

Prescriberfile

From the Primary Care Prescribing Group

Antibiotic Update

This edition of Prescriberfile concerns information around antibiotics and their use.

Launch of Updated Forth Valley Antimicrobial Guidelines

The Forth Valley antimicrobial guidelines have recently been updated. From a PC, the updated guidelines can be accessed through the Quality Improvement Clinical Guideline Page where the link is listed under [Antibiotic Prescribing](#).

A quick reference antimicrobial poster has also been updated and will be circulated to all practices.

The Scottish Antimicrobial Prescribing Group (SAPG) has commissioned an app for hosting antibiotic guidelines.

The platform also links to a web based

guideline so can be accessed from a PC. The app is available for both IOs and Android devices and once downloaded can be opened where there is no internet access so is truly portable.

Updates can easily be made and users will be prompted to update their device when a change is made.

The app can be downloaded from Apple Store or Google Play by searching for "Antimicrobial Companion" and is free of charge. Once downloaded, NHS Forth Valley guidance can be selected from the Reference List.

- App can be downloaded from Apple Store or Google Play
- Quick reference antimicrobial poster will be circulated to practices

Focus on co-amoxiclav

Co-amoxiclav is a broad spectrum antibiotic which has the following indications for use in Primary Care:

Empirical Use
Upper UTI in children
Acute pyelonephritis
Acute diverticulitis – poor evidence for antibiotics however in uncomplicated cases
Facial cellulitis
Human or animal bites
Second Line or Resistant Organisms Suspected
Rhinosinusitis
COPD
Mastitis

Resistance rates across Forth Valley for commonly seen organisms do not support empirical use of co-amoxiclav out with these recommendations so **unless specific culture and sensitivity** for a particular patient is available, then the guidelines should be followed.

Historically, NHS Forth Valley had the lowest usage of co-amoxiclav within Primary Care across mainland Scotland. However, as all boards have made a significant effort to reduce 4 "C" prescribing, Forth Valley has become one of the highest usage boards.

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Please Circulate to All Staff

