World Health Organization
REGIONAL OFFICE FOR Europe

THE TAP
QUICK GUIDE

A practical handbook for implementing
Tailoring **A**ntimicrobial Resistance **P**rogrammes

World Health Organization
REGIONAL OFFICE FOR Europe

THE TAP
QUICK GUIDE

A practical handbook for implementing
Tailoring **A**ntimicrobial Resistance **P**rogrammes

Abstract

This Tailoring Antimicrobial Resistance Programmes (TAP) Quick Guide has been developed to assist Member States in initiating and undertaking projects to address the spread of antimicrobial resistance (AMR) in their countries. AMR is a complex problem with many factors affecting its rise and spread, making it difficult to address. The TAP Quick Guide is designed to assist national-level TAP working groups in using a behavioural insights approach to identify appropriate and feasible interventions to begin tackling AMR in their contexts.

The Quick Guide provides a brief overview of AMR and the TAP process and walks users through the five stages of assessing feasibility, establishing a baseline understanding of issues, prioritizing topics to address, developing strategies, and implementing and evaluating interventions. The contents of the Quick Guide are based on a more extensive TAP Manual which will be available soon. Accompanying the Quick Guide is a TAP Toolbox with exercises and tools to assist in each stage of project development.

Address requests about publications of the WHO Regional Office for Europe to:

Publications
WHO Regional Office for Europe
UN City, Marmorvej 51
DK-2100 Copenhagen Ø
Denmark

Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office website (http://www.euro.who.int/pubrequest).

ISBN: 978-92-890-5567-3

© World Health Organization 2021

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; https://creativecommons.org/licenses/by-nc-sa/3.0/igo).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition: The TAP quick guide: a practical handbook for implementing Tailoring Antimicrobial Resistance Programmes. Copenhagen: WHO Regional Office for Europe; 2021.

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization. (http://www.wipo.int/amc/en/mediation/rules/)

Suggested citation. The TAP quick guide: a practical handbook for implementing Tailoring Antimicrobial Resistance Programmes. Copenhagen: WHO Regional Office for Europe; 2021. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

Sales, rights and licensing. To purchase WHO publications, see http://apps.who.int/bookorders. To submit requests for commercial use and queries on rights and licensing, see http://www.who.int/about/licensing.

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

General disclaimers. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

Design and layout: 4PLUS4.dk

Contents

Acknowledgements ..... **iv**
Abbreviations ..... **v**
Overview ..... **vi**
The process. Let's Get Started! ..... **xiv**

The TAP process **1**

1. **Engage. Are you ready to start?** **2**
   - 1.A Thinking about the most important challenges 2
   - 1.B What resources do you have? 3
   - 1.C Start developing your plan 4
2. **Analyse. What do you think you know already?** **8**
   - 2.A What do you know already? 8
3. **Prioritize. Identifying target behaviour(s) and group(s)** **10**
   - 3.A Presenting findings and identifying target behaviour(s)/population(s) 10
   - 3.B Plan research to understand and prioritize the target behaviour, as required 12
   - 3.C Conduct additional research and report findings 13
4. **Design your intervention. How can you respond?** **14**
   - 4.A Agree on drivers/ barriers to be addressed 15
   - 4.B Agree on interventions 15
   - 4.C Consider possible activities within your interventions 16
   - 4.D Plan for monitoring and evaluation 17
   - 4.E Document the intervention development process 18
5. **Implement and evaluate. Start doing!** **20**
   - 5.A Implementation with ongoing monitoring 21
   - 5.B Evaluation and adjustment 21
   - 5.C Final evaluation and scale-up 21

Acknowledgements

The Tailoring Immunization Programmes (TIP) approach was developed by the WHO Regional Office for Europe to support countries in achieving high and equitable vaccination uptake, through understanding the barriers to vaccination among population groups with suboptimal coverage. The TIP inspired the development of a Manual for Tailoring Antimicrobial Programmes (TAP), to be available in 2021. The Manual for TAP then inspired, and served as the foundation for, this user-friendly TAP Quick Guide and TAP Toolbox.

This guide was prepared by Felicity Pocklington (Common Thread, London, England), Michael Coleman (Common Thread, London, England) and Sahil Warsi (WHO Regional Office for Europe) under the technical guidance of Ketevan Kandelaki (WHO Regional Office for Europe), Danilo Lo Fo Wong (WHO Regional Office for Europe), Karen Mah (WHO headquarters) and Anand Balachandran (WHO headquarters).

Input and review were provided by Siff Malue Nielsen (WHO Regional Office for Europe), Katrine Bach Habersaat (WHO Regional Office for Europe) and Ponnu Padiyara (WHO headquarters).

Significant contributions for the technical concept were made by Marie Louise Wright (World Food Programme headquarters), Chantal den Daas (National Institute for Public Health and the Environment Netherlands, RIVM) and Anja Schreijer (Public Health Service, Amsterdam, The Netherlands).

This document was produced with the financial assistance of the European Union. The views expressed herein can in no way be taken to reflect the official opinion of the European Union.

Abbreviations

ABR	antibiotic resistance
AMR	antimicrobial resistance
BCW	Behaviour Change Wheel
COM-B	Capability, Opportunity and Motivation for Behaviour Change
DALYs	disability-adjusted life years
GAP	Global Action Plan
M&E	Monitoring and Evaluation
TAP	Tailoring Antimicrobial Resistance Programmes
THP	Tailoring Health Programmes

Overview

What is the TAP Quick Guide?

This Tailoring Antimicrobial Resistance Programmes (TAP) Quick Guide follows a step-by-step, practical approach to design and implement a targeted behaviour change intervention to address drivers of antimicrobial resistance (AMR) in human and animal health. AMR is a complex social phenomenon and there are many behaviours affecting AMR that Member States might choose to address through an intervention. Example behaviours might include, but are not limited to:

- prescribing practice (who, what, where and why) and the over-prescribing of antibiotics and other antimicrobials;
- public demand for antibiotics and/or poor adherence once they have been prescribed; and
- infection prevention and control practice in health care settings and the community.

This Quick Guide, paired with the TAP Toolbox, offers inspiration and direction to stakeholders involved in the TAP process. The guide and toolbox provide a framework and exercises to identify and examine behaviours related to human consumption and the overuse of antimicrobials in Member State contexts. While the guide focuses on the human drivers of AMR, the methods outlined in the guide can be applied to other sectors under the One Health umbrella, such as veterinary medicine and agriculture.

The primary focus of the Quick Guide and its accompanying Toolbox is the TAP process. This Quick Guide provides an overview of the TAP values and principles, theoretical model, and framework. The content of this guide and toolbox have been taken from the WHO TAP Manual, which is to be published soon and which will provide more detailed information on material presented in this Quick Guide. An overview of these three TAP documents, together with the TAP Process Poster, is provided in Table 1.

Please keep in mind that the TAP are a work-in-progress project. As it is implemented in more countries and contexts, we welcome your feedback on how this guide and the TAP process can be made more effective, efficient, and easier to implement.

How to use the TAP Quick Guide

The TAP process is usually led and implemented by national or subnational public health professionals working in AMR, as well as anyone involved in designing and planning behaviour change, communication, or health promotion activities to reduce the spread of AMR. While the TAP process is usually led by the country team, the WHO Regional Office for Europe can provide technical support in initiating and implementing the TAP process, such as with undertaking the situation analysis, conducting stakeholder engagement activities, or supporting research studies and intervention design.

This Quick Guide should be used in parallel with the TAP Toolbox, which includes hands-on tools and templates for each stage of the TAP approach.

Please remember that while you may decide to implement all phases of the TAP process as outlined in this document, the process is not always linear. For example, you might have already conducted or found research identifying barriers to reducing AMR and might therefore skip the research phase. In other cases, you may wish to spend more time doing intense research to gain further understanding of the context or the drivers of and barriers to AMR-related behaviours.

