



In conversation with
members of the antimicrobial
stewardship community of practice for
European Antibiotic Awareness Day
22nd Oct 2025



This webinar is being recorded by AMRIC/IIOP

Attendees are asked not to use AI generated minutes or recording during the webinar



IIOP

INSTITIÚID CÓGAISÍOCHTA NA hÉIREANN
IRISH INSTITUTE OF PHARMACY



[BBC newslane](#) piece for the patient story



Patient story

“yes, there was a little bit of fear creeping in at that point, I suppose, that what next when the guidelines or the doctor says that there’s nothing else at her disposal right now... in the back of my own head, I was thinking ok, where are we going to go from here?”





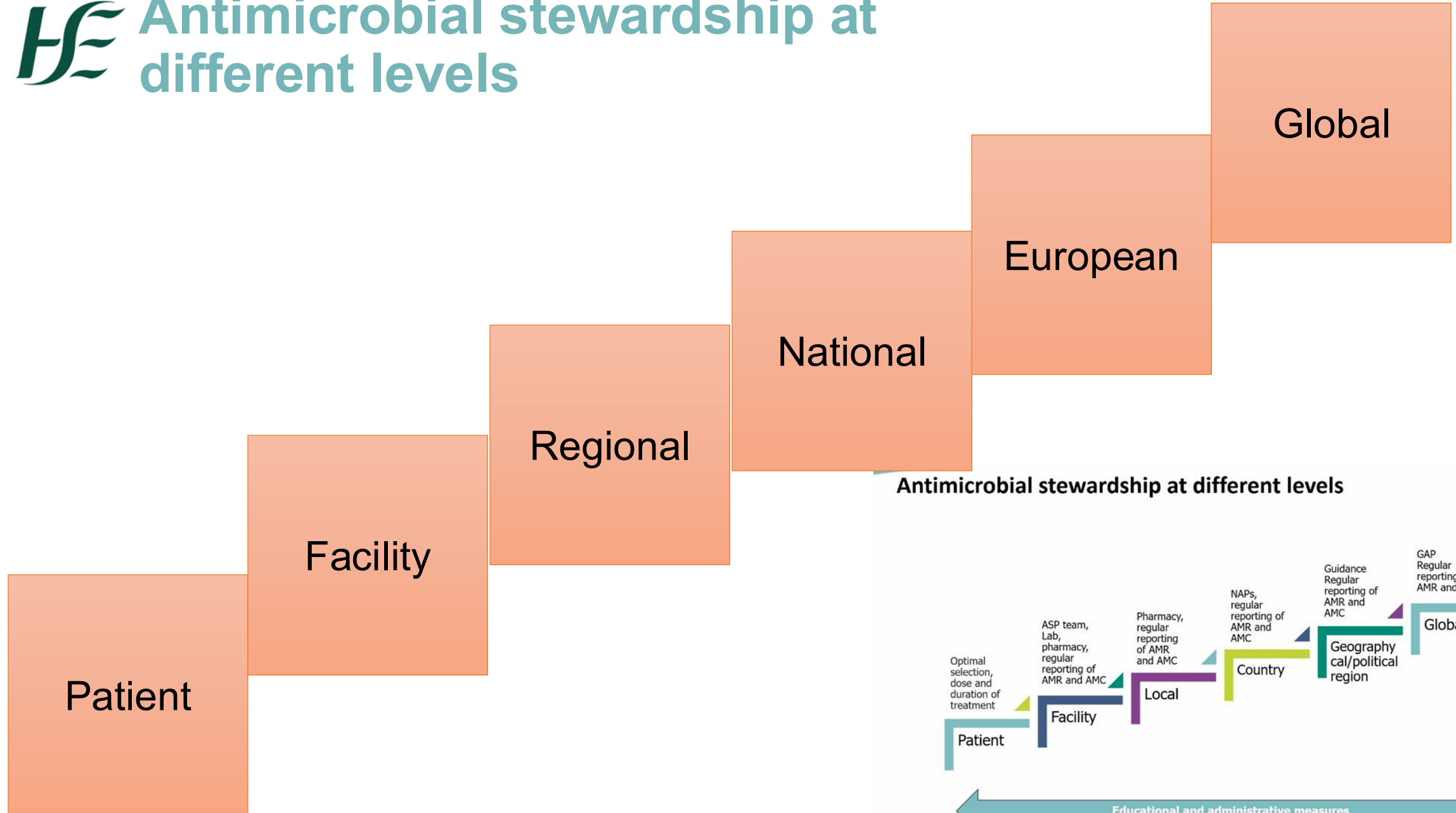
Patient story



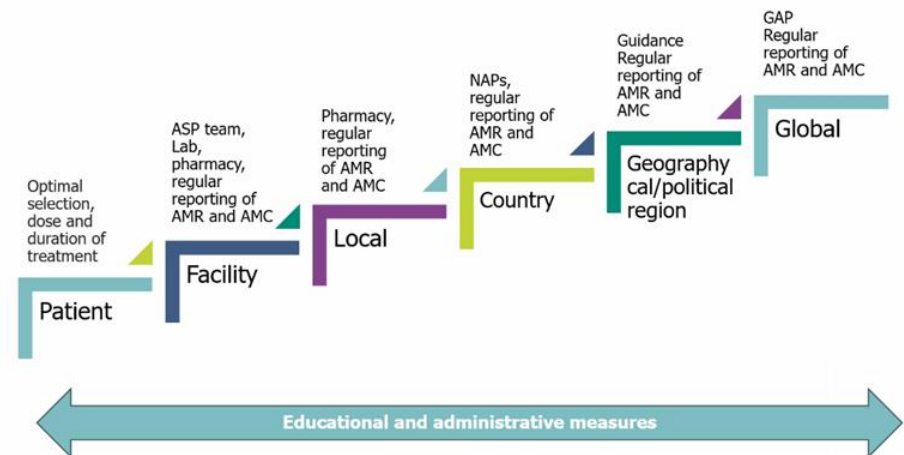