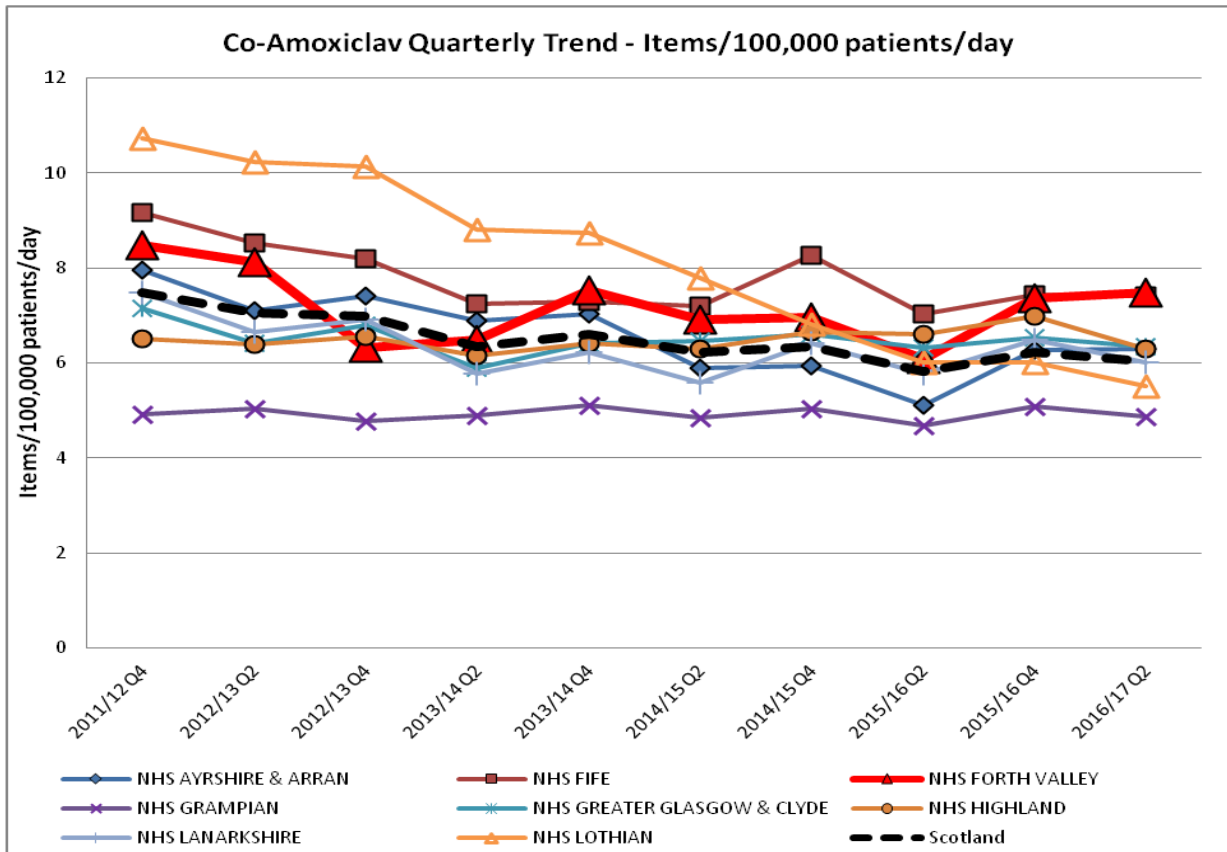
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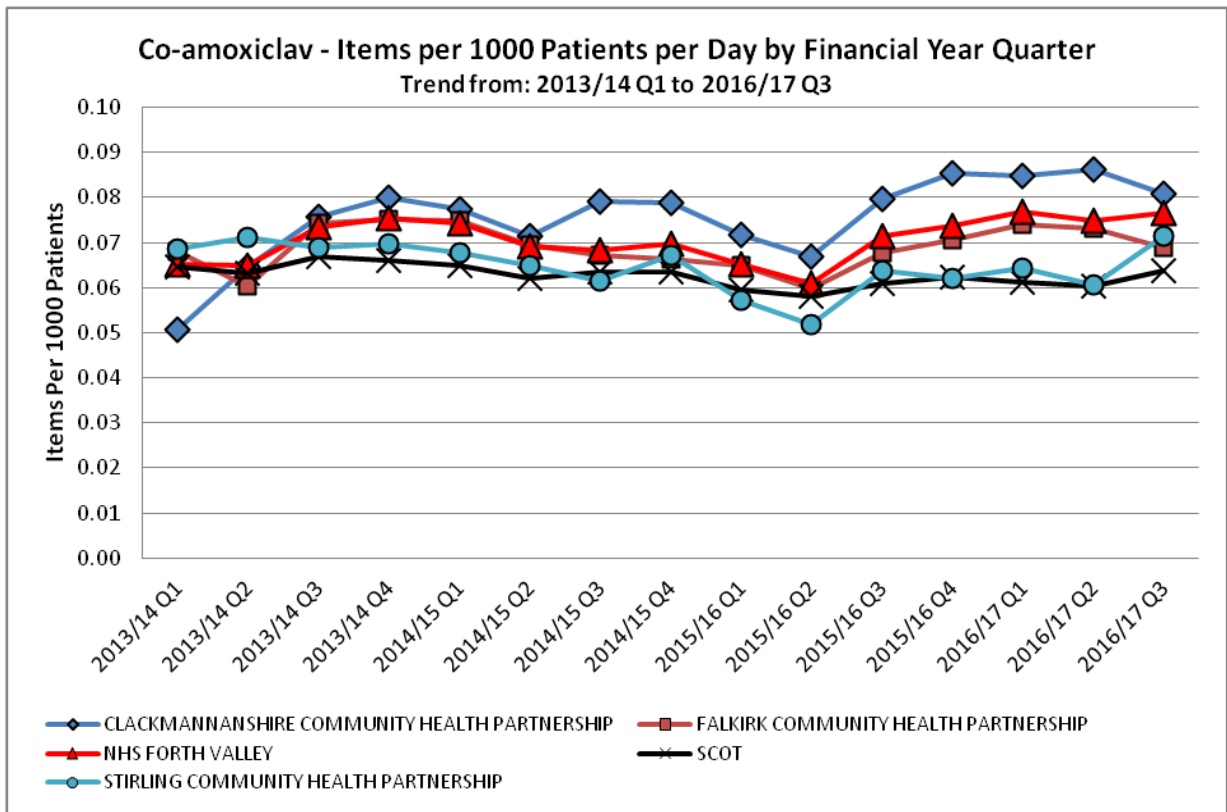
Key Points of interest:

- Updated Forth Valley antimicrobial guidelines and app are now available
- NHS Forth Valley is one of the highest usage boards for Co-amoxiclav
- Clackmannan CHP is the CHP with the highest use of co-amoxiclav
- All patients with upper UTI should have a sample obtained to ensure appropriate treatment
- Repeated or prolonged LRTIs or COPD infections should have samples sent before co-amoxiclav is used

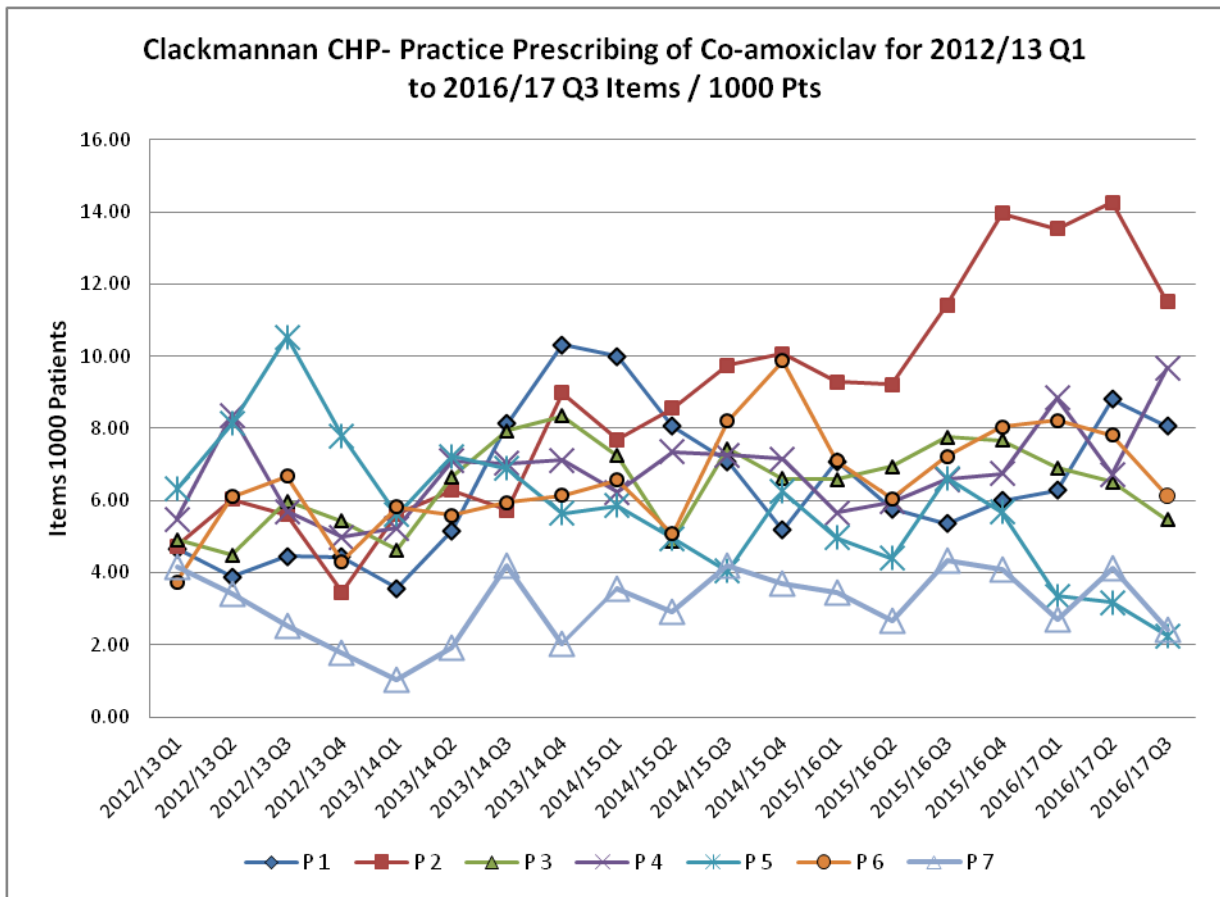
Forth Valley is one of the highest usage Boards of Co-amoxiclav



