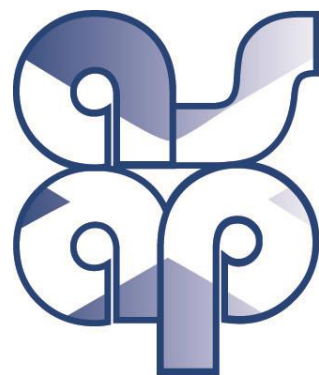


# Evolving Role of Pharmacy in Antimicrobial Stewardship



**Association of Scottish  
Antimicrobial Pharmacists**

**Kirsteen Hill & Fiona McDonald  
Co-chairs**

# Overview



**NATIONAL  
VISIONS**



**WORKFORCE  
& EDUCATION**



**TECHNOLOGY**



**FUTURE**

# National Visions

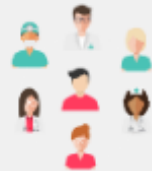
Publication - Strategy/plan

**Scottish Management of Antimicrobial Resistance Action Plan 2014-18 (ScotMARAP2)**

**ACHIEVING EXCELLENCE  
IN PHARMACEUTICAL CARE**  
A STRATEGY FOR SCOTLAND



**Shared Decision Making**



**Personalised Approach To Care**



**Reduce Harm and Waste**



**Reduce Unwarranted Variation**



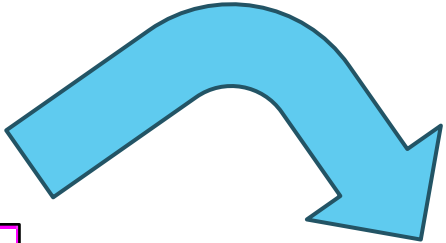
**Managing Risk Better**



**Become Improvers and Innovators**

**Reduce**  
**4Cs**  
**Ceftriaxone**    **Cefuroxime**  
& other cephalosporins  
**Cloxacillin**    **Ciprofloxacin**  
& other quinolones  
**& reduce**  
**C Diff**

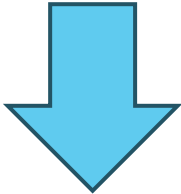
Produced by the Antimicrobial Management Team, June 2018  
Central Specialist Antibiotics Pharmacy Unit, 4th Floor, 4th Floor



> *J Antimicrob Chemother.* 2018 Aug 1;73(8):2223-2230. doi: 10.1093/jac/dky171.

**Optimizing carbapenem use through a national quality improvement programme**

Siân E Robson<sup>1</sup>, Alison Cockburn<sup>1 2</sup>, Jacqueline Sneddon<sup>1</sup>, Abdulrhman Mohana<sup>3</sup>,  
Marion Bennie<sup>3 4</sup>, Alexander B Mullen<sup>3</sup>, William Malcolm<sup>5</sup>, Jennifer Armstrong<sup>4</sup>,  
Andrea Patton<sup>1</sup>, Ronald Andrew Seaton<sup>1 6</sup>



# Think tabs

NHS  
Grampian



not jabs

make the switch  
FROM IV TO ORAL ANTIBIOTICS

Antimicrob Chem

Optimizing  
Quality imp

E Robson<sup>1</sup>, Alis  
on Bennie<sup>3,4</sup>, A  
lea Patton<sup>1</sup>, Ron

ACCE



NHS  
SCOTLAND



## COLD? FLU? TAKE CARE NOT ANTIBIOTICS

- Viral infections, which can often cause coughs, colds, sore throats and earaches, cannot be cured by antibiotics and your doctor will only prescribe antibiotics when you need them.
  - Many infections get better just as quickly without antibiotics. Simple eye, ear, throat infections are good examples of this.
- If you are concerned about your symptoms and think you may need antibiotics, speak to your local pharmacist or contact your GP surgery.