Table 1. Overview of the TAP tools and their intended audience

Name of tool	Overview	Intended audience
TAP Quick Guide	The TAP Quick Guide provides a 'how-to' guide for a rapid and practical application of the TAP approach. It should be read and used in parallel with the TAP Toolbox.	Public health professionals working on AMR, as well as anyone involved in designing and planning behaviour change, communication, or health promotion activities to reduce the development and spread of AMR.
TAP Toolbox	The TAP Toolbox contains key tools and templates for each stage of the TAP Quick Guide approach. Consider it as a workbook.	
TAP Poster	A TAP Process Poster provides a visual description to a step-by-step, practical approach to design and implement a targeted behaviour change intervention to address drivers of AMR.	
Full WHO TAP Manual	The Full WHO TAP Manual will provide the theoretical framework for the TAP Quick Guide and Toolbox. Once published, it can be read in conjunction with these other tools.	

AMR, ABR, and how they emerge

AMR occurs when microorganisms, such as bacteria and viruses, change after being exposed to antimicrobial drugs. Such a change can include their becoming resistant to the drugs used to treat them. There are different types of antimicrobials which work against different types of microorganisms, such as antibacterials or antibiotics against bacteria, antivirals against viruses, and antifungals against fungi. Antibiotic resistance (ABR) specifically refers to resistance in bacteria caused by the overuse and misuse of antibiotics in humans and animals, that can cause infections that are more difficult or even impossible to treat. As a result of ABR, the world is running out of effective antibiotics to treat infectious diseases which affect all population groups. AMR and ABR are compromising our ability to treat infectious diseases and undermining many advances in medicine.[1]

While AMR and ABR are natural phenomenon, development and spread of AMR and ABR is accelerated due to the systematic misuse and overuse of antimicrobials in humans, animals, agriculture, and the environment.[2]

1 United Nations high-level meeting on antimicrobial resistance, New York, USA. Antimicrobial resistance summit to shape the international agenda [website]. In: World Health Organization, Antimicrobial resistance; September 21, 2016 (https://www.who.int/antimicrobial-resistance/events/UNGA-meeting-amr-sept2016/en/, accessed June 2, 2021).

2 Alison Holmes, Luke Moore, Arnfinn Sundsfjord, Martin Steinbakk, Sadie Regmi, et. al Understanding the mechanisms and drivers of antimicrobial resistance. The Lancet. 387. Issue 10014; December 2015. DOI: 10.1016/S0140-6736(15)00473-0.

Some key drivers of resistance include:

- the overuse and misuse of antimicrobials in human and animal health, such as overprescribing for blanket prevention, or growth promotion in animal husbandry;
- a lack of access to diagnostics;
- low vaccination coverage or access to vaccines;
- poor infection, prevention and control practices;
- poor sanitation and hygiene, and low access to clean water;
- low public awareness on appropriate antibiotic use;
- the spread of resistant bugs through the international movement or exchange of people, animals, or crops; and
- environmental contamination.

ABR in humans is driven by the overuse and misuse of antibiotics along with poor infection control and hygiene measures. Without urgent changes to our individual and collective behaviour in human and animal health and agricultural sectors, we run the risk of life-saving medicines becoming ineffective. Our actions to stop the spread of AMR/ABR are crucial to save lives, to preserve the efficacy of antibiotics, and for us to be responsible and effective practitioners and consumers.

Why tackle AMR?

AMR is one of the greatest public health challenges of our time. It threatens the effective prevention and treatment of a growing range of infections caused by bacteria, parasites, viruses and fungi. A failure to tackle AMR is estimated to cause 2.4 million deaths in the 33 OECD countries and 1.3 million in the EU/EEA region by 2050. Each year, AMR results in around 1.75 million disability-adjusted life years (DALYs) lost across the modelled countries with 1 million DALYs lost in EU/EEA countries.[3]

The study conducted by European Center for Disease Prevention and Control shows that 33000 people die every year due to infections with antibiotic-resistant bacteria in EU/EEA countries.[4]

WHO and partners are supporting member states to estimate their national burden of AMR.

The global health community's commitment to tackling AMR is highlighted through the objectives set out in the Global Action Plan (GAP) on AMR.[5] The TAP, and the work you do through this guide, help support the primary objectives of the GAP: improving awareness and understanding, strengthening knowledge and evidence, directly helping reduce AMR incidence, and optimizing the use of medicine.

---

3 Organisation for Economic Co-operation and Development. Stemming the superbug tide: just a few dollars more. OECD Health Policy Studies. Paris: OECD Publishing; 2018. doi: 10.1787/9789264307599-en.

4 33000 people die every year due to infections with antibiotic-resistant bacteria [web-site]. In: ECDC, News and events (https://www.ecdc.europa.eu/en/news-events/33000-peopledie-every-year-due-infections-antibiotic-resistant-bacteria, accessed 1 June 2021).

5 Global Action Plan on Antimicrobial Resistance. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/193736/9789241509763_eng.pdf?sequence=1, accessed 19 May 2021).

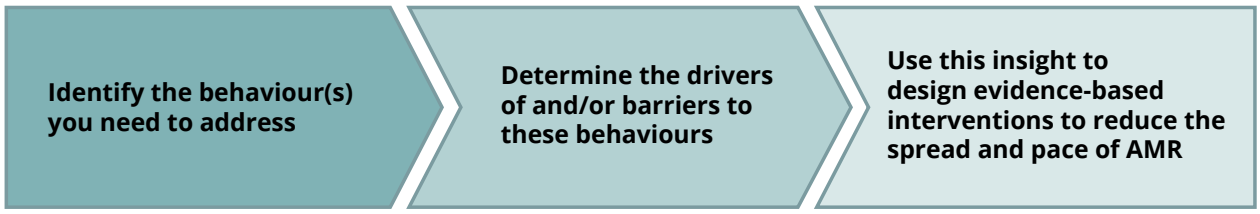
Why TAP?

The WHO Regional Office for Europe, with input from WHO headquarters, has created the TAP approach to help countries develop targeted interventions for AMR/ABR. The TAP process uses a behavioural insights approach called Tailoring Health Programmes (THP).

The THP is an evidence-based approach based on the belief that people's health behaviours are rarely static, and are susceptible to change, both positive and negative. By unpacking health behaviours, and better understanding the multiple factors that facilitate or hinder their performance, the THP approach assists Member States in designing interventions for lasting change.

This Quick Guide provides stakeholders working in the field of AMR and ABR with proven tools to identify and understand factors influencing AMR-related behaviour, and to design interventions tailored to their contexts (see Fig. 1).

Fig. 1. Logic of the TAP Guide



The TAP process

The TAP approach is built on the belief that people make decisions, both unconsciously and consciously, in the midst of complex social and individual contexts. Responses that do not take the beliefs, perspectives and wider systems that influence human behaviour into account will have limited success in influencing behaviour and for maintaining good practice.

It is a practical tool to help take this complexity into account. It is guided by 5 stages that help you to get organized, understand the problem, and design a behaviour change strategy that overcomes barriers and takes advantage of drivers for adopting target behaviours. The process is flexible and can be adjusted for contextual needs and available resources.

The TAP process is based on a number of core principles and values, including ensuring that interventions are: people-centered; participatory; focused on equity; underpinned by health goals and evidence-based (see Fig. 2).

Fig. 2. TAP values and principles

Comprehensive in their approach: TAP offers a comprehensive approach to project development which is broad at the outset and becomes increasingly focused, at each stage of the process to result in targeted interventions.

Using social and behavioural insights to address AMR

The behavioural insights approach of the TAP puts human behaviour at the centre of intervention development. It allows us to combine the latest thinking from psychology, cognitive science, communication, and social science, including sociology and anthropology, to better understand why and how people make decisions. This allows us to understand conscious and unconscious motivations, barriers and biases, as well as social-cultural and structural factors that influence our decisions.

