



Draft

DRAFT Coventry and Warwickshire
“Keep Antibiotics Working” Strategy
2019 - 2022

Coventry and Warwickshire “Keep Antibiotics Working” Strategy on a Page (2019 – 2022)



“I’ve watched patients deteriorate in front of my eyes because the germs are resistant... People think of this as a problem of the future but it is a problem now”

Professor Sir Bruce Keogh, Former NHS Medical Director

What is Antimicrobial Resistance (AMR)?

The World Health Organisation defines AMR as the ability of a microorganism (like bacteria, viruses and some parasites) to stop an antimicrobial (such as antibiotics, antivirals and antimalarials) from working against it. As a result, **standard treatments become ineffective**, infections persist, and spread to others.

Overuse or misuse of antimicrobials gives microorganisms opportunities to become resistant to these treatments. The rapid spread of multi-drug resistant (MDR) bacteria means that we could soon be close to reaching a point where we may not be able to prevent or treat everyday infections or diseases.

Case Studies

A Warwickshire woman suffered repeated urinary tract infections which are normally easily treated with antibiotics. She first discovered that she carried a resistant bacterium, ESBL E. coli, when she was just 17. Now in her twenties, she is hospitalised most months with infections and is treated with last-resort antibiotics. Fortunately they still work, but she worries that her next infection could kill her.

When an 18-year-old female student first noticed that her throat was sore, she thought nothing of it. Yet she quickly developed pneumonia and then sepsis. Doctors were unable to kill the resistant bacteria despite trying 11 different antibiotics in seven different combinations. The young lady died just two weeks after first noticing symptoms.

Coventry and Warwickshire “Keep Antibiotics Working” Strategy 2018 to 2021

A Coventry and Warwickshire Wide AMR Strategy has been developed with the ultimate aim of **‘keeping antibiotics working’** across the sub-region. This is being led by CCG Infection control leads, supported by Public Health, Pharmacy, Microbiology, Infection Control and Infectious Disease teams, as well as Coventry University and PHE.

The key things we can do relate to:

1. **Preventing infection** in the first place
2. Making sure that **antibiotics are used only when needed** and that the right antibiotics are used
3. Ensuring that **people know what can and can’t be treated** with antibiotics, what they can do to

care for themselves if antibiotics won’t help, and making sure, if they do take antibiotics, that they take the full course.

Strategic Actions

The local strategy has 5 key strategic actions underpinning AMR reduction work across Coventry and Warwickshire:

1. Improving Infection prevention and control practices:

- Improvement of infection prevention practices such as handwashing and environmental cleaning across health and social care settings.
- Training and raising awareness of the early signs of infections and “sepsis”.



2. Optimising prescribing practices and management of common infections:

- Monitoring local trends in prescribing practices in primary, secondary and community care settings and ensuring these follow national guidelines.
- Working alongside the dental and veterinary sector regarding improving prescribing.

3. Improve professional education, training and public engagement:

- Creation and promotion of educational resources and training across the health and social care sector, and ensuring that health and care professionals have access to the right information about good prescribing
- Engaging with the general public, and working with schools to increase understanding of AMR and what people can do to help

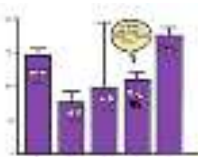


5. Explore technologies to support better diagnostics and understanding (data) of Antimicrobial Resistance:

- Participate in relevant research/development initiatives that support better diagnosis, optimum prescribing, and the development of new therapies.

4. Use of surveillance data to inform quality improvement:

- Monitor local trends relating to infection rates, levels of resistance and prescribing to help target AMR work.



Call to action - we are calling on professionals and members of the public alike to do what they can to support the strategy, and sign up to be an antibiotic guardian. Please see <https://antibioticguardian.com/> for more information.

Coventry & Warwickshire Wide “Keep Antibiotics Working” - Antimicrobial Resistance and Healthcare Associated Infection Reduction Strategy 2019 - 2022

Introduction

Following on from the UK Five Year Antimicrobial Resistance (AMR) Strategy (2013 to 2018), a new national 5 year action plan has been published for 2019 – 2024.^{1,2} The national focus on this issue relates to the fact that there are “few public health issues of greater importance than antimicrobial resistance (AMR) in terms of its impact on society”.

