

Optimizing ward-based antimicrobial stewardship by empowering pharmacy technicians to complete IV to oral reviews

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Background: At Leeds Teaching Hospitals (LTHT), antimicrobial stewardship (AMS) is essential but challenging due to high patient volumes, limited reviews, and frequent staff turnover. Prolonged intravenous antibiotic (IV) use delays discharge increases costs, heightens infection risks, and demands more nursing time. Embedding AMS principles trust-wide optimizes care.

Methods: Building on a previous project demonstrating the benefits of 48–72 h IV antibiotic reviews, I implemented targeted training for pharmacy technicians across specialties. Most wards at LTHT have pharmacy technician coverage, this presented an opportunity to enhance AMS efforts across the trust. Training pharmacy technicians with the knowledge and skills to support IV-to-oral switches (IVOS), we could significantly amplify the impact of stewardship strategies.

Pharmacy technicians were trained to conduct virtual reviews using an electronic IV antimicrobial review tool. Patients on IV antibiotics for 48–72 h were identified via an Emeds report. Inclusion criteria: inpatients aged 16+ on IV antibiotics for 48–72 h. Exclusion criteria: patients under 16, those on antibiotics for cystic fibrosis, directed antimicrobial therapy, oral antibiotics, or prophylactic antimicrobials. Data collated from December 2022 to March 2023 and analysed using Excel.

Results: 87 patients audited, IVOS recommendations were made for 38, with 30 accepted. Seventeen patients were discharged within 48 h of switching. In cases where IV therapy was necessary, clinicians adhered to recommendations. Overall, 83% of patients had documented care plans aligned with pharmacy technician advice. This intervention reduced unnecessary IV antibiotic use and improved documentation of clinical reviews.

Conclusions: This audit highlights the value of involving pharmacy technicians in AMS to enhance prescribing practices. Their participation in daily reviews increased IVOS transitions and improved patient outcomes. Collaboration with infection prevention teams and pharmacy technicians will be key to optimizing AMS at LTHT, making it a shared responsibility to improve care and reduce antibiotic resistance.

References:

1. Leeds Teaching Hospital Antimicrobial guidelines/Eolas. (n.d.). IV to Oral Switch (IVOS) - Think ACED. [online] Available at: <https://app.eolasmedical.com/organisation/landing/null?organisationId=ORG%23staging-leeds-teaching-hospitals-nhs-trust%23681281d1-a290-4ab4-adac-4d4022b7d94f&fileId=FILE%23c4af8ad7-4772-4f69-8777-a35bef3d1685&origin=section&loginToken=EOLAS%23ORG%23staging-leeds-teaching-hospitals-nhs-trust%23681281d1-a290-4ab4-adac-4d4022b7d94f%2368a02761-f647-4c0c-bbd1-4beaf8ea91fe>. (Accessed 25/02/2025)