TOOL 3:

APPLY YOUR LEARNING AND CHANGE YOUR WORKPLACE

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The aim of this tool is to help you to identify, develop and apply skills and knowledge relevant to your role to change and improve your working practice and the practice of people that you work with.

To tackle AMR, we need both the knowledge and action taken because of this knowledge. In other words, it is important for human and animal health professionals not only to learn new AMR-related knowledge or skills, but also to apply them to their day-to-day work for a more effective AMR practice. However, there is a range of factors that can make it difficult for professionals to use what they have learned in their day-to-day work.[18]

For example, there might be some deep-rooted practices in a workplace that challenge the use of new knowledge, skill or what professionals already know or there might be some barriers such as lack of equipment or resources. Lack of monitoring or feedback might be another reason for not improving the workplace practices.

PROBLEM: Professionals are not always able to use newly learned knowledge or skills in their day-to-day work, because they have few opportunities to reflect on their learning and make sense of it in ways that are relevant to their roles. They may also have a limited understanding of how they can apply their learning to their work while existing forms and structures of work (as well as limited resources) may not support staff to use what they know, or any newly learned skills and knowledge, in their day day-to-day practice. Trust and openness among staff are not always evident. Strong hierarchical structures in a workplace may create mistrust among staff while management may not be aware that hierarchal structures can lead to a lack of trust among staff.

OBJECTIVE: This tool is designed to facilitate a group session around identifying barriers that prevent staff from applying their knowledge of AMR to their work and discussing opportunities to support staff in this process and minimise or remove barriers or challenges they face.

MATERIALS NEEDED IN TOOL 3

In-person meeting:

- Flipchart paper
- Marker pens
- Adhesive (to hang paper on walls)
- Laptop, projector and internet connection (for PowerPoint slides; alternatively, use an overhead projector and printed transparencies of slides)
- Printouts of figures and tables, depending on the task

Online meeting:

- Internet access and broadband speed
- PC, laptop, tablet or mobile phone
- Videoconferencing tools (such as Zoom, MS Teams, Skype, Cisco Webex, Whereby or Google Meet)
- Access to online whiteboards (such as Google Jamboard, Miro, MS Teams whiteboard or the Canvas Chrome app)

18 Littlejohn et al., 2019; Charitonos and Littlejohn, 2021; Kaatrakoski et al., 2021.

Task 3.1: Applying what you know – dealing with the challenges that might obstruct knowledge transfer

Time: about 90 minutes

Group size: five to eight participants and a facilitator

Seating arrangement: in a group, pairs or individually

Task 3.1 encourages the team to reflect on factors that can make it difficult for professionals to use what they have learned in their day-to-day work.

As the facilitator,

1. Distribute copies of the following list of challenges to the group. You may also show this in a PowerPoint presentation. These challenges have been reported by healthcare professionals and refer to difficulties they experience to apply their learning about AMR in their day-to-day work.

- Professionals' limited knowledge of AMR.
- The lack of public awareness of the AMR threat. This could result in pressure from patients or clients (such as farmers) to get antibiotics prescribed.
- Lack of trust among health professionals in various roles and ranks.
- The limited flow of information concerning AMR across local and national surveillance networks.
- Limited professional development opportunities for professionals to reskill or upskill.
- Limited opportunities for interdisciplinary and multi-sectoral collaboration.

2. Ask the participants to get into pairs or groups of three to discuss each of the challenges in the list above. Use the following questions to facilitate discussion:

- What do you think of these challenges? Are you surprised by any of them?
- How are these challenges related to your day-to-day experiences at work?
- What other difficulties do you face when applying knowledge on AMR in your day-to-day work?
- What other difficulties would you add to the list?

