NEW ZEALAND COLLEGE OF
PUBLIC HEALTH MEDICINE

20 April 2017

Submission to the Ministry of Health and Ministry for Primary Industries:

Draft New Zealand Antimicrobial Resistance Action Plan

The New Zealand College of Public Health Medicine would like to thank the Ministry of Health (MOH) and Ministry for Primary Industries (MPI) for the opportunity to make a submission on the Draft New Zealand Antimicrobial Resistance Action Plan (the Plan).

The New Zealand College of Public Health Medicine (NZCPHM) is the professional body representing the medical specialty of public health medicine in New Zealand. We have 225 members, all of whom are medical doctors, including 186 fully qualified Public Health Medicine Specialists with the majority of the remainder being registrars training in the specialty of public health medicine.

Public Health Medicine is the branch of medicine concerned with the assessment of population health and health care needs, the development of policy and strategy, health promotion, the control and prevention of disease, and the organisation of services. The NZCPHM strives to achieve health gain and equity for our population, reducing inequalities across socioeconomic and cultural groups, and promoting environments in which everyone can be healthy.

Position

The NZCPHM welcomes the opportunity to comment on the Action Plan. The NZCPHM has previously called for a national plan such as this,[1] that is comprehensive, sufficiently financed and incorporates:

- preventing infections;
- improving antimicrobial prescribing and stewardship, in both community and healthcare settings;
- public education;
- national, DHB-level monitoring and surveillance activities;
- suitable regulation of agricultural and veterinary use (and improving stewardship) of antimicrobials;
- a national strategy that links with international efforts; and
- new research to identify the most effective methods to revive and sustain the effectiveness of existing antimicrobial agents.

The NZCPHM congratulates the MOH and MPI for incorporating the points above into the Plan, however further suggestions are detailed below.

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Overview

It is important that health equity is explicitly considered under the Plan, and a need to monitor and ensure that all New Zealanders benefit from this Plan.[1] For example, there is a need to ensure AMR and AM stewardship in New Zealand is considered by ethnicity/NZDep, both from a dispensing and burden of disease perspective. Local examples of inequitable impacts of AMR include fusidic acid overuse and impacts on Māori and Pacific populations, among those living in the most deprived deciles[2] and multi-drug resistant tuberculosis (MDR-TB) in NZ migrants.[3]

A commitment to a One Health approach should be explicit in the introduction to the document, and in the explanation of Objective 5. At present, the Plan has human and animal health developing strategies/ actions separately with, in some cases (for example Objectives 3, 4, and 5), no stated plans for bringing them together. Systems for Antimicrobial Resistance (AMR) and Antimicrobial (AM) use surveillance, and for infection prevention and control (IPC), should be developed in collaboration from the outset to avoid considerable extra work in the future to harmonise approaches.

The Plan would benefit from being much 'punchier'; at present there are a great number of 'activities', some of which overlap and repeat, making it hard to get a clear sense of what the key new initiatives are. We suggest that activities should be specified under only one action area, and where appropriate be combined. 'Activities' such as "Consider the findings and recommendations from the Review of Antimicrobial Stewardship Practices in Public Hospitals in New Zealand" should not be listed separately; considering all appropriate evidence and reports is inherent in any activity. The implementation structure should ensure that the people acting under any given action area are working closely with those acting under the others, so there should be no risk of relevant activities that are listed under different action areas being un-noticed.

There is little in the Plan about evaluation. A general statement about the need to formally evaluate activities, with particular emphasis on those where the evidence base is lacking, would be helpful.

While 'animals and plants' are mentioned in a few places, actions mainly refer to animal health and veterinary medicine. It would be better to be clear about what is intended for horticultural uses of antimicrobials (and whether the One Health approach includes other aspects of the environment).

We are concerned that many activities are to be led by Ministries, which are primarily advisory/ strategic rather than implementation organisations, and may not have the capacity to take on leading implementation of all these activities. A coherent, multi-disciplinary, multi-perspective approach, led by an organisation with implementation and evaluation expertise, is required.

The naming and numbering of objectives, action areas, and activities is confusing. Navigation and understanding of how things fit in to the overall picture would be easier if they were explicitly related, e.g. Objective 1; Action area 1.1, 1.2, etc.; Activity 1.1.1, 1.1.2, etc.

Objective 1

- While raising awareness is important, and (Priority area 1) public understanding is helpful in facilitating changes in regulation, policy and prescribing, it cannot achieve changes in AMR alone.

