

**FAO: Primary Care colleagues in North Yorkshire and York**

**Medicines Management Prescribing Focus – May 2024**

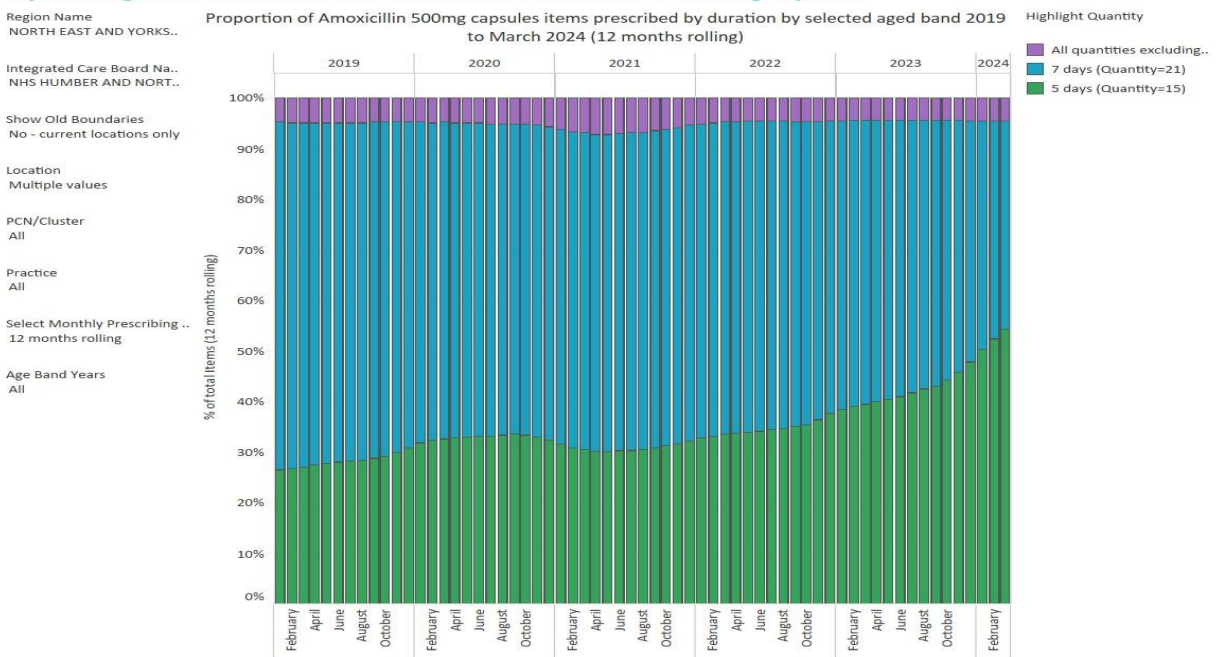
**Five Day Courses of Antibiotics for Lower Respiratory Tract Infections (LRTIs)**  
**'Shorter is Better'**

**Summary:**

- Current [NICE/PHE](#) guidance (now hosted on the TARGET website) for treatment of LRTIs advise that, where antibiotics are considered necessary, course lengths of 5 days are prescribed for all indications listed except bronchiectasis.
- A recent [meta-analysis](#) found that each additional day of antibiotic therapy was associated with a 4% increase in risk of side effects and a 3% increase in risk of resistance.
- In another [study](#) longer antibiotic courses were found to be no more effective than shorter courses at preventing infection-related hospitalisations.
- Substantial reductions in antibiotic use in primary care could be achieved by reducing course lengths to 5 days for the majority of LRTIs.

In North Yorkshire and York practices the quantity of amoxicillin 500mg capsules (commonly first line for LRTIs in non-penicillin allergic patients) prescribed as a 5 day course can be seen as the green portion of the stacked bar chart below. This demonstrates that the proportion of 5 day prescribing has increased in our localities since this data was first shared last year. Although amoxicillin can be prescribed for different indications which may require different course lengths, this is a useful marker for discussion. The national aim is for 75% of all prescriptions for amoxicillin 500mg capsules to be for 5 days.

