

TIPPING, S., FLEMING, N., DAMANT, G., TONNA, A.P. and MARTIN, S., on behalf of NAPEG (National Antimicrobial Stewardship Pharmacy Education Group). 2024. Preparing the future pharmacy workforce: competency-based undergraduate curricula for teaching, learning and assessment with a focus on antimicrobial stewardship. Presented at the 2024 Infection: BSAC (British Society for Antimicrobial Chemotherapy) winter conference, 5 December 2024, London, UK: [virtual event].

Preparing the future pharmacy workforce: competency-based undergraduate curricula for teaching, learning and assessment with a focus on antimicrobial stewardship.

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Preparing the future pharmacy workforce: competency-based undergraduate curricula for teaching, learning and assessment with a focus on antimicrobial stewardship

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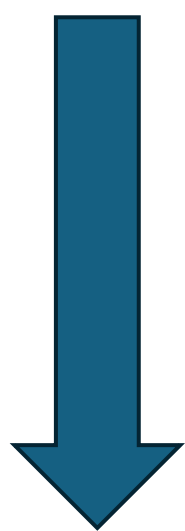
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INTRODUCTION

- ❖ Competency-based teaching, learning and assessment underpins the requirements for initial training and education of pharmacists in the UK and is set by the General Pharmaceutical Council. (General Pharmaceutical Council, 2021)
- ❖ This pedagogic approach is conducive when teaching antimicrobial resistance (AMR) and antimicrobial stewardship (AMS).
- ❖ It ensures student pharmacists gain the necessary skills and behaviours to apply knowledge effectively in clinical practice.

BRIDGING THE GAP BETWEEN SKILLS AND BEHAVIOURS



AIM

The aim of this project was to develop a UK-wide AMS competency framework and indicative curriculum specifically tailored for student pharmacists and foundation year trainees.

METHOD

- ❖ A working group of academics, NHS England and pharmacy practitioners from all four nations and with expertise in AMS was set up in September 2022 (NAPEG).
- ❖ Representatives from the British Pharmaceutical Student Association (BPSA), Royal Pharmaceutical Society (RPS) and United Kingdom Clinical Pharmacy Association (UKCPA) and United Kingdom Health Security Agency (UKHSA) are also members.
- ❖ The AMS/AMR indicative curriculum for student pharmacists was developed by NHS England and NAPEG. The competency framework was adapted from published frameworks including those for UK undergraduate medical students (McMaster et al, 2020), for generic undergraduate healthcare professional education, (Courtney et al, 2018) and WHO.
- ❖ The results of a survey conducted across Schools of Pharmacy aiming to determine the nature and extent of implementation of the latter generic competencies, also informed this project. (Hamilton et al, 2023)
- ❖ To ensure consistency, NAPEG worked with the British Society for Chemotherapy (BSAC) to align the Keep Antibiotics Working (KAW) website (that provides resources for student pharmacists and educators) to the curriculum domains.
- ❖ No ethics approval was required for this study since it did not involve any participants.

OUTCOMES

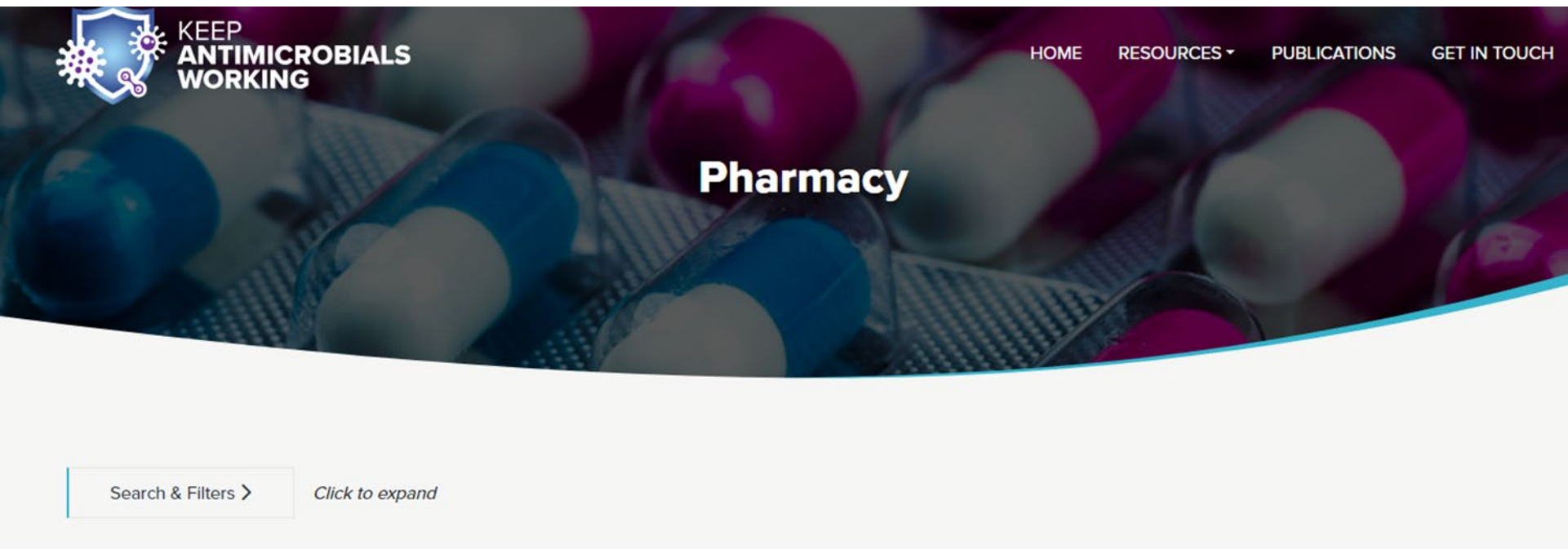
The AMR & AMS competency curriculum comprises 6 domains, each with a competency statement and accompanying descriptors.

Domain 2 (1 of 6 domains) Antimicrobials and antimicrobial resistance

Competency statement
All newly qualified pharmacists need to understand the core knowledge underpinning the action of antibiotics and the concept of antimicrobial resistance; and use this knowledge to help prevent antimicrobial resistance.

Descriptors Examples (2 of 8)

- 2.01. Demonstrate an understanding of the major classes of antimicrobials, their mechanisms of action and their spectrum of antimicrobial activity in terms of Gram-positive, Gram-negative, anaerobic and atypical bacteria and viruses, fungi and parasites
- 2.08. Demonstrate an understanding of the concept of One Health where AMR is concerned and the inter-dependencies between human health, animal health, agriculture, food and the environment



Keep Antibiotics Working resources for student pharmacists and educators

The competency framework and practice-based assessment framework are published by NHSE.

They may be accessed at:
Indicative Curricula for the MPharm and Foundation Training Year | NHS England | Workforce, training and education (hee.nhs.uk)



CONCLUSION

- ❖ This project is timely to support development of future pharmacists as leaders in AMS since they will be independent prescribers at the point of registration from 2026.
- ❖ Though it is not mandatory to implement this curriculum, it provides a benchmark for embedding the competencies into undergraduate pharmacy curricula and allows identification of topics that may not be adequately covered. It also promotes consistency of approach across schools of pharmacy.

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