



Royal College
of Nursing

Antimicrobial resistance

RCN position on the nursing contribution





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Contents

Executive summary	4
Key recommendations	4
The position	5
Background and context	5
1. Reduce the demand for antibiotics	6
2. Enhance the effectiveness of prescribed antimicrobials	7
3. Provision of specialist infection prevention advice – the role of specialist nurses in supporting multidisciplinary engagement	8
4. International collaboration and action	10
References	11
Glossary	11

Executive summary

This Royal College of Nursing (RCN) publication describes the contribution that nurses and nursing can make at an international, national and local level to reduce the risk of antimicrobial resistance (AMR). To achieve successful reductions in antimicrobial resistance all disciplines within the health, social care and public health workforce must be engaged and contributing to the delivery of local and national programmes aimed at reducing AMR and improving population health.

The document has been developed to stimulate discussion and ensure nurses are fully involved and engaged with initiatives and actions that impact on AMR. As nurses are a large part of the health care workforce, the benefits they bring should be clearly identified and articulated at all levels so that their full contribution can be recognised, encouraged and facilitated.

The RCN believes that in order to work effectively with other stakeholders, the growing demand for health care and the association between health, society and AMR needs to be explicitly and consistently communicated. This publication describes the wide contribution of nursing to AMR from a broad perspective, and makes specific recommendations on what needs to be done to support the impact of the nursing contribution nationally and internationally.

Key recommendations

1. The recently published NICE Quality Standard (NICE, 2014) should be evaluated to identify its impact and benefits to improvements in infection prevention and control.
2. Electronic prescribing, dispensing and administration systems should be standard in all secondary care settings to enable the collection of quality and timely data on prescribing and administration practices to drive further improvements.
3. The inspector of microbiology position (or equivalent) should be re-evaluated to support leadership and assistance for AMR and infection prevention and control (IPC) multidisciplinary programmes, the provision of pathology services and multi-professional engagement across all system and organisational boundaries
4. The NMC curriculum for pre-registration nursing programmes should include AMR and the contribution of the nurse to support multidisciplinary engagement of antimicrobial stewardship.
5. A nurse envoy should be present in any and all World Health Assembly (WHA)/World Health Organization (WHO) delegations from the UK whose specific remit is to communicate and work with nursing organisations and leaders within the UK and internationally. This will ensure that the contribution of nursing is recognised, enhanced and supported to ensure the success of the WHA resolution on AMR and future WHO global action plan.
6. All commissioning organisations (England) should ensure they have access to adequate specialist infection prevention advice to support the commissioning and assurance of provider services.

The position

Antimicrobial resistance poses a major threat to the delivery of health care nationally and internationally (DH, 2013a). The importance of preventing infection in order to preserve the effectiveness of antimicrobials as a major patient safety concern cannot be overstated. The RCN believes that nurses have a significant role to play in limiting the threat posed by antimicrobial resistance through their leadership and skills supporting infection prevention and control, antimicrobial stewardship and public health. The RCN is keen to see the development of a national strategy for IPC which endures political changes and complex commissioning arrangements. IPC needs to be paramount in all service and care pathway specification and design and be retained as a key priority for development and improvement. It is essential that nurses are recognised as influential members of the multidisciplinary team in combating AMR and assuring stewardship.

Background and context

The reality of AMR from a global perspective has been highlighted by the World Economic Forum (WEF) as the greatest threat to human health with the potential to severely limit the treatment options available to modern medicine (WEF, 2013).

The publication of the *UK Five Year Antimicrobial Resistance Strategy 2013 to 2018* (DH, 2013a) is a good focal point for driving actions and innovation to reduce the threat of AMR. The strategy indicates that the prevention of infection remains the most effective weapon in reducing the impact of AMR on human health and requires renewed focus, strategic management and collaboration. Concerns have been expressed that IPC does not appear to be delivered in a coherent fashion within the NHS and that the integration of antimicrobial resistance measures will be more difficult in the absence of a coherent IPC policy across the NHS' (House of Commons, 2014).

Historically, nurses have led and championed UK strategies to reduce health care associated infection (HCAI) and they continue to lead on quality improvement initiatives to reduce avoidable harm in health care. Nurse prescribing is well established and regulated by the Nursing and Midwifery Council (NMC). Whilst nursing has an important role to play in challenging medical prescribing behaviours, this should not be seen as its primary contribution to antimicrobial stewardship. The following sections provide a starting point for ensuring that the impact of AMR is minimised and that patient safety is promoted effectively.

The contribution of nursing to reduce the threat and impact of antimicrobial resistance can be classified into the following key themes.

1. Reduce the demand for antimicrobial treatment.
2. Enhance the effectiveness of prescribed antimicrobials.
3. The provision of specialist infection prevention advice – the role of specialist nurses in supporting multidisciplinary engagement.
4. International collaboration and action.

