Evaluation of the UK Antimicrobial Resistance (AMR) Strategy, 2013-2018

Key messages

- Antimicrobial resistance (AMR) is the ability of microorganisms to survive and thrive in the presence of antimicrobial drugs (like antibiotics). AMR is a problem when the antibiotics used to treat infections in humans and animals are less effective. This is why Governments and health systems around the world are trying to slow the development of AMR.

- PIRU has evaluated how the UK Government’s Antimicrobial Resistance (AMR) Strategy (2013-2018) was used. The objective of the Strategy was to slow the development and spread of AMR, by things like improving prescribing of antibiotics and infection prevention and control measures for both animals and people.

- The PIRU evaluation explored the implementation of the Strategy in human and animal health across the UK. This was a large programme of research examining a wide range of topics, including how data are used to monitor and reduce AMR, AMR in the food chain (how our food is produced and processed), and what the UK has done to stimulate an international effort to reduce AMR. As part of this work, the study looked at how AMR is being managed in local health services across different parts of the UK in Camden, West Norfolk, Blackburn with Darwen, Betsi Cadwaladr, Derry/Londonderry and Glasgow; in the pigs and poultry livestock sectors, and in pets.

- Our study found that:
  - There has been considerable progress in the collection and sharing of better AMR data since the launch of the Strategy, particularly in England. However, there was a lack of awareness amongst some local NHS staff of all of the data that are available.
  - In animal health, livestock sectors were at different stages in improving the way they used antibiotics and recording data, with some private industry groups and professional bodies demonstrating strong leadership in implementing the Strategy. Veterinarians working with pets highlighted challenges with talking to pet owners about prescribing antibiotics due to the short consultations.
  - More data over a longer period of time is required to assess the impact of the guidelines and voluntary efforts to reduce the use of antibiotics in animals. More could be done to harmonise surveillance of AMR and data on use of antibiotics across animals and people so that they can be compared more easily in a One Health perspective.
There are problems with introducing and using diagnostic tests that are designed to distinguish whether someone has a bacterial infection (that might require an antibiotic) or a viral infection (where antibiotics are ineffective) in the NHS. It is not clear how these tests should be paid for and there are challenges in ensuring that the tests are used appropriately. These tests are not currently the ‘silver bullet’ to reduce inappropriate use of antibiotics that proponents had hoped for.

It is important that national and local government, and NHS staff, work together on AMR; and that the four countries of the UK (England, Scotland, Northern Ireland, and Wales) work together, particularly on sharing specialist expertise.

Some hospitals are likely to find it easier to meet AMR control targets than others. For example, hospitals that are very small or have limited resources, may find it more difficult than larger hospitals to introduce electronic prescribing systems (which makes it easier to get information about antibiotic prescribing, identify inappropriate prescribing, and provide guidance to prescribers).

In some places people have become enthusiastic local ‘champions’ who have prioritised action on AMR in their area, but, in future, having a more structured approach to finding local champions and prioritising AMR action locally is likely to be important.

So far, there has been very little involvement of patients and members of the public in the development and implementation of the Strategy. Increased involvement of patients and members of the public in future may lead to development of better ways of managing AMR.

- Much more information on the study can be found at www.piru.ac.uk