

# World Antimicrobial Resistance Awareness Week & Experiential Learning – Getting Student Pharmacists Involved on Placement

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## Introduction

- World Antimicrobial Resistance Awareness Week (WAAW) is an annual global campaign to improve awareness of Antimicrobial Stewardship (AMS) and Antimicrobial Resistance (AMR).
- Third year of study Student Pharmacists undertook a 1 week Experiential Learning (EL) placement within primary or secondary care in NHS Lanarkshire (NHSL) during WAAW 2025.
- This was an innovative opportunity to plan a novel EL activity – enabling student pharmacists to contribute to a global health campaign within the health board.

## Methods

- The WAAW EL activity was planned by Antimicrobial and Education & Training pharmacists within NHSL and topics were aligned to local and national guidance and key AMS messages.
- Permission from the university was sought.
- Student pharmacists were allocated a specific topic and asked to create a promotional poster, leaflet, or memo aligned to WAAW key messages.
- Content of posters were sense-checked by a member of the NHSL Antimicrobial Pharmacist team prior to sharing with colleagues in practice.

## Conclusion

This EL learning activity was a novel way to involve Student Pharmacists in a global health campaign in a real healthcare setting, in real time. The activity was well received by both colleagues and students. Local Antimicrobial and Infection Control Governance committees have plans to use the output in AMS and Winter Preparedness campaigns.

## Results & Discussion

- Thirteen student pharmacists took part - either individually or in pairs.
- Ten pieces of WAAW content were produced.
- Student pharmacists shared their work with colleagues on placement and received positive feedback.
- Student pharmacists presented their posters to share learning with peers at the end of placement through online group discussion.

### Examples of student pharmacist posters for WAAW:

**Antimicrobial AWaRe**

**What is antimicrobial resistance?**  
Microbial agents (bacteria, viruses and fungi) can develop resistance to treatment which makes infections harder to clear.

**Causes of antimicrobial resistance**

- Overuse of antibiotics
- Unnecessary use of antibiotics
- Incomplete antibiotic courses
- Broad spectrum antibiotics

**AWaRe (Antibiotic categories)**

Access	Watch	Reserve
<ul style="list-style-type: none"> <li>Low resistance potential</li> <li>Narrow spectrum</li> <li>Fewer side effects</li> </ul>	<ul style="list-style-type: none"> <li>Higher resistance potential</li> <li>Broader spectrum</li> <li>Requires careful monitoring</li> </ul>	<ul style="list-style-type: none"> <li>LAST RESORT</li> <li>Require close monitoring</li> <li>Used in multidrug-resistant infections</li> </ul>
1st/2nd Line	2nd/3rd Line	Last line

**WATCH CCQ**

- Co-amoxiclav
- Clarithromycin
- Quinolones (Ciprofloxacin/Levofloxacin)

**RIGHTDECISIONS FOR HEALTH AND CARE**

For guidance on first line antibiotic prescribing. SCAN ME!

by Natalie Love

**DON'T GIVE BACTERIA A FIGHTING CHANCE!**

**WHAT IS ANTIMICROBIAL RESISTANCE?**

Microorganisms like bacteria find ways to overcome drugs like antibiotics, which are designed to kill them.

**THE SCOTTISH GOVERNMENT'S KEY ACTIONS:**

- Don't share your antibiotics with others- they won't work and may make the problem worse!
- Wash your hands regularly
- Follow the prescribers advice: antibiotics aren't for viruses, colds or the flu

**RESOURCES FOR EXTRA INFO:**

Scan Me

by Florence Bergeret

**BEWARE THE 4 C'S: THEY CAN TRIGGER C. DIFF INFECTION**

These antibiotics are broad-spectrum, meaning they kill a wide range of bacteria - both harmful AND beneficial. When they destroy the healthy bacteria in your gut (your natural gut flora), this creates an opportunity for C. difficile bacteria to grow.

**4Cs**

- Ciprofloxacin
- Co-amoxiclav
- Clindamycin
- Cephalosporins

**How can you avoid C. diff?**

- Handwashing with soap and water
- Take antibiotics only when necessary
- Avoid high-risk 4Cs when alternatives exist
- Early detection and isolation
- Bleach cleaning in healthcare settings
- Complete full prescription as directed
- Appropriate treatment when infected

**Are you at Higher Risk of C. diff?**

- Age 65+
- Recent hospitalization
- Previous infection of C. diff
- Long term PPI use-Omeprazole
- Immunocompromised
- Exposure to infected individual - 13x higher risk of CDI
- Abdominal surgery

by Fatima Mansoor

**PROTECT ANTIBIOTICS: Get LRTI & UTI Durations Right**

World AMR Awareness Week – NHS Lanarkshire

**WHY IT MATTERS**

- Every antibiotic = increases resistance risk
- Longer courses do not improve outcomes
- Short, evidence-supported durations keep antibiotics working

**HOSPITAL ANTIBIOTIC DURATIONS (NHSL)**

LRTI	UTI
CAP HAP Infective exacerbation COPD	Lower UTI Female: 3 days Men: 7 days Catheterised patients: 7 days Upper UTI
Total duration (I/V/oral): 5 days	Total duration (I/V/oral): 7-10 days

**WHY IVOST & SHORT COURSES HELP**

Patients	Staff & Flow	Environment
Fewer IV lines Fewer side effects Earlier discharge	Less IV Prep ↑ Nursing Time ↑ Bed Availability	Fewer consumables Less waste Lower carbon impact

**KEY AMR MESSAGES**

- Shortest effective duration – don't extend 'just in case'
- Always document a 'stop date' on oral therapy on HEPMA
- Don't treat asymptomatic bacteriuria
- Tailor treatment based on culture sensitivity

Right Duration. Right Route. Right Time

by Carlo Tamayo & Mohammed Saeed