



ABSTRACT BOOK

The 11th AMSInSight Meeting and 4th CARA All-Island Collaboration: A Multidisciplinary Approach to Antimicrobial Stewardship, 2026

8 October 2026, Half Day AMS Research Symposium
9 October 2026, Full Day AMS Conference

Ashling Hotel, Dublin

Programme



8th October: Half Day AMS Research Symposium

TIME	EVENT
13:30	Registration
14:00	Welcome and Introduction: Dr Gerry Hughes
14:10	Keynote 1 – Professor Andrew Seaton, Infectious Diseases Physician, President British Society of Antimicrobial Chemotherapy
14:40	Session 1: Antimicrobial stewardship in the community: changing prescribing and practice. Moderator: Professor Alida Fe Talento
15:40	Break - Tea/Coffee
16:00	Keynote 2 – Professor Clare Rock, Infectious Diseases Physician, Deputy Director HSE AMRIC
16:30	Session 2: Optimising antimicrobial treatment: getting the right antibiotic to the right patient. Moderator: Professor Robert Cunney
17:30	Wrap-up
17:40	Break
18:30	Networking Dinner

Programme



9th October: Full Day AMS Conference

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10:40	Moving breaks
10:45	Session 3: Measuring antimicrobial use and stewardship. Moderator: Professor Akke Vellinga
11:35	Break - Tea/Coffee
12:00	Session 4: Improving antimicrobial decisions in practice. Moderator: Professor Alida Fe Talento
13:00	Networking Lunch
13:40	Keynote 2 – Dr Amanda McCullough, Specialty Registrar in Public Health, Public Health Agency, Northern Ireland
14:10	Moving breaks
14:15	AMS Workshop – Professor Robert Cunney, Consultant Microbiologist, Children's Health Ireland
15:00	Break - Tea/Coffee
15:20	Keynote 3 - Professor Gerry Molloy, School of Psychology, University of Galway
15:50	Session 5: Stewardship in action. Moderator: Professor Cristin Ryan
16:35	Presentation of awards, wrap-up and close

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Half Day AMS Research Symposium (8th Oct)

Antimicrobial stewardship in the community: changing prescribing and practice

14:40–15:40 • Moderator: Professor Alida Fe Talentó

Abstract 1 - 14:40–14:50

Association between Cardiovascular Disease and Antibiotic Prescribing for Respiratory Tract Infections in European General Practice: A Cross-Sectional Secondary Analysis

Oral presentation • 10 minutes • Presenting author: Sara Yousif

Authors: Sara Yousif, Nathaly Garzon-Orjuela, Akke Vellinga, Abigail Murfitt

Keywords: Antimicrobial resistance; antimicrobial stewardship; cardiovascular disease; respiratory tract infections; general practice

Background: Antimicrobial resistance (AMR) causes about 25,000 deaths annually in Europe, with 80% of antibiotic prescribing (AP) occurring in general practice (GP), half of which are issued for respiratory tract infections (RTIs). AP is complicated by cardiovascular disease (CVD): macrolides and quinolones carry risks of QT prolongation and sudden cardiac death. Whether CVD independently influences AP or agent selection remains unexamined. This study aimed to determine the association between pre-existing CVD, AP and antibiotic class selection in RTI consultations in European GP.

Methods: A cross-sectional secondary analysis of Point Prevalence Audit Survey (PPAS) data, covering 8,908 adult RTI consultations in GP across 17 European countries. The primary exposure was CVD status, and the primary outcome was AP; secondary outcome was antibiotics class selection. Multilevel logistic regression estimated adjusted odds ratios (aOR) with 95% confidence intervals (CI), accounting for country-level variation.

Results: Of 8,908 consultations, 2,067 (23.2%) involved CVD patients. Antibiotics were prescribed more often for CVD patients than non-CVD patients (30.7% vs 21.4%). After adjustment, CVD was independently associated with higher prescribing odds (aOR 1.19 [1.02 to 1.39]). CVD patients also received more macrolides (7.2% vs 4.5%) and quinolones (3.1% vs 1.2%). Country-level variation explained 13% of AP variance (ICC=0.13, MOR=1.94 [1.74 to 2.15]).

Conclusions: Pre-existing CVD was independently associated with increased AP; CVD patients also received more cardiotoxic macrolides and quinolones. This reveals an antimicrobial stewardship gap: comorbidity-specific guidance accounting for individual patient risk and national context is needed to improve prescribing quality and patient safety.

Abstract 2 - 14:50–15:00**A study investigating the feasibility and implementation of a Treat Your Respiratory Infection (TY-RTI) Leaflet in Irish GP practice.**

Oral presentation • 10 minutes • Presenting author: Mala Shah

Authors: Mala Shah, Teresa M. Barbosa, Paul Ryan, Scott Walkin, Aoife Fleming

Keywords: general practice, respiratory infections, patient leaflet, implementation science, antimicrobial stewardship

Background

Interactive use of patient leaflets can reduce antibiotic prescribing for self-limiting respiratory tract infections (RTIs) in general practice.

Objectives

- To assess the feasibility and acceptability of using a Treat Your RTI (TY RTI) leaflet in GP consultations in Ireland.
- To apply implementation science methods to inform national roll-out.

Methods

A mixed methods study was conducted, with ethical approval. Six GPs in daytime practice and three in out-of-hours services used the TY RTI leaflet during RTI consultations. GPs and patients/parents completed feedback surveys. Qualitative interviews conducted with GPs were analysed using the Consolidated Framework for Implementation Research (CFIR) and the Capability Opportunity Motivation-Behaviour (COM-B) model for behaviour change.

Results

Survey responses from GPs for 201 consultations and from 84/201 (42%) patients/parents showed that the leaflet was useful and feasible to use. More than 80% patient/parents' reported greater confidence to self-manage RTIs and changed views on antibiotic need. CFIR analysis of interviews identified determinants influencing use of the leaflet within the practice: inner setting (practice ethos, access to GPs); external factors (patient expectations) and implementation processes (utilising GP leads to promote the leaflet, incorporating on www.antibioticprescribing.ie). COM-B model mapping revealed individual determinants influencing capability (empowering patients on self-management of infection) and motivation for GP behaviour change (something tangible to give to patients, supports decision not to prescribe antibiotics).

Conclusion

This study demonstrates the feasibility and value of the TY-RTI leaflet for both GPs and patients, supporting antimicrobial stewardship, and provides GP-informed implementation determinants to consider for national roll-out.

Abstract 3 - 15:00–15:10**Designing a behaviour change intervention to support CRP point-of-care testing for respiratory tract infections in primary care: the PREDICTORS study***Oral presentation • 10 minutes • Presenting author: Isil Coklar-Okutkan*

Authors: Isil Coklar-Okutkan, Joseph O'Shea, Carmel Hughes, Gerard J. Molloy, Cathal Cadogan, Tom Fahey, Eimear Morrissey, Akke Vellinga, Anthony Maher, Stacey Grealis, Cristín Ryan

Keywords: C-reactive protein point-of-care testing (CRP POCT), general practitioners (GPs), community pharmacists (CPs), theoretical domains framework (TDF), behaviour change techniques (BCTs)

Antimicrobial resistance is a major threat to global health. Inappropriate antibiotic prescribing in primary care is a key driver. Respiratory tract infections (RTIs) account for a substantial share of that prescribing, despite most being viral and self-limiting. C-reactive protein point-of-care testing (CRP POCT) offers a way to improve diagnostic certainty during consultations, but uptake in practice remains limited. PREDICTORS is developing an intervention to support CRP POCT use for lower RTIs, following the UK Medical Research Council (MRC) framework for complex interventions. A scoping review and three-round Delphi study with 19 experts generated 37 best-practice guidance statements. We then interviewed 18 general practitioners (GPs), 18 community pharmacists (CPs), and 15 patients/carers across the Republic of Ireland. Barriers and facilitators were coded to the Theoretical Domains Framework, and the resulting determinants translated into behaviour change techniques using the BCT Taxonomy v1. Recurring determinants included diagnostic uncertainty, workload and consultation time, cost and reimbursement, and pressure from patients expecting an antibiotic. These informed three intervention components: a blended learning programme, an implementation and audit package, and patient resources. Task group meetings comprising GPs, CPs, and patient/carer representatives appraised the draft against the APEASE criteria; all three components were retained, with recommendations on training format and delivery. A proof-of-concept feasibility study is now being designed. This presentation describes how behavioural theory informed each stage of intervention development, and the practical implications for introducing CRP POCT in Irish primary care

Abstract 4 - 15:10–15:13**Community Pharmacy Sore Throat Service: Enhancing Antimicrobial Stewardship and Access to Care in Northern Ireland***Elevator presentation • 3 minutes • Presenting author: Sara Gardner***Authors:** Sara Gardner, Katherine Kidd, Clare Hunter, Ennis Shields, Breege Brogan, Siobhan O'Hare-Smith**Keywords:** Antimicrobial stewardship, community pharmacy, point-of-care testing, antibiotic prescribing**Background**

Acute sore throat is a driver of antibiotic use, despite most infections being viral. Expanding antimicrobial stewardship (AMS) into community pharmacy offers an opportunity to optimise appropriate antibiotic use. A Pharmacy First Sore Throat Service incorporating point-of-care (POC) testing for Group A Streptococcus (GAS) was piloted in community pharmacies across Northern Ireland.

