



EVIPNet Europe - Hungary lessons

Lessons learned in developing an evidence brief
for policy on appropriate use of antibiotics to
combat antimicrobial resistance in Hungary





1. Evidence-informed Policy Network (EVIPNet) and EVIPNet Europe

EVIPNet is a global WHO initiative that promotes the systematic use of health research evidence in policy-making. It is present in all WHO regions and is coordinated at both the regional and global levels. EVIPNet encourages the development of country-level teams, which comprise policy-makers, researchers and representatives from civil society. These actors encourage and facilitate policy development and implementation through the promotion and use of the best available global and local evidence.

In recognition of the need to scale up national efforts to close the gap between research and policy, the WHO Regional Office for Europe launched EVIPNet Europe in October 2012 under the umbrella of the WHO European Health Information Initiative (EHII).¹ EVIPNet Europe follows the same mandate for the WHO European Region as the global EVIPNet; that is, to increase country capacity to develop evidence-informed policy (EIP) on health system priorities. Through its focus on strengthening EIP by capacity-building in knowledge translation, the Network further contributes to the implementation of the European policy framework Health 2020² and to the achievement of the Sustainable Development Goals (SDGs).³

1 European Health Information Initiative [website]. Copenhagen: WHO Regional Office for Europe; 2019 (<http://www.euro.who.int/en/data-and-evidence/european-health-information-initiative-ehii>, accessed 14 June 2019).

2 Health 2020: a European policy framework and strategy for the 21st century. Copenhagen: WHO Regional Office for Europe; 2013 (http://www.euro.who.int/_data/assets/pdf_file/0011/199532/Health2020-Long.pdf?ua=1, accessed 14 June 2019).

3 United Nations General Assembly. Transforming our world: the 2030 Agenda for Sustainable Development (A/Res/70/1). New York (NY): United Nations; 2015 (<http://undocs.org/A/RES/70/1>, accessed 14 June 2019).



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2. Developing evidence briefs for policy (EBPs)

One of the key tools employed by EVIPNet Europe is the EBP, which synthesizes the best available research evidence to answer a specific policy problem in a concise way, is written in non-expert language, and is adapted to the needs of various local stakeholders.

EBPs are based on a systematic search and appraisal of the global, regional and local evidence to understand what is known about the policy issue and which policy options effectively address it. The brief is used to create awareness among policy-makers and other stakeholders of the urgency of a health problem and the need to adopt certain preferred policy options or interventions. EBPs have the potential to improve the likelihood that policy-makers will read, consider and apply the research findings and use them to inform policy decisions.

A series of support tools exist⁴ that can be used to inform the EBP process. The WHO Secretariat for EVIPnet Europe builds capacity in countries to develop EBPs and provides assistance in establishing mechanisms to translate evidence into policy.

4 Lavis JN, Permanand G, Oxman AD, Lewin S, Fretheim A. SUPPORT Tools for evidence-informed health Policymaking (STP) 13: Preparing and using policy briefs to support evidence-informed policymaking. *Health Res Pol Syst.* 2009; 7(Suppl 1):13 (<https://doi.org/10.1186/1478-4505-7-S1-S13>, accessed 14 June 2019).



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3. The Hungarian experience

Hungary, which has been an EVIPNet member since 2015 (as part of the Biennial Collaborative Agreement between WHO Europe and Hungary), undertook the development of an EBP in 2016. The team responsible for the EBP was led by a national EVIPNet champion and included experts from Hungary's National Healthcare Services Center, the Ministry of Human Capacities, the University of Szeged, and the Jahn Ferenc Dél-pesti Hospital and Polyclinic in Budapest, supported by the WHO Country Office.

Based on the available evidence, the Hungarian Ministry of Human Capacities selected antimicrobial resistance (AMR) as a priority topic from a list of topics that the EVIPNet team had identified during a situation analysis. AMR increases the burden of hospital-acquired infections, leads to longer hospital stays, and can have other serious and wide-reaching complications, such as higher mortality rates. The EVIPNet team decided to focus on the specific problem of inappropriate use of antibiotics because this had received very little policy attention previously and addressing it could have the greatest impact at country level.

Creating an EBP is a complex process that necessitates gathering a team of experts to analyse and synthesize a wide variety of knowledge sources. This process can be divided into a number of specific stages. These stages, as they relate to the Hungarian experience with an EBP on AMR, are outlined below. Importantly, before this process began, the Hungarian EBP team participated in an extensive EBP training programme, provided by the WHO Secretariat for EVIPNet Europe and its expert collaborators. This included a series of webinars and a face-to-face training session. Throughout the EBP development process the team continued to receive support from the WHO Secretariat and the WHO European Region AMR programme, in collaboration with the WHO Country Office and expert collaborators, which included technical assistance and reviews of the EBP.



1

Step 1: assembling the EBP team

The Hungarian EBP