EUROPEAN  
ANTIBIOTIC  
AWARENESS DAY

A European Public Health Alliance



Produced by the  
Scottish Antimicrobial Prescribing Group  
Prepared: August 2010  
For review: August 2011

ERVE

# WORKFORCE & EDUCATION

## Pharmacists

- Pharmacy First/First +
- Prescribers/ Prescriber Ready



## Pharmacy Support Workers

- Advanced roles

## Pharmacy Technicians

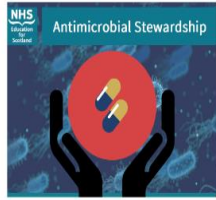
- Pre-registration Trainee scheme
- Vocational Training Foundation Programme
- Specialist Antimicrobial Technicians



# WORKFORCE & EDUCATION



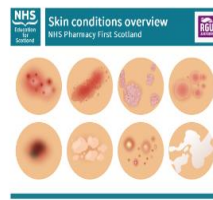
## Pharmacists



Antimicrobial Stewardship



Urinary Tract Infections (UTIs)



Skin Conditions Overview



Impetigo



Skin infections



Shingles



## Pharmacy Support Workers

### What is a pharmacy support worker?


Pharmacy support workers are a key part of the pharmacy team. They order, prepare and help to dispense medicines.

They work in different areas, including:

- distribution centres
- hospital wards
- hospital dispensaries
- NHS contracted community pharmacies
- care homes
- primary care
- GP practices in some Health Boards

Pharmacy support workers are also known as pharmacy assistants or dispensing assistants.

## Pharmacy Technicians

- P20 Addition of a pharmacy technician to the ward team improves antimicrobial stewardship and patient care and safety 



R Rodger, Jonathan Coulter, Sharon Thompson

*JAC-Antimicrobial Resistance*, Volume 5, Issue Supplement\_2, June 2023, dlad066.024, <https://doi.org/10.1093/jacamr/dlad066.024>

Published: 14 June 2023

# EDUCATION AND CAREER PATHWAY



EXPERIENTIAL  
LEARNING

PRESCRIBING  
LEARNING  
IN PRACTICE

PRESCRIBERS  
& DESIGNATED PRESCRIBING  
PRACTITIONERS PROVIDING  
SUPERVISION

MULTIPROFESSIONAL  
& CROSS SECTOR  
OPPORTUNITIES



**EDUCATION  
AND CAREER PATHWAY**

UNDERGRADUATE  
COURSE  
INDEPENDENT PRESCRIBING

1

FOUNDATION YEAR

EXPERIENTIAL  
LEARNING

MULTIPROFESSIONAL  
& CROSS SECTOR  
OPPORTUNITIES

PRESCRIBING  
LEARNING

Guidance

# Antimicrobial prescribing and stewardship competency framework

Updated 16 August 2023

DEPENDENT ON ROLE

5

CONSULTANT PHARMACIST  
FRAMEWORK

6



Automated dispensing of  
OPAT pumps

Personalised clinical  
decision making tools

Delivery by drones

National electronic  
social care and  
health record

Pharmacogenetics

Integrated medical  
calculators

Antibiotic prescribing  
data linked to infections  
/outcomes

# Future Opportunities and Challenges



Balancing workload  
Patient specific vs  
Population level



Upskilling  
workforce  
Support  
prescribers



Embrace  
technology

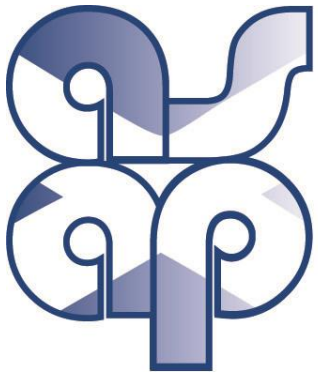


As Healthcare services evolve

Pharmacy services will evolve



And the role of the pharmacy workforce in AMS must evolve



**Association of Scottish  
Antimicrobial Pharmacists**

**THANK YOU!**