

European Antibiotic Awareness Day 2012:

TARGET antibiotics through guidance, education, and tools

The rise of antimicrobial resistance was placed firmly on the world map with the publication of the World Health Organization (WHO) report in March of this year and there have been other calls for international action.¹ GPs are well aware of the problem of resistance but don't really take ownership, attributing resistance to prescribing by other organisations or sectors.² However, 80% of antibiotics are prescribed in primary care³ and there is ample evidence of the link between outpatient prescribing and antibiotic resistance.⁴

THE IMPORTANCE OF EUROPEAN ANTIBIOTIC AWARENESS DAY

The fourth in the series of the now annual European Antibiotic Awareness Day (EAAD) was held on the 18 November 2012. The day endeavoured to increase the profile of initiatives designed to improve antibiotic use across Europe aimed at the general public and professionals in both community and hospital settings. Rates of antibiotic resistance are still increasing across Europe, and as resistance is related to use, campaigns have been aimed at encouraging more appropriate prescribing to control the emergence and spread of new resistant bacteria.⁵ The antibiotic campaign in England, following the publication of the 1998 Standing Medical Advisory Committee report, *The Path of Least Resistance*,³ led to a fall in community antibiotic prescriptions, but between 2005 and 2011 total antibiotic items prescribed have risen by about 8%.⁶ Despite this overall increase in antibiotic prescribing there have been some successes associated with improved awareness of the importance of appropriate antibiotic prescribing. Hospital initiatives aimed at controlling methicillin-resistant *Staphylococcus aureus* and *Clostridium difficile* have led to a fall in both infections from these organisms and cephalosporin and quinolone usage, which were considered one of the main drivers of these infections. However there has been a steady rise in extended-spectrum beta-lactamase (ESBL)-producing *Escherichia coli* and *Klebsiella* spp in both the hospital and community setting over the past few years.⁷ Therefore the ideals of EAAD are still relevant and worth promoting.

Recent changes in hospital prescribing have been mirrored in community antibiotic prescriptions. The number of community

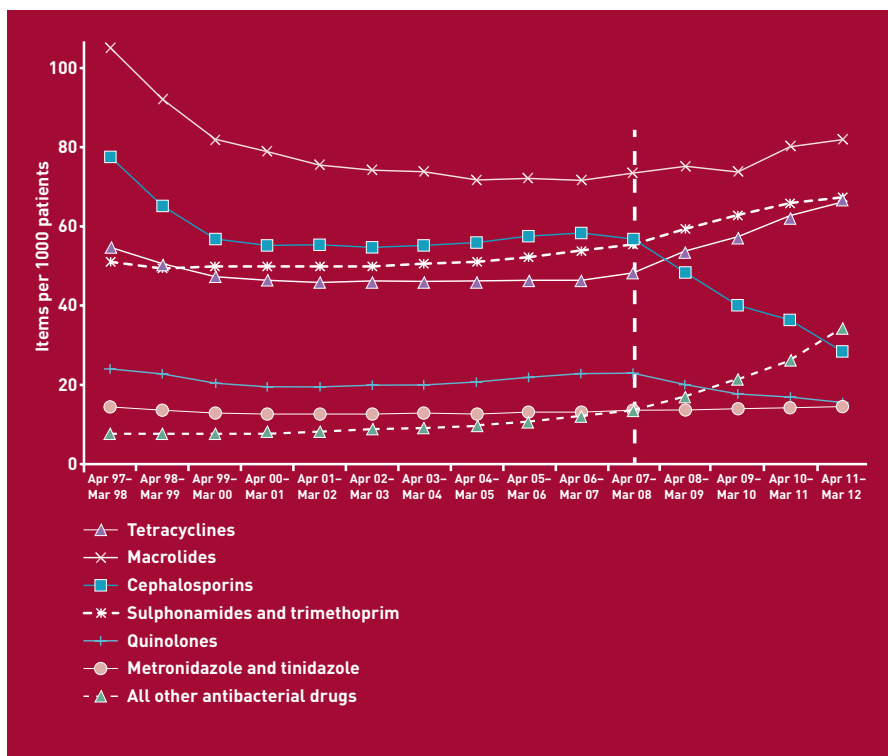


Figure 1. Trends in prescribing antibacterial items (excluding penicillins) in English general practices, with change since 2007/2008.⁶

prescription items for cephalosporins in the past 4 years has fallen by 49% and that of quinolones by 35% (Figure 1).⁶ In contrast the number of prescriptions for tetracyclines, macrolides, trimethoprim, and Macrochantin® (Mercury), which are

the first-line antibiotics recommended by national guidance,^{8,9} have increased,⁶ resulting in an overall rise in antibiotic prescribing in the community. Cross-European comparisons show that the UK has some way to go before prescribing