“I’m now maybe a lot more cognisant of how quickly antimicrobial resistance can occur or how quickly you run out of options, or options that fit into your day-to-day life maybe...And I can see how that can happen for people now a lot more simply than I would have thought before.”



Antimicrobial stewardship at different levels



Antimicrobial stewardship at different levels





Introduction to the Pharmacist Antimicrobial Stewardship Network (PAMS-net)

Marie Philbin, HSE AMRIC Chief I Pharmacist



Antimicrobial Resistance &
Infection Control Programme

Mission statement: To support pharmacists across all sectors to work towards the common goal of promoting responsible use of antimicrobials in all patients and limiting the emergence of antimicrobial resistance.

~300 pharmacist members

PAMS-net working group



Educational events

Discussion forum

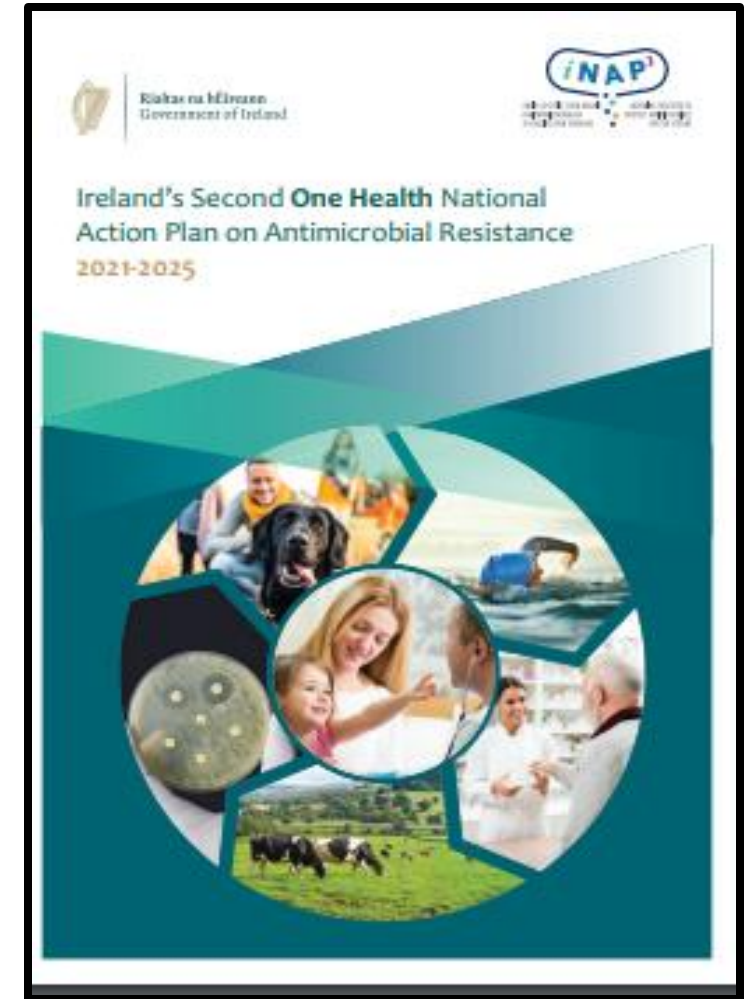
Updates & resources



Ireland's third national action plan on antimicrobial resistance (iNAP 3)