Objective 2

- As noted in the Overview above, the human and animal health activities should be carried out collaboratively from the start.
- It should be made clear that any 'list of priority antimicrobials' for surveillance will change (and probably grow) over time.
- 3-21 seems to be the same as 12-3.
- 3-7, 3-8 and 3-9 seem to be part of the same activity. As noted above, to get the best impact the Plan should minimise the number of separately noted activities.
- Action area 4 seems redundant. 4-1 underpins surveillance (ie action area 3), 4-3 and 4-4 are repeats, and outbreak investigation and control, while often triggered by surveillance information is more 'prevention and control' rather than 'surveillance'. Therefore 4-2 and 4-5 should be listed under Objective 3.
- In 6-3, the example is unnecessary. The process of identifying gaps needs to be broadly considered and there is no justification for privileging this particular literature review at this stage.

It is important to do more than "better coordination and expansion [of existing surveillance systems] to support the identification of emerging risks and trends". A programme of targeted, active surveillance is needed if we are to identify the presence of dangerous resistance genes or resistant organisms before they cause clinical disease and/or outbreaks (including some consideration of border screening / management, particularly of people entering NZ with recent healthcare experience in other countries with high prevalence of AMR organisms, or with known particular organisms in their healthcare facilities). This needs to be carefully thought through and designed, but the need for it should be explicitly stated in the explanation of this objective. At present, the activities could be implemented by just expanding the somewhat passive surveillance of routine clinical samples that currently occurs.

Objective 3

- As noted above, the human and animal health activities should be carried out collaboratively from the start.
- Wider Public Health prevention strategies, e.g. reducing the conditions in which high rates of infection occur, food safety, etc, should be noted as part of prevention of infection and therefore AMR infection.
- Along with strategies for surveillance of entry of AMR organisms from overseas, PH strategies for managing travellers/returning residents who have had health care overseas, should be part of AMR prevention and control.
- 10-1 – IPC standards in animal health are not just to prevent zoonotic infections, they are to prevent transmission of AMR organisms between animals as well as between animals and people and vice versa.
- 11-1 (review AMR epidemiology internationally) – as written this is not an "alternative approach to reduce infection and need for AM use in animals". It would seem to fit in better to Objective 2, to underpin some of the surveillance activities.
- Typo: Priority Action Area 7, Activity #8, is to be carried out "(as per outcomes from Priority Action Area 7, #8)".

[1] We have used this way of referring to activities: X-Y denotes Action Area X, Activity Y.

Objective 4

- As noted above, the human and animal health activities should be carried out collaboratively from the start.
- 12-7, 12-8, 12-9 should be combined into "Taking into account all relevant reports and evidence, develop options to improve access to antimicrobial stewardship services in hospitals and the community", with "and animal health" added. The example given in 12-9 is not necessary – since the reports and evidence will determine what will be done, this should not be prejudged.
- 12-10 – it is not clear what a "point prevalence tool for antimicrobial stewardship" is.
- 12-11, 12-12, and 12-21 are not separate, and either feed into each other or should be done together.
- 12-18 Regional AMS committees - do these exist already? If not, should be an activity in year 1, presumably led by DHBs.

Objective 5

- As noted above, an explicit commitment to the One Health approach would be appropriate here, and the human and animal health activities should be carried out collaboratively from the start.
- As noted above, it would be beneficial to start as we mean to go on, with a single organisation sitting between human, animal, (and environmental?) health, working with all relevant organisations to oversee implementation of the plan.
- The activities under this objective seem relatively weak – *explore* other funding opportunities (presumably other than direct government funding) and *develop business cases* for implementation – i.e. there is no commitment to fund this area in principle, a priori. We realise that funding commitments are probably out of the scope for the Plan committee, but if (Objective 5) the Government is committed to tackling AMR, then the Government should be able to commit to funding, at least in principle.
- There is no mention of developing and ensuring adequate capacity and skills to carry out this work, except for laboratory and genomic capacity. Surveillance, prevention, implementation require specific skills including public health and epidemiology.

Monitoring progress

As noted above, it will be important to not just monitor the implementation, but also to evaluate the success of the Plan.

Thank you for the opportunity for the NZCPHM to submit on Draft New Zealand Antimicrobial Resistance Action Plan. We hope our feedback is helpful and please do not hesitate to contact the NZCPHM if we can be of further assistance.

Yours faithfully,

Dr Felicity Dumble, President Elect, NZCPHM

References:

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3. Das, D., Baker, M., Venugopal, K., & McAllister, S. Why the tuberculosis incidence rate is not falling in New Zealand. N Z Med J. 2006; 119(1243). http://www.healthyhousing.org.nz/wp-content/uploads/2010/03/Why-the-tuberculosis-incidence-rate-is-not-falling-in-New-Zealand.pdf