

# Oral antibacterial drug prescribing in primary care and out-of-hours services: stakeholders' perceptions

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## Background

- Antibacterial prescribing considerably contributes to global antimicrobial resistance (AMR).<sup>1</sup>
- In Wales, various initiatives are available to improve antibacterial prescribing practices in different healthcare settings (e.g., National Prescribing Indicators and Improvement Goals).<sup>2,3</sup>
- A gap in evidence in Wales regarding oral antibacterial drugs out-of-hours (OOH) services currently exists.
- A 7-year analysis of oral antibacterial prescribing data in primary care (PC) from the Comparative Analysis System for Prescribing Audit (CASPA), focusing on OOH services, showed an overall decline with variations across health boards (HBs).
- While the analysis was valuable, research is needed to understand the broader context and stakeholders' perceptions of these patterns.

## Aim

- Explore stakeholders' perceptions of oral antibacterial drug prescribing and prescribing patterns in Wales PC and OOH services.

## Methods

- Semi-structured individual interviews.
- One representative purposefully selected from each HB in Wales: lead or primary care antimicrobial pharmacist or an equivalent person, with help from a gatekeeper.
- Interviews were conducted between August and October 2023, transcribed verbatim and analysed thematically using inductive and deductive approaches with NVivo software.

## Results

- 7 interviews were conducted.
- Declining trends were attributed to collective efforts to meet targets rather than specific initiatives, and issues with presented trends were identified (Figure 1).
- 5 main themes were identified with several subthemes (Figure 2).

- Missing information from the database would provide a more accurate picture of prescribing, such as:

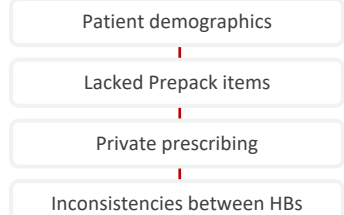


Figure 1: Highlighted issues with presented trends

### Issues influencing prescribing in PC and OOH

- Crisis management and healthcare response → COVID, Strep A, Media
- Resource challenges → Drug shortage, Financial
- Public perception and individual behaviour → Cure all, No harm

### Potential solutions to improve prescribing

- Data management and communication → Absence/Insufficient
- Training and education → Refresher courses
- Decision-making support → Tools, Reassurance
- Behavioural change/accountability → Responsibility

### Barriers to implementing OOH interventions

- Data related challenges → Data limitations
- Operational and organisational challenges → Irregular team

### Facilitators to implementing OOH interventions

- Strategic enhancement → Leadership support
- Process standardisation/improvement → Documentation

### Antimicrobial stewardship (AMS) strategies implementation

- Available AMS initiatives → TARGET toolkit, Incentives
- Ensuring successful implementation → Simple, Feedback
- Constraints to assessing AMS interventions → Workload, Lag-time

Figure 2: Identified themes/subthemes with examples

## Conclusion

- This work highlights the challenges, specifically within OOH services, and opportunities to address the prescribing of antibacterial drugs in primary care.
- Insights gained may guide stakeholders in further improving current prescribing practices, refining existing interventions, or developing targeted ones to support prescribers across the various healthcare settings.

## Recommendations

- Collecting and utilising intelligent data to define the population and identify prescribing issues – e.g., a user-friendly system to facilitate auditing.
- Improving communication and connectivity between in-hours and OOH services with better leads engagement.
- Evaluating individual AMS intervention impact to promote widespread adoption.

## References

1. WHO. 2023. *Antimicrobial resistance*.
2. All Wales Medicines Strategy Group. 2022. *National Prescribing Indicators 2022-2023*.
3. Welsh Government. 2023. *AMR & HCAI Improvement Goals for 2023-24*.