Submission by PAMS-net working group to
Department of Health for iNAP 3

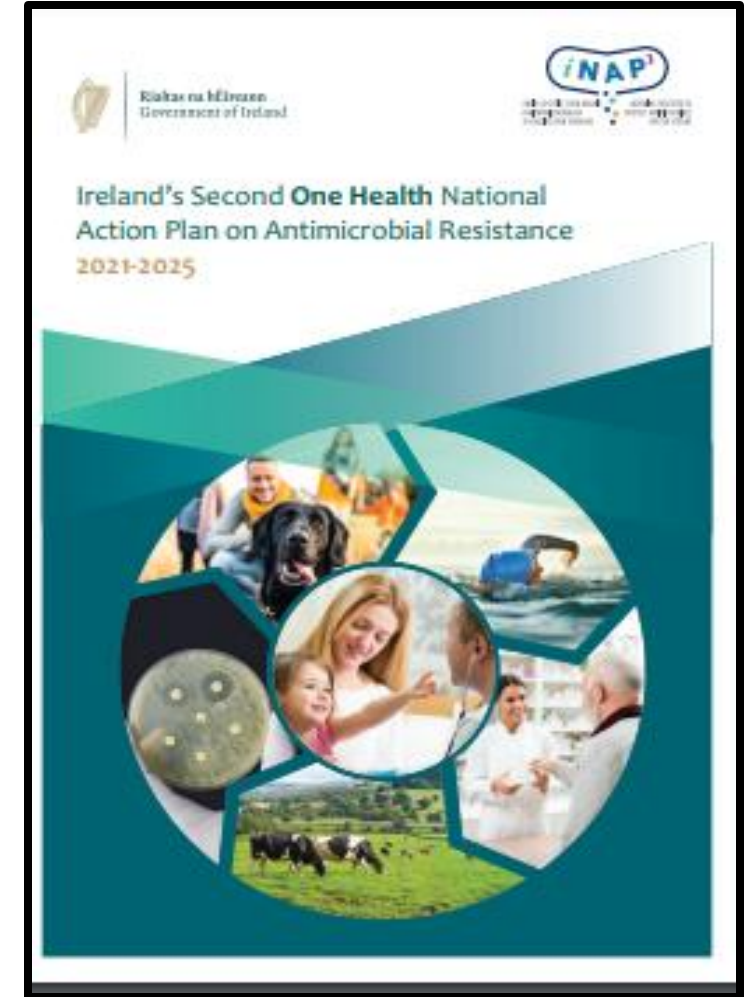
1. Antimicrobial use in human health in Ireland
 - 90% community
 - 10% in hospitals
2. EU council recommendations:
 - Reduce antibiotic use by 27%
 - Green/ Access agents to be > 65% of total use
3. Shift from what to prescribe to whether to prescribe





PAMS-net working group submission for iNAP 3

- Collaborative viewpoint
- Unique value and impact that pharmacists, working across all settings, can bring to the fight against AMR
- Stewards of antimicrobial safety
 - Interventions to improve patient outcomes
 - Reduce the risk of AMR
 - Educating the public on reducing the risk of infection, e.g. vaccination, hand hygiene.





Areas for action to optimise the role of the pharmacist in AMS in Ireland

- Action required to embed AMS in pharmacy services in all settings
- Support and expansion of pharmacist leadership roles in AMS at national, regional and local level is key
- Indicative curriculum for undergraduate pharmacy students
- Support for AMS research in community pharmacy settings
- Consideration should be given to mandating engagement with AMS continuing education activities for all registered pharmacists.



Areas for action to optimise the role of the pharmacist in AMS in Ireland

- PAMS-net discussion forum:
 - Support to grow the network
 - Update of the digital platform to simplify access
- Opportunity for greater community pharmacists' involvement in AMS.
 - 'Wait and see' (delayed) antimicrobial prescriptions
 - Participation in public-oriented media campaigns
 - Engagement with prescribers to optimise antimicrobial prescribing
 - Completion of AMS audits
 - Incentivisation of community pharmacists' participation in AMS initiatives
- Accurate and comprehensive antimicrobial consumption reporting
- The role of specialist antimicrobial pharmacists should be optimised and resourced across all settings.