Methods

Between November 2023 and March 2024, 43 community pharmacies delivered the service to patients aged ≥ 5 years presenting with symptoms of acute sore throat. Pharmacists conducted clinical assessments using scoring tools alongside professional judgement. Where appropriate, rapid GAS POC testing was performed. Antibiotics were supplied only where clinically indicated, with all patients receiving self-care advice, safety-netting and onward referral where required.

Results

During the pilot, 6,768 consultations were completed, with antibiotics supplied in 1,721 cases (25%), meaning 75% of patients were managed without antibiotic treatment. Following positive evaluation, the service was commissioned and expanded regionally across N.Ireland.

In 2025/26, 18,830 consultations were delivered, with antibiotics supplied in 3,716 cases (20%). This represents a further reduction in antibiotic supply rates compared with the pilot. Published analysis of England's Pharmacy First sore throat service, which does not routinely incorporate GAS POC testing, reported antibiotic supply in 72.7% of consultations.

Conclusion

Northern Ireland's sore throat service demonstrates how community pharmacists can support evidence-based, targeted antibiotic use. The low antibiotic supply rates suggest that combining clinical assessment with GAS POC testing supports appropriate antimicrobial use and strengthens AMS across Primary Care.

Abstract 5 - 15:13–15:16**Antimicrobial stewardship review of prescribing practices in HSE primary care dental services, Dublin South and Wicklow: Impact of audit, education and guideline updates (2023-2024)***Elevator presentation • 3 minutes • Presenting author: Olivia Gallagher***Authors:** Olivia Gallagher, Frances O'Callaghan, Karina O'Connell**Keywords:** Audit; Education; Dentistry; Multidisciplinary**Background**

Dentists contribute substantially to community antibiotic prescribing, underlining the vital role of antimicrobial stewardship (AMS) in dentistry in mitigating antimicrobial resistance. A two-year review was undertaken across all HSE primary care dental services in Dublin South and Wicklow to quantify antimicrobial use, evaluate prescribing quality, assess the impact of AMS education, and identify opportunities for improvement.

Methods

A retrospective review of antimicrobial prescriptions issued across seven HSE dental clinics was conducted for January-June 2023 and January-June 2024. Data were extracted from the prescribing system and benchmarked against national guidelines. Prescribing indicators included antimicrobial selection, dose, frequency, duration and use of preferred ("green") versus broader-spectrum ("red") agents. Between audit periods, AMS education and guideline update training were delivered to staff.

Results

Antimicrobial prescriptions decreased from 277 in 2023 to 227 in 2024 (18% reduction despite a 9% increase in clinic activity). Prescriptions issued during emergency visits decreased (23% to 19%). Adherence to guidelines improved for antimicrobial selection (82% to 88%) and dosing (91% to 94%), while adherence remained high for frequency (96% and 94%) and duration (87% and 86%). The proportion of "green" agents increased from 79% to 87%, while use of "red" agents remained low (0.4% and 2.2%). AMS education was positively received, with 70% of respondents reporting an intention to change practice.

Conclusion

Review demonstrated reduced antimicrobial use and improved guideline adherence within dental services following AMS engagement. Continued audit, education and optimisation of prescribing may further strengthen antimicrobial stewardship, reduce antimicrobial resistance and improve patient safety.

Abstract 6 - 15:16–15:19**Advancing Antimicrobial Stewardship in HSE Dental Services: Reduced Antibiotic Prescribing and Improved Guideline Compliance Over Four Years***Elevator presentation • 3 minutes • Presenting author: Mary Regan***Authors:** Mary Eva Regan, Dr Roisin Mulqueen, Dr Kathrin Knaf**Keywords:** Dental infections**Background**

Appropriate antimicrobial prescribing is essential to minimise antimicrobial resistance and support effective antimicrobial stewardship (AMS). Since 2022, Mayo and Roscommon HSE Dental Services have undertaken annual audits of antibiotic prescribing. Educational initiatives have focused on antimicrobial resistance, adherence to national prescribing guidance, promotion of phenoxymethylpenicillin as a narrower-spectrum alternative to amoxicillin where clinically appropriate, and a "procedures over prescriptions" approach. This audit assessed compliance and prescribing trends over four years.

Methods

A retrospective audit of 85 antibiotic prescriptions issued in 2025 was conducted. Prescriptions were assessed against recommendations on www.antibioticprescribing.ie for antibiotic choice, dose, frequency, and duration. Findings were compared with audit data collected between 2022 and 2024.

Results

85 prescriptions were reviewed. Compliance was 100% for antibiotic choice and duration, 92% for dose, 63.5% for frequency. Phenoxymethylpenicillin accounted for 33% of prescriptions but 61% were prescribed incorrectly as three times daily. Since 2022, correct antibiotic selection improved from 84% to 100%; guideline-concordant prescribing for dental abscesses improved from 84% to 100%. Sustained reduction in antibiotic prescribing was also observed following annual AMS education.

Conclusion

Substantial improvements in AMS have been achieved through repeated audit, feedback, and education. Antibiotic selection and treatment duration demonstrated excellent compliance. Overall prescribing appears to have decreased over four years, supporting a "procedures over prescriptions" approach. The principal stewardship challenge identified was incorrect dosing frequency of phenoxymethylpenicillin. Future interventions should reinforce that phenoxymethylpenicillin should be prescribed four times daily; where adherence to this dosing is unlikely, amoxicillin may be more appropriate.

Optimising antimicrobial treatment: getting the right antibiotic to the right patient

16:30–17:30 • Moderator: Professor Robert Cunney

Abstract 1 - 16:30–16:40

Broad-Spectrum Habits Die Hard: Persistent Gaps in Antimicrobial Stewardship and Pneumococcal Vaccination Over a Decade

Oral presentation • 10 minutes • Presenting author: Saied Ali

Authors: Saied Ali, Karen Burns, Binu Dinesh, Helene McDermott, Sinead O'Donnell, Fidelma Fitzpatrick, Ciara O'Connor

Keywords: Antimicrobial stewardship; Invasive pneumococcal disease; Pneumococcal conjugate vaccine; Pneumococcal polysaccharide vaccine; Streptococcus pneumoniae

Background

Invasive pneumococcal disease (IPD) remains a major cause of morbidity in adults, despite the availability of effective vaccines and evidence-based antimicrobial guidelines. Understanding local patterns in management and prevention can inform stewardship and immunisation strategies.

Objectives

To evaluate clinical management, antimicrobial use and pneumococcal vaccination practices among adults with Streptococcus pneumoniae bloodstream infections (BSIs) over a ten-year period.

Methods

A retrospective review of laboratory-confirmed pneumococcal BSIs at a tertiary hospital (2014–2023) was conducted. Clinical and microbiological data were extracted from electronic records to assess antimicrobial susceptibility, de-escalation practices, complications, ICU admissions, and documentation of pneumococcal vaccination recommendations.

Results

Among 176 cases identified, the median age was 69.5 years, and 56% were aged ≥ 65 years. Penicillin susceptibility remained high (85%), yet only 25% of eligible patients were de-escalated from empiric broad-spectrum therapy. Complications occurred in 15% of cases and ICU admission in 10%. Of all patients, 22% had pneumococcal vaccination documented at discharge. Serotype 8 predominated, with non-vaccine serotypes comprising 23% of isolates.

Conclusions

Despite favourable susceptibility patterns, narrow-spectrum therapy was seldom adopted, and vaccination follow-up was limited. These findings highlight persistent stewardship and prevention gaps in IPD care. Embedding automated vaccine prompts and structured antimicrobial review may enhance both therapeutic precision and long-term disease prevention.

*Received AMS InSight Travel Bursary to present the above at the Microbiology Society Annual Conference 2026

Abstract 2 - 16:40–16:50**From Report to Action: A survey of Clinician Understanding of EUCAST “Susceptible, Increased Exposure” Reporting and Its Impact on Antimicrobial Prescribing***Oral presentation • 10 minutes • Presenting author: Anne-Marie Dolan*

Authors: Anne-Marie Dolan, Grace Rothwell-Kelly, Saied Ali, Tamara Hoban, Diana Persad, Jane O'Connor, Martha Glynn, Saoirse Ni Bhaoill, Robert O'Shea, Maeve Doyle, James Donnelly, Sinead O'Donnell, Helene McDermott, Karen Burns, Fidelma Fitzpatrick, Ciara O'Connor, Marta Trzos-Grzybowska, Roisin Connolly

Keywords: Antimicrobial stewardship; carbapenem-sparing; EUCAST; prescribing behaviour; susceptible increased exposure; susceptibility reporting

The European Committee on Antimicrobial Susceptibility Testing (EUCAST) redefined the “I” category in 2019 from “Intermediate” to “Susceptible, Increased Exposure” (SIE). Concerns persist that clinicians still interpret “I” according to its historical meaning, potentially influencing antimicrobial prescribing behaviour. We evaluated clinician understanding of “I” and the impact of susceptibility notation on prescribing decisions.

A multi-centre electronic survey was conducted in four Irish hospitals (February-May 2026) assessing interpretation of susceptibility notation (particularly “S*”, “I” and “D”, all used to denote SIE in different Irish hospitals), prescribing behaviour in clinical scenarios, usage of prescribing aids (antimicrobial guideline smartphone application), and clinician demographics. Statistical analysis included chi-squared testing, Fisher's exact testing, and odds ratios.