Antimicrobial resistance is a global problem but requires local, national and global partnerships to instigate actions which will limit the risk of AMR and minimise its impact for health, both now and in the future. It is estimated that 700,000 people die globally every year due to drug-resistant infections and there is predicted to be a 3 fold increase in global antibiotic consumption by 2030, although antibiotic use in the UK has been reducing.²

The harsh reality is that infections are becoming increasingly difficult to treat. The rapid spread of multi-drug resistant (MDR) bacteria means that we could soon be close to reaching a point where we may not be able to prevent or treat everyday infections or diseases. This has major implications for the way healthcare will be delivered in the future. Many existing antimicrobials are becoming less effective and the development of new antimicrobials is at an all-time low, therefore it is essential that health care professionals aim to “keep antibiotics working” and preserve the use of these valuable medicines.

At the same time we need to work to help prevent infections occurring by ensuring that good and effective infection prevention and control measures become the norm and if infections do occur they are quickly diagnosed and that treatment is appropriate.

Healthcare associated infections (HCAs) have been a major concern for the NHS and caused significant morbidity and mortality annually. The emergence of high resistant blood stream infections such as MRSA and diarrheal disease caused by Clostridium difficile (CDI) all of which have occupied the political agenda for the last 15 years, have been tackled by the adoption of stringent targets and objectives. The control measures implemented to achieve these objectives have worked to reduce their incidents and associated mortality. However, other organisms not included, such as Gram Negative Blood Stream Infections (GNBSIs) including E. coli, Klebsiella and Pseudomonas continue to rise unchecked, both in and out of healthcare settings. Any strategy implemented which focuses therefore on methods to decrease the rates of bacteraemia also work to reduce the need for antibiotics required to treat these infections.

This strategy therefore should seek to tackle both infection rates and antibiotic use simultaneously. The need to conserve and make more effective use of our existing antibiotics and develop new approaches for hard to treat infections requires improvements in clinical practices which will also require changes in attitude and behaviours and beliefs about antibiotics at all levels.

¹ <https://www.gov.uk/government/publications/uk-5-year-antimicrobial-resistance-strategy-2013-to-2018>

² <https://www.gov.uk/government/publications/uk-5-year-action-plan-for-antimicrobial-resistance-2019-to-2024>

Vision

This strategy will be implemented across Coventry and Warwickshire and seeks to “keep antibiotics working” by:

- Ensuring the implementation of effective infection prevention and control measures.
- Optimising the use of antibiotics, ensuring their preservation and appropriate use.
- Raising awareness and education around AMR, among professionals and the public.
- Improving the surveillance of AMR within our local health economy.
- Participating in any relevant research initiatives in the development of new therapies.

Ambition

- Reduce the growing trend of AMR resistance locally
- Reduce the volume of antibiotics prescribed
- Preserve and protect existing antimicrobials
- Reduce the incidence of infection across the health economy
- Improve awareness of AMR across all spheres of health professionals and public
- Utilise surveillance data to enhance clinical practice and maintain patient safety

Governance

Progress against the vision and ambitions will be monitored by the already established Coventry and Warwickshire Antimicrobial Resistance Strategy Group, which has active membership from CCG, Acute and Community Trust Infection Prevention and Control and Pharmacist Leads, Infectious Disease and Microbiology Teams, Primary Care, Community Pharmacy, Local Authority Public Health and Public Health England. The group is currently chaired by the Joint Consultant in Public Health (Health Protection) for Coventry and Warwickshire. Formal progress on the strategic ambitions will be reported to Quality Committees within the CCGs and Infection Prevention and Control Committees within acute and community trusts. The Directors of Public Health in Coventry and Warwickshire will seek assurance on progress through the Coventry and Warwickshire Health Protection Committee

Local Need and Current Actions

The complexity of the landscape in Coventry and Warwickshire, with multiple acute and community trusts, and the availability of a wide range of data related to infection control, healthcare associated infection and antimicrobial resistance, both in primary and secondary care, has required the Antimicrobial Resistance Strategy group to include the development of an understanding of local needs and variation through creation of an agreed dashboard of indicators, which is currently in progress, and is envisaged to be held at the following site:

<https://coventry-city-council.github.io/public-health/antimicrobial-resistance/>

Detailed scrutiny of local need will inform further detailed actions, and measures of success will be developed that are linked to need, alongside taking into account national targets that are set out in the national 5 year action plan

The Antimicrobial Resistance Strategy group has agreed a number of key actions that address the strategic aims outlined above, developed by the CCG Infection Prevention and Control teams. The detail of these actions can be found in the table below.