3. List the main challenges that have been reported by the groups. You may use a flipchart paper and place it on the wall. Invite each group to share their key notes of discussion.
4. Use the list to select the challenges that the group feels are most relevant to them. Remember that these are the challenges and recommendations affecting the operation of the team, and not an individual. For each challenge, ask the participants to form pairs or groups of three to develop some specific actions and recommendations that they think should be implemented in their organisation.
    - Write down the recommended actions. Make a distinction between actions that are 'required' and 'optional/desired'.
    - Discuss how you would implement these recommendations in your unit, across units or your organisation.
    - Discuss how you could share the information in ways that would encourage your colleagues to relate the recommended actions to their own roles and work context.

Note that if not all of the challenges can be discussed in the same meeting, keep a record and discuss in a future session.

FOLLOW-ON ACTIONS

Think critically about the challenges that your team has reported and make an action plan to support your colleagues to integrate knowledge into day-to-day work. Identify people and resources that you may need to put your plan into action. Set up some short- and long-term goals in your team to minimise these challenges, and review these regularly in team meetings.

Task 3.2: Applying what you know – reflecting on good practice around AMR

Time: about 90 minutes

Group size: five to eight participants and a facilitator

Seating arrangement: in a group, pairs or individually

Task 3.2 encourages members of the team to recognise and reflect on existing good practice around AMR.

As the facilitator,

1. Encourage the group to share some examples of good practice on AMR that they are practising themselves or have observed in their workplace.
2. Note down the examples that were shared (from Step 1) so you can share these further with other colleagues, if possible.
3. Ask the participants to form small groups to discuss Examples A–G and reflect on the practices that are described. You could discuss all of the examples or you may select a few that are more relevant to your team.

Example A

I know sometimes in very sick children, clinicians give a para-treatment. And then they write on their sample requests to the lab, 'We have begun treating with this drug.' And the good clinicians write them on the form for us [laboratory technicians] that we began treating with this drug, so test it. But at other times there's the request form issue – you can get a request with no age, no sex, no diagnosis.

(Lab technician based in a teaching hospital in a LMIC)

Example B

One of the challenges is that we still have request forms that are handwritten. And we don't want ones you don't have all the information you need on it, so when you're going to our register or our books, you see some missing data. So that is one of the main challenges we have now. We can have request forms without names, – and we know with the local names, you can have a name that can go for both male and female, so when they don't state their sex, it's difficult to know whether it's for a male or a female. And it's sometimes the clinical data or the diagnosis – clinicians don't really write that. It's just about 10% completed. Most of the forms come without a diagnosis.

(Microbiologist in a lab in a teaching hospital in a LMIC)

Example C

A blood sample was sent to me for an examination. The sample was collected in an EDTA vial with the proper amount, i.e. 3 ml. The sample was well labelled, with age, sex, species, breed and ongoing medicines. The sample was received within half an hour, so that a good blood smear could be prepared. I sent back the report to the clinician in a timely manner.

Example D

Once I received a blood sample of a dog in an EDTA vial requested for haematological examination. On examination of the blood smear under a microscope, echinocytes were seen, which was a strange phenomenon. Usually, echinocytes are seen in chronic renal failure in dogs. Also, an excess of EDTA (underfilled tube) is responsible for echinocytes: actually, only 1 ml of blood was drawn by clinician, and at least 3 ml of blood was required to dilute the EDTA. In this particular case, an excess of EDTA caused a faulty result to occur.

(Vet lab technician in a clinic in a LMIC)

Example E

Food safety is the major issue in my country, where veterinarians, human doctors and public health workers, all three disciplines, meet. Poultry farmers use antibiotics at the last hour of marketing of poultry, regardless of their health status. Many growth promoters have been incorporated into animal diets. Some farmers do so owing to a lack of knowledge, while many others because of business motives. Sadly, they do not follow the withdrawal period: a specific period of time after the last dose of the veterinary medicine has been administered that must elapse before an animal or foodstuffs from an animal can enter the food chain. For example, the withdrawal period of enrofloxacin for meat is three weeks and for milk is four days. The public are not supposed to consume animal products in this period because such products have the residual effect of drugs. This residual effect of antibiotics may lead to AMR.

