

Dental Antimicrobial Prescribing in the Midlands: A Regional Action Plan

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Introduction

Dental professionals are a key stakeholder in tackling Antimicrobial Resistance (AMR). It has been estimated that primary care dental prescribing accounts for an estimated 7.4% of all antimicrobial prescriptions in England (excluding private sector and secondary care).^[4] The UK Government has set tangible targets to tackle AMR, as part of the National Action Plan, including to reduce UK antimicrobial use in humans by 15% by 2024.^[3]

A survey of antimicrobial prescribing, amongst dentists in ten English local authorities, revealed suboptimal prescribing including for inappropriate clinical situations and under time pressures.^[5] COVID-19 certainly appears to have exacerbated the threat of AMR. Studies appear to suggest that the number of antibiotic prescriptions administered in primary care setting has increased, despite the overall reduced number of appointments.^[6] Dental antibiotic prescribing during the pandemic was 20% higher in 2020 compared to the previous year.^[7] Antibiotic prescribing increased within the Midlands and was one of the five highest regions within the UK across the pandemic.^[7]

There are further challenges in regards to the collection of prescribing, or indeed dispensing, data which may not necessarily reflect true prescribing. Overall, there is a lack of appropriate interventions to communicate and target AMR strategies within our Region. Further work is needed to optimise and reduce Dental Antimicrobial Prescribing in Primary Care.

Project Overview: Aims, Objectives and Method

Aim: Create a resource to support improvement in dental antibiotic prescribing

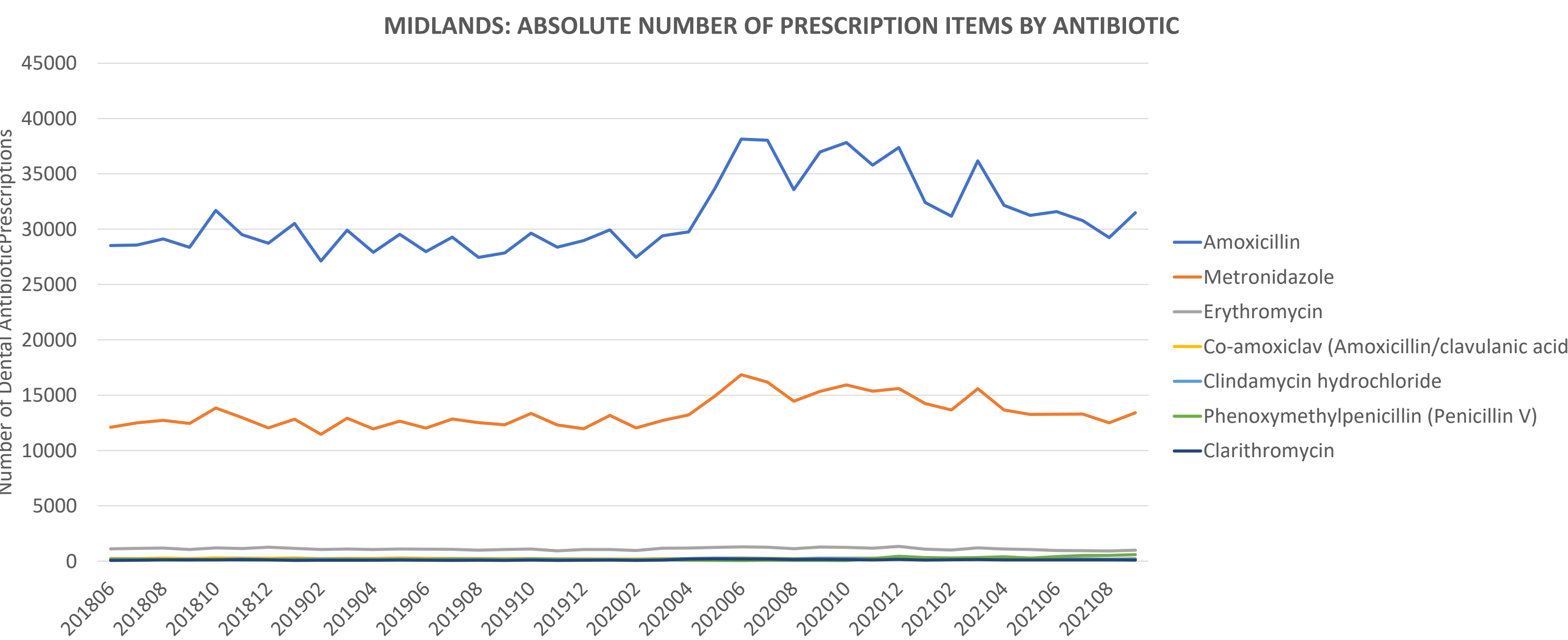
Objectives:

