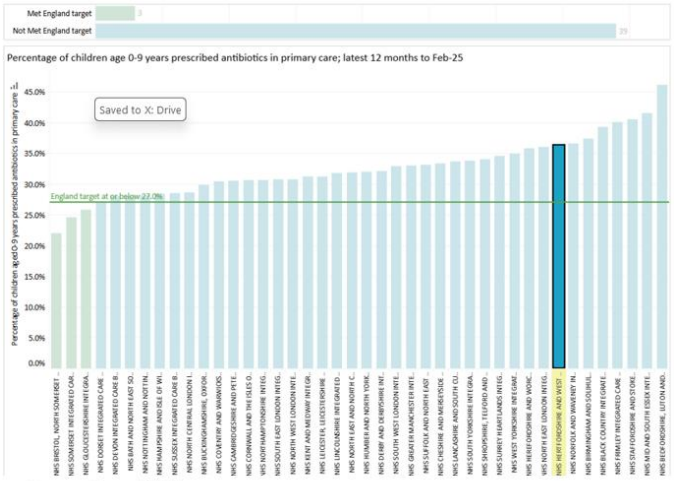
There is recent increase in prescribing of amoxicillin greater than 5-day course lengths (figure 3). HWE ICB also has relatively high prescribing of paediatric antimicrobials (figure 4).

Figure 3: Proportion of prescription items of amoxicillin 500mg capsules with quantity greater than 15 capsules



Source: OpenPrescribing

Figure 4: Percentage of children 0-9 years prescribed antibiotics in primary care



Source: PrescQIPP

3. Why is it important to reduce inappropriate prescribing of antimicrobials?

Inappropriate antibiotic use accelerates antimicrobial resistance (AMR), reducing treatment effectiveness and limiting future treatment options. Broad-spectrum antibiotics such as co-amoxiclav, cephalosporins, and quinolones increase the risk of resistant infections including Clostridioides difficile and MRSA, and should be avoided when narrow-spectrum agents are effective.[4] Quinolones should only be used when other antibiotics are inappropriate, as advised in the 2019 MHRA Drug Safety Update, due to the risk of disabling and potentially long-lasting side effects.

AMR is a global public health threat. Infections with resistant organisms can lead to longer illness, extended hospital stays, increased mortality, and reduced protection for patients undergoing procedures.[3]

The UK Government recognises AMR as a priority and has committed to coordinated action. Its 20-year vision and five-year national action plan outline measures across sectors to minimise infections and reduce AMR.[5,6] This includes promoting optimal antimicrobial use and reducing unnecessary exposure to support safe, effective patient care. There is also a national ambition to reduce antimicrobial use in humans by 5% by 2029.

4. Why is it important to prescribe antimicrobials for a short duration?

Shorter antibiotic courses can help minimise harm from antibiotics and reducing antimicrobial resistance. The research suggests that short durations of antibiotics are as effective as longer courses in treating patients with uncomplicated infections.[7]

The most common indication for prescribing of amoxicillin and doxycycline in primary care is for the treatment of respiratory tract infections. NICE guidance **recommends five-day courses when antibiotics are indicated for sinusitis, sore throat, COPD infective exacerbation, cough (acute), pneumonia (community-acquired) and otitis media.** There are certain indications where longer duration of antibiotics may be required e.g. treatment of *H. pylori* or infected leg ulcers.

Primary care data shows wide variation in antibiotic course lengths. NHS England's 2024/25 Medicines Optimisation Opportunities highlight shorter effective courses as a key improvement area, recommending that 60% of amoxicillin prescriptions be for 5 days.[8] ScriptSwitch supports this by alerting prescribers when shorter courses may be appropriate.

5. Why Focus on Paediatric Prescribing?

The NHS Performance and Assessment Framework for 2025/26 introduces a new metric that measures the **percentage of children aged 0–9 years who have been prescribed at least one antibiotic in primary care over the previous 12-month period.** The fixed national target is 27.0%, based on prescribing data to March 2020. Current figures show both the East of England region and Herts and West Essex ICB exceed this target, highlighting the need for targeted antimicrobial stewardship in paediatric care.

Children commonly present with conditions such as respiratory infections and febrile illness, most of which are self-limiting. Clinicians should use narrow-spectrum antibiotics where indicated, prescribe the shortest effective course and follow local guidance, such as the Herts and West Essex ICS antimicrobial guidelines. The NICE traffic light table for assessing illness severity is a helpful tool to support decision-making.

While prompt antibiotic treatment remains essential in suspected sepsis, stewardship principles are equally important. Prescriptions should be reviewed regularly, therapy de-escalated when appropriate, and source control prioritised. The UK Sepsis Trust provides useful resources to guide balanced management: https://sepsistrust.org/healthcare-professionals/clinical-tools/.

When prescribing antibiotics for children, clinicians should consider the most suitable formulation. Solid oral dosage forms may be appropriate depending on a child's age and ability to swallow tablets. The KidzMed e-learning programme offers guidance for supporting children and families with this: https://www.e-lfh.org.uk/programmes/kidzmed/.