1

Reduce the demand for antibiotics

Nurses are able to influence demand for antibiotics through the prevention of infection as an outcome of safe high quality nursing practice and holistic patient management. This can be undertaken through nursing teams or as part of multi-agency care providers and commissioners. Nurses can:

- use the principles of ‘Making Every Contact Count’ to influence public and patient knowledge and expectations of antibiotic prescribing through every day interactions as midwives, health visitors, district, community, school, public health and practice nurses
- lead and implement public health strategies to support the public to ‘live well’ and prevent or reduce the burden of long-term conditions such as diabetes, liver disease, obesity, smoking cessation and alcohol consumption resulting in reduced health care contacts and interventions
- lead and implement immunisation programmes across all age groups to prevent avoidable infection and associated morbidity/mortality
- lead and contribute to quality improvement strategies to reduce the development of HCAs. This includes the adverse outcomes associated with the insertion or management of invasive devices commonly used to support short and long-term patient care. They can encourage patients, where appropriate, to manage these themselves in the home setting (for example, vascular access devices, urinary catheters, PEGs)
- obtain specimens only where clinical need is clearly indicated and support the timely transfer to laboratories to maintain specimen quality and accurate results
- co-ordinate discharge planning and interagency collaboration to enable prompt and proactive successful patient discharge and the prevention of avoidable readmissions.

What more needs to be done?

Educate the general public; this is recognised as a key factor in reducing expectations of, and demands for, antibiotics in community settings. This, together with greater emphasis on supporting patients to ‘live well’ and independently, is crucial to avoiding contact with health care interventions for as long as possible. Innovative new ways of providing care supported by adequate resources for nurses must be made available in community settings to help patients avoid admissions to hospitals and reduce the burden of admissions for long-term conditions in secondary care. The RCN believes that to reduce demand for antibiotics:

- the link between wider public health and AMR should be strengthened through engagement and involvement of regulatory bodies, health care organisations, support and scrutiny organisations (such as local authorities, health and wellbeing boards and Healthwatch England)
- UK health care provision must keep pace with the changing focus on responsive, accessible care provision and also place greater emphasis on health protection and promotion to the wider population
- a new approach should be adopted to ensure all nurses have an increased and more explicit role in public health and wellbeing. This should not be confined to those working in traditional public health roles but across the nursing workforce
- providers of health and social care should prioritise the principles of Making Every Contact Count (MECC) to capture opportunities for the uptake of adult vaccination as recommend by the International Longevity Centre (ILC, 2014) to reduce the burden of vaccine preventable illnesses
- explore the opportunity to develop information within the the child health record to support key messages for new parents on the use of antibiotics for childhood illnesses.

2

Enhance the effectiveness of prescribed antibiotics

Once prescribed, antibiotics require dispensing and administration. Numerous factors influence the prescription and administration of antibiotics which can impact on patient outcomes. Nursing practice influences this by:

- raising awareness of existing campaigns in community and hospital settings to improve prescribing practices and compliance with antibiotic policies/guidelines, for example, Start *SMART* then *FOCUS* (DH, 2011), TARGET antibiotic toolkit (RCGP, online) and influencing their implementation
- ensuring that process elements of antibiotic prescribing relevant to nursing are clearly communicated, implemented and monitored (for example, ensuring prescription charts are correctly completed with drug, stop date and IV to oral switch information)
- dispensing antibiotics at the right time and under the optimal circumstances required to maintain therapeutic levels
- educating patients and their carers on how to take antibiotics as prescribed in the home setting and when to report unresolved or worsening symptoms.

What more needs to be done?

Measurement of prescribing is commonly undertaken through audit; however this often does not include complementary data on administration of antibiotics, essential for maintaining the therapeutic dose for patient treatment. The RCN is concerned that challenges to best practice in administration are not highlighted enough and that limited data is available on missed doses and the impact that this may have on the patient and subsequent resistance. RCN members refer to NHS hospitals as not being ‘medication (including antibiotic) friendly’ and report challenges in aligning dispensing of antibiotics with or without food, investigations removing patients from the ward, and the availability of sufficient staff to provide intravenous drugs at the correct time. The RCN believes the following should be considered.

- The implementation of electronic prescribing, dispensing and administration systems in all NHS organisations to enable more accurate data to be available on prescribing, and administration practices to stimulate learning and improvement.
- Language surrounding prescribers needs to be reviewed to avoid confusion over terms such as medical, non-medical, independent, community and supplementary prescribers. We recommend that simplified language is considered (for example, use of the word ‘prescriber’ only) to ensure that key messages regarding best practice in antimicrobial prescribing are relevant for all disciplines within their scope of practice.
- Strengthening under/postgraduate nurse education to include detailed elements of curricula on pharmacology associated with antimicrobial prescribing and AMR where relevant.