**Optimising antimicrobial duration dashboard - Amoxicillin 500mg capsules**



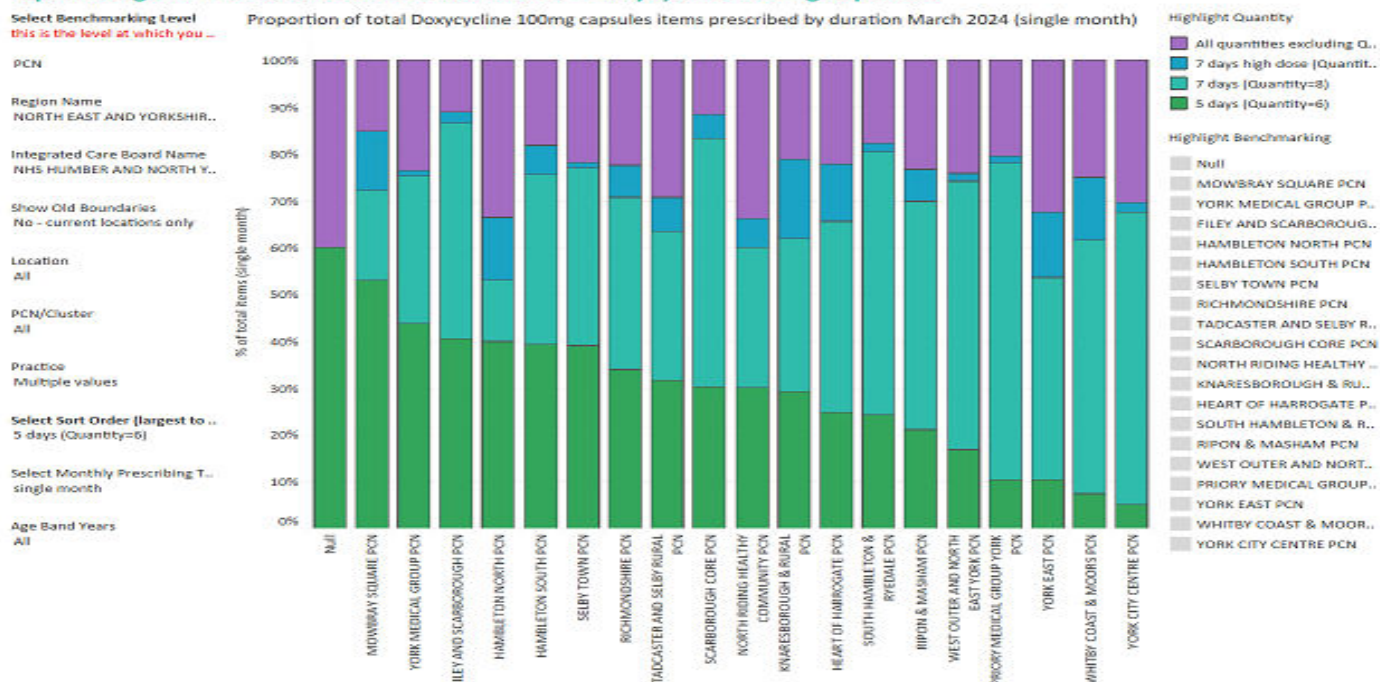
**Amoxicillin 500mg caps - All NY&Y practices 12 month rolling data, as at Mar 2024.**

Source: PrescQIPP Optimising antimicrobial use dashboard

Following on from the work done on amoxicillin prescribing, the next step is to review course lengths for doxycycline, with the aim of increasing the proportion of 5 day prescribing in LRTIs. This is a little more complex to display on a graph, as it may be prescribed at a standard dose of 200mg stat followed by 100mg daily, or at a higher dose of 200mg each day. In addition, it can be prescribed for skin and soft tissue infections as well as for LRTIs in penicillin allergic patients. In the stacked bar chart below the quantity of doxycycline 100mg capsules prescribed as a 5 day course (quantity of 6 caps) during March can be seen as the green portion of the bar. The turquoise portion of the bar is the same dose for 7 days, the blue portion is prescriptions for 14 capsules and the purple section is for any other dose/quantity.



### Optimising antimicrobial duration dashboard - Doxycycline 100mg capsules



Doxycycline 100mg caps - All NY&Y PCN's (Null = Reeth) as at March 2024 (single month).

Source: PrescQIPP Optimising antimicrobial use dashboard

- We have included (as separate attachments) the 5 day prescribing graphs for both amoxicillin and doxycycline down to practice level (as at March 2024), to enable practices to review their own data as a team.
- We have also included (as a separate attachment) graphs showing total oral antibiotic prescribing at practice level for practices to review.

### Suggested actions :

- **Formulary** – for S1 practices, check that amoxicillin 500mg x 15 caps and doxycycline 100mg x 6 caps are at the top of the 'pick list' in your formulary. You can view this in: 'Setup>Prescribing>Drug Formularies'. Some teams have removed the 7 day course lengths altogether from their formulary; quantities can of course be changed at the point of prescribing where necessary.
- **Dispensary** – for dispensing practices, check if the team have stock of the boxes of 15 amoxicillin 500mg capsules to make the dispensing process more efficient. Unfortunately, doxycycline 100mg does not yet come in packs of 6 capsules.
- **Read code** - ensure indication for prescribing antibiotics is appropriately coded to facilitate future audits

- **COPD Rescue Packs** – check that any antibiotics in [COPD rescue packs](#) on repeat templates (usually amoxicillin or doxycycline) are for 5 day courses.

**Useful resources:**

- [PrescQIPP Optimising Antimicrobial Use Dashboard for Amoxicillin](#)
- [PrescQIPP Optimising Antimicrobial Use Dashboard for Doxycycline](#)
- [NICE/PHE Summary of antimicrobial prescribing guidance – managing common infections](#)

Please share the information in this document with all relevant members of staff in the Practice.

For any queries or feedback on this topic please contact us via: [hnyicb-ny.routine@nhs.net](mailto:hnyicb-ny.routine@nhs.net)

The MMT welcomes ideas and suggestions that you and colleagues may wish to recommend for future prescribing focus editions.

Many thanks,

**North Yorkshire & York Medicines Management Team**