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Strategic Action		Lead responsible
1. Improving Infection prevention and control practices		
Improve infection prevention and control practices through enhanced dissemination and implementation of best practice and better use of data and diagnostics across the local health economy	Implement standardised hand hygiene and environmental cleaning strategies including audit, development of consistent measurements of compliance (e.g. toolkits for success) within NHS and care settings	IPC leads
	Encourage implementation of Early Warning Scores for secondary care and awareness in primary and social care to promote early recognition of infection/sepsis	IPC/LA
	Review sepsis training, awareness and treatment pathways within acute trusts, and look to make recommendations for primary care.	IPC/LA
	Monitor key infection rates, e.g. CDI, E coli, Klebsiella and Pseudomonas, reviewing trends and themes and sharing learning through RCAs undertaken across the health economy.	All
	Identify, implement and evaluate specific infection prevention projects, e.g. hydration, obtaining a good MSU, TWOC, hand hygiene audits at meal times, "Dip or not to Dip", catheter passports in acute trusts	IPC leads
	Continue to deliver collaborative educational sessions across the health economy to support social care in the reduction of HCAI and AMR	CCG
	Undertake scoping work to understand what may be needed to support infection control within domiciliary care/private care work	Public Health
	Protect the NHS workforce/service users from avoidable communicable disease by encouraging the uptake of all relevant immunisations across the health economy, and monitor uptake	Occupational Health
	Encourage the reporting of all infection related incidents across the health economy and share learning	IPC leads including CCG
	Ensuring IPC advice is sought when new health service premises are being refurbished/built	IPC leads
Consider how the above can be built into all relevant commissioning processes	All commissioners	

Strategic Action	Lead responsible	
2. Optimising prescribing practices and management of common Infections		
Optimise prescribing practices through the implementation of antimicrobial stewardship programmes that promote rational prescribing both in secondary and primary care	Continue to develop and implement AMR guidelines in line with NICE guidance	Meds Management/Pharmacists
	Explore downloadable guidelines linked to NICE and NHS evidence to ensuring easy access to agreed formularies	Meds Management/Pharmacists
	Examine Practice level data re prescribing and compliance with APC formulary, identifying outliers for further investigation and action	Meds Management
	Develop a process to provide assurance around OOHs prescribing within primary care, and also prescribing among dentists.	CCG/PHE/Dental PH
	Ensure implementation of Stewardship programmes e.g. Start Smart and Focus and TARGET across the wider health economy, including provision of prescriber feedback (re. prescribing and resistance)	CCG/Meds Management/Pharmacists
	Review the effectiveness of Trust CQUIN schemes around Antibiotic prescribing and the quality premium for primary care	CCG
	Review West Midlands quarterly reports on antibiotic prescribing across acute trusts, comparing trends and themes	Pharmacists/Microbiologists
	Explore the availability and implementation/ benefit of Electronic Prescribing schemes across providers to ensure consistency with agreed protocols	Med Management
	Review the use and appropriateness of prophylactic Antibiotic prescribing in relation to UTIs across the health economy	Micro/CCG IPC
	Encourage the role out of national guidance on management of common infections in primary care and Emergency medicine, and use of FeverPAIN score for children over 3	Primary Care Quality
	Share outcomes and learning around local initiatives and interventions	All

Strategic Action	Lead responsible	
3. Improve professional education, training and public engagement		
To improve clinical practice and promote wider understanding of the need for a more sustainable use of antibiotics	Promote educational resources across all health sectors e.g. TARGET self- help leaflets.	CCG/Public Health
	Utilise self-help resources including local pharmacies	Public Health
	Engage in antibiotic awareness week, as part of EAAD utilising available PHE resource material across all organisations	Public Health and CCG
	Promote training re AMR/infection control/prescribing for primary and secondary care staff utilising Health Education England resources/others as part of Mandatory training for staff including doctors, dentists, nursing staff and pharmacists, as well as social care providers. Modules could include "SCILS" (social care information and learning services) modules via local authority websites/"Say No to Infection" website.	All
	Implement targeted training based on data available (e.g. individual teams etc.)	All
	Encourage the development of competencies for AMR stewardship for graduate and undergraduate educational training programmes for health and care staff	All

Strategic Action		Lead responsible
4. Use of surveillance data to inform quality improvement		
Utilising “PHE Fingertip” data and other surveillance systems (e.g Presquipp), open prescribing to select and extract any relevant data to our local health economies to inform action	Monitor resistant patterns and trends related to key organisms	Micro/ID
	Review local performance – including benchmarking	All
	Develop a local dashboard to monitor progress, infection rates, and trends/themes	All
	Ensure ownership of the dashboard at an organisation level	All
	Target areas of concern for action.	All

Strategic Action		Lead responsible
5. Explore technologies to support better diagnostics and understanding (data) of Antimicrobial Resistance		
Explore technologies to support better diagnostics and understanding (data) of Antimicrobial Resistance	Review modern diagnostics and consider what may/should be implemented system-wide (including best of use of resource)	Micro/ID
	Explore data usage (e.g sensitivity epidemiological data)	Micro/ID
	Explore genomic technologies to map infections	PHE