Table 1. Resources on the RCGP TARGET Antibiotics website

TARGET resources	For clinicians	For patients
Guidance	<ul style="list-style-type: none"> Antibiotic guidance for local adaptation Antibiotic App 	<ul style="list-style-type: none"> Guidance for GPs on how to optimise use of the patient materials
Education	<ul style="list-style-type: none"> PowerPoint presentation template for local adaptation Links to clinical modules covering antimicrobial use (for example respiratory or urinary tract infections on the RCGP and other websites) 	<ul style="list-style-type: none"> Materials to share with the patient during the consultation Life channel antibiotic videos to run in the waiting room Links to e-Bug educational activities
Tools	<ul style="list-style-type: none"> Self-assessment tool to assess locality and GP surgery antimicrobial stewardship programmes, guidance, education and audit 	<ul style="list-style-type: none"> Patient leaflet to be used within consultation Audit materials to evaluate GP surgery antimicrobial use Links to other leaflets and tools to use with patients

“EAAD 2012 encourages GPs across the UK to make antimicrobial stewardship a clinical priority, through the launch of a new toolkit: ‘Treat Antibiotics Responsibly, Guidance, Education, Tools’ (TARGET Antibiotics).”

rates match those of other north European countries. It comes down to further action being taken in the community setting.

GENERAL PRACTICE AND EAAD

EAAD 2012 encourages GPs across the UK to make antimicrobial stewardship a clinical priority, through the launch of a new toolkit: ‘Treat Antibiotics Responsibly, Guidance, Education, Tools’ (TARGET Antibiotics), which will be available on the Royal College of General Practitioners (RCGP) website.¹⁰ The TARGET Antibiotic resources have been developed for use in primary care, to highlight the importance of antimicrobial resistance and responsible use, through resources aimed at the clinicians themselves and for them to share with the patients during consultations (Table 1). The resources have been developed by the RCGP and members of Antimicrobial Stewardship In Primary Care Group (ASPIC), a multiprofessional group including GPs, nurses, microbiologists, pharmacists, and patients.¹¹

It is the turn of primary care to embrace EAAD, and to utilise the available resources of both the TARGET Antibiotics website and EAAD. The resources can all be accessed via the Department of Health website (www.dh.gov.uk) or by searching Google with the terms ‘EAAD’, ‘2012’, and ‘England’.

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Provenance

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Competing interests

Michael Moore is the RCGP clinical champion for antimicrobial stewardship.

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REFERENCES

1. Carlet J, Jarlier V, Harbarth S, *et al*. Ready for a world without antibiotics? The Pensières Antibiotic Resistance Call to Action. *Antimicrob Resist Infect Control* 2012; **1(1)**: 11.
2. Wood F, Phillips C, Brookes-Howell L, *et al*. Primary care clinicians’ perceptions of antibiotic resistance: a multi-country qualitative interview study. *J Antimicrob Chemother* 2012; DOI: 10.1093/jac/dks338.
3. Department of Health. *The path of least resistance. Main report of the Standing Medical Advisory Committee, Sub-Group on Antimicrobial Resistance*. Report No: 152. London: DoH, 1998.
4. Goossens H, Ferech M, Vander SR, Elseviers M. Outpatient antibiotic use in Europe and association with resistance: a cross-national database study. *Lancet* 2005; **365(9459)**: 579–587.
5. British Society of Antimicrobial Chemotherapy. *Antibiotic action — the arms race*. Birmingham: British Society for Antimicrobial Chemotherapy, 2011. <http://antibiotic-action.com> [accessed 1 Nov 2012].
6. NHS Prescription Services. *Antibiotics National Charts*. NHSBSA, 2011. http://www.nhsbsa.nhs.uk/PrescriptionServices/Documents/PPDPrescribingAnalysisCharts/Antibiotics_Jun_11_-_National.pdf [accessed 1 Nov 2012].
7. Enoch DA, Brown F, Sismey AW, *et al*. Epidemiology of extended-spectrum beta-lactamase-producing Enterobacteriaceae in a UK district hospital; an observational study. *J Hosp Infect* 2012; **81(4)**: 270–277.
8. Department of Health Guidance. *Antimicrobial stewardship: start smart — then focus*. London: DoH, 2011. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_131062 [accessed 1 Nov 2012].
9. Health Protection Agency. *Management of infection guidance for primary care for consultation and local adaptation*. London: HPA, 2000. http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1279888711402 [accessed 1 Nov 2012].
10. RCGP and members of Antimicrobial Stewardship in Primary Care Group. *TARGET antibiotics*. London: RCGP, 2012. <http://www.rcgp.org.uk/TARGETantibiotics/> [accessed 13 Nov 2012].
11. McNulty CAM, Francis NA. Optimizing antibiotic prescribing in primary care settings in the UK: findings of a BSAC multi-disciplinary workshop 2009. *J Antimicrob Chemother* 2010; **65(11)**: 1–7.