A total of 207 clinicians responded. Only 36.7% correctly interpreted “I” as “SIE”, while 36.7% applied the historical definition of “Intermediate” (no significant difference by clinician grade ($\chi^2=2.39$, $p=0.49$)). Susceptibility notation significantly influenced self-reported prescribing behaviour. Cefuroxime was more frequently selected when reported as “S*” rather than as “I” or “D”, despite identical definitions ($\chi^2=42.5$, $p<0.0001$). In a *Pseudomonas aeruginosa* bloodstream infection scenario, meropenem was selected more frequently than piperacillin-tazobactam or aztreonam ($\chi^2=34.46$, $p<0.0001$). Consultants reported substantially lower antimicrobial guideline application usage than non-consultant clinicians (OR 0.09, $p<0.0001$).

Substantial misunderstanding of the revised EUCAST “I” category persists. Susceptibility category notation independently influences prescribing behaviour and may contribute to preferential use of broader-spectrum agents including carbapenems. Clearer reporting terminology, improved dosing guidance, and targeted educational interventions are needed to support antimicrobial stewardship objectives.

Abstract 3 - 16:50–17:00**Elastomeric Infusions for Antibiotics***Oral presentation • 10 minutes • Presenting author: Jaquie Hanley*

Authors: Jaquie Hanley, Peter McKee, Geraldine Conlon-Bingham, Oonagh Donnelly, Pauline Curran, Sara Hedderwick, Tina McCauley, Oonagh Andrews, Lisa Mullan, Celina McConnellogue

Keywords: Flucloxacillin; piperacillin-tazobactam; elastomeric infusion; OPAT; Staphylococcus aureus.

Background

Flucloxacillin is a narrow-spectrum antibiotic and the gold-standard treatment for serious Staphylococcus infections. However, six-hourly intravenous administration presents challenges for outpatient management and may require prolonged hospital admission or use of broader-spectrum alternatives. Local data demonstrated that 50% of patients with bone and joint infections discharged on alternative agents, such as teicoplanin, could potentially have received flucloxacillin if a suitable outpatient option had been available. Similarly, piperacillin-tazobactam is an important treatment for Pseudomonas aeruginosa infections but requires four-times-daily administration, limiting use within Outpatient Parenteral Antimicrobial Therapy (OPAT) services. This study evaluated continuous 24-hour antimicrobial infusions delivered via elastomeric devices.

Methods

Following governance approval, patients requiring prolonged courses of flucloxacillin or piperacillin-tazobactam were identified across two Health and Social Care Trusts. After consent, central venous access was established, patients were educated on elastomeric device use, and therapy was converted to continuous infusion. Patients were managed through OPAT, with devices replaced daily at ambulatory care hubs or community nursing centres.

Results

Forty-eight patients received elastomeric infusions (40 flucloxacillin; 8 piperacillin-tazobactam). Clinical cure was achieved in 44/48 (92%) patients. Four patients required treatment modification or alternative therapy; none of these events were related to elastomeric infusion. Evaluation of additional agents, including cefazolin, is ongoing.

Conclusion

Continuous antimicrobial infusion via elastomeric devices is a safe, effective and practical OPAT strategy that enables delivery of flucloxacillin and anti-pseudomonal therapy in community settings.

Abstract 4 - 17:00–17:10**Optimising Antimicrobial Stewardship Through Implementation of a Hospital-wide Penicillin Allergy Assessment Pathway in a Tertiary Maternity Hospital***Oral presentation • 10 minutes • Presenting author: Meadhbh Collison***Authors:** Meadhbh Collison, Louise Delany, Susan Knowles**Keywords:** Keywords: Penicillin allergy; De-labelling; Allergy assessment

Inaccurate penicillin allergy labelling is an important barrier to first-line antimicrobial prescribing and effective antimicrobial stewardship. Approximately 10% of patients report a penicillin allergy; however, fewer than 10% of these patients have a true allergy. Consequently, many receive alternative antimicrobials associated with increased antimicrobial resistance, *Clostridioides difficile* infection and surgical site infection. Despite strong evidence that most reported penicillin allergies are not true allergies, inaccurate labels frequently persist and influence antimicrobial prescribing. We aimed to implement a practical, hospital-wide penicillin allergy assessment pathway to improve patient safety and optimise first-line prescribing.

A multidisciplinary antimicrobial stewardship team developed and implemented a structured penicillin allergy assessment pathway in a tertiary maternity hospital. A standardised assessment tool was integrated into the electronic patient record, empowering healthcare professionals to accurately assess allergy status and appropriately remove incorrect penicillin allergy labels through structured history-based assessment. Implementation was supported by updated prescribing guidelines, multidisciplinary education, including a train-the-trainer programme, patient information resources and a patient awareness campaign.

The pathway is now embedded in routine care at the first clinical encounter, standardising penicillin allergy assessment and documentation and enabling appropriate history-based de-labelling. In the first full month following implementation, 53 electronic allergy assessment forms were completed by healthcare professionals across multiple disciplines. Updated prescribing guidance and education support appropriate first-line antimicrobial prescribing.

This project demonstrates a practical, transferable approach to embedding structured penicillin allergy assessment into routine antimicrobial stewardship. The framework is readily adaptable to other hospital settings to support patient safety and appropriate first-line prescribing.

Abstract 5 - 17:10–17:13**Prospective Inpatient Penicillin Allergy Screening in a Model 3 Hospital: Assessing the Feasibility of a Structured Delabelling Pathway.***Elevator presentation • 3 minutes • Presenting author: Jessica Spain***Authors:** Jessica Spain, Clare Greene, Eoghan Mulqueen, Eileen Sweeney**Keywords:** Penicillin allergy, delabelling, antimicrobial stewardship, oral challenge testing, multidisciplinary care.**Background**

Penicillin allergy labels are common among hospital inpatients, despite only a minority representing immune-mediated hypersensitivity. Such labels can result in avoidance of first line antibiotics and increased use of broader spectrum alternatives. We assessed whether a collaborative pharmacy and Infectious Disease model could identify patients suitable for delabelling and establish the potential demand for oral challenge testing (OCT) in a Model 3 hospital.

Methods

A five week prospective feasibility project combined hospital wide pharmacist case finding with twice weekly surveillance by Infectious Diseases. Identified patients underwent a structured allergy history and were risk-stratified according to the ESCMID clinical guideline on the evaluation and management of reported antibiotic allergy. Very low risk patients meeting guideline criteria were considered for direct delabelling, with patients and their GP subsequently informed. Patients potentially suitable for oral challenge testing (OCT) were identified to estimate demand for a formal pathway.

Results

Forty-eight patients were assessed. Thirteen (27.1%) were successfully delabelled and 28 (58.3%) were potentially suitable for OCT. Seven (14.6%) were not eligible: three (6.3%) were unable to provide a reliable allergy history due to cognitive impairment, while four (8.3%) reported high risk reactions. Overall, 41/48 (85.4%) had an allergy label amenable to direct delabelling or potential further assessment with OCT.

Conclusion

A collaborative pharmacy and Infectious Diseases case finding model identified an actionable penicillin allergy label in over 85% of patients assessed. These findings demonstrate potential demand for OCT and support development of a sustainable multidisciplinary penicillin allergy pathway within a Model 3 hospital.

Abstract 6 - 17:13–17:16**A Service Evaluation of a Pharmacist-Led Penicillin Allergy Reconciliation and Assessment Service in an Irish Hospital***Elevator presentation • 3 minutes • Presenting author: Teresa M. Barbosa***Authors:** Niamh Mulcahy, Emma Skelton, Arthur Jackson, Teresa M. Barbosa**Keywords:** Penicillin Allergy Reconciliation, Pharmacist-Led De-labelling, Antimicrobial Stewardship**Introduction:**

Fewer than 10% of patients with a documented penicillin allergy are truly allergic, with spurious labels arising from inaccurate documentation and misunderstanding of allergy types. Inappropriate allergy labels negatively impact patient care. Penicillin allergy reconciliation and de-labelling are vital components of antimicrobial stewardship.

Aim:

To investigate the impact of a pharmacist-led penicillin allergy reconciliation and assessment service in Cork University Hospital.

Methods:

A prospective observational service evaluation study was conducted between February-April 2025. Adult inpatients with a documented penicillin allergy on the Medicines Prescription Administration Record (MPAR) were referred to the pharmacist and penicillin allergy reconciliation was performed. The patient's allergy status was classified using the CUH penicillin allergy de-labelling and PEN-FAST tools, and patients who were potentially inappropriately labelled were identified.

Results:

Of 184 referred patients, 96 participated, 75% of which were prescribed an antimicrobial with 33.3% prescribed a fluoroquinolone. Only 19.8% of MPARs allergy boxes were fully complete. A total of 17.8% of patients could not recall the nature of their reaction, while this was documented by 25% of GP records and only 2.4% of community pharmacies. Due to limited documentation, 53.1% of patients could not have their allergy status classified. Of the 45 patients who could be classified with the CUH tool, 26.7% were identified as potentially inappropriately labelled.

Conclusion:

The study demonstrates the positive impact of a pharmacist-led penicillin allergy reconciliation service highlighting the need for improved documentation and enhanced education for patients and healthcare professionals to reduce spurious allergy labels and support antimicrobial stewardship.

