The Role of the Antimicrobial Pharmacy Technician

Sarah Thomson - Specialist Pharmacy Technician
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NHS Tayside
0.4 WTE Antimicrobial Stewardship Pharmacy Technician

Routine tasks within Primary and Secondary care include:

- Daily carbapenem surveillance, liaising with ID/micro teams
- Regular surveillance reports e.g. Consumption of reserved antibiotics and ad-hoc reports e.g. During an outbreak
- Develop and deliver education to various staff groups within and outside Health Board
- Collate background information on treatment for infection recommended in national, international, and other hospital guidelines to guide local policy development and update
- Antimicrobial website: upload all guidance/information
- Stock availability: liaise with procurement and clinical teams
- Audit: national and local
- Public engagement: EAAD and WAAW activities
EDUCATION for PHARMACY TECHNICIANS

- No education tailored to profession
- Develop & deliver training to engage all pharmacy technicians in the antimicrobial stewardship agenda
- Share materials around the UK & further afield
- Highlight further learning resources
Five Golden Rules

Key Alert Antimicrobials include:

- **Meropenem** — Prescribing is monitored locally and nationally. All patients (except ITU, SHOU, Haematology, Oncology, Paeds, CF) should be reported to Antimicrobial Team.
- **Gentamicin** — After 72 hours this is classed as an Alert agent due to increased risk of adverse effects. Many areas prescribe using Gentamicin chart (exceptions include Paeds, CF, Gynaec).
- **Aztreonam** — Generally used as alternative to Gentamicin only if patient has poor renal function or still requires IV after 72 hours of Gentamicin.
- **Fidaxomicin** — Must be approved by ID or microbiology — as per Recurrent Clostridium Difficile Infection (CDI) Guidance.
- **Piperacillin/Tazobactam** — Used within specific guidelines. All other use should be approved by ID or microbiology.
- **Moxifloxacin** — Increased risk of CDI. Must be approved by ID or microbiology.

Make your pledge to preserve antibiotics for future generations at

[https://antibiotic-guardian.com](https://antibiotic-guardian.com)
“I now have a better knowledge of antibiotic prescribing, particularly around the area of prophylactic prescribing of antibiotics. This will allow me to more confidently raise any issues that I come across, whilst carrying out my role in primary care, with the pharmacist or the GP.”

“I felt this was a really good presentation – delivered in a very confident manner which makes me want to do more work around this subject.”

“I will be more aware when checking TPARs with antimicrobials to look out for indications, course lengths and missed doses and highlight these.”

“I have a much better understanding of the impact of antimicrobial resistance and the timescale in which it will become a prevalent health issue globally.”
The role of the Pharmacy Technician – Hospital

- May review medicines drug chart before ward pharmacist

- Inform ward pharmacist if
  - Alert antimicrobial
  - No indication on medicines drug chart
  - No course length or review date documented
  - Missed doses

- Working in distribution: aware antimicrobials are unavailable: help maintain supply

- Checking prescriptions: no course length on discharge prescription: inform pharmacist
The role of the pharmacy technician – GP Practice

- Participate in audits
- Identify repeated acutes/long term antibiotics with no review
- Visit patients in their homes to assess medicines concordance
- Direct healthcare professionals to local antibiotic prescribing policies

- Anything else????

The role of the pharmacy technician – Community Pharmacy

- Advise patients to take antibiotics correctly and complete course
- If you notice a patient has received numerous prescriptions for antibiotics would you highlight to the pharmacist?
- Have you dispensed a delayed antibiotic prescription?
- Minor ailments schemes, pharmacists can prescribe pain relief for patients and counsel on symptom management. Do you think this reduces patient expectation of receiving an antibiotic?
- Pharmacy First – community scheme for patients to access antibiotics to treat uncomplicated UTI in non-pregnant women or impetigo

The Role of the Pharmacy Technician – Helping your Health Board meet national prescribing indicators

* **Duration for ORAL antibiotics and Review for IV antibiotics – documented on drug chart**
  * Ensuring antibiotics are prescribed for the recommended duration can have a big impact on overall use

* **Indication for antibiotic should be documented on drug chart**

* **WHO AWaRe antibiotics list – 2019**
  * Once 2019 prescribing indicators in place, check what you can do locally