To reduce the pace of AMR and ABR, it is necessary to understand the basis of behaviours that affect the incidence, spread, or reduction of AMR/ABR within a target population. Factors that promote a behaviour are called 'drivers' and factors hindering performance are known as 'barriers'. Identifying the multiple barriers to and drivers of AMR-related health behaviours helps in designing solutions and interventions that consider both individual and societal contexts, and effectively enable people and communities to reduce the development and spread of AMR.

Tailoring interventions towards the needs of specific groups (e.g. pharmacists, patients, prescribers, veterinarians) and contexts (e.g. communities, pharmacies, hospitals) can ensure that AMR interventions are effectively implemented and lead to positive behaviour change among populations.

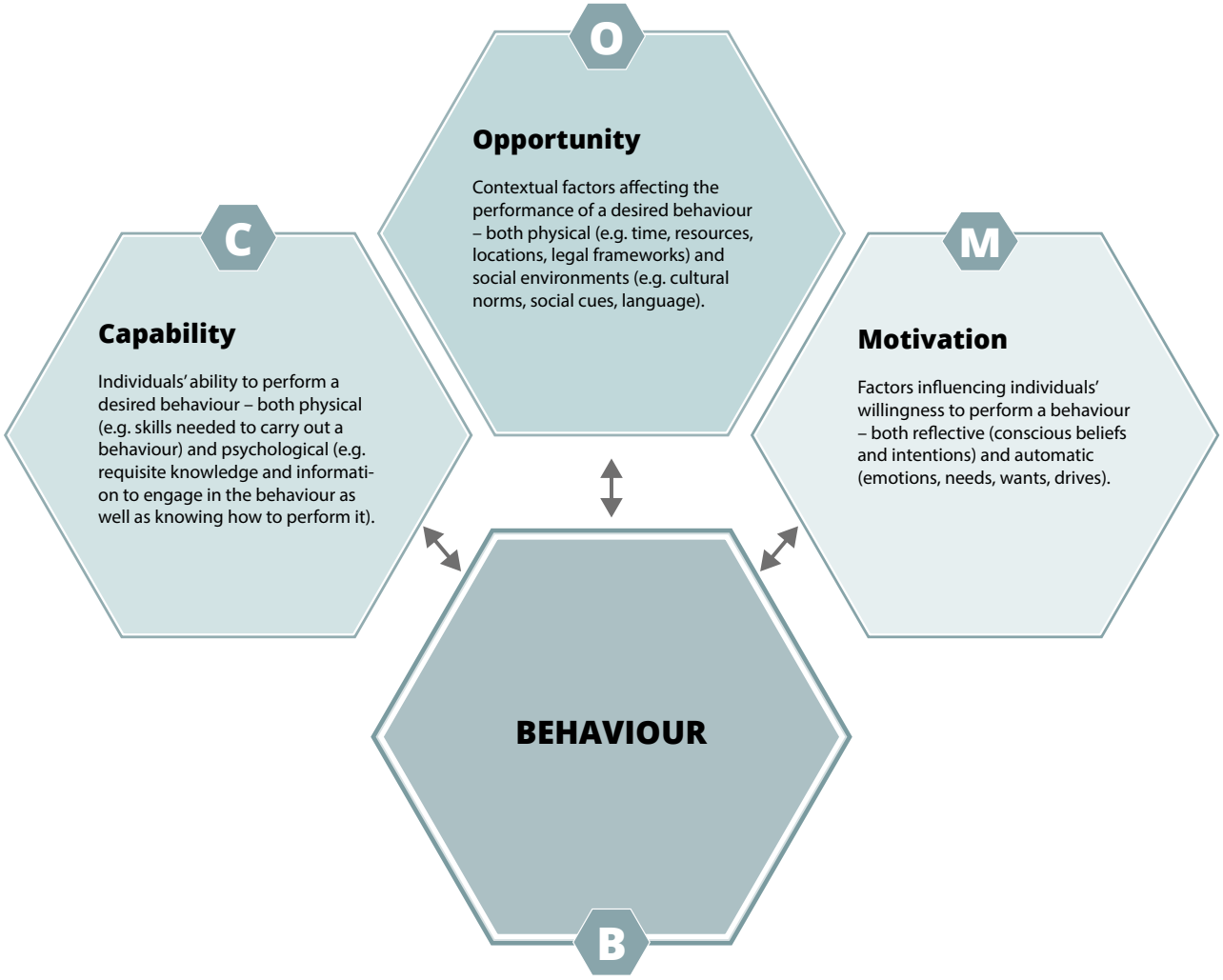
We are better able to bridge the gap between recommendations and actual practice when we investigate the factors determining the performance of recommended behaviours. Such factors can be at the individual level (e.g. personal needs, understandings and motivations) as well as the wider social or structural level (e.g. health policies, access to facilities, or other social determinants of health). Attending to these issues in intervention development enables us to go beyond a one-size-fits-all approach. Instead, we can design and test tailored and appropriate AMR interventions that address the most common reasons for AMR/ABR within a specific context.

TAP approach to behaviour change

The TAP process provides a systematic approach to understanding and addressing drivers of and barriers to AMR-related health behaviour. It is based in part on the Behaviour Change Wheel (BCW) model for understanding health behaviours. The BCW is designed to help a range of users, including practitioners and researchers, apply behaviour change theory to their work. At the core of the BCW model is the Capability, Opportunity, and Motivation for Behaviour change (COM-B) framework. The BCW/COM-B model was chosen for the TAP because it takes a comprehensive approach to identifying and addressing individual and contextual drivers and barriers to AMR-related behaviours.

COM-B highlights three factors affecting behaviour change (see Fig. 3).