Full Day AMS Conference (9th Oct)

Measuring antimicrobial use and stewardship

10:45–11:35 • Moderator: Professor Akke Vellinga

Abstract 1 - 10:45–10:48

Exploring Community Pharmacists' Views and Experiences of Antimicrobial Prescribing and Stewardship: a survey in Ireland.

Elevator presentation • 3 minutes • Presenting author: Aoife Fleming

Authors: Aoife Fleming, Ellen Martin, Marie Philbin, Mary Eva Regan, Ellen Melia

Keywords: Community pharmacists, antimicrobial stewardship, survey

Background:

Community Pharmacists have an impactful role in Antimicrobial Stewardship (AMS) yet limited data exist regarding their role within community pharmacy practice in Ireland. This study explored the views and experiences of community pharmacists in Ireland regarding AMS, antimicrobial resistance (AMR) and antimicrobial prescribing.

Methods:

A cross-sectional online survey was disseminated via email in April 2026 to all pharmacists registered in community pharmacy practice with the Pharmaceutical Society of Ireland. Descriptive statistics were conducted on quantitative responses while thematic analyses were undertaken for free text responses.

Results:

From 184 responses, 93% (n=171) considered AMS important to the community pharmacist role, and 92% (n=169) expressed interest in greater involvement in community-based AMS initiatives.

Awareness of HSE antibiotic prescribing guidelines was high (98%, n=181), with 41% (n=75) reporting regular use.

Most pharmacists rated their AMS knowledge as good to excellent (91.8%, n=169) and reported moderate to high confidence in implementing AMS activities.

Confidence was highest for providing self-management advice for common infections (91.4%), advising on appropriate antibiotic use (91.3%), and explaining AMR to patients (90.2%).

Pharmacists reported routinely communicating with prescribers regarding allergies or drug interactions. However, intervention regarding antibiotic selection was reported less frequently, with 38.6% contacting prescribers only occasionally or never when antibiotic choice did not align with guidelines.

Conclusion:

Community pharmacists demonstrated strong AMS knowledge, positive attitudes, and willingness to expand their stewardship role. Supporting pharmacists through targeted education, improved healthcare integration, and appropriately resourced AMS initiatives could strengthen AMS and optimise antibiotic use in primary care.

Abstract 2 - 10:48–10:51**Harnessing Technology for the Surveillance of Antimicrobial Use to inform on antimicrobial stewardship in secondary care.***Elevator presentation • 3 minutes • Presenting author: Sarah-Jayne McKinstry***Authors:** Sarah-Jayne McKinstry, Eileen Corey, Paul Strain, Magda Bucholc, Abbie Harrison, Bronagh McBrien**Keywords:** AMS, AMR, AMU

Surveillance of antimicrobial use (AMU) in secondary care is a systematic process of collecting, analysing, and interpreting AMU and disseminating this information to inform antimicrobial stewardship (AMS) interventions led by hospital pharmacy teams. Leveraging technological advancements like automation and digital tools for AMU surveillance can streamline reporting, reduce manual effort, and minimise the risk of errors associated with data handling. Here, we present our experience of implementing efficient, automated, and reproducible analytical workflows to enhance surveillance, analysis, and intervention strategies for AMU within the Public Health Agency (PHA) Health Protection Surveillance team. We demonstrate how standardised reports and automated data analysis can be integrated into existing data pipelines, eliminating time-consuming manual tasks such as formatting and compiling data. Through the use of R shiny indicator dashboards, we provide stakeholders with real-time access to key AMU metrics with embedded error and validation checks to improve data accuracy and overall data processing, which were previously more burdensome. The new dashboards will allow for a collaborative approach between epidemiology colleagues, pharmacists and microbiologists to view antibiotic consumption within their own Trusts at ward level, allowing them to implement interventions towards high prescribing wards and frequently prescribed antibiotics to improve patient safety and care. By facilitating timely decision making and supporting antimicrobial stewardship interventions, this approach aims to reduce the consumption of antibiotics in secondary care and mitigate the overall burden of antimicrobial resistance (AMR) to improve public health outcomes in Northern Ireland.

Abstract 3 - 10:51–10:54**Parental preferences for primary care pathways in respiratory infections: a discrete choice experiment***Elevator presentation • 3 minutes • Presenting author: Anthony Maher***Authors:** A. Maher, E. C. Morrissey, A. W. Murphy, S. Walsh, and G. J. Molloy**Keywords:** Primary Care; Health Economics; Treatment-seeking Behaviour**Background/Objectives**

Antimicrobial stewardship strategies targeting high-use areas like unnecessary antibiotic use in children have often focused on clinician behaviour, with comparatively less attention to parents. However, parental decision-making may also influence healthcare

use. This study aimed to quantify parental preferences for healthcare pathways and antibiotic prescribing in childhood respiratory tract infections.

Methods

A discrete choice experiment was conducted among parents of children under 18 in Ireland. Participants completed 12 choice tasks, selecting between two hypothetical healthcare options. Attributes included waiting time, provider type, antibiotic prescribing plan, advice, and cost. Data were analysed using conditional logit and latent class multinomial logit models. Willingness-to-pay estimates were derived, and pre-specified interaction terms explored observed preference heterogeneity.

Results

Parents ($n=469$) demonstrated strong preferences for shorter waiting times and GP-led care. Utility decreased with increasing waiting time, with the greatest disutility observed for delays of 72 hours ($\beta=-1.18$, $p<0.001$). Relative to no antibiotic prescribing,

both immediate ($\beta=0.78$, $p<0.001$) and delayed ($\beta=0.47$, $p<0.001$) prescribing were positively associated with the probability that parents chose a healthcare package. Non-GP providers were associated with lower utility, particularly pharmacist-led care ($\beta=-0.78$,

$p<0.001$). Cost was negatively associated with utility ($\beta=-0.016$, $p<0.001$). Subsequent interaction analysis indicated that having subsidised healthcare reduced cost sensitivity; rural location favoured pharmacist provider preferences; and prior antibiotic experience

affected antibiotic-related preferences.

Conclusions

Parental preferences for healthcare pathways for childhood respiratory tract infections may be shaped by structural and behavioural factors, including access, cost, and the need for reassurance. Interventions that account for the behavioural and service-level

factors shaping parental preferences may offer a useful route to support antimicrobial stewardship in this context.

Abstract 4 - 10:55–11:05**Antimicrobial stewardship in Ireland: a descriptive study.***Oral presentation • 10 minutes • Presenting author: Fiona Barry***Authors:** Fiona Barry, Olive Murphy, Anthony P Fitzgerald, Eilis J O' Reilly, Maura Smiddy**Keywords:** Survey, AMS Pharmacists**Introduction:**

Antimicrobial Stewardship Programmes (AMS) optimise antimicrobial use, reduce resistance, and improve patient outcomes. In Ireland, the SARI Hospital Antimicrobial Stewardship Working Group published national AMS guidance in 2009, providing a framework for stewardship activity across acute hospitals.

Aim: Document implementation of the SARI (2009) guidelines from the perspective of hospital-based AMS pharmacists.

Methods

A descriptive cross-sectional online survey was conducted in January 2023. Eligible participants were AMS pharmacists working in public-sector hospitals in the Republic of Ireland. Survey items adapted from:

- * 2016 national AMS survey
- * SARI (2009) guidelines
- * First national AMR action plan (iNAP1)
- * Findings from our scoping review

The survey was distributed to all AMS pharmacists nationally (n=49). Two reminders were issued.

Results:

15 AMS pharmacists responded. Respondents represented eight model-3 hospitals and three model-4 or specialist hospitals; one did not specify hospital type. Appointment dates for AMS pharmacists ranged from 2003-2017. Three hospitals (20%) did not provide patient or public information on prudent antibiotic usage. Two pharmacists (13%) reported a defined AMS budget. 11 hospitals (77%) reported an annually assessed AMS programme, committee, and prescriber education. Compliance with iNAP1 indicators varied: 14 hospitals (93%) reported IV-to-oral switch compliance, 12 (80%) complied with surgical prophylaxis guidelines, and six (40%) reported uptakes of antimicrobial decision-support applications.

Conclusion:

Implementation of national AMS guidance has improved, but gaps in governance, funding, and information technology remain. Stewardship practices show progress, though greater standardisation and investment are required to achieve national antimicrobial resistance action plan targets.

Abstract 5 - 11:05–11:15**Antimicrobial stewardship activities in the Republic of Ireland: a qualitative study exploring knowledge, attitudes, and experiences of community-based antimicrobial stewardship pharmacists.**

Oral presentation • 10 minutes • Presenting author: Fiona Barry

Authors: Fiona Barry, Olive Murphy, Tony Fitzgerald, Eilis O'Reilly, Edel Burton, Maura Smiddy

Keywords: Community AMS Pharmacist, Ireland

Aim: To explore the knowledge, attitudes, and experiences of community-based antimicrobial stewardship (AMS) pharmacists in Ireland regarding AMS implementation.

Methods: In Ireland, there are eight community-based AMS pharmacists who were invited to participate via an email distributed by an independent clinical pharmacist gatekeeper. The interviews were transcribed verbatim and analysed using thematic analysis, with themes mapped to Theoretical Domains Framework.

Results: Four Pharmacists participated in semi-structured interviews conducted via Microsoft Teams in 2026. Seven themes and 22 subthemes were identified. Participants highlighted the importance of embedding AMS education across the continuum of care, emphasising accessible, practice-focused education to support consistent stewardship. Strengthening AMS capacity was essential, with a need for dedicated resources, appropriate training, and clearer professional roles. Barriers to implementation included time and resource constraints, variable engagement, and limited integration of AMS into routine community pharmacy practice. Effective, tailored leadership was identified as an enabler, particularly where leaders provided clear vision, prioritised AMS, and supported implementation. Context-specific interventions, evaluation, and feedback enabled practice-based change. Collaborative interdisciplinary integration was critical, with more efficient communication pathways between community-based AMS pharmacists, prescribers, and other healthcare professionals required to optimise AMS efforts. Professional identity and service development highlighted opportunities to enhance their contribution through expanded roles and integration of AMS into existing and future services.

Conclusion: Education, workforce capacity, leadership, collaborative working, and practice-based improvement were identified as key determinants of successful AMS implementation. Strengthening their role and professional identity within interdisciplinary AMS initiatives may support sustainable and integrated antimicrobial stewardship in Ireland.

Abstract 6 - 11:15–11:25**National Antimicrobial Targeted Point Prevalence Survey for Route of Administration in Acute Hospitals in Ireland 2025**

Oral presentation • 10 minutes • Presenting author: Ellen Martin

Authors: Ellen Martin, Marie Philbin, Mary Kelly, Lauren Webster, Sebastian Vencken, Deirdre Collins, Sinead Hurley, Tich Matsweru, Clare Rock, Eimear Brannigan

Keywords: Antimicrobial Stewardship (AMS), Intravenous-to-Oral Switch (IVOS), Point Prevalence Survey (PPS)

Background/Objectives:

The primary objective of the route of administration targeted point prevalence survey (tPPS) was to focus collective antimicrobial stewardship (AMS) efforts and drive quality improvement in intravenous-to-oral switch (IVOS). Appropriate use of oral antimicrobial therapy in place of intravenous (IV) therapy is a key AMS intervention that can improve patient outcomes, reduce nursing administration time, and lower the environmental impact of antimicrobial use.

Methods:

Data were collected between 15 September and 10 October 2025. Participating sites selected medical wards representing at least 30% of all medical wards within their hospital. Full survey protocol available on the national PPS webpage on antibioticprescribing.ie.

Results:

Fifty-five of 65 invited hospitals participated (8 model 4, 17 model 3, 9 model 2, 11 private, and 10 specialty hospitals). A total of 2,133 antimicrobial prescriptions were reviewed, of which 1,278 were administered intravenously. Among IV antimicrobial prescriptions surveyed on medical wards, 17.0% (213/1,254) had an opportunity for discontinuation. 28.3% (356/1,258) of IV therapies were considered suitable for oral switch. Local IVOS guidance aligned with national IVOS toolkit in 94.5% of participating hospitals. About half of the participating hospitals reported having implemented local quality improvement initiatives focussed on improving appropriateness of route of antimicrobial administration.

Conclusions:

There is widespread alignment of current local IVOS guidance with the national IVOS toolkit. Findings from the tPPS indicate opportunities remain to ensure local guidelines and pathways promote and enable stopping or switching to oral as appropriate. There is scope to build on quality improvement efforts to support IVOS.

Abstract 7 - 11:25–11:35**National Antimicrobial Targeted Point Prevalence Survey for Surgical Antibiotic Prophylaxis in Acute Hospitals in Ireland 2025**

Oral presentation • 10 minutes • Presenting author: Mary Kelly

Authors: Ellen Martin, Marie Philbin, Mary Kelly, Lauren Webster, Sebastian Vencken, Deirdre Collins, Sinead Hurley, Tich Matsweru, Clare Rock, Eimear Brannigan

Keywords: Antimicrobial Stewardship (AMS), Surgical antibiotic prophylaxis (SAP), Point Prevalence Survey (PPS)

Background:

The primary objective of the surgical antibiotic prophylaxis (SAP) targeted point prevalence survey (tPPS) was to focus collective antimicrobial stewardship (AMS) efforts to reduce both inappropriate use and extended duration of SAP.

Methods:

Data were collected between 15 September and 10 October 2025. Participating sites surveyed all patients on surgical wards, with detailed data collected for those receiving SAP in the previous 24 hours. Full survey protocol is available on the national PPS webpage at antibioticprescribing.ie.

Results:

Fifty-three of 65 invited hospitals participated (8 model 4, 17 model 3, 3 model 2, 14 private, and 11 specialty hospitals) with 698 SAP prescriptions reviewed. Most SAP prescriptions (91.1%) were required for the surgical procedure as stipulated in local guidelines. 21.5% (n=150/698) of SAP prescriptions were extended beyond the recommended maximum duration. 16.8% (n=117/698) were extended beyond 24 hours, representing a decrease from the previous year (2024: 26.0%). 20.1% (140/698) were not first line choice of antibiotic regimen. 35.8% of hospitals had a lead surgeon and 32.1% of hospitals had an anaesthetist overseeing quality improvement work in relation to SAP.

Conclusions:

Positive reduction in proportion of SAP extended beyond 24 hours. Opportunity remains to reduce inappropriate extension of SAP, to promote appropriate documentation when SAP is extended, and to support quality improvement using a collaborative and multidisciplinary approach.

Key recommendations: ensure availability of comprehensive SAP prescribing guidelines; only prescribe SAP when stipulated as a requirement for the surgical procedure according to local guidelines, and stop SAP at earliest recommended time.

Improving antimicrobial decisions in practice

12:00–13:00 • Moderator: Professor Alida Fe Talento

Abstract 1 - 12:00–12:10

Balancing stewardship and susceptibilities: using real world culture results to optimise sepsis of unknown origin policy

Oral presentation • 10 minutes • Presenting author: Hannah McCormick

Authors: Judith Troughton, Hannah McCormick, Rory Clinton

Keywords: Sepsis; Susceptibilities; Stewardship

Background/objectives:

There is impetus in Northern Ireland to regionalise antimicrobial policies. To safely introduce a “Sepsis of unknown origin” policy, the susceptibilities of blood culture isolates submitted to BHSCT laboratory were analysed.

Methods:

Significant blood culture isolates from adult patients, between 1 November 2023–31 December 2025, were included (excluding Haematology/Oncology and central lines). Isolates within 48-hours of admission were designated ‘likely community-acquired’; isolates 48-hours after admission ‘likely hospital-acquired’. EUCAST methodology was used for susceptibility testing and isolates recorded as ‘susceptible’(S), ‘susceptible-dose-dependent’(I), ‘resistant’(R) or ‘agent may be considered for therapy’(L). The proportion of isolates which were susceptible to at least one of the antibiotics given in combination, was calculated alongside 95% confidence intervals.

Results:

In total 2166 blood cultures isolates were included. Community-acquired isolates comprised 388 gram-positive, 715 gram-negative and 46 anaerobic organisms (1149 total). Hospital-acquired isolates comprised 393 gram-positive, 582 gram-negative and 42 anaerobic organisms (1017 total).

Amongst community-acquired isolates, 87.38% (95%CI 80.87, 93.89%) were susceptible to amoxicillin-gentamicin, 89.21% (95%CI 83.13, 95.29%) and 94.36% (95%CI 89.70, 98.82) susceptible to piperacillin/Tazobactam-gentamicin. Amongst hospital-acquired isolates: 79.15% (95%CI 71.19, 87.12%) were susceptible to amoxicillin-gentamicin and 86.73% (95%CI 80.08, 93.38%) susceptible to piperacillin/Tazobactam-gentamicin.

Conclusion:

Although differences in susceptibility did not reach statistical significance, there was a trend toward increased susceptibility to piperacillin/Tazobactam-gentamicin compared with amoxicillin-gentamicin in both community and hospital-acquired isolates. These findings support the use of piperacillin/Tazobactam-gentamicin for empirical sepsis treatment. Bespoke policies for community-acquired and hospital-acquired organisms may provide opportunities for better stewardship.

Abstract 2 - 12:10–12:20**Audit to Assess Appropriateness of Empiric Piperacillin-Tazobactam use in Cork University Hospital**

Oral presentation • 10 minutes • Presenting author: Marita Barrett

Authors: Marita Barrett, Andrew Conroy, Eimear Kennedy, Minihil Hafeez, Roisin Crowe, Sarah O'Connell, Katie McFaul

Keywords: piperacillin-tazobactam, empiric, community acquired pneumonia

Background/Objectives:

Cork University Hospital had the highest consumption of systemic antimicrobials nationally in 2024. Piperacillin-tazobactam (PT) was the most commonly prescribed broad-spectrum antimicrobial.

Aim:

To assess appropriateness of empiric PT, initiated on hospital admission, against local guidelines.

Methods:

From 17th to 28th October 2025, newly admitted patients were identified via Microsoft Power BI. Screening of medication prescription and administration records identified prescriptions of PT on, or within 48 hours of admission. A clinician retrospectively reviewed digitally available records to assess guideline compliance. Microsoft Forms was used to collect data, which was analysed using Microsoft Excel.

Results:

The audit included 442 patients, 64 were prescribed PT (14.5%).

Information on indication was available for 62 patients; respiratory infection (RI) (n=20, 32%), intra-abdominal infection (n=19, 31%), complex urinary tract infection (n=12, 19%), and other indications (n=11, 18%).

Of the 20 RIs, 13/20 (65%) used PT appropriately; 11 patients with complex RIs, and 2 patients with community acquired pneumonia (CAP), on advice of infection specialists.

Five cases of CAP plus two of infective exacerbation of lung disease were deemed as inappropriate use of PT.

In total, appropriate use of PT, as per antimicrobial guidelines was identified for 79% (49/62) of patients.

Conclusion:

Indication appropriateness was confirmed for 79% of prescriptions, falling short of AMRIC's target of $\geq 90\%$. CAP was identified as the most common indication for inappropriate PT use, reflecting AMRIC's position statement on its use in this presentation.

Education and adoption of AMRIC's position statement on PT use in CAP is planned.

Abstract 3 - 12:20–12:30**Skip the Dip in Northern Ireland: Reducing the use of urinary dipsticks in older people**

Oral presentation • 10 minutes • Presenting author: Helen Quinn

Authors: Helen Quinn, Matthew Dolan, Finola Powell, Bronagh McBrien, Fiona Hughes, Caroline McGeary

Keywords: Antimicrobial stewardship; Urinary tract infection; Older people; Primary care; Care homes

Background: Urinary tract infections (UTIs) are a common indication for antibiotic prescribing in primary care. In Northern Ireland (NI), five key UTI antibiotics accounted for 34% of antibiotic prescribing among adults aged ≥65 years in 2025. In older people, diagnosis should be based on clinical symptoms, as inappropriate use of urinary dipsticks can lead to unnecessary antibiotic prescribing. This project aimed to support antimicrobial stewardship through implementation of UTI diagnostic decision tools and the ‘Skip the Dip’ campaign across primary care and care home settings.

Methods: Diagnostic decision tools developed by the UK Health Security Agency and the ‘Skip the Dip’ campaign from Antimicrobial Resistance & Infection Control (AMRIC) in the Republic of Ireland were adopted and rebranded for use in NI. Resources included posters, diagnostic decision tool booklets, an animation for training purposes and a dedicated webpage. Materials were distributed to GP practices and care homes, supported by awareness sessions and stakeholder communications.

Results: The campaign was implemented across primary care and care home settings in NI, with formal evaluation to follow. Planned outcome measures include audits of UTI diagnosis and trends in prescribing of UTI antibiotics among adults aged ≥65 years. Questionnaires completed by Care Home staff will establish the number of infections pre- and post- intervention.

Conclusion: Introduction of UTI diagnostic decision tools, alongside the ‘Skip the Dip’ campaign supports best practice in the assessment and management of suspected UTI in older people. Ongoing evaluation will determine the impact on antibiotic prescribing and wider antimicrobial stewardship outcomes.

Abstract 4 - 12:30–12:40**Éistigí – Early Identification of Susceptibility to Gentamicin-induced Hearing Loss**

Oral presentation • 10 minutes • Presenting author: Lisa Clooney

Authors: Brian Cleary, Ciara Terry, Leon O'Hagan, Fiona Gaffney, Richard Drew, Siobhan Mulvany, Lisa Clooney, Niamh Hegarty, Aisling Smith, John O'loughlin, Breda Hayes

Keywords: Pharmacogenomic, aminoglycoside, neonatal

Background & Objectives:

Gentamicin is an important empiric antimicrobial agent in neonatal care; however, it carries a risk of irreversible ototoxicity, particularly in individuals harbouring the mitochondrial m.1555A>G variant. Approximately 1 in 400 people carry this variant. ÉISTIGÍ assessed the feasibility of integrating rapid point-of-care pharmacogenomic testing into neonatal antimicrobial prescribing to identify neonates at increased risk of gentamicin-induced hearing loss before antibiotic administration. The study explored whether testing could support safer, more personalised antimicrobial use without compromising timely treatment.

Methodology:

Following parental consent, the Genedrive MT-RNR1 point-of-care test was performed for neonates admitted to NICU or prescribed antibiotics. An auditable electronic health record note captured consent, test result and timing of the antibiotic decision. Baseline and post-implementation data were compared.

Results:

A total of 1,023 tests were performed in 927 unique neonates. The m.1555A>G variant was detected in 2 cases; 92.6% were negative and 6.9% failed. Weekly testing coverage approached 100% of neonates receiving gentamicin. Median decision-to-treat-to-administration time increased during initial training but subsequently returned to baseline and remained stable. The intervention demonstrated that pharmacogenomic information could be incorporated into routine antimicrobial prescribing at scale.

Conclusions:

Point-of-care pharmacogenomic testing is a feasible antimicrobial stewardship intervention in a busy NICU. By identifying neonates at increased risk of aminoglycoside toxicity before treatment, testing can support individualised antibiotic selection, reduce avoidable antimicrobial-associated harm and complement existing stewardship approaches while maintaining timely empiric treatment. Findings support continued implementation and a nationally resourced pathfinder programme to embed pharmacogenomics within neonatal antimicrobial stewardship policy and practice.

Abstract 5 - 12:40–12:43**Check before you Swab: Reducing Non-Value-Added Respiratory Viral Testing for More Sustainable Healthcare**

Elevator presentation • 3 minutes • Presenting author: Amy O'Keeffe

Authors: Amy O'Keeffe, Aedín Hanahoe, Meadhbh Collison, Niall Wall, Donal Smith, Anne-Marie Dolan

Keywords: diagnostic stewardships, sustainability, non-value added testing

Background:

Unnecessary repeat diagnostic testing contributes to healthcare costs, resource utilisation and avoidable carbon emissions. This audit evaluated duplicate respiratory viral testing to identify non-value-added testing and its financial and environmental impact.

Methods:

Respiratory viral samples processed in Tallaght University Hospital from July 2025 to July 2026 were reviewed. Repeat samples collected on the same day of a previous respiratory viral swab were identified, excluding repeats necessitated by processing or testing errors, to determine whether they provided additional diagnostic value.

Results:

16283 swabs were processed in this time period. 310 of these were duplicate specimens (tested on the same day on the same platform). Following review, 282 (91%) tests did not alter the diagnostic result and were classified as non-value-added. These tests cost approximately €14,700 with additional labour and handling costs of almost €3000. These duplicate tests were estimated to generate 182.7 kg CO₂e, comparable to driving 450 miles, and absorption of which would require 8 mature trees growing for an entire year.

Conclusion:

Too-rapid repeat respiratory viral testing represents an opportunity to reduce non-value-added healthcare activity and its environmental impact. Further analysis is required to understand why testing is repeated so soon, including clinical and system-level drivers. Improving awareness and visibility of existing results before repeat sampling may reduce unnecessary testing, costs and carbon emissions, supporting more sustainable healthcare.

Abstract 6 - 12:43–12:46**Lost in summary: Communication of Clostridioides difficile infection to General Practitioners in acute hospital discharge summaries.***Elevator presentation • 3 minutes • Presenting author: Saoirse Ní Bhaoill*

Authors: Saoirse Ní Bhaoill, John Gibbons, Anne-Marie Dolan, Martha Glynn, Jane O'Connor, Saied Ali, Lisa Rogers, Karen Burns, Helene McDermott, Sinead O'Donnell, Binu Dinesh, Fidelma Fitzpatrick, Ciara O'Connor

Keywords: Clostridioides difficile; Antimicrobial stewardship; Communication; General Practitioner.

Background: Effective communication of Clostridioides difficile infection (CDI) to General Practitioners (GPs) is vital for safe continuity of patient care and antimicrobial stewardship. Deficiencies in discharge documentation incur an increased risk of inappropriate prescribing and potential community transmission. We aimed to evaluate the completeness of discharge communication regarding CDI from secondary to primary care, focussing on identifying gaps and informing targeted interventions.

Methods: In 2024, 149 patients had laboratory-confirmed CDI in Beaumont Hospital. Admission dates and anti-CDI treatment data were extracted from surveillance records. Discharge summaries were reviewed and correlated with laboratory information system (LIMS) records. Fourteen cases managed by GPs or in long-term care were excluded. Data on the remaining 135 patients managed in hospital were analysed.

Results: Of 135 patients, 16.3% (n=22) had no discharge summary completed. Of these, 6 died during admission and the remaining 16 were discharged without documented correspondence to their GP. Among the 113 available discharge summaries, 23 (20.4%) failed to document CDI as a diagnosis or infection during admission. These included 16 medical and seven neurosurgical patients. Four medical patients died during admission from complications unrelated to CDI and their discharge summary included limited clinical details.

Conclusions: This study identified a significant communication gap; 16.3% patients had no discharge communication and 20.4% of completed discharge summaries omitted CDI diagnosis and management. This has implications for patient safety, infection control, and continuity of care. Proposed interventions include targeted clinician education, specifically in neurosurgery and in the medical directorate with re-audit.

Stewardship in action

15:50–16:35 • Moderator: Professor Cristin Ryan

Abstract 1 - 15:50–16:00

Empowering new partnerships with non-infection specialists through handshake antimicrobial stewardship.

Oral presentation • 10 minutes • Presenting author: Zachary Ramsamaroo

Authors: Zachary Ramsamaroo, Jennifer Britton, Grace Rothwell-Kelly, Hind Awad, Anna May Whelan, Joseph Healy, Maeve Doyle, Grace Chan

Keywords: Antimicrobial stewardship, handshake stewardship

Background

As Europe races to meet AMR targets for 2030, there is increasing movement to decentralise AMS leadership beyond infection specialists and empower non-infection specialists. Handshake stewardship, an interactive team-led approach of prospective audit and feedback, was initiated to embed AMS responsibilities across the workforce.

Methods

Three Plan-Do-Study-Act cycles of AMS rounds were included. In phase one, a ward-based pharmacist and AMS pharmacist accompanied consultant microbiologist-led rounds. Phase two rounds were microbiology specialist registrar (SpR)-led and supervised by consultant microbiologist. Phase three was microbiology SpR-led handshake rounds in partnership with non-infection specialists.

Results

271 antimicrobial prescriptions were reviewed on 33 rounds: 33% in phase one, 44% in phase two and 23% in phase three.

De-escalation rates remained comparable between phases one, 43% (38/89) and two, 41% (49/120). In phase three, the de-escalation rate of 35% (22/62) may reflect the timing of Friday rounds.

RTI was most de-escalated with comparable rates in phase one, 52% (14/27) and three, 55% (12/22). In phase two, intra-abdominal infections were most de-escalated at 50% (13/26) due to more surgical patients. Piperacillin–tazobactam was most de-escalated, highest in phase three, 36% (8/22) compared to 28% (11/38) in phase one and 27% (13/49) in phase two.

In phase three, nine non-infection specialists participated, demonstrating high prescriber engagement and recommendation uptake of 85% (53/62).

Conclusions

Microbiology SpR-led AMS rounds offer comparable antimicrobial de-escalation opportunities. Partnership with non-infection specialists is key to sustained improvements in prescribing behaviours in high-yield infections and embedding AMS leadership across the workforce.

Abstract 2 - 16:00–16:10**A Multidisciplinary Orthopaedic-Infectious Disease OPAT Pathway to Support Antimicrobial Stewardship in Prosthetic Joint and Fracture-Related Infection***Oral presentation • 10 minutes • Presenting author: Jessica Spain***Authors:** Jessica Spain, Clare Greene, Patricia Carroll, Eileen Sweeney**Keywords:** Keywords: Antimicrobial stewardship; OPAT; Prosthetic joint infection; Fracture-related infection; Multidisciplinary care**Background**

Prosthetic joint infections (PJI) and fracture-related infections (FRI) are complex infections requiring coordinated surgical and antimicrobial management. Optimising microbiological diagnosis is essential to facilitate targeted antimicrobial therapy and antimicrobial stewardship. Our OPAT service uses a multidisciplinary pathway involving orthopaedic surgery, infectious diseases, an OPAT clinical nurse specialist and an antimicrobial pharmacist. We reviewed microbiological sampling and antimicrobial prescribing in patients managed through this pathway.

Methods

We retrospectively reviewed adult patients with PJI and FRI managed through the OPAT service between January 2022 and April 2026. Data were collected from a prospectively maintained OPAT database and included microbiological sampling, culture results and definitive antimicrobial therapy prescribed through OPAT.

Results

A total of 184 OPAT episodes were included. Tissue specimens accounted for 83.3% of microbiological samples, while aspirates accounted for 9.2%. A microbiological diagnosis was established in 166/184 (90.2%) episodes. Twelve episodes (6.5%) were culture-negative and six (3.3%) had no microbiology sent. Antimicrobial prescribing reflected microbiological findings, with anti-staphylococcal β -lactams most commonly used for MSSA infections, glycopeptide or lipopeptide therapy for resistant Gram-positive organisms, and combination regimens reserved for polymicrobial or culture-negative infections.

Conclusion

A multidisciplinary Orthopaedic-ID OPAT pathway supports antimicrobial stewardship by promoting appropriate microbiological sampling and enabling organism-directed antimicrobial therapy in patients with PJI and FRI. Collaboration between orthopaedic surgery, infectious diseases, OPAT nursing and antimicrobial pharmacy facilitates targeted antimicrobial prescribing and integrated multidisciplinary care in complex bone and joint infections. Local surveillance of orthopaedic infection patients on oral antibiotics must be expanded as this treatment strategy expands.

Abstract 3 - 16:10–16:13**Improving Surgical Antimicrobial Prophylaxis Documentation in Elective Arthroplasty: A Closed-Loop Antimicrobial Stewardship Initiative.**

Elevator presentation • 3 minutes • Presenting author: Tomasz Wloch

Authors: Tomasz Wloch, Brian Rigney, Anna Marzec, Prasad Ellanti

Keywords: Antimicrobial Stewardship, Surgical Antimicrobial Prophylaxis

Background/Objectives:

Surgical antimicrobial prophylaxis (SAP) is an important component of antimicrobial stewardship, balancing prevention of surgical-site infection with appropriate antimicrobial use. Accurate documentation enables assessment of compliance with recommended timing and duration. This project evaluated adherence to local SAP standards in elective hip and knee arthroplasty and assessed the impact of a multidisciplinary, documentation-focused intervention.

Methods:

A closed-loop retrospective audit compared 25 consecutive total hip or knee arthroplasties performed in August 2025 with 25 consecutive procedures in April–May 2026. Standards assessed antimicrobial selection, administration within 60 minutes before incision, documentation of administration time and discontinuation within 24 hours. Interventions included multidisciplinary feedback, staff education, engagement with consultant anaesthetists and redesign of the anaesthetic operative record to make the antimicrobial administration-time field more prominent.

Results:

Documentation of administration time improved from 19/25 (76%) to 24/25 (96%), an absolute increase of 20 percentage points. At re-audit, antimicrobial selection and prophylaxis duration were guideline-concordant in 25/25 cases (100%). All 24 cases with documented administration times received prophylaxis within 60 minutes before incision. One administration time remained undocumented.

Conclusion:

A simple system-level intervention combining documentation redesign, multidisciplinary engagement and staff education improved SAP documentation from 76% to 96%. Embedding antimicrobial stewardship into routine peri-operative documentation can strengthen monitoring of guideline adherence and represents a practical, low-cost intervention applicable to surgical practice.

Abstract 4 - 16:13–16:16**Re-audit of compliance with surgical antibiotic prophylaxis guidelines at Tallaght University Hospital (TUH)***Elevator presentation • 3 minutes • Presenting author: Leah Colclough***Authors:** Leah Colclough, Aedín Hanahoe, Eimear O'Shea, Pedram Pirghasemi, Sarah Bergin**Keywords:** Audit, surgical antibiotic prophylaxis, guidelines, compliance**Introduction**

Surgical antibiotic prophylaxis (SAP) is essential for preventing surgical site infection (SSI). Appropriate SAP requires correct antibiotic selection, dose, timing and duration. Inappropriate use may cause adverse effects, including acute kidney injury and *Clostridioides difficile* infection, and contribute to antimicrobial resistance.

A 2024 audit evaluated SAP practice at TUH against best-practice guidelines. Findings were presented to the Anaesthetics Department and Peri-operative Committee to establish baseline data and identify areas for improvement as part of an ongoing SAP quality improvement (QI) project. A re-audit was conducted in 2026 to assess the impact of these interventions.

Methods

Retrospective data were collected for 50 surgical patients across five specialties: general, orthopaedic, urology, vascular and gynaecology. Compliance was assessed against four criteria: administration within 60 minutes before incision; correct antibiotic selection; intra-operative re-dosing for procedures lasting >4 hours or blood loss >1.5 litres; and prophylaxis duration in accordance with TUH guidelines. Data were collected using the MEG QMS audit tool, with information obtained from Centricity IntraAnaesthesia, ICE, Kardex®, ICCA, iPatientManager and Synergy

Results

Correct antibiotic selection decreased from 85% (34/40) in 2024 to 72% (36/50) in 2026. Administration within 60 minutes of incision decreased from 90% (36/40) to 84% (42/50). Intra-operative re-dosing when indicated improved from 40% (2/5) to 75% (6/8). Compliance with recommended prophylaxis duration increased from 72.5% (29/40) to 84% (42/50).

Conclusion

Overall SAP compliance improved, particularly for re-dosing and duration. However, antibiotic selection and timing declined. These findings may reflect the small sample size and differing case mix.

Abstract 5 - 16:16–16:19**An audit of pre- and post-operative antibiotic management for acute appendicitis in a level three hospital.**

Elevator presentation • 3 minutes • Presenting author: Christina Gillespie

Authors: Christina Gillespie, Shane McCarthy, Sabrina O'Regan, Ali Muhammad Chaudhary, Ruth Waldron

Keywords: Surgical prophylaxis, Appendicitis, Peri-operative

Background/Objectives:

Acute appendicitis is a common indication for emergency abdominal surgery. Evidence supports administration of appropriate surgical antibiotic prophylaxis (SAP) before appendectomy to reduce postoperative infectious complications. Prolonged postoperative antibiotics are not routinely indicated following removal of an uncomplicated, non-perforated appendix. This audit assessed compliance with national and local guidance on antibiotic selection, timing and duration, with the aim of reducing avoidable antimicrobial exposure while maintaining patient safety.

Methods:

A retrospective review of the medicine charts and intra-operative notes of 20 patients who underwent appendectomy at this hospital was performed. Antimicrobials given as SAP, time of administration and duration during the post-operative period recorded. Compliance with local SAP guidance were reviewed retrospectively.

Results:

10 paediatric and 10 adult patients were included. All were prescribed antibiotics pre-procedure. 19 patients had no drug allergy and were prescribed co-amoxiclav whilst one was given cefuroxime and metronidazole in the setting of a reported penicillin allergy, representing 100% compliance with choice of antibiotic as per local guidelines. There was 100% compliance regarding timing of antibiotic administration pre-operatively.

Regarding post-operative antibiotics, 15 cases of appendicitis were categorised as uncomplicated without perforation. For such cases, guidance recommends no post-operative antibiotics. However, all such cases were continued on antibiotics post-operatively representing 0% compliance with local guidelines.

Conclusions:

This first stage of the audit cycle demonstrated conflicting compliance between pre- and post-operative antibiotic management of acute appendicitis, with 100% and 0% respectively. This data informs an intervention with specific focus on limiting antibiotic exposure in the post-operative period.

Abstract 6 - 16:19–16:22**Multidisciplinary antimicrobial stewardship in an older adult mental health service: a 12-month review of antimicrobial prescribing in Clonskeagh Hospital, Dublin, Ireland***Elevator presentation • 3 minutes • Presenting author: Olivia Gallagher***Authors:** Olivia Gallagher, Larry Santiago, Mairead Tobin, Karina O'Connell**Keywords:** Antimicrobial stewardship; mental health services; multidisciplinary

Background: Evidence describing antimicrobial use in inpatient mental health services is limited. Older adult mental health facilities present unique antimicrobial stewardship (AMS) challenges due to advanced age, multimorbidity, polypharmacy, and potential antimicrobial-psychotropic drug interactions. This study evaluated antimicrobial prescribing in Clonskeagh Hospital Mental Health Service and identified opportunities for AMS improvement.

Methods: A multidisciplinary retrospective review of all antimicrobial prescriptions issued between January and December 2024 was conducted across three units. Data were collected quarterly by a senior staff nurse using a standardized antimicrobial record and validated by the AMS pharmacist. The mental health pharmacist fielded validation queries using dispensing data with clinical input from the consultant microbiologist. Consumption was measured using days of therapy (DOT) per 1,000 resident days. Prescribing quality was assessed against national guidelines (www.antibioticprescribing.ie).

Results: Eighty-seven antimicrobial prescriptions were issued to 22 residents during 2024. Overall antimicrobial consumption was 44.8 DOT/1,000 resident days, lower than reported in the 2021 national mental health point prevalence survey (76.8 DOT/1,000 resident days). Urinary tract infection (UTI) was the predominant indication (46%), followed by respiratory tract infection (37%). Allergy documentation was completed in 100% of cases. Guideline adherence was 85% for antimicrobial choice, 98% for dose, 90% for frequency and 48% for treatment duration. Preferred (“green”) antimicrobials comprised 75% of prescriptions, while reserved (“red”) agents accounted for 23%.

Conclusion: Multidisciplinary AMS review demonstrated robust AMS performance, with low antimicrobial consumption and high adherence to guidelines. Opportunities remain to optimise treatment duration and reduce reserved antimicrobial use, particularly for UTI management.

Abstract 7 - 16:22–16:25**Antimicrobial Stewardship Functionality Within Epic: An evaluation of Awareness, Utilisation and Educational needs.**

Elevator presentation • 3 minutes • Presenting author: leeanne stewart

Authors: leeanne stewart

Keywords: Antimicrobial Stewardship, Epic, Tools, Education and Training

Background: Electronic Patient Record (EPR) systems such as Epic increasingly incorporate antimicrobial stewardship (AMS) decision-support tools that can facilitate optimisation of antimicrobial therapy and delivery of stewardship interventions. Previous studies have demonstrated that Epic AMS modules can improve stewardship efficiency and increase AMS interventions. This evaluation explored pharmacists' awareness and utilisation of AMS tools available within Epic and identified opportunities for education and service development.

Methods: A cross-sectional electronic survey was distributed to pharmacists within the Belfast Health and Social Care Trust. The questionnaire explored awareness and utilisation of Epic AMS functionality, including the Radar sidebar, Fever Summary, Antimicrobial Summary Timeline and AMS monitoring tools. Respondents were also asked about methods used to identify patients prescribed antimicrobials, frequency of seeking specialist AMS pharmacist advice and educational requirements.

Results: Awareness and utilisation of Epic AMS tools varied considerably, with respondents describing a range of approaches to antimicrobial review. Awareness of the EPIC antimicrobial prescribing help guide, Fever Summary and Antimicrobial Summary Timeline was 39%, 31% and 42%, respectively. Fifty percent reported using the Radar sidebar to identify patients prescribed aminoglycosides. Seventy-five percent of respondents expressed a desire for additional training on the utilisation of Epic AMS tools.

Conclusion: Pharmacists demonstrated variable awareness and utilisation of AMS functionality within Epic. This evaluation provided insight into AMS tools utilisation in clinical practice, informed the development of targeted AMS education and training, and identified opportunities to explore the use of Epic AMS functionality across the wider multidisciplinary team, including medical and nursing staff.

Abstract 8 - 16:25–16:28**An Epidemiological analysis of adult urinary tract infections in Ireland: Comparing Hospital-acquired and Community-acquired infections using HIPE data.***Elevator presentation • 3 minutes • Presenting author: Karishma Parveen***Authors:** Karishma Parveen, Nathaly Garzon-Orjuela, Abigail Murfitt, Akke Vellinga**Keywords:** Keywords: Urinary tract infection; community-acquired urinary tract infection; hospital-acquired urinary tract infection; epidemiology; in-hospital mortality.

Background: Urinary tract infections (UTIs) are a major public health concern. National evidence comparing UTI groups in Ireland is limited. This study compared the epidemiology, clinical outcomes and predictors of mortality among adults with Primary community-acquired UTI (Primary CA-UTI), Secondary community-acquired UTI (Secondary CA-UTI) and hospital-acquired UTI (HA-UTI).

Methods: A retrospective cohort study was conducted using the national Hospital In-Patient Enquiry (HIPE) database. Adults aged ≥ 20 years admitted between 2020 and 2024 with UTI-related diagnoses were classified as Primary CA-UTI, Secondary CA-UTI or HA-UTI according to ICD-10-AM diagnosis fields and the hospital-acquired (HA) flag.

Findings: Among 159,576 patients with UTI, 75,934 had Primary CA-UTI, 69,825 Secondary CA-UTI and 13,817 HA-UTI. HA-UTI patients had the longest median hospital stay (32 days IQR 16-60), highest in-hospital mortality (9.2%) and greatest critical care utilisation (17.9%). HA-UTI occurred predominantly in older patients, particularly those admitted with fractures. Secondary CA-UTI patients had poorer outcomes than Primary CA-UTI patients. Sepsis was the strongest predictor of in-hospital mortality (aOR 3.9, 95% CI 3.7–4.1). Compared with Primary CA-UTI, HA-UTI (aOR 2.3, 95% CI 2.1–2.5) and Secondary CA-UTI (aOR 2.0, 95% CI 1.9–2.2) were associated with increased in-hospital mortality.

Conclusion: HA-UTI patients were older and frequently admitted with fractures, highlighting frailty and reduced mobility as potentially important risk factors. Secondary CA-UTI and HA-UTI were associated with poorer outcomes than Primary CA-UTI, while sepsis was the strongest predictor of mortality. These findings may help inform infection prevention and antimicrobial stewardship in hospitals.

Abstract 9 - 16:28–16:31**Antimicrobial prescribing in Northern Ireland general practice: a three-year defined daily dose analysis**

Elevator presentation • 3 minutes • Presenting author: Aaron Courtenay

Authors: Roisin Kiely, Michael Tadros, Aaron Courtenay, Ahmed Abuelhana

Keywords: Antimicrobial stewardship, Primary care, Defined daily dose, Antimicrobial prescribing, Northern Ireland

Background/Objectives: Primary care is a major setting for antimicrobial use and an important focus for antimicrobial stewardship. This study evaluated antimicrobial prescribing across Northern Ireland general practice between 2023 and 2025 using defined daily doses (DDDs) to enable comparison across antimicrobial agents.

Methods: A retrospective descriptive analysis was undertaken using Business Services Organisation prescribing data from all 17 GP Federations in Northern Ireland, representing approximately 307 GP practices over a three-year period between 2023 and 2025. Prescriptions originating in general practice and subsequently dispensed were included. Product-level data were aggregated by antimicrobial substance and analysed using WHO-defined DDD values contained within the dataset.

Results: Across 2023–2025, 44.07 million DDDs were prescribed: 14.77 million in 2023, 15.31 million in 2024 and 13.99 million in 2025. Antimicrobial use in 2025 was 5.3% lower than in 2023 and 8.7% below the 2024 peak. Doxycycline accounted for the greatest number of DDDs (10.70 million; 24.3%), followed by amoxicillin (7.63 million; 17.3%). Methenamine use increased from 318,312 DDDs in 2023 to 1,184,786 DDDs in 2025, representing a 272% increase.

Conclusion: DDD-based analysis demonstrates a reduction in overall antimicrobial dispensing by 2025 following a peak in 2024. Doxycycline represented a substantial proportion of antimicrobial use, while the marked increase in methenamine warrants further investigation as a potential stewardship-relevant prescribing trend. Future analysis incorporating indication, population-standardised prescribing rates and AWaRe classification would support more detailed assessment of prescribing quality and stewardship opportunities.