- Present key data on prescribing activity by different systems
- Develop tools to:
 - Improve antimicrobial prescribing and raise awareness of AMR

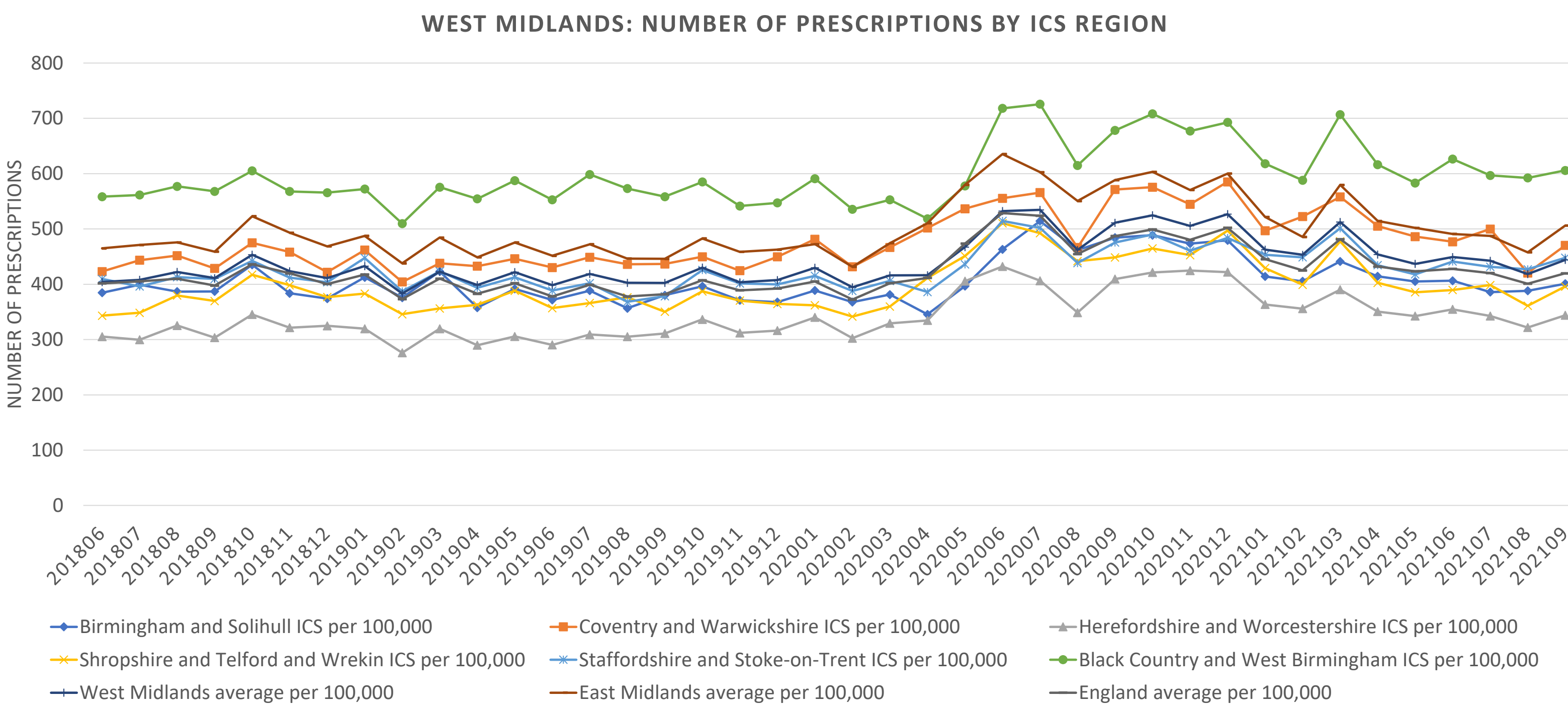
Method:

- Visualisation of dispensing trends using NHSBSA data
 - Limited to antibacterial prescribing data by Dentists in England only
 - Special acknowledgement to NHSBSA and Elizabeth Beech for data provision
- Creation of a bespoke website
- Supporting resource toolkit

Prescribing Data from June 2018 – September 2021



Prescribing Data from June 2018 – September 2021



Regional Action Plan: Dedicated AMR Website

Communication and Interprofessional Support

How can I help?

- Send the message with friends and family
- Remember that antibiotics help, but change for needed
- Become an antibiotic guardian and protect your health

"Protect antibiotics for the future by returning any unused or old antibiotics to your local pharmacy"

(Birmingham and Solihull Clinical Commissioning Group, 2022)

Reassure

- Understand patient concerns and explain how you will help them

Educate

- Antibiotics will not help with the pain or cure toothache
- Antibiotics can cause more harm than good
- Using antibiotics, when not needed, can stop them working correctly in the future

Treatment

- Appropriate arrangements: triage, consultation, examination
- Safety net
- Follow up with patient
- Document conversation

Antimicrobial Stewardship NHS England

How can we tackle AMR?

- 1. Anyone can join
- 2. Follow QR code to learn more
- 3. Make a pledge towards better use of antibiotics

How to become an antibiotic guardian?

- 1. Anyone can join
- 2. Follow QR code to learn more
- 3. Make a pledge towards better use of antibiotics

Antimicrobial Stewardship

Guidance

Learning modules

Resources

Audit tools

Updated dental AMR toolkit for regional use

Antimicrobial Stewardship and Audit

Regional Action Plan

Component	Description	Impact
Prescribing Data Activity Presentation	<p>Presentation of prescribing across the Midlands at local MCN meetings</p> <p>Data interpretation and visualisation tailored for range of audiences</p>	<p>Permit a targeted discussion with local practitioners</p> <p>Raise awareness with tangible figures specific for each ICS</p> <p>Signpost to website and highlight need for improvement</p>
Creation of a Regional Website dedicated to AMR	<p>Novel and bespoke website designed for patients, public, professionals and practices</p> <p>Domains include antimicrobial stewardship (latest guidance, learning modules, resources, and audit tools), audit, and the amnesty of antibiotics</p>	<p>Single resource combining latest evidence based resources and national action plan to tackle AMR</p> <p>User friendly through desktop and mobile accessibility</p> <p>Free to access</p>
Updated Audit Tools	<p>National audit tools updated for use in the Midlands</p> <p>Based on PHE, FGDP and BDA AMR audit toolkit</p> <p>Further extended for use in Primary and Secondary Care</p> <p>Audit overview and explanation of process</p>	<p>Easier navigation through the addition of drop-down functions</p> <p>Simplified and concise spreadsheet design</p> <p>Permits streamlined use of audit as per the antimicrobial stewardship toolkit</p>
New Communication Tools	<p>Dedicated patient discussion tool for non-clinical staff to assist in difficult discussions and encouraging behaviour change</p> <p>Development of posters/screensaver for display in Primary and Secondary Care to raise awareness and signpost to additional support</p>	<p>Simple three-stage approach for discussions whilst safeguarding patient care</p> <p>Multi-media formats to reach a range of audiences; including professionals, patients, and wider teams</p>

Future Direction

Collaborative change through engagement with pharmacy undergraduates	Develop interprofessional understanding and work towards our shared goal through early teaching and collaboration
Meaningful engagement through Google Analytics	Teaching planned in Sept 22 on management of dental conditions
Website growth as a resource for public and professionals	Demonstrate performance and track engagement on a regional level
Driving regional engagement through incentives	Highlight proof of concept and regional development
	Further updating of website ongoing to ensure latest guidance
	Additional domains planned (dental infections/signposting)
	Prizes and awards (AMR champion) to spotlight good practice
	Publicity through communication networks and newsletter