3

Provision and availability of specialist infection prevention advice – the role of specialist nurses in supporting multidisciplinary engagement

The benefits of specialist nurses is well documented (RCN, 2010; Vidal et al, 2011) and although the role of infection prevention differs from other specialist roles supporting patient caseloads, many similarities exist with regard to their influence on strategic planning, leadership, education, quality improvement initiatives and service delivery. Specialist nurses operate within infection prevention teams and work autonomously across care settings, frequently interacting and influencing public health, health protection and patient safety delivery. The implementation of guidance documents and standards is a pivotal element of the specialist nurse role. Additionally, some IPC nurses work as, or deputise for, directors of infection prevention and control (DIPCs) where used. The RCN recognises that differences exist across the UK in relation to NHS structures and how healthcare needs are commissioned. The complex structures in England and retained separation of health and social care services have resulted in the development of unique roles and skills to support IPC. Specifically following the provider/commissioner separation in England, infection prevention nurses have expanded their role to influence the commissioning of provider services. However, significant variation exists with regard to availability of these specialist nurses. As a relatively new role, more is required to support nurses working in this area, including the provision of standards for nurses working in commissioning and relevant professional development.

What more needs to be done?

Where new initiatives are introduced or existing initiatives become normalised, it is essential evaluation is undertaken to identify both learning and how resources (time and money) can be better used so as to take into account the ever changing nature of health care. Initiatives impacting significantly on the structure and impact of infection control teams and the ambitions of health care organisations should be prioritised.

The RCN is clear that successful strategies to improve IPC require an equivalent focus within commissioning processes. In England, nurses are now integral to the commissioning process and the RCN considers infection prevention nurses critical to successful quality commissioning and assurance of care by provider organisations. RCN members report the role and influence of multiple agencies on infection prevention in the absence of a nationally co-ordinated strategy as confusing potentially exposing patients and organisations to risks and variation, delaying progress in reducing AMR and IPC improvements through lack of co-ordination. The RCN believes:

- the recently published NICE Quality Standard (NICE, 2014) should be evaluated to identify its impact and benefits to improvements in infection prevention and control
- all commissioning organisations should ensure they employ or have access to adequate specialist infection prevention advice to support the commissioning and assurance of provider services (England)
- standards for nurses working in the commissioning of infection prevention and control should be developed to strengthen the quality of overall commissioning of health and social care

- the role and impact of the director of infection prevention and control (DIPC) should be evaluated to explore how the role has supported IPC and how learning can further support reductions in AMR moving forward
- The inspector of microbiology position (or equivalent) should be re-evaluated to support leadership and assistance for AMR and IPC multidisciplinary programmes, the provision of pathology services and multi-professional engagement across all system and organisational boundaries
- NHS England includes AMR within future indicators supporting Domain 5 (DH, 2013b) as data becomes available to clarify and measure objectives.

4

International collaboration and action

Efforts to reduce the threat of antimicrobial resistance are not confined to the UK and require cohesive international activity and commitment for initiatives to be effective. Nursing needs to act as one body and voice and requires international recognition as central to the success of AMR reduction strategies. This needs to take place at the local, national and international level. The increasing movement of health care workers and patients across European borders, and within health care systems, brings with it both opportunities and risks for AMR reduction strategies at the international level. The contribution of nursing as the common thread in multi-agency and complex health and social care landscapes cannot be underestimated and the RCN expects to see strong nurse representation in all UK delegations and work supporting future World Health Assemblies and the proposed WHO global action plan.

The visibility and promotion of nursing as a major contributor is essential if perceptions of AMR as a 'medical and prescribing issue' are to be moved forward. We need to be in a position where AMR is viewed as a societal and multi-professional priority in order to protect the future of health care in the UK and abroad.

What more needs to be done?

- Nursing leadership in the UK (with respect to IPC and antimicrobial resistance) needs to be clearly identified and communicated.
- Nursing representation and leadership within all WHO member countries should be clearly communicated, visible and active at the international level supporting the WHA resolution on AMR and the future WHO global action plan.
- A nurse envoy should be present in any and all World Health Assembly (WHA)/World Health Organization (WHO) delegations from the UK whose specific remit is to communicate and work with nursing organisations and leaders within the UK and internationally to ensure that the contribution of nursing is recognised, enhanced and supported to ensure the success of the WHA resolution on AMR and future WHO global action plan.
- Awareness raising and involvement by nurses and nursing bodies across Europe should be encouraged to support European Antibiotic Awareness Day (EAAD) and other affiliated promotions.

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Glossary

AMR – Antimicrobial resistance

DIPC – Director of Infection Prevention and Control

HCAI – Health care associated infection

HEE – Health Education England

IPC – Infection prevention and control

NICE – National Institute for Health and Care Excellence

NMC – Nursing and Midwifery Council

SCPHN – Specialist Community Public Health Nursing

WEF – World Economic Forum

WHA – World Health Assembly

WHO – World Health Organization



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