Fig. 3. The COM-B factors

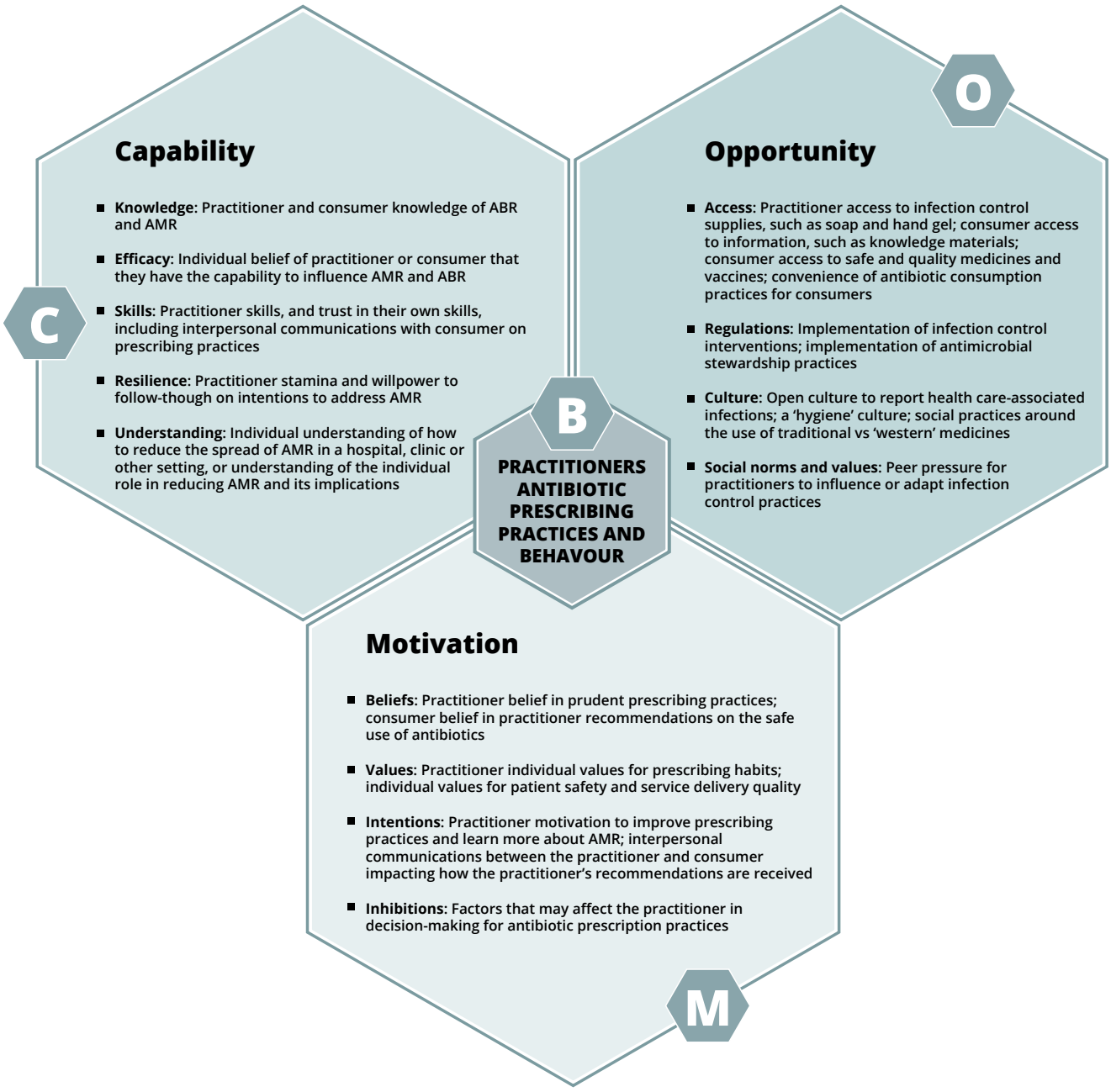


Each of the three factors can be broken down into specific aspects to help target analysis and intervention development. Fig. 4 below provides some examples of each aspect. Stakeholders engaged in the TAP process will identify aspects relevant to the behaviour and context they have selected.

Individual COM-B factors might be both barriers to or drivers of a behaviour. The BCW links the COM-B factors to nine common intervention functions and seven policy categories to enable intervention development. COM-B factors, intervention design, and policy categories are thus interlinked and understood to support and influence each other.

To start using the COM-B framework to explore factors affecting AMR-related behaviour and identify research priorities and objectives, go to Section 4 of the Toolbox.

Fig. 4. The COM-B Model adapted to AMR – examples for considerations



The process. Let's Get Started!

The next sections of the Quick Guide lead you through the five stages of the TAP process (see Fig. 5). For each stage, you are provided with the objectives, guidance on methods and process, and a summary of outputs.

While the stages below are presented linearly, we encourage you move between them as you go along and learn more. Test and challenge assumptions and check whether the intervention being developed or implemented remains relevant to the evolving context. This process does not have to be heavy or time-intensive. Lighter, rapid methods can be used depending on the programme and intervention under consideration.

Throughout the process, it is important to use all stakeholders' experiences and expertise to inform intervention design and strengthen the intervention's applicability and feasibility. Whom to involve and how will depend on many different factors. Some examples might be:

- **TAP advisory group**: provides expert opinion on the overall design and plan, and ensures alignment with the TAP process overall.
- **Decision-makers and managers**: engaged in advocacy for TAP work, to inform development of the TAP process and potential interventions, and to discuss sustainability and scale-up.
- **Target group representatives**: asked to critically reflect on the applicability and feasibility of the proposed intervention.
- **Key persons involved in the day-to-day implementation of the intervention**: involved to create ownership of the project, set expectations and ensure appropriateness of intervention.

Remember: the process aims to be flexible, adaptable and sustainable.

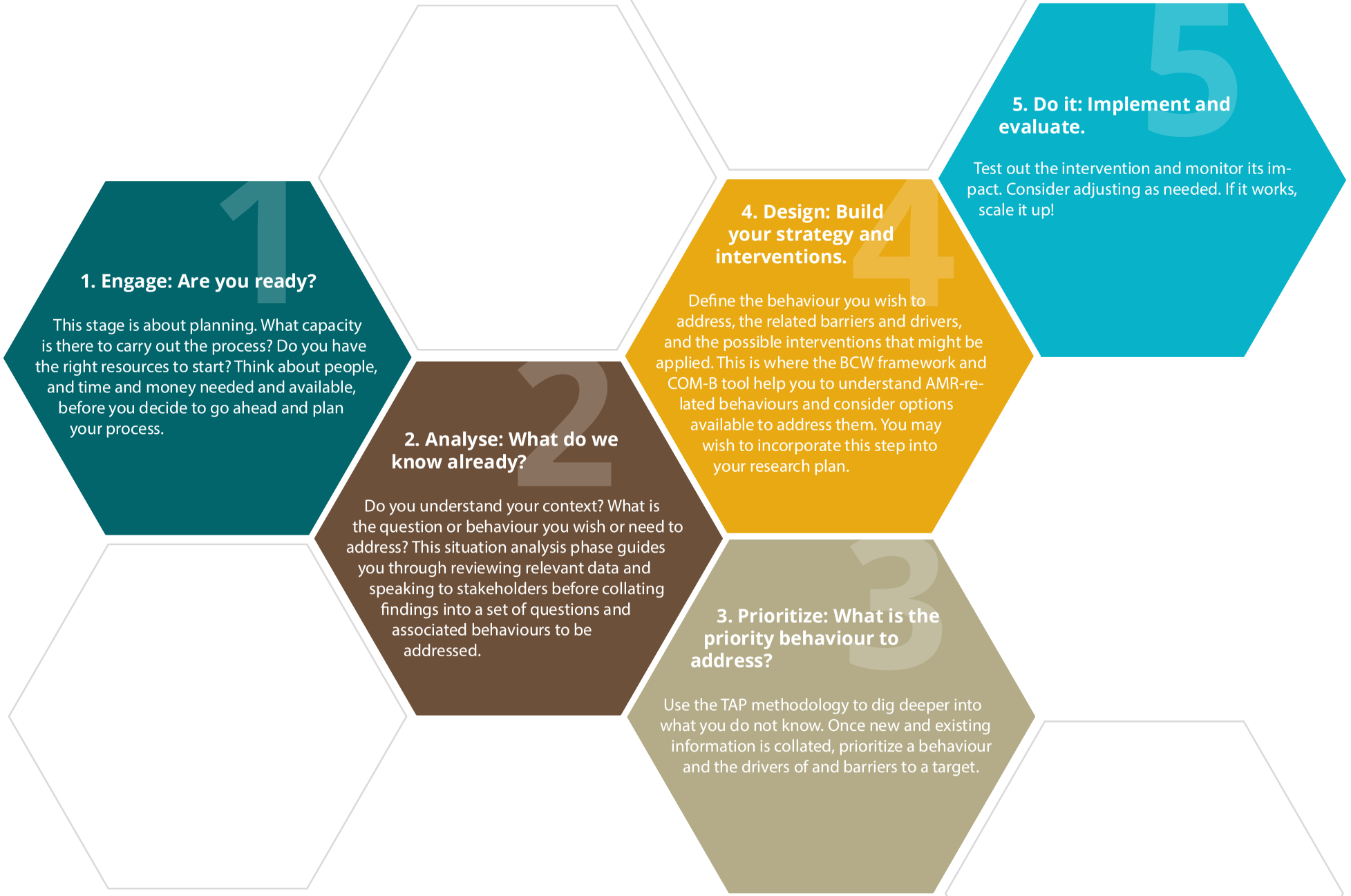


Fig. 5. The TAP process

1

The TAP process

1. Engage. Are you ready to start?

Step:
Engage

Output:
A decision on whether to go ahead, and a TAP assessment report that includes available resources, context, budget and process indicators

Consider whether you are ready to start the TAP process

Guidance is provided below on methods and processes to follow for three issues when considering whether you are ready to start the TAP process:

A. independently thinking about the most important challenge(s) in your context, at both the national and subnational levels;
B. considering what human and financial resources are available; and
C. starting to develop a TAP project plan.