What is your area of work?



Agenda

Bite size presentations and panel discussions on the following topics:

Introduction to the Pharmacist Antimicrobial Stewardship Network

- Learn more about the PAMS-net vision for the pharmacy profession and recent submission to the Department of Health

Intravenous to oral switch for antimicrobials

- Learn why intravenous to oral switch is important for patients and the environment, and is increasingly relevant for pharmacists working across all healthcare settings
- Insights from an antimicrobial pharmacist practicing in the acute hospital setting

Supporting the management of self-limiting respiratory tract infections in primary care

- As we approach the winter season, learn about new resources developed to support GPs treating patients with respiratory tract infection
- Contribute to discussion on value of adapting these resources to community pharmacy practice in the future

Note: This event will be recorded and made available on the PAMS-net webpage of the IOP website and on the IOP webinar page.



Intravenous to oral switch for antimicrobials

Ellen Martin, HSE AMRIC Antimicrobial Pharmacist

Ann-Marie Garvin, Antimicrobial Pharmacist, Connolly Hospital
Blanchardstown



Antimicrobial Resistance &
Infection Control Programme

Oral prescribing... *(tick all that apply)*

- Reduces risk of infection
- Reduces nursing time
- Reduces length of stay
- Reduces use of single use plastics



Why is intravenous to oral switch important?

Oral prescribing should be used wherever possible



Benefits of oral prescribing:

**Reduces
risk of
infection**

**Higher
comfort &
mobility**

**Reduces
nursing
time**

**Reduces
length of
stay**

**Less
waste**

**Decreases
cost**



National Antimicrobial Point Prevalence Survey of acute hospitals – 2024

- Two thirds administered via the **IV route (68.0%, 3357/4935)**
- **17% suitable for oral switch** (2022: 14%)
- **512 patients** who were on IV antimicrobials were **considered suitable for oral switch**.





Resources to support intravenous to oral switch



AMRIC IV to oral switch toolkit

- Aims to provide local AMS teams with supports to implement a local intravenous to oral switch (IVOS) initiative
- Guidance, implementation tool, generic presentation, poster, metronidazole factsheet

National antimicrobial targeted point prevalence study (PPS) 2025

- Route of administration tPPS
- Audit tool being designed for local use

Challenge: Who to target?

HCP	Pros	Cons
Doctors	➤ Prescribers who review patients daily ❖ <i>Would reduce patient length of stay</i>	➤ Constant NCHD changeover
Nurses	➤ Know patients clinical status ❖ <i>Would free up nursing time taken to administer</i>	➤ Difficulty contacting doctors
Pharmacists	➤ Know who is on IV antimicrobials ❖ <i>Would reduce unnecessary use of IV antimicrobials</i>	➤ Uncertainty of patients clinical status ➤ Difficulty contacting doctors ➤ Gaps in clinical cover

Learning: Who performed best and why?

Doctors (Resp team) (OR 0.27, 95% CI 0.07–0.98)	✓ Prescribers who review patients daily <u>plus</u> ✓ Prioritised medication record review ✓ Added antimicrobial column to patient list to track
Nurses (OR 0.73, 95% CI 0.24–2.28)	✓ Know patients clinical status <u>however</u> ➤ Do not routinely check patient bloods ➤ Difficulty contacting medical teams ➤ Time-saving for future rather than present
Pharmacists (OR 0.49, 95% CI 0.11–2.10)	✓ Know who is on IV antimicrobials <u>however</u> ➤ Competing priorities (NB Medicine Reconciliation) ➤ Gaps in clinical cover ➤ Difficulty contacting medical teams

Intravenous to oral switch: Learning and challenges in practice

Further Learning: Applicable to surgeons?