To support clinicians and families, several online resources are available. These include parent leaflets on using solid oral dosage forms, helping children to swallow tablets, understanding coughs, general advice on antibiotic use and antimicrobial resistance. Trusted materials can be accessed via the Healthier Together website, which also provides information on managing fever and details about the Pharmacy First service: https://www.hwehealthiertogether.nhs.uk/.

Specific paediatric resources include:

- Swallowing Pills guidance - Medicines for Children
- KidzMed training materials
- Cough information leaflet
- General advice on antibiotics
- Antimicrobial resistance – what can I do as a parent.

Practices are encouraged to embed antimicrobial stewardship into routine care by ensuring all prescribers have access to training, clear guidance, and patient information to support appropriate prescribing and reduce unnecessary antibiotic exposure in children.

6. How can my practice monitor antimicrobial prescribing?

Practices can monitor the prescribing of total antimicrobials and broad-spectrum antimicrobials via the monthly ECF dashboard that is shared with the practice.

There are other resources available to monitor practice antimicrobial prescribing as below (some requires login).

- ePACT2 AMS dashboard
- OpenPrescribing
- PrescQIPP AMS visual analytics
- ePACT2 Antimicrobial stewardship (AMS) Children Dashboard
- ePACT2 Urinary tract infection dashboard
- ePACT2 National Medicines optimisation opportunities dashboard
- PrescQIPP antimicrobial duration dashboard

7. What strategies can practices implement to improve antimicrobial prescribing? [9]

The following strategies should be used to improve antimicrobial prescribing[9]

Do:

- Appoint an Antimicrobial Champion within the practice to lead on antimicrobial stewardship and promote best prescribing practices.
- Use local prescribing data or national resources to monitor antimicrobial use and identify areas for improvement.
- Ensure all prescribers have easy access to local or national guidelines and follow them, prescribing the shortest effective course at the appropriate dose and via the correct route. Clinicians are strongly encouraged to download the local antimicrobial guidelines app by searching “Herts Antibiotics” in the Apple App Store or Google Play.
- Use TARGET patient information leaflet for RTI and UTI during consultations to support discussions and help manage expectations (see TARGET resources below). These can also be accessed within clinical systems and sent via AccuRx (see Appendix 1).
- Utilise prescribing support tools such as ScriptSwitch to guide decision-making
- Display patient-friendly resources in waiting areas that promote self-care and signpost to reliable sources of information (see national resources below).
- Carry out regular antibiotic audits and develop a practice-specific action plan to support continuous improvement in prescribing (see TARGET resources).
  Contact your local ICB pharmaceutical adviser for additional support to embed antimicrobial stewardship initiatives.

Don’t:

- Issue immediate prescriptions for antimicrobials in patients likely to have self-limiting conditions.
- Issue delayed or backup prescriptions without clinical justification. When appropriate, delayed prescriptions can be issued with clear instructions to the patient.
- Issue repeat prescriptions for antimicrobials unless there is a specific ongoing clinical indication.
- Allow repeat prescriptions for antimicrobials to continue for more than six months without clinical review.

8. How the ICB can support practices with this work?

The ICB can support practices in reducing inappropriate prescribing by

- Monitoring and evaluating antimicrobial prescribing at the practice level and sharing data with all practices

- Discussing practice prescribing benchmarked against local and national antimicrobial prescribing rates and trends
- Providing regular feedback to individual practice/prescriber about inappropriate antimicrobial prescribing
- Developing, reviewing, updating and implementing local antimicrobial guidelines in line with national guidance
- Updating IT prescribing decision support tools for appropriate prescribing of antimicrobials e.g. ScriptSwitch
- Providing education and training to health and social care practitioners

Please contact your local pharmaceutical advisor to discuss support available to practices.

9. What are the national resources available to reduce inappropriate prescribing of antimicrobials?

The Royal College of General Practitioners' (RCGP) TARGET antibiotics toolkit for primary care has a range of resources to support clinicians in optimising antimicrobial prescribing.[10] These include:
Self-Assessment checklist for clinician
TARGET RTI leaflets to discuss with patient during consultation
TARGET UTI leaflets to discuss with patient during consultation
Managing common infection (self-care) leaflets
Audit toolkits
Antimicrobial Action plans
Posters and videos for clinical and waiting areas
Learning resources for prescriber
TARGET train the trainer workshop

Other leaflets and resources
HWE ICB Primary Care Webinar Library - antimicrobials (requires login)
Digital resources for primary care e.g. posters, screensavers

Two resources which are particularly good for parents
Caring for children with coughs leaflet[11]
When should I worry booklet

10. How can the Pharmacy First service support antimicrobial stewardship?

The Pharmacy First service allows GPs and other settings to electronically refer patients directly to community pharmacies for minor illness consultations for seven common conditions: sinusitis (12 years and over), sore throat (5 years and over), acute otitis media (1 to 17 years), infected insect bites (1 year and over), impetigo (1 year and over), shingles (18 years and over) and uncomplicated urinary tract infections in women (16 to 64 years). The clinical pathway consultations allow pharmacist to supply antibiotics via Patient Group Directions (PGDs) for shortest duration and in line with the national guidelines, supporting principles of antimicrobial stewardship.

Appendix 1: How to access TARGET resources guide (SystmOne/Emis Web)

How to access guide.pptx

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