(Vet in an animal clinic in a LMIC)

Example F

While working in the intensive care unit (ICU), the lab technician showed up with the sputum culture report of a critically ill patient undergoing treatment. The organism isolated was resistant to all the antibiotics available for antibiotic sensitivity test in the lab. We had upgraded the antibiotic to a broad-spectrum group, piperacillin and tazobactam, as per his deteriorating condition. There were no diskettes of this antibiotic in the lab for the sensitivity test. The lab staff informed the authorities of the hospital and made the diskettes of piperacillin–tazobactam available for the sensitivity test. The report was in our hands within a few days. The antibiotic was sensitive and the patient improved.

(Consultant in a central hospital in a LMIC)

Example G

A patient who was suffering from fever and burning sensation of urine had been taking ofloxacin tablets from a nearby drugstore for three days. His condition was not improving, so he visited the hospital. Urine R/E and cultures were sent. Forms were filled, which included the details of the patient. It was also mentioned in the form that the patient was under antibiotics. Urine culture reports were positive and he was resistant to ofloxacin. However, the patient did not come to collect the report. The lab staff was kind enough to inform us. The patient was notified via telephone and his antibiotics were changed. He recovered well in a few days.

(Consultant in a central hospital in a LMIC)

- Distinguish between examples of good and poor practice around AMR.
- How do the practices described in the examples affect the AMR surveillance process?
- Ask the participants to suggest possible reasons that affect the practices described in the examples, whether positively or negatively. Make a note of all the reasons suggested.
- As a group discuss how could people involved in the examples be rewarded for good practice performed or be supported to change their work practice?

4. In small groups, encourage the participants to share one example of an existing practice around AMR that they have observed or are practising themselves, and that they think in hindsight needs to be improved. Invite each group to share key points of their discussion.
5. As a group, list the practices identified in Step 4 and ask the participants to suggest possible reasons that affect such practices. Make a note of all the reasons suggested and add these to the list you started creating in Step 2.

FOLLOW-ON ACTIONS

Think critically about the examples of good and poor practice that the participants discussed. Can you reward any existing good practice of your team? Can you share such examples of good practice beyond the team, and establish ways for the team to find out about good practice on AMR that is happening in your own organisation or elsewhere? You may also consider:

- facilitating a discussion around the type of support that the team needs to change some of the practices identified in their own examples (from Step 3)
- developing some regular meetings to discuss existing practices on AMR as a team
- identifying specific actions and recommendations that could be implemented in your team
- which of these actions should be prioritised in the short and long term.

Review these actions regularly to ensure that they align with the organisations' priorities, as well as with recent developments in AMR.

Task 3.3: Applying what you know – developing trust and openness

Time: about 90 minutes

Group size: six to eight participants and a facilitator

Seating arrangement: in a group or pairs

Task 3.3 aims to support a discussion around issues of trust and encourage members of your team to promote trust and openness among their colleagues.

Facilitator note

Good AMR surveillance requires trust and openness among professionals. Here is an example of how a lack of trust among professionals creates a tension and affects the quality of their work:

In many, many places in developing countries, [sampling and testing] does not happen because first, the clinician does not do the sampling. Very often, they do not do the sampling, because [...] they don't trust the result of the lab. And if they don't trust the results of the lab, they don't do the test because they know that they will not use the result. [...] They don't send test, so the lab has very little tests to perform, and so they are not very good at performing tests and they are not very good at giving good results. And so it doesn't work.

In many countries this tension may be the result of strong hierarchical structures within health systems. It has also been reported that in several settings, senior staff usually do not talk or share their experiences with their junior staff. This might create a communication gap between the staff, which may affect the quality of their work.[17]

Drawing on this, this task is designed to encourage your staff to promote trust and openness among their colleagues.