By drilling down to CHP level, it can be seen that Clackmannan CHP is the highest of the 3 CHPs in Forth Valley



Further analysis of the practices within Clackmannan CHP demonstrates a spread of usage suggesting that prescribing behaviours are not uniform across the area.



Several audits over the past 2-3 years have been conducted in high use practices and the drivers for use include:

- Suspected upper UTI but limited supporting symptoms
- UTI
- COPD
- LRTI

Only occasionally are samples sent for culture and sensitivity to determine if choice was appropriate.

- All patients with upper UTI should have a sample obtained to ensure appropriate treatment.
- Repeated or prolonged LRTIs or COPD infections also should have samples sent.

Hierarchy of 4 “C” Antibiotics

Practitioners continue to be advised that 4 “C” antibiotics should be avoided if alternative antibiotics are clinically appropriate. This is particularly of relevance to the elderly population who are greatest risk of Clostridium difficile infection (CDI) and more patients are being identified with CDI in the community than previously.

If however, a 4 “C” antibiotic is indicated then it has been suggested that having a hierarchy of risk may be helpful.

In terms of drivers for resistance; co-amoxiclav and ciprofloxacin have greater potential than cefalexin.

- If cefalexin is an option for lower UTI (when first line treatments are not appropriate), then this should be given in preference to co-amoxiclav or ciprofloxacin.

Focus on Urinary Tract Infections caused by *Enterobacteriaceae*

E. coli remains the most frequently isolated pathogen from urine samples sent from primary care with 97% being sensitive to nitrofurantoin and 67% sensitive to trimethoprim.

The urine samples being sent from primary care however represent a skewed sample as the current guidance for simple UTIs in non-pregnant females is to treat without sampling, hence a proportion of the samples received in the lab will have come from women who have failed on trimethoprim.

Nitrofurantoin covers the majority of pathogens with the exception of *Proteus* spp and some *Klebsiella* spp.

Both trimethoprim and nitrofurantoin will also provide cover for more resistant organisms such as ESBL

producers which co-amoxiclav will not treat.

Cefalexin provides very similar coverage to co-amoxiclav. In terms of risk of both resistance and CDI, cefalexin would be preferable if other treatment options are not suitable.

An algorithm giving options for the management of UTIs caused by *E. coli*, *Klebsiella*, *Proteus* etc has been developed which can be used in conjunction with the antibiotic guidelines.

This [algorithm](#) is included in the updated guidelines and copies are available on the intranet QI guidelines page – Antibiotic section and through your practice pharmacist and give options for more resistant organisms.

- [Algorithm](#) giving options for the management of UTIs caused by *E. coli*, *Klebsiella*, *Proteus* etc is included in the updated guidelines and copies are available on the intranet - QI guidelines page – Antibiotic section

Contact Information:

General Primary Care Prescribing Advice:
Contact your Primary Care Pharmacist; or alternatively
Primary Care Prescribing Support Team on 01324 673611

For Advice Related to Management of Controlled Drugs:
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