Objectives: Stage 1

- Bring people together to discuss whether the TAP process is the right approach for the behavioural challenge you wish to explore.
- Build support among stakeholders, confirming the timing is right and that necessary human and financial resources are available to move forward.

Note: This is not a phase that will define the detailed problem area, target group or interventions, but it is a moment to build the programme structures, team and some excitement to move forward.

1.A Thinking about the most important challenges

You may have an idea already of the detailed behavioural challenges that you want to address, or you may not know where to start. Either way, a thorough review of the current AMR situation will help set the scene for the entire TAP process. Depending on your needs as a Member State, this review can be conducted:

- at the national and subnational levels, to generate a general understanding of trends in AMR; or
- within a particular area of the country or a subpopulation with a high AMR risk or priority, to examine issues as they relate to that population.

Based on this review you can:

- conduct a preliminary analysis based on identified challenges around AMR;
- consider the strengths, weaknesses, opportunities and threats in current practices on AMR at the national or subnational levels;
- identify important stakeholders and potential interventions;
- determine key challenges in reducing the spread and pace of AMR, and converting these challenges into strategic priorities; and
- recognize where the gaps in information about the problem or issue lie, and plan for additional research that can be applied for the intervention.

Methods

Read through and answer the questions in the 'process' section below and use the Tools 1.1 and 1.2, Exercise *Thinking about the most important challenges* of the TAP Toolbox to help you to prioritize the most important AMR problems to tackle in your TAP project.

Process

To consider the important challenges in your context, ask yourself the following questions.

- What are the most important challenges facing AMR at the national and subnational levels? Are these topics relevant or urgent? Why?
- Are there particular issues, populations, or behaviours that are critical to your AMR work? Where are they happening? With whom? And what are the related behaviours you would like to explore further? Do you have any hypotheses or evidence to explain the situation?
- What are you expecting to achieve from the TAP? Is the TAP process the right process?
- What do you know about the topic, population or targeted behaviour already? Is this supported by data, or is this your hypothesis?
- Who are the key stakeholders (experts, advisory group, working group)? Do you have their support to conduct research? Is there broader political momentum and support for a TAP project?

Output

Through answering the questions above and using Tool 1.1 and 1.2 of the Toolbox, you should have a prioritized list of AMR-related issues in your context that you would like to consider addressing as well as details on whom to involve.

1.B What resources do you have?

The TAP process needs commitments of time, people and funding. To assess whether the TAP process is feasible in your context, take stock of what resources are available. Resist the temptation to do too much too soon. Start small, incorporate lessons learned, and then scale up. Below are a set of questions you should ask yourself before starting a full TAP process.

Methods

To get an idea of available resources, conduct meetings and internal discussions between key stakeholders. This could include the Ministry of Health, WHO Country Office, AMR advisory groups, or other implementing partners at the service level working in AMR. Use tools in Exercises *Suggested stakeholder profiles to consult and engage in your TAP working group* and *Budgetary considerations for the TAP process* in the TAP toolbox.

Process

Use the following questions and tools in the TAP Toolbox to identify available resources.

- **People:** (human resources). Who do you need? Consider, for example, day-to-day work or any specialists or consultants you might need.
  - » See the tools in Tools 1.3–1.5 in Exercise *Suggested stakeholder profiles to consult and engage in your TAP working group* in the TAP Toolbox, which provide some ideas on which stakeholders to consult.

- **Money:** (financial resources). How much do you think this will cost? Is there funding? Will you need more?
  - » See the tools in Tool 1.6 in Exercise *Budgetary considerations for the TAP process* in the TAP Toolbox for budgetary considerations for the TAP process.

- **Time:** How much time will you need? Remember that the time it may take to design and implement a TAP process will vary depending on the identified issue, the context and amount of available resources (including the availability of dedicated human resources). Some countries may have already conducted research and may want to go straight to intervention design, while other countries might want to focus more on early stage capacity building, stakeholder engagement and further research.

Output

Using the tools and exercises above, by the end of this stage, you will have an understanding of the resources that are required and available to undertake a TAP project.

1.C Start developing your plan

At this point in the TAP process, you now have enough information to start developing a specific TAP project for your context. To start, you will need to make a TAP project plan (TAP plan), which will begin with developing a TAP Assessment Report. The TAP Assessment Report must include the project, timeline, budget, funding options and key roles and responsibilities. The headings below provide an outline of a TAP plan.

Methods

The TAP working group will put the TAP plan together through meetings and internal discussions. You might decide to bring in external experts, consultants, partners, or other stakeholders as needed as part of the planning process.

Process

Here are steps for developing the TAP plan:

1. **Think about your key stakeholders and set up your TAP working group.** Who the relevant stakeholders are, and how to best engage them, depends on the context. Some individuals will be actively engaged in the TAP working group while others will only be consulted via workshops or interviews.

Consider the following:

- Who do you need to include in the group?
  - » Identify the skills and expertise needed.
  - » Identify who will lead and define the roles of other members.
  - » Consider additional stakeholders, advisors or experts that you might include (e.g. experts, researchers, opinion leaders, health workers, local community organizations, institutions).
  - » See the tools in Tools 1.3–1.5 in Exercise *Suggested stakeholder profiles to consult and engage in your TAP working group* in the TAP Toolbox, which provide some ideas on which stakeholders to consult.

- Agree on how the group will be coordinated.

- Consider whether the TAP working group is representative of the community conducting the behaviour you wish to change.

- Clarify expectations and develop terms of reference for the group(s).
  - » See Tool 1.8 in the TAP Toolbox for a sample terms of reference for the national TAP working group.

Tool 1.4 in the Toolbox sets out a proposed governance structure that may be useful to consider. Depending on your selected behaviour, resources available, and context, you may not need all the groups as set out in the tool.

2. Timeline: ***This should be adapted depending on your needs***. The time it will take to design and implement a TAP project varies depending on the issue, context, resource and evidence available. While the initial phases can be fairly quick to plan and conduct, both the initial planning and implementation phases can take longer if research is required. That said, the TAP process is a flexible process, so it may make sense to start with a shorter, smaller, targeted project that could then be scaled up into something bigger. With dedicated staff, available data and funding, an intensive TAP project can be planned in a matter of weeks.

Some estimates on how much time it might take to plan and implement a TAP project are provided in Table 2 below.

Table 2. Estimated times for TAP Process Phases

Stage	Estimated time (months)
Engage – are you ready?	2–6
Analyse – what do you know already?	3–12
Prioritize – what is the priority behaviour and the drivers and barriers we need to address?	3–12
Design – build your strategy and interventions	1–6
Do it – implement and evaluate	6–18

True behaviour change can take years, so be sensitive to opportunities that may nudge people to the desired behaviour, while continuing to work on more fundamental change.

Many decisions must be made quickly and with limited information and data. The tools presented in the guide can be useful even when there are information or research gaps to be filled. When developing a timeline, it is important to think about additional information needed to make decisions or to ensure that relevant options are properly discussed.

3. **Budget:** Costs depend on the context and issue under investigation. When assessing whether the necessary financial resources are available, the TAP working group needs to consider:

   a. the TAP process itself
   b. the future and ongoing implementation of an intervention.

See Tool 1.6 in the TAP Toolbox for potential cost items related to a TAP process.

4. **Milestones:** Identify process indicators to help ensure desired outcomes are reached. Using process indicators allows you to track progress against desired outcomes. See Tool 1.7 in the TAP Toolbox for a sample process monitoring framework.

Output: TAP Assessment Report with recommendations for each section on whether to proceed.

Development of the TAP Assessment Report can be completed by a WHO consultant or a member of the TAP working group. The report should include a summary of each of the above items for consideration (context, available resources, milestones, people, budget and process indicators), as well as clear recommendations on whether to initiate a TAP project or not.

Please note that you may need to revisit this TAP Assessment Report after you have gathered data to better define your target behaviour, target group or other factors relating to the TAP process. The next stage, 'Analyse', may also reveal gaps in your knowledge for adequately framing the research purpose and objectives. Don't be concerned. Evidence or a lack of it can help frame analysis and sharpen problem definition in subsequent phases.