As the facilitator,

1. Present the following examples of types of relationships existing among professionals in AMR related activities. You could use a power point presentation or provide a printed copy of the examples to each person in the group. You may present all the examples or select a few that are more relevant to your team.

Example A

just called the patient, spoke with the doctor – and it's a typical example. Ideally, I shouldn't call the patient – I should call the doctor straight. There's no means of communication. You have to walk all the way to – and this one has no ward. There's no ward on this sample request form. So fortunately, I had a telephone number of the mother of the child, an 11-month-old child. And I was able to call. This child has sepsis. And so I wanted them to start treating or giving [specific drug], because a child last week – I followed up a child who passed on. It had candida in the blood, and before we could follow up with them to start treatment, the child was gone. So this child was being given some drugs which would not work at all for them. So I told the doctor that, obviously, you know you have to change your drugs. And he said, yes. So the child was on another medication, and mentioned something else, which does not work for this drug – for this bacteria that we have found. So then AMR is in, because she's taking drugs that she shouldn't have been taking that she doesn't need.

(Medical laboratory scientist in a central lab in a LMIC)

Example B

In many, many places in developing countries, [sampling and testing] does not happen because first, the clinician does not do the sampling. Very often, they do not do the sampling, because [...] they don't trust the result of the lab. And if they don't trust the results of the lab, they don't do the test because they know that they will not use the result. [...] They don't send test, so the lab has very little tests to perform, and so they are not very good at performing tests and they are not very good at giving good results.[19]

Example C

A lab report of a patient from the emergency room was doubtful and did not correlate with his clinical condition. The doctor from the emergency called the lab technician and discussed it with him. The lab staff agreed to repeat the test once more in the same lab to confirm and clear doubts.

There was a similar case of a doubtful report of another patient, where the treating doctor suspected the lab team as inefficient and sent the samples to be repeated in a comparatively expensive private lab that supposedly provided him incentives.

(Consultant in a central hospital in a LMIC)

Example D

We found that we don't have many problems communicating in the local AMR network. It is because most of us hold the same degree of education. There are some technical difficulties between clinicians and veterinary technicians that could be solved with regular meetings and bonding. However, there are some barriers to the local network and regional/national network. This may be due to hierarchical differences, confusion and unclear expectations. There are some barriers in communication between human lab technicians and clinicians that might have arisen from different educational backgrounds, difference in reference level of parameters, differences in species of bacteria isolated, etc.

(Consultant in a hospital in a LMIC)

Example E

In field conditions I can hardly find any lab to perform antimicrobial susceptibility tests [ASTs]. On the other hand, farmers want prompt treatment from my side because their animals are dying or the production [milk] is decreasing day by day. In this situation I am left with no options other than prescribing broad and highly potent antibiotics without performing ASTs.

(Vet in an animal health clinic in an LMIC)

19 Charitonos et al., 2018, pp. 24–5

2. Invite participants in small groups to discuss the examples. You may use the following questions to help your discussion:
   - What type of relationships are described in these examples and how do they unfold considering situations emerging in their setting?
   - How does trust enable or hinder relationships in the examples provided?
   - Do any of the examples remind you of situations in your own workplace? If yes, in what ways? If not, what do you think might be different in your team or organisation compared to the example provided?

   Invite each of the groups to share key points of their discussion.
3. As a group, discuss how 'trust' unfolds in day-to-day situations, especially when working with others. Is trust important in the way you perform your work?
4. Discuss and list possible reasons why some relationships are more challenging than others. In what ways can trust be further developed in your relationships with others and/or as a team? Share some ideas in the group.

FOLLOW-ON ACTIONS

Think critically about the examples of challenging relationships that the participants have reported during the discussion – especially cases where trust seems to be affecting working relationships. You may like to consider:

- facilitating a discussion around the type of support the team needs to develop more trust in their working relationships
- developing some regular meetings to discuss existing challenging situations that the team faces
- identifying specific actions and recommendations that could be implemented in your team
- which of these actions should be prioritised in the short and long term.

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