Key learnings:	Key challenges
Audit ❖ Tailored education was an effective method of intervention for driving improvement in the rate of IV to PO switching	➡ Sustainability ➡ Educational opportunities
Survey ▪ 28 responses to the survey were obtained ▪ 86% of respondents aware of local IV-PO switch policy ▪ Half of respondents review drug chart daily ▪ 79% of respondents first assess for suitability of PO switch when source control achieved rather than at 48-72 hours as per local policy ▪ 33% of respondents reassess daily in line with local policy	➡ Poor response rates ➡ Improving frequency of drug chart review ➡ Addressing misconception of need for source control ➡ Improving reassessment frequency



Q&A discussion



Antimicrobial Resistance &
Infection Control Programme



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Supporting the management of self-limiting respiratory tract infections in primary care

Mala Shah, HSE AMRIC Chief II Pharmacist

Dr Scott Walkin, GP, AMRIC Clinical Lead, ICGP



Antimicrobial Resistance &
Infection Control Programme



EU targets for antibiotic consumption for Ireland



Ireland

	Target achieved	Progress	Regress
 Reduce by 27% the total consumption of antibiotics in humans Defined daily doses (DDD) per 1 000 inhabitants per day	2019 baseline	22.8	-
	2023	22.4	-1.6%
	2030 TARGET	16.6	-27%
 At least 65% of the total consumption of antibiotics in humans belongs to the 'Access' group of antibiotics As defined in the AWaRe classification of the WHO	2019 baseline	70.3%	-
	2023	75.1%	+4.9%*
	2030 TARGET	65%	-

*Percentage point difference from 2019.

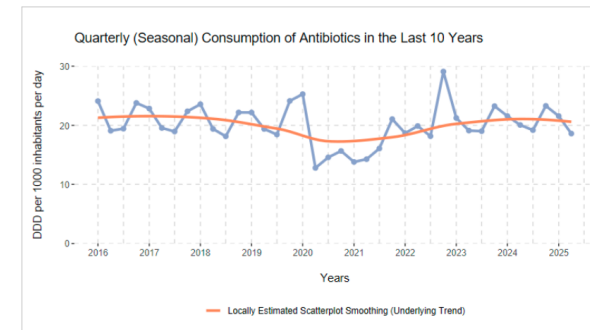


Figure 1: Primary care antibiotic consumption trends (HPSC)

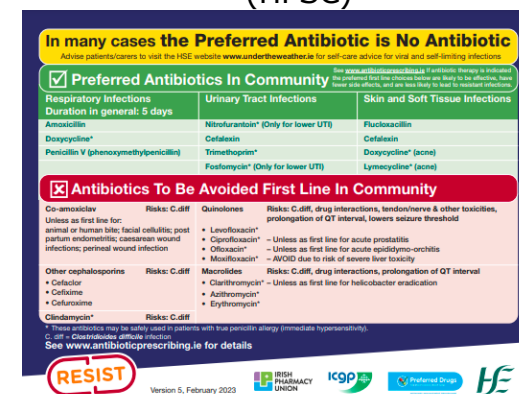


Figure 2: Green / Red Antibiotic Mousemat

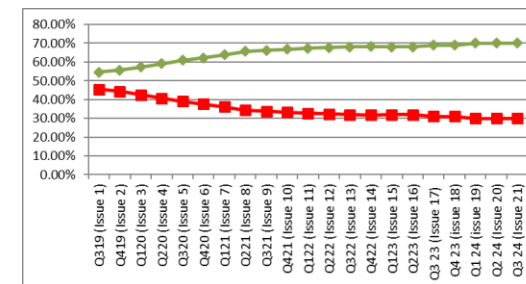


Figure 3: Green/Red antibiotic prescribing trends For GPs with GMS lists >100 patients. (PCRS)

HE Where can we make a difference?

- 90% antibiotic use in Ireland is in primary care
- Respiratory infections (RTIs) are common presentations in primary care with high levels of antibiotic prescriptions for self-limiting / viral infections.
- There is considerable scope to reduce antibiotic prescribing for RTIs



An Roinn Sláinte
Department of Health

A Department of Health Research Paper 2024

Changing Behaviour: Reducing Unnecessary Antibiotic Prescribing. A Systematic Review and Meta-analysis.

Dr. Robert Murphy*, Dr. Elayne Ahern**, Aaron Deegan*, Kimberly Hogan*, Ailish Kelly*, John Reidy*, Dr. Grace McMahon**, Prof. Orla Muldoon**

*Strategic Research & Evaluation Unit, Research, Development, & Health Analytics Division, Department of Health.