2. Analyse. What do you think you know already?

Step:
Analyse. Review data and engage stakeholders

Output:
A detailed situation analysis based on a review of existing data and knowledge

Build on what you already know about the challenge

- Building off the work in Stage 1, review existing data and evidence to establish a baseline knowledge of the situation through the methods outlined below.

Objectives: Stage 2

- Gain an in-depth understanding of the problem you are trying to address by obtaining:
  - » an overview of existing evidence regarding AMR in the country and in specific population groups; and
  - » stakeholder input and support to inform the situation analysis and strengthen stakeholder ownership and support of the TAP process.

2.A What do you know already?

Methods

The following represent some potential methods:

- desk review and literature search of existing data, guidelines and studies
- TAP Working Group meetings
- stakeholder workshop(s), discussions or interviews
- documentation of process through the development of a situation analysis report.

For the desk review and literature search of existing data, guidelines and studies, data sources could include national, subnational, or district level AMR data. This might include: disease surveillance data; data on antibiotic prescribing, dispensing and susceptibility testing; surveys about population awareness and perceptions; national, subnational or district level guidelines and strategies; traditional and social media

coverage; and peer-reviewed articles. A more detailed list of data and information sources is available in Tool 2.1 in the TAP Toolbox.

Process

Review existing data and evidence to establish a baseline knowledge of the situation. The following represent potential guiding questions.

- What is the scale of the AMR problem (e.g. prevalence of AMR in the country)? What are the patterns of antimicrobial consumption in the country? How do people currently access antimicrobials?
- What guidelines and regulations exist, and are they being followed? What is the political climate for working on AMR?
- Who are the most important stakeholders that might influence AMR behaviours? Who could you involve? What is their role?
  - » To help you answer these questions, see Tools 2.3 on Stakeholder Mapping in the TAP Toolbox.
- What are the social and environmental drivers, changes in population, or demographics and lifestyle factors that influence the issues? How are AMR issues communicated? What are different groups' knowledge of AMR?
  - » Pay particular attention to social determinants, and any differences in practice across income, gender, ethnic and geographic groups.
  - » To help guide you in this step, see Tool 2.2 in the TAP Toolbox, which includes questions to guide the data review.

After reviewing existing data, conduct a stakeholder workshop(s), discussions and/ or interviews, to help ground evidence and cross-check the findings from the analysis of the data.

- See Tool 2.4 in the TAP Toolbox for methods to help you conduct a key stakeholder workshop.

Output: Situation analysis report

Based on the discussions, exercises, and evidence gathering, present the key findings coherently. The format may vary but could include the following elements.

- Introduction to the focus area. Examples could include:
  - » AMR surveillance data and activities, including at the national, subnational, or local hospital level;
  - » infection prevention and control;
  - » antibiotic prescribing at primary, secondary or tertiary care level;
  - » antibiotic dispensing practices (through pharmacies or online sale);
  - » antibiotic consumption practices among high risk groups;
  - » antibiotic susceptibility testing;
  - » population-level awareness and perception of AMR.
- Country context
- Summary of key findings from the review
- Stakeholder map
- Recommendations regarding gaps.

After gaining further understanding of the problem you're trying to solve from this analysis, it may be important to revisit your Capacity Assessment from Stage 1 to assess whether the investments for the TAP process (time, human resources and funds) are still feasible.

3. Prioritize. Identifying target behaviour(s) and group(s)

Step:
Prioritize target behaviour and population group

Output:
Confirming a target behaviour, population group and drivers and barriers to achieving it

Defining and prioritizing the problem for intervention design:

In the third stage, you will start to specify the parameters of your TAP project. You will:

A. present findings, identify the priority behaviour(s) and target population(s), and consider further research needs;
B. plan research to understand and prioritize the target behaviour(s); and
C. conduct research and summarize findings.

Objectives: Stage 3

- Consolidate and use the information from the situation analysis and stakeholder consultations to:
  - define the problem, target behaviour(s) and population group(s) to be addressed by the TAP project; and
  - identify if further research is required to better understand the problem.
- Conduct further research (if required) to more closely define the problem.

Work at this stage applies the BCW and COM-B model to help identify behaviours, and how to influence them. Tools are provided in the Toolbox to help guide you through this.

3.A Presenting findings and identifying target behaviour(s)/population(s)

Methods

- Engage and consult the TAP working group.
- Organize a one- or two-day workshop including additional stakeholders who may not be part of the working group.

Process

First, present your findings from the situation analysis, including a summary of the data and any preliminary conclusions on target behaviours, knowledge gaps or research priorities, to the TAP working group.

Following this, and based on the existing knowledge and data, work with the TAP working group to define the problem to be addressed in the TAP project. To do this, work through the questions outlined in Table 3 below and use the tools in exercises: *Defining the problem in behavioural terms*, *Mapping of behaviours* and *Prioritize target behaviours and identify target groups* in the TAP Toolbox.

Table 3. Questions and actions to help you define the problem

Action	Subquestions/ subactions
Summarize what has been learnt from the situation analysis	● What are the knowledge gaps or behaviours that need to be addressed? ● Does the group agree on 1–2 clear gaps or behaviours to address in the TAP project?
Define the target behaviour and target group	● Confirm there is a clear behaviour to address through the TAP process. ● Confirm there is a clear target population group.
Consider the behaviour change scenario	● Are any existing behaviour change interventions currently in place? ● Is there a need to adapt an intervention that is already in use?
Define the problem in behavioural terms and select the behaviour(s) and target group(s) to focus on	● What is/are the behaviour(s)? » Remember: Even though you might select one AMR-related behaviour, there might be different target groups performing the behaviour or connected behaviours. You might need to consider each behaviour separately. ● Who performs the behaviour(s)? ● Where does/do the behaviour(s) take place? ● Prepare a **conceptual map** of the behaviour(s) to help organize information and guide the design of any further analysis (see Tool 3.2 in the Toolbox). Challenge any assumptions and ask yourself what might stand in the way of the behaviour being changed. ● Consider each behaviour and assess the following criteria analysis (see Tool 3.3 in the Toolbox): » **Impact** – how much of an impact could addressing the behaviour have? How long might this take? » **Changeable** – How likely is it that the behaviour can be changed? Consider what improvement might look like. » **Spillover** – How likely is it that the behaviour will have a positive or negative impact on other, related behaviours? » **Measurable** – How easy will it be to measure the behaviour? ● Use the COM-B framework to explore drivers of and barriers to the performance of selected behaviour(s) by the target group(s) (see Exercise *Selecting barriers/drivers to target in your behaviour change intervention*, Tools 4.1–4.2 in the Toolbox). ● Use the information gained from above to identify any other research objectives or information needs.

Output

Develop a report based on the findings of the workshop(s) and/or working group meetings. This report should:

- provide a summary of Stage 2 findings (situation analysis report)
- define the target behaviour(s) and group(s), and COM-B related drivers/barriers
- outline any gaps in knowledge that need to be filled through further research.

3.B Plan research to understand and prioritize the target behaviour, as required

Methods

- Hold TAP working group meetings to develop a research plan.

Process

After completing the steps in 3A above, you might need to conduct further primary research to better understand the target behaviour(s) or population group(s) that you'll be designing the intervention for.

Should the TAP working group decide that further in-depth research is required, the first step will be to develop a research plan to develop a research protocol, obtain ethical approval for research from the relevant national ethics committee, and begin research after approval is received.

The following exercises and tools in the TAP Toolbox can assist with developing a research plan:

- Exercise *Using the COM-B framework to understand drivers of and barriers to a behaviour and to identify research objectives* provides guidance on transforming results of 3A into research objectives.
- Exercise *Designing a research plan* provides an overview of steps to take when designing a research plan, including an overview of qualitative, quantitative and mixed-methods methodologies.
- Tool 3.4 provides guidance on the contents of a research protocol.
- Further guidance on obtaining ethical approval is available in Tool 3.5.
- The strengths and weaknesses of qualitative and quantitative methods are available in Tool 3.6, and tips on data analysis are available in Tool 3.7.