* **GP Practice**
  * Antibiotic audit – what is being prescribed and for which indication?
  * Identify patients prescribed long-term antibiotics and highlight for review
  * Remember NITROFURANTOIN is not recommended for durations >6 months unless benefit outweighs risk. Specific warnings available on NHS Tayside netFormulary
  * Updated warnings for fluoroquinolones are available on the NHS Tayside antimicrobial website

* **Penicillin Allergy**
  * <10% of patients who think they are allergic have a true penicillin allergy
  * Patients with documented penicillin allergy have reduced treatment options.
  * Pharmacy Technicians can help by collecting and documenting information from patient on admission e.g. What kind of reaction did they have?
Antimicrobial Pharmacy Technician Virtual Network

- Set up September 2018
- Currently 25 members from:
  - England
  - Northern Ireland
  - Scotland
  - Wales
  - Australia

PHARMACY TECHNICIANS KEEP CALM AND HELP FIGHT ANTIMICROBIAL RESISTANCE
Antimicrobial Pharmacy Technician
Virtual Network

Roles and Responsibilities around the UK and beyond

- Data collection & audit for Commissioning for Quality and Innovation (CQUIN) framework
- Jointly manage pharmacy workload for annual influenza campaign
- Post Infection Reviews (PIRS)
- Clinical PT duties on ID wards and in pharmacy department
- Manage & create PGDs
- Outpatient Parenteral Antibiotic Therapy (OPAT) medicines management
- Electronic prescribing – evaluate benefits for antimicrobial stewardship
- ARK audit work
- Maintenance of Microguide
- Research for Vancomycin project & PPMC project (Australia)
- Attend daily consultant-led antimicrobial ward round as pharmacy representative
- Attend sepsis group meetings
- Staff education
- Public awareness including WAAW & EAAD activities
Secondary Care Role

- Supporting Antimicrobial ward rounds.
- Updating MicroGuide app.
- Taking lead on World Antibiotic Awareness Week.
- Antimicrobial training for Nurses and Pharmacy Technicians.
- Annual Bug Busting Hero Awards.
- Audits – KPI, PPS etc.

Amy John, Antimicrobial pharmacy technician, Cwm Taff University Health Board, South Wales
Primary Care Role

- GP audit (e.g. 4C’s, UTI prophylaxis & UTI treatment)
- GP feedback
- Antibiotic Myth Busting Sessions with the public.
- Scouts Young Antibiotic Guardian badge

Future work

- Nursing Home project
- District Nurse training – Urine dip

**Scout Antibiotic Guardian Badge**

Inspired at the Antibiotic Guardian Awards 2018, by Ryan Hamilton, & after focusing on the older generation for 12 months, as a team we believed the younger generation should be our new target. Ryan shared his programme which I used as a guide to educate a new generation of young people on the topic of antibiotic use, and good hygiene. Due to running these sessions I was invited to join the Scout & Girl Guiding Steering group to launch the programme Nationally later this year.

**Antibiotic Myth Busting**

Educating members of the public in 60+ forums on the misconception around antibiotics, through an interactive PowerPoint presentation.

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Amy John, Antimicrobial pharmacy technician, Cwm Taff University Health Board, South Wales
ACHIEVEMENTS

- Highlighted the Antimicrobial PT role to pharmacists
- Promotion of network = requests for job descriptions & information around roles and responsibilities
- Collaborative working to set up network
- Support network for those new to role
- Quick way to share information i.e. antibiotic prophylaxis in asplenic patients
Future Plans

- Collaborative working – leading up to World Antibiotic Awareness Week & European Antibiotic Awareness Day 2019?
- Network logo, informal What’s APP group & Twitter account?
- Network representative from all countries?
- Antibiotic Guardian Awards submission?
- Improve engagement of all members – potential to develop web-based forum accessible to pharmacy technicians in all sectors with an interest in antimicrobial stewardship?
- Webinar?
Could national antimicrobial groups tap into network to easily connect with members?

Provide opportunities for members to participate in national work i.e. education, public engagement, Fleming Fund, audits?

Education links could be sent directly to network

Present at 2019 APTUK conference?

Link into Pharmacy Technician Day Oct 2019?

Written article – Pharmacy in Practice, Your RPS?

Engage with community pharmacy technicians who have an interest in Antimicrobial Stewardship
Thank you for listening

Questions??