**Department of Psychology, University of Limerick

August 2024

Interventions to reduce unnecessary antibiotic prescribing:

- ✓ **education**
- ✓ **communication training**
- ✓ point of care testing
- ✓ decision support tools
- ✓ **delayed prescribing**
- (audit and feedback)

www.antibioticprescribing.ie

Supporting Antimicrobial Stewardship

Scott Walkin

GP

Assistant Scheme Director of GP training

GP Trainer

Clinical Lead in AMRIC

PAMSnet

22nd October, 2025



Declarations of Interest



- Sources of income – described above
- No industry funding



1. Non-medical drivers
2. CHESTSSS
3. The TYI leaflet

CHESTSSS Model



Top Tips for Discussing Antibiotics

Asking specific questions and providing information will help address patient's concerns and maintain patient satisfaction if you decide not to prescribe an antibiotic

First 5 minutes of consultations	C oncerns	Ask specifically about concerns	'What are the things you are most worried about?'
	H istory and exam	Discuss history and exam	While doing an examination provide 'no problem' commentary 'Your heart rate is normal, your temperature isn't raised'
	E xpectations	Ask specifically about expectations	How do you think I could most help you today?' <u>or</u> 'How do you feel about antibiotics?'
	S ymptoms	Provide non-serious explanation for symptoms	'Your body produces phlegm as a normal reaction to inflammation in your airways. The phlegm catches particles and helps keep your lungs clear.'
Covered by patient leaflet	T imelines	Be specific about illness timeline/usual course	'A typical cough can take 3-4 weeks to clear completely.'
	S hortcomings	Explain shortcomings of antibiotics	Antibiotics don't help with pain but side effects, such as diarrhoea, nausea and rash, can be experienced by up to 1 in 10 people.'
	S elf care	Self-care advice	'Pain in the chest or throat is normal due to inflammation, you can take paracetamol, and/or ibuprofen, which will help the pain and soothe the inflammation.'
	S afety-netting	Safety-netting advice	Provide patients with specific information on red-flag symptoms and when they should seek further help



Courtesy of UKHSA TARGET Antibiotic Toolkit



Treat your Respiratory Tract Infection



This information is for use during GP consultations with patients aged 3 months old and above presenting with respiratory tract infections (RTIs) where there is no immediate need for an antibiotic.

Patient Name: _____ Date: _____

- **Antibiotics do not work for viral infections such as colds and flu, and most coughs.**
- **Colds, most coughs, sinusitis, ear infections and sore throats are mainly caused by viruses, and antibiotics are not necessary in the majority of cases.**
- **Your body can usually fight these infections on its own.**
- **Your doctor will assess whether you need an antibiotic.**

☒	Your infection:	Most are better by:
☐	Middle-ear infection	3 - 7 days
☐	Sore throat	7 days
☐	Common cold	14 days
☐	Sinusitis	14 – 21 days
☐	Cough or bronchitis	21 days

Upper respiratory infections are common among infants in childcare (up to 10–12 per year) but become less common as children get older.

How to look after yourself and your family

- Have plenty of rest to help you get better.
- Drink enough fluids to avoid feeling thirsty.
- Ask your local pharmacist to recommend medicines to help your symptoms or pain (or both).
- A high temperature is a sign the body is fighting the infection and usually gets better by itself in most cases. You can use paracetamol if you or your child are uncomfortable because of a fever.
- Cover your coughs and sneezes. Use a tissue and place it immediately in the bin. Cough or sneeze into your upper sleeve, not into your hands.
- Hand hygiene is essential to help prevent spread of infection to your family, friends and others you meet. Wash your hands with soap and water or use alcohol based hand rub or sanitiser.
- See <https://www2.hse.ie/conditions/common-illnesses/> for further information.



Why you should only take antibiotics when needed

The more antibiotics are used to treat minor conditions, the more likely antibiotic resistance will occur, and that superbugs will develop. This means antibiotics can become ineffective for treating more serious conditions.

Antibiotics can cause side effects such as rashes, thrush, stomach pains, diarrhoea, reactions to sunlight and other symptoms. If you are concerned, seek medical advice.

If your condition does not improve

In certain circumstances, your GP may prescribe an antibiotic, as a back-up, in case your condition does not improve after a few days. If you feel better, you do not need to fill the prescription. However, if you do not feel better in _____ days, then fill your back-up antibiotic prescription at the pharmacy. If symptoms get worse or your level of concern is increasing, seek urgent medical attention. Refer to 'When to get help' section of this leaflet.

When to get help

How an infection progresses can sometimes be difficult to predict. **If you or your child are getting worse or are sicker than you would expect, trust your instincts and seek medical advice urgently from your GP, local out-of-hours GP service, emergency department or the HSE on 999 or 112. Don't be afraid to ask "Could this be sepsis?".** Sepsis can develop when your body has an extreme reaction to any infection and urgent medical attention is needed.

The signs and symptoms of sepsis in CHILDREN are:

- very fast breathing
- fits or convulsions
- mottled skin (irregular colour) bluish or pale
- a rash that does not fade when you press it
- unusually sleepy and difficult to wake
- unusually cold when you touch them
- has had no pee or wet nappy for more than 12 hours

In addition, in children under 5 years: not feeding or else vomiting repeatedly

In children under 3 months: a fever of 38°C or more should prompt an urgent medical review.

Signs and symptoms of sepsis in ADULTS are:

- slurred speech, new confusion, too sick to communicate, drowsy
- extreme shivering, muscle aches, fever
- has not passed urine in the last 12 hours
- shortness of breath, lips tinged with blue
- feels like your heart is racing, dizzy when you sit or stand
- feeling a lot worse. "I feel like I'm going to die"
- Skin mottled and discoloured, new rash that is still visible when pressed on with a clear glass (glass test)

Go back to your GP if:

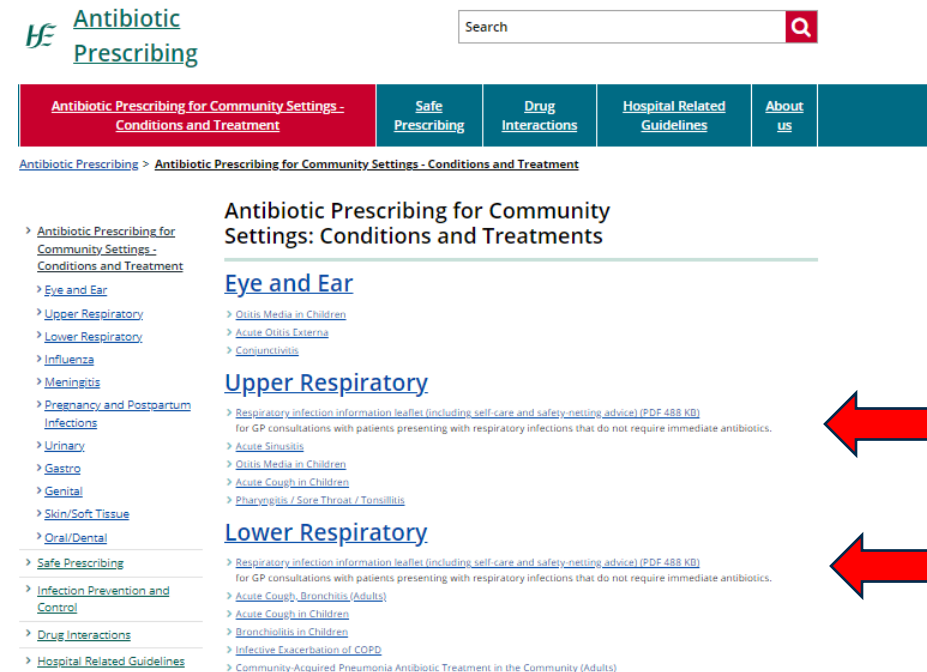
- if you are not starting to improve a little by the time given in the 'Most are better by' section.
- your child has a middle ear infection and there is fluid coming out of their ear/s



Treat your RTI leaflet

- The Treat your RTI leaflet was published on www.antibioticprescribing.ie by the HSE AMRIC Programme in October 2024.
- Up until August 2025, it had been downloaded over 8000 times.
- Printed copies will be posted to GPs within the next month.

QR code to access the Treat your RTI leaflet



The screenshot shows the 'Antibiotic Prescribing' website. At the top, there is a search bar and a navigation menu with links: 'Antibiotic Prescribing for Community Settings - Conditions and Treatment', 'Safe Prescribing', 'Drug Interactions', 'Hospital Related Guidelines', and 'About us'. The main content area is titled 'Antibiotic Prescribing for Community Settings: Conditions and Treatments'. It features a sidebar with a list of categories: 'Antibiotic Prescribing for Community Settings - Conditions and Treatment', 'Eye and Ear', 'Upper Respiratory', 'Lower Respiratory', 'Influenza', 'Meningitis', 'Pregnancy and Postpartum Infections', 'Urinary', 'Gastro', 'Genital', 'Skin/Soft Tissue', 'Oral/Dental', 'Safe Prescribing', 'Infection Prevention and Control', 'Drug Interactions', and 'Hospital Related Guidelines'. The main content area displays the 'Eye and Ear' and 'Upper Respiratory' sections, each with a list of links to specific leaflets. Two red arrows point to the 'Upper Respiratory' section, highlighting the 'Respiratory infection information leaflet (including self-care and safety-netting advice) (PDF 488 KB)' for GP consultations with patients presenting with respiratory infections that do not require immediate antibiotics.

Would a similar RTI leaflet for community pharmacy practice be useful to assist AMS?

- Yes
- No
- Don't know



Call for action!

**IIOP/AMRIC
eLearning module**

**Pharmacist Antimicrobial
Stewardship Network**



www.antibioticprescribing.ie

**AMS microlearning
View AND Share**

Conditions and Treatments View a list of conditions and treatment guidelines	Antimicrobial use in Residential Care Facilities including Nursing Homes	AMRIC Key Messages Antimicrobial safety alerts and advice issued by AMRIC
What's New Updates and new content	Infection Prevention and Control Evidence based approach preventing patients and health workers from avoidable infections	Safe Prescribing Prescribing safely, Renal impairment dosing, Drug interactions
Paediatric Prescribing Guidelines based on weight and height	Antimicrobial stewardship Learn about AMS & access tools to improve antimicrobial use	Prescribing in Pregnancy Prescribing Antimicrobials in Pregnancy, Postpartum infections and Lactation
Dental Prescribing Guidelines on dental prescribing and treatments	Tips on Penicillin Allergy Tips on verifying Penicillin Allergy	Covid-19 Acute Respiratory Infection Prescribing guidance in suspected or proven infection



HSE Spark Innovation Programme

Spark Impact Funding Initiative Launch

Spark Impact 2026 launches November 3rd, 2025, offering funding from €5,000 to €90,000 for innovative projects

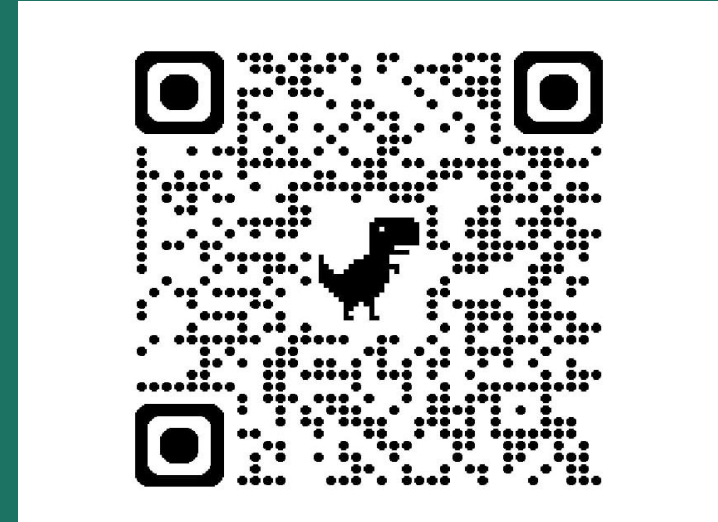
Applications are open to **HSE and Section 38 staff only**

Applications close at midnight January 4th, 2026

Focus on pharmacy projects supported by dedicated webinar on November 24th & general webinar on November 20th (between 1 and 2 pm)

Mandatory design thinking workshops on November 12th & December 10th help refine project proposals effectively. It is **mandatory** that applicants complete a Design Thinking Workshop

Further information is available on our website and social media channels



www.hse.ie/spark



[@hse spark innovation programme](https://www.linkedin.com/company/hse-spark-innovation-programme)



Can you identify an action in your setting where you help promote better use of antibiotics?



Q&A discussion



Antimicrobial Resistance &
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Questions from webinar registration...

- Are there any forums where doctors & pharmacists could liaise re antimicrobial stewardship?
- Any changes around antibiotic prescribing in managing sepsis
- I don't know how to word this but why is the dose of some antibiotic specifically amoxicillin the same for a 5-year and a 50 year old individual? It just concerns me sometimes.
- Different treatment duration for dental extraction prophylaxis
- Prescribing of fluoroquinolones and risk of tendonitis . When I see prescriptions for cipro I panic. What counselling should I give knowing that it is my duty to counsel on side effects.

HE Thank you very much for your time

- Very short post event survey will pop up on your screen after the event finishes – we would really appreciate all feedback



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