Developing a research protocol
Guiding questions to developing the research protocol include:

- What are the overall questions to which answers are required? These should cover capability, social opportunity, physical opportunity and motivation.
- Which kind of quantitative, qualitative or mixed study design is useful to answer these questions?
- Which members of the target group(s) will be targeted, how many and where, and how will they be recruited?
- Who will conduct the research and what will be their roles and responsibilities?
- Who will develop the data collection tools, such as questionnaires?
- How will the data be analysed?
- What is the timeline?
- What is the budget?
- Where should ethical approval be sought?

Outputs

- Research protocol(s), including time plan and budget
- Ethical approval
- Alternative outcomes: a decision to revisit the situation analysis or go straight to Section 4 because sufficient knowledge and evidence is already in place.

3.C Conduct additional research and report findings

The objectives of this step are to (1) obtain further insights into the barriers to and drivers of specific AMR-related behaviours in selected target groups identified in step 3.A, and (2) to summarize research findings, prioritizing specific behaviour(s) and group(s).

Methods
The specific methods for conducting research will depend on the needs identified in step 3.B. Qualitative, quantitative, mixed-methods studies or action research studies might be used to answer the research questions.

Outputs
The findings of further research should be compiled in a report that outlines:

- the issues for which further research was required and how research was conducted
- a description of findings on the target behaviour(s) or target group(s)
- identification of COM-B barriers to and drivers of the target behaviour(s) for each target group
- clear conclusions based on research findings and on how to proceed with the TAP process.

4. Design your intervention. How can you respond?

Step:
Design your intervention

Output:
Intervention agreed, designed, and funded

Designing your intervention

The tools and exercises in Stage 4 guide you to creatively develop potential solutions and interventions, using the information gained from the previous stages. You have by now identified your target behaviour and group. You also have an understanding of the drivers of and barriers to your selected AMR-related behaviour. By understanding the target group and their behaviour you can now consider how to influence them to perform the required behaviour to reduce AMR. In this stage, you will use the tools provided to consider possible interventions.

In Stage 4, you will:

- **A.** agree on drivers/barriers to be addressed
- **B.** agree on interventions
- **C.** consider and prioritise possible intervention activities and policy support
- **D.** plan for monitoring and evaluation (M&E)
- **E.** document the intervention development process.

Objectives: Stage 4

- Design and plan interventions that best address the barriers and drivers identified
- Develop a M&E framework
- Consult stakeholders to obtain their input and support, as needed

Methods for 4.A–E

Across the steps in Stage 4, group work, evidence reviews, and potential further light-touch data collection can be carried out as needed.

4.A Agree on drivers/ barriers to be addressed

Clearly define the target behaviour and the target group the TAP project will focus on, as explored through Stages 2 and 3. Use the COM-B framework to explore all drivers and barriers to performance of the selected behaviour. Consider each driver and barrier against the following criteria:

- **Need/urgency** – how important is it to address the barrier or driver?
- **Feasibility** – is it realistic, practical, or possible to address the barrier or driver?
- **Evidence** – do you know enough about the barrier or driver to develop interventions (e.g. from formative research, the situation analysis, or other insights)?

At this step, you may decide you need more information. You can consider speaking to key stakeholders about the feasibility of collecting more information or conducting research, or identify light-touch methods (desk review, phone survey, data interpretation, etc) for addressing the knowledge gap. Using this information, select a final set of barriers/ drivers to address. Exercise 4.2 *Selecting barriers/drivers to target in your behaviour change intervention* in the TAP Toolbox provide a helpful template to facilitate this process.

4.B Agree on interventions

The BCW model (see page xi) describes seven kinds of intervention functions to guide development of activities. The intervention functions with examples of activities are outlined in Table 4 below. Exercise *Select intervention functions for selected barriers or drivers* in the TAP Toolbox will help guide you through the process of identifying potential interventions for each of your selected barriers and drivers. Activities may be small or large scale.

Table 4. Intervention functions with definitions and examples

Intervention function	Definition	Examples of activities
Information/ Education	Increasing knowledge or understanding	• Poster campaign on the risks of health care-associated infections • Facts on safety and effectiveness of hand hygiene provided on employee pay slips • Leaflets containing Information on infection control measures (i.e. 'the British National Health Service (NHS) *Catch it, Kill it, Bin it*)
Persuasion	Using communication to induce positive or negative feelings or stimulate action	• Sharing stories of doctors working to tackle drug resistance or stories of patients struggling with the impacts of drug resistance. These aim to influence feelings that lead to action
Incentivization	Creating an expectation of a reward	• Incentives can be modest, such as free movie tickets or meal tokens • Additional annual leave or small salary increment (which could move into coercion depending on size of incentive)

Table 4 contr'd

Intervention function	Definition	Examples of activities
Coercion	Creating an expectation of punishment or cost	• Strict regulations and enforcement of antibiotic consumption at primary, secondary and tertiary health care levels
Training	Imparting skills	• Training clinicians on when to order a microbiology test for patients, e.g. blood culture, etc. to guide the treatment choices. • Training microbiologists in doing antibiotic susceptibility testing • Training nurses on correctly taking blood samples for culturing for reliable results
Restriction	Using rules to either (i) reduce the opportunity to engage in the target behaviour, or (ii) increase behaviour performance by reducing the opportunity to engage in competing behaviours	• Health staff that have not complied with hand hygiene guidelines will not be allowed in wards
Environmental restructuring	Changing the physical or social context	• Making hand gels available at common touch points, or high traffic transit points in care settings. • Provide messaging prompts and visible information posters to indicate where there is soap and hand gel available
Modelling	Providing an example for people to aspire to or imitate	• Identifying key influencers and making their behaviours more visible in order to encourage change

4.C Consider possible activities within your interventions

Within the TAP working group, brainstorm potential intervention activities you might use to address each barrier or driver. You can use Exercise *Consider possible activities within your interventions* of the TAP Toolbox to guide you. Consider the following questions:

- What is the activity?
- When will the activity be delivered?
- Where will the activity be delivered?
- Who will deliver the activity?

After developing your set of activities, **prioritize and select the activities** by rating each activity according to the following criteria:

- How affordable is the activity? – Can be it delivered to the target group within budget?
- How achievable is the activity? – How easily can it be delivered to the target group?
- How effective is the activity? – How well does it work in a real-world context?
- How cost-effective is the activity? – How much will it cost to conduct the activity and how does this compare to the potential impact?
- How acceptable is the activity? – How appropriate is it for the selected target group and other stakeholders involved?

Repeat this exercise for each target group. Exercise *Prioritizing and selecting activities* in the TAP Toolbox can help guide you through this process.

Finally, **consider how policy might support the activities**. This includes reviewing possible policy actions using the BCW. Exercise *Considering how policy can support activities* in the TAP Toolbox can help in this step.

4.D Plan for monitoring and evaluation

An important part of intervention planning is developing a M&E Framework, which will allow you to understand your intervention's implementation and impact. A plan for M&E plan will lay out what kind of information needs to be gathered, by whom, when, and how, so that you can keep an account of how your intervention is progressing and what effect it might be having.

The M&E Framework allows you to:

- track and document lessons learned
- continuously refine and improve the intervention
- assess whether the intervention was a success
- explore reasons behind intervention outcomes
- highlight opportunities to adjust, improve, and scale up
- advocate for continued investment.

Exercise *Considering process and impact targets/indicators* in the TAP Toolbox guides you through identifying and recording indicators, i.e. types of data or information used to measure change, relating to the process and impact of your intervention.

