AMR: Ambition to Action
Antimicrobial resistance (AMR) poses a significant threat to public health. It is already responsible for approximately 700,000 deaths globally every year, a figure that it is estimated could rise to 10 million by 2050.¹

In January 2019, the government released its new five year action plan: *Tackling antimicrobial resistance 2019-2024*, accompanied by a 20 year vision. The five year plan advocates an approach to tacking AMR that focuses on the following areas:

- reducing the need for and exposure to antimicrobials
- optimising their use
- investing in innovation.

The plan sets targets to reduce UK antimicrobial use in humans by 15% by 2024 and reduce UK antibiotic use in food-producing animals by 25% between 2016 and 2020. While the BMA welcomes the government’s plan, it is essential that more specific commitments are made, supported by investment that meets the scale of the threat.

The following sets out key areas in which UK government must commit to meaningful action, if the ambitions of its antimicrobial resistance plans are to be realised:

1. Reducing working pressures to support appropriate prescribing of antimicrobials

Prescribing of antibiotics in England reduced by 4.5% overall between 2013 and 2017, including significant reductions in primary care settings. This represents a good start. To support continued progress beyond the ‘quick wins’, it is vital that doctors have adequate time with patients to make a clinical assessment and discuss if antibiotics are necessary. The current workforce shortages and heavy workloads across the health sector are challenges to this. In a 2018 BMA survey of doctors from all branches of practice, 9 in 10 said staffing levels are inadequate to support quality patient care. Supporting continued improvements in antimicrobial prescribing is therefore dependent upon the government adequately addressing the workforce crisis, to reduce workload across the health sector.

Alongside urgent action required to reduce working pressures, antimicrobial prescribing can be supported through the provision of clear, evidence-based prescribing guidance that provides joined-up consistent advice across different clinical indications.

Doctors have also raised concerns about the potential repercussions of not prescribing antimicrobials. It is vital that effective medico-legal protections are in place to support doctors who have taken a clinical and evidenced-based decision not to prescribe antimicrobials.

2. Ensuring effective regulation to limit inappropriate use of antimicrobials in animals

The ways in which antimicrobials are used in animals, particularly in agriculture, have contributed to the development and spread of AMR. We urge the government to follow WHO (World Health Organization) guidance and:

- Ban the routine preventative use of antimicrobials for healthy groups of animals.
- Restrict the use of critically important antimicrobials in agriculture.

In 2018 the European Parliament voted to introduce new regulation in these areas, which will come into force in the EU in 2022. It is vital the UK government commits to having regulations on antimicrobial use in animals that are at least as strong.
3. Maintaining strong co-operation with European partners

It is essential that leaving the EU does not undermine global co-operation efforts on tackling AMR. The UK must ensure it continues to collaborate with the EU once it has left, and maintains close and effective working relations with:

- European Centre for Disease Control’s surveillance networks
- The EU AMR One Health Network
- EU research and environmental monitoring
- European Food Standards Agency

Doctors are concerned the EU exit may lead to weaker regulation and surveillance of food imports. This could expose the UK to food safety risks, including the potential transmission of antimicrobial resistant pathogens via food products. It is crucial the government ensures that any future trade agreements maintain high food standards, and promote appropriate use of antimicrobials in agriculture.

4. Leading efforts to facilitate global co-operation

AMR is a borderless and multi-sectoral threat and the regulatory response required to reduce the use of antimicrobials requires global efforts and co-ordination. Consumption of non-prescribed antimicrobials is commonplace in many low to middle income countries and there is heavy misuse of antimicrobials in farming practices globally.

The UK should therefore lead efforts to establish an international legally binding AMR treaty. Better global knowledge sharing and surveillance is desperately needed and a treaty would enable this. A treaty would co-ordinate country efforts, pool funding to support low to middle income countries, incentivise action, and hold countries accountable. The global challenge of AMR is analogous to that of climate change and international agreements on climate change should not just be implemented, they should also be used as a model for a future treaty on AMR.

5. Committing to a comprehensive programme of investment

Achieving the 2020 vision will not be possible unless action to tackle AMR is backed up by adequate funding to make the commitments within it a reality. Given that any increase in antimicrobial resistant infections will be associated with substantially increased costs within and outside the health service, it is essential that the government acts now to ensure adequate investment in:

Research and development into diagnosing and preventing infection

- To reduce the spread of infection there is a need to promote research into innovative infection prevention and control methods in hospital and community settings.
- A number of diagnostic tools may allow diagnosis at point-of-care, enabling doctors to more accurately assess whether antimicrobials are needed and what dosage, and then prescribe appropriately. There are concerns that some existing diagnostic tools, are currently not being provided because of cost.
- Greater investment is required to research, implement and evaluate new diagnostic tools to support antimicrobial prescribing.
Developing new antimicrobials

- No new classes of antimicrobials have been introduced into clinical practice in the last thirty years.
- Developing and testing antimicrobials is a lengthy, expensive process and there is a lack of financial incentives to encourage their development.
- The five year plan promises to explore a new payment model to support antimicrobial development but lacks detail and timeframes. The government must set specific and timely commitments to incentivise innovation.

IT systems to improve data and monitoring of prescribing across animal and human use

Current data and surveillance systems are inadequate and slow; a result of chronic underinvestment in IT. High quality data and surveillance systems are essential to combatting AMR and are needed to:

- support healthcare professionals to appropriately prescribe antibiotics
- provide warning of emerging threats and long-term trends, and
- guide policy and interventions.
- The government’s vision for IT in healthcare recognises that better data infrastructure is needed. This needs to be backed up with funding and clear timescales.

6. Developing a co-ordinated plan to improve professional and public awareness

A lack of a co-ordinated approach to raising awareness is a key gap in the government’s AMR action plan. The government must raise awareness about the appropriate use of antimicrobials among healthcare professionals, veterinarians, the agricultural sector, and the public in a co-ordinated way. We recommend that a comprehensive communications strategy is developed, which uses social marketing techniques, and provides clear guidance, including on the appropriate disposal of unused antimicrobials. This needs to be supported by ambitious and measurable targets for raising public and professional awareness of AMR.