Antimicrobial Stewardship (AMS) Policy for Your Practice

What does it mean for me? Where do I start?

You hear the words PDSA and rapid cycle analysis and get a sinking feeling ……..

What is Antimicrobial Stewardship (AMS)?

AMS refers to coordinated interventions designed to improve and measure the appropriate use of antimicrobials by promoting the selection of the optimal antimicrobial drug regimen, dose, duration of therapy, and route of administration. Antimicrobial stewards seek to achieve optimal clinical outcomes related to antimicrobial use, minimize toxicity and other adverse events, reduce the costs of health care for infections, and limit the selection for antimicrobial resistant strains www.idsa.org

It is easy to get put off by the term AMS especially when you read about AMS teams in hospitals and at community level in other countries who have better resourced AMS programmes but there are key elements to AMS that all Gp's already practice – they just might not use the terminology and have not formally documented it as the Practice AMS Policy.

Key elements/core principles of AMS are to ensure the following:

- You prescribe the right antibiotic, antiviral, antifungal for the patient in front of you considering age, , other medical conditions ,pregnant ? Long term care resident ?
- Choose the right dose, duration, and route for the condition you are treating
- You cause the least amount of harm to that patient , consider drug interactions, allergy and toxicity.
- You cause the least amount of harm to future patients by increasing antimicrobial drug resistance
- Do not prescribe for obvious self-limiting viral infections
- Only use antibiotic's for suspected bacterial infections
- Promote use of immunization to minimize infections
- Practice good infection control to minimize the spread of infections

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Helpful resources for you to use:

The National HCAI AMR Clinical Care Programme has developed and number of resources to support you in this.

1. www.antibioticprescribing.ie

This gives you the most appropriate antimicrobial choices for the common conditions we treat in general practice and links into national guidance , clinical algorithms from key resources including, HSE Intregrated Care Programmes, Health Protection Surveillance Center (HPSC) ,National Clinical Effectiveness Committee (NCEC) , ICGP Quality In Practice and Health Products Regulatory Authority (HPRA).

2. Use Preferred Antibiotics:

We have tried to make it easier again by developing the preferred antibiotics for use in primary care with medicine management programme. The idea here is to use antibiotics from the green section mainly and only use the red where you can justify your choice e.g. penicillin allergic or specific bacterial condition not capable of being treated by “green “antibiotic http://www.hse.ie/eng/about/Who/clinical/natclinprog/medicinemanagementprogramme/yourmedicines/prescribingtips/

✓ Preferred Antibiotics in Primary Care

Medicines Management Programme
Prescribing Tips and Tools

Respiratory Infections (upper and lower)	Urinary Tract Infections	Soft tissue infections - cellulitis, acne
Penicillin V (phenoxymethylpenicillin) Calvepen®	Trimethoprim	Flucloxacillin
Amoxicillin	Nitrofurantoin	Doxycycline
Doxycycline	Fosfomycin	Lymecycline (Tetralysal®)
Amoxicillin and clarithromycin if Community Acquired Pneumonia (CAP)	Cephalexin	Trimethoprim
Clarithromycin if penicillin allergic or specific clinical indication		

✗ Antibiotics to be avoided in Primary Care

Co-amoxiclav (unless animal or human bite!)	Azithromycin - only on advice of consultant or if treating STI
Ciprofloxacin (only in proven resistant UTI or acute prostatitis)	Moxifloxacin - only on consultant advice
Most third generation cephalosporins	Macrolides (unless penicillin allergic or specific indication e.g. mycoplasma, helicobacter eradication)
Clindamycin	

January 2015 Medicines Management and HCAI/AMR Programmes Refer To www.antibioticprescribing.ie

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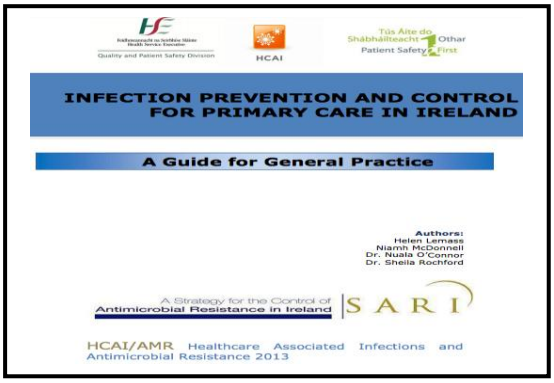
3. www.undertheweather.ie

This is a patient self help website advising patients on how to manage common self limiting infections by themselves, what they can do, what to look out for and when they should seek help. It discourages inappropriate use of antibiotics and can support you in reinforcing the advice you have use in your patient consultations.

4. Infection Prevention and Control (IPC) Guidance document for Irish General Practice.



http://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/Guidelines/File,14612,en.pdf.
The ICGP launched an e-learning module on IPC in May 2016 which was filmed in the Irish GP setting.

HIQA is currently revising the 2009 National standards for Preventing Health care Associated infections and Antimicrobial Drug Resistance which was very much geared towards the acute hospital setting but they are now going to produce separate standards for Primary and community care in 2017 and being able to demonstrate effective antimicrobial stewardship at work in your clinical practice will almost certainly be a key element of HIQA's initial assessment's of general practice.

Now you have all the tools formulate your Practice AMS Policy.
Key things it should state are:

* We use www.antibioticprescribing.ie to guide best antimicrobial choice to minimize AMR
* We prescribe preferred antibiotics for primary care as per HSE Medicines Management Programme
* We promote all immunizations to our patients recommended but national immunization guidelines and run seasonal influenza and pnemococcal winter vaccination promotions each year
* We promote good Hand Hygiene and Respiratory and cough etiquette in our practice HH and Cough posters displayed, Alcohol rub available, tissues and waste paper baskets in wait rooms (found in the appendix of the above IPC guidance)
* We promote self care for self limiting viral infections www.undertheweather.ie

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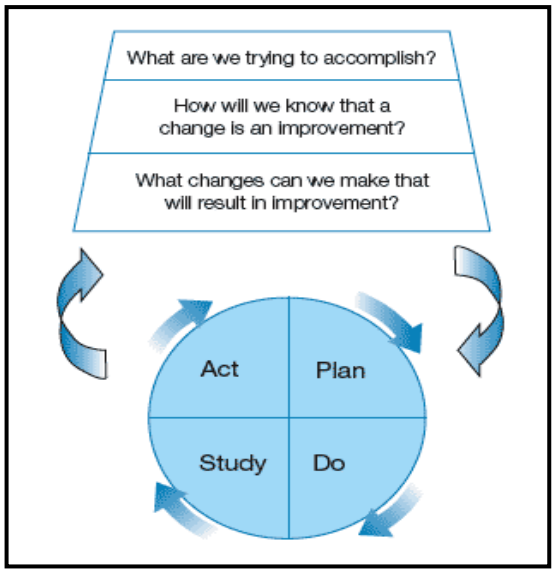
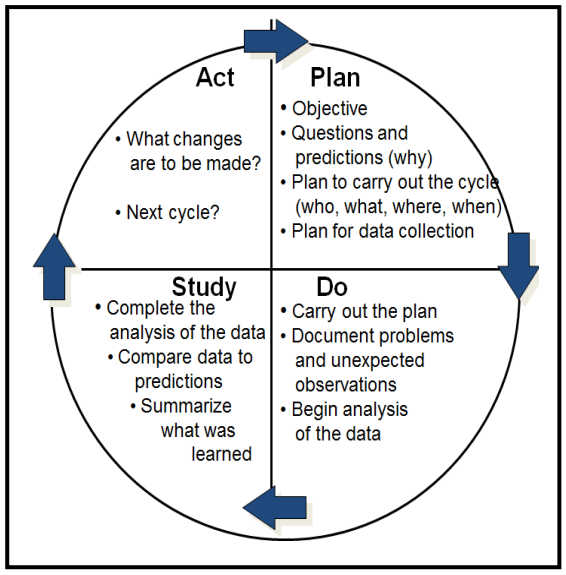
How do I demonstrate Quality Improvement (QI) in action?

You can demonstrate improvement by using a simple antibiotic prescribing audit (Appendix one) to show policy in action. You can use this rapid cycle analysis audit tool to show compliance with recommended preferred antibiotics – repeat it once month for 4 cycles to demonstrate QI over time.
How practice has reduced e.g. co amoxiclav, quinolone, macrolide use as % overall prescribing.

By using the audit tool you will have a measure of how compliant you are with recommended preferred antibiotics. Then use the model for improvement and PDSA methodologies to help to make small continual changes to improve your practice. By re measuring using the audit tool you can check for improvements in your practice.



Model for Improvement



PDSA Cycle

So **Now** you are using all the "QI language "and can demonstate to HIQA that you have a **Practice Antimicrobial Stewardship Policy.**

Demonstrate it is an active and effective policy by showing you quality improvement in action using the rapid cycle analysis audit tool.

You now have also completed several PDSA cycles too!

Appendix one: Rapid cycle analysis preferred antibiotics audit tool

	Antibiotic name	Condition	Age	Dose	Duration	Preferred	Justified	Correct	Comment
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

Now ask yourself –

- **What were your results?**
- **Is there room for improvement?**
- **How will I know a change is an improvement?**
- **What changes could I test?**

****Repeat the audit after your change to check for improvement.**

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Instructions for use:

1. Take 10 consultations where you prescribe and antibiotics. During consultation record columns 1-5 without consulting any resource i.e what you usually use in this clincal situation
2. Set aside sometime and sit down and open up listed resouces and the fill rest of columns
3. Score your self as % preferred antibtiocs used
   % overall correct i.e you can justify using “red “antibiotic and why
4. Document what you learned e.g must use 7 day course for UTI pregnancy, my first line for condition x was incorrect
5. Set a target /goal /QI improvement e.g. Seem to use lot of macrolides and not justified can I reduce this

Or

Seem to have lot registered as penecillin allergic –having read penecillin allergy tips must explore notes and hx with patients to make sure they are truly penicillin allergic .Then you could start another sheet for this .ie take next 10 patients documented as penicillin allergic and try to see what % it is likley to be true peneicllin allergy BUT remember to document your finddings and up load them as part of you CPD audit requirment s.

Or

Realise my UTI prescribing is incorrect on number of occasions wrong does, wrong duration for that patient toolong ,not first line drug so each time im going to open up the guidelines and check and start new sheet just for UTI then score your self after 10 UTI consultations . Document your improvement.

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