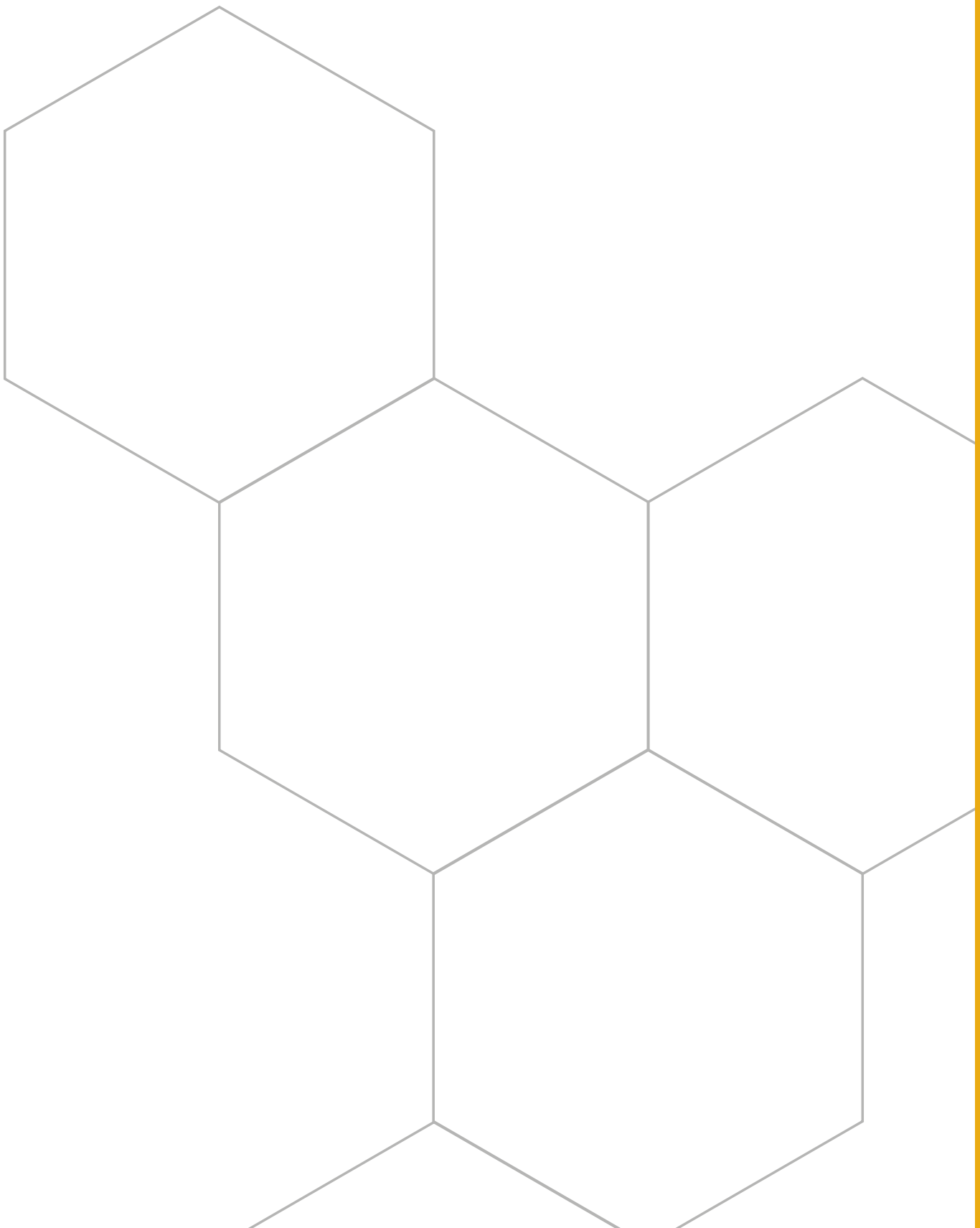
4.E Document the intervention development process

Once you have completed steps 4.A–C, you should create an overview of the decisions made. This will serve as a reference for you, and assist you with reporting and analysis. An overview of the selected barriers/drivers, associated COM-B factors, related intervention functions, and associated activities or policy actions is an integral part of the research plan. Exercise *Documenting the intervention development process* of the TAP Toolbox provides you with a template for documenting this information.

Outputs

Based on steps 4.A–E, you will be able to prepare a comprehensive intervention plan. Prepared by the working group, the contents of this plan will of course depend on the context and questions being asked. An intervention plan will usually include:

- information on the background to the intervention (using information from Stages 1–3);
- overall presentation of the behaviour change intervention: intervention functions, activities and policy actions;
- clearly defined aims and objectives of the intervention;
- detailed description of each activity: scope, purpose, timing, location, roles, responsibilities at all levels;
- detailed description of each policy activity: scope, purpose, timing, location, roles, responsibilities at all levels;
- M&E framework ;
- budget, broken down per activity;
- timeline with milestones.



5. Implement and evaluate. Start doing!

Step:
Implement and evaluate.
Start doing!

Output:
Intervention implemented and evaluated

Delivering the Intervention

Now that you have planned the intervention, it's time to implement it. How this is done, and how long it takes, depends on the project plan and cannot be described in full detail below. Each country context will be different. Make sure that you monitor progress using the M&E plan alongside implementation, integrate evaluation into the process, and allow for real-time adjustments that can be clearly documented.

In Stage 5, you will:

A. implement with ongoing monitoring
B. evaluate and adjust the intervention
C. analyse and scale up.

Objectives: Stage 5

- Implement, monitor and evaluate, refine the intervention while it is ongoing
- Consider intervention results and determine if you can scale up the intervention.

Methods

- Implementation as per the intervention plan
- M&E guided by the M&E framework
- Ongoing and documented refinement and adjustment of the intervention
- Project scale-up

Process

5.A Implementation with ongoing monitoring

Implementation is guided by the project intervention plan. Exercise *Considering process and impact targets/ indicators* in the TAP Toolbox, which helped in developing the M&E plan, provides templates for recording M&E data. This information will help you to consider process and impact as the intervention is being implemented.

Monitoring will happen at different points in the implementation process for different reasons (e.g. setting a baseline for data comparison; mid-point or final evaluation). Depending on whether you are measuring short-term, mid-term, or long-term indicators, you might be collecting different information. Do not be afraid to rethink data collection if you face problems, and document the rationale and solutions.

5.B Evaluation and adjustment

Using the M&E framework, monitor the intervention on an ongoing basis to understand how activities are being implemented, their quality, and whether they are going according to time, budget and expectations. If you find the activities are not meeting these expectations, you should try to understand why this is happening and adjust the intervention if needed. Do not worry if this happens. You can consider returning to activities in Stages 1–4 if needed. Whatever you do, make sure to document the process.

5.C Final evaluation and scale-up

At the end of the intervention, you should develop a final report based on the analysis of the data that has been collected during the implementation period. This report might explore, for example, changes in the identified COM-B drivers/barriers, progress against the aim of the intervention, and measures of equity. The details of your report will be specific to your project.

Based on the data analysis, you will be able to consider the outcomes of the intervention and whether it should be adjusted and scaled up, if further research is required, or if attention should be paid to another issue or behaviour. Again, your decision will be based on the results of the intervention.

Scale-up and adjustment decisions should be made through the TAP working group following a discussion of the evaluation and M&E findings. Scale-up must be considered carefully given that interventions were designed using a specific behavioural insights approach relevant to the group being targeted in a specific context.

Outputs

By the end of the project, you will be able to assemble a series of reports, or one final report outlining:

- the results of the M&E process
- an analysis of intervention results and outcomes
- recommendations for how to proceed, whether to scale up or adjust, or other activities or decisions.

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

Member States

Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Netherlands
North Macedonia
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
Turkey
Turkmenistan
Ukraine
United Kingdom
Uzbekistan

World Health Organization
Regional Office for Europe

UN City, Marmorvej 51,
DK-2100 Copenhagen Ø, Denmark
Tel.: +45 45 33 70 00 Fax: +45 45 33 70 01
Email: eurocontact@who.int
Website: www.euro.who.int

ISBN 978-92-890-5567-3