Antimicrobial Stewardship in Northern Ireland
Contained and controlled

The UK’s 20-year vision for antimicrobial resistance

Published 24 January 2019

2.1 Optimal use of antimicrobials in humans

Measuring success
Target: to reduce antimicrobial use in humans by 15% by 2023/24.
HCAI AMR Structures in NI: pre-Covid 19

- Strategic Antimicrobial Resistance and Healthcare-associated Infection (SAMRHAI) Group
  - CMO/CVO

- HCAI AMR Improvement Board
  - AD for Health Protection (PHA)

- IPC Lead Nurse Forum
- Primary Care AMS Operational Group (ASOG)
- HCAI & AMR Improvement Board Secondary Care Sub-group
- HCAI & AMS Epidemiology Subgroup

- Regional Antimicrobial Pharmacists Network

- Urinary Tract Infection Project Subgroup
- Point Prevalence Survey Subgroup
- Communications Subgroup

- Still active during Covid
- Paused during Covid

Regional Antimicrobial Pharmacists Network

HCAI AMR Improvement Board Secondary Care Sub-group

HCAI & AMS Epidemiology Subgroup

Urinary Tract Infection Project Subgroup

Point Prevalence Survey Subgroup

Communications Subgroup
HCAI & AMR Improvement Board
Secondary Care Sub-Group

• Membership of the HCAI & AMR Secondary Care Subgroup includes:
  - Lead Antimicrobial Pharmacists
  - Consultant Medical Microbiologists
  - ID Consultant & Associate Specialist in one of the Trusts
  - Consultants from BHSCT
  - Consultant in Public Health
HCAI & AMR Improvement Board Secondary Care Sub-Group

Regional workstreams:

• Regional Vancomycin and Teicoplanin guidelines
• Participation in CO-GENT (Clinical Outcomes in Gentamicin Prescribing and Monitoring) National Audit
• Antibiotic Review Kit (ARK) Research Project
• Regional Kardex redesign following ARK study
• ENCOMPASS
• Link with NI Paediatric Antimicrobial Group (regional gentamicin chart/paper published April 22)
• Link with the Medicines Optimisation Innovation Centre (MOIC)
<table>
<thead>
<tr>
<th>Areas of Activity</th>
<th>Completed</th>
<th>Ongoing</th>
<th>Future plans</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antimicrobial Consumption</strong></td>
<td>Surveillance system developed in collaboration with PHA providing timely access to DDD data for all 5 Trusts&lt;br&gt;Target Monitoring Reports</td>
<td>No annual targets for antimicrobial consumption in last 2 years&lt;br&gt;Participation in UK-wide review of AMC metrics</td>
<td>Overall target of 15% reduction in antimicrobial consumption by 2024 still in place&lt;br&gt;Improved graphical representation of consumption trends over time</td>
</tr>
<tr>
<td><strong>Guideline Development</strong></td>
<td>Regional Glycopeptide Guidelines - Vancomycin and Teicoplanin now completed</td>
<td>Aminoglycosides in progress&lt;br&gt;Empirical Antibiotic Guidelines update&lt;br&gt;Surgical prophylaxis Guidelines update&lt;br&gt;Regional Neonatal Guidelines update&lt;br&gt;Advise on primary care antimicrobial guidelines</td>
<td>Regional Paediatric guidelines</td>
</tr>
<tr>
<td><strong>Audit &amp; Quality Improvement</strong></td>
<td>Participation in Global PPS 2021</td>
<td>Participation in Co-Gent national audit&lt;br&gt;Pen-allergy de-labelling projects&lt;br&gt;Scheduled adherence to policy audits in Trusts</td>
<td>PPS participation</td>
</tr>
<tr>
<td><strong>OPAT service development</strong></td>
<td>OPAT pharmacy service established in 4 of 5 Trusts- Recruitment issues in one Trust</td>
<td>Post Project Evaluation completion&lt;br&gt;Funding in some Trusts not permanent&lt;br&gt;Virtual clinics</td>
<td>Exploring self OPAT and aim to increase switch to orals</td>
</tr>
</tbody>
</table>
## Regional Antimicrobial Pharmacists Network: 2

<table>
<thead>
<tr>
<th>Areas of Activity</th>
<th>Completed</th>
<th>Ongoing</th>
<th>Future plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENCOMPASS</td>
<td>Multiple meetings with ENCOMPASS teams</td>
<td>Advising ENCOMPASS on AMS needs e.g. ARK principles</td>
<td>Continue to work with Encompass teams to ensure AMS needs are incorporated</td>
</tr>
<tr>
<td>Regional and National Networks</td>
<td>NI Paediatric AMS Group set up – current chair of our network a member</td>
<td>Developing a regional audit tool for AMS in paediatrics</td>
<td>Development of regional paediatric guidelines</td>
</tr>
<tr>
<td>Diagnostics</td>
<td>PCT study in one Trust</td>
<td>PCT pilot in another Trust</td>
<td>POCT CRP testing in the community under consideration</td>
</tr>
<tr>
<td>Research</td>
<td>ARK study completed</td>
<td>AMS Teach Study</td>
<td>Celtic collaborative work with MOIC Link with Queen’s University Belfast and University of Ulster</td>
</tr>
<tr>
<td></td>
<td>Contributed to the UK-wide survey during June 2020 assessing the impact of COVID-19 on AMS activities</td>
<td>Link with University of Ulster and MOIC – Evaluating the impact of COVID-19 pandemic on antimicrobial prescribing in NHSCT Working with MOIC on a European research project - QUARANTINE</td>
<td></td>
</tr>
</tbody>
</table>
# Regional Antimicrobial Pharmacists Network: 3

<table>
<thead>
<tr>
<th>Areas of Activity</th>
<th>Completed</th>
<th>Ongoing</th>
<th>Future Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education and Training</td>
<td>ARK e-learning available on NI HSE e-learning</td>
<td>ARK training to be made mandatory for all NI Trusts</td>
<td>Consideration of a Regional TDM training package</td>
</tr>
<tr>
<td></td>
<td>Pre-registration workbook and training</td>
<td>FY0 &amp; FY1 training (annual)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advanced Pharmacy Practice (APP)</td>
<td>Other staff training</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WAAW – co-ordinated regional activities including regional symposium on Thursday 24&lt;sup&gt;th&lt;/sup&gt; November</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New way of working during pandemic</td>
<td>Use of electronic AMS care plans for patients with complex infection</td>
<td>Virtual ward rounds and clinics e.g. Diabetic Foot Infection clinics (OPAT), and remote sites in different Trusts</td>
<td></td>
</tr>
<tr>
<td>Outpatient COVID-19 treatment centres</td>
<td>Involvement in set up of Outpatient Covid-19 Treatment Centres (OCTCs) in each trust including protocols, SOPs, prescription design</td>
<td>Involvement in OCTCs to ensure prudent prescribing of antivirals for certain non-hospitalised patients with covid-19</td>
<td>Transfer to community with appropriate training</td>
</tr>
</tbody>
</table>
Primary Care AMS Operational Group Work Streams

Completed
• CMO letter
• GP POC CRP Pilot
• Community pharmacy AMR living well campaign

Paused/Stopped due to COVID
• Community Pharmacy POC CRP pilot
• HSCQI – nursing home UTI pilot

Continued during COVID
• NI Formulary & MicroGuide App
• Resources – PCI, PILs, Patient Zone
• Education & training – remote consultations
• Community pharmacy UTI pilot
• OOHs and COVID centres
Dental Work Streams: Pre-pandemic

- Promotion of AMS and FGDP on-line tool (to check compliance with best practice guidelines)
- Practice-based Clinical Audits (CAPRAP scheme)
- NI dental prescribing dashboard made available
- Draft dental prescribing database to help practices compare prescribing patterns
- Pharmacy student project: ‘Analysis of the clinical appropriateness of out-of-hours emergency dental prescribing of antibiotics’

- Partners – BDA, NIMDTA and CAPRAP committee
Dental work streams: Post pandemic

• Compiling monthly data on dental prescribing
• Communicating data and trends to practices
• Information on AMS highlighted during talks to FD dentists at start and end of their year – also in presentation to any dentist joining a practice
• Facilitating two student projects looking at dental prescribing during the pandemic University of Ulster
  a) Quantitative – analysis of data
  b) Qualitative – focus group and questionnaire
• Part of 4 nations dental prescribing study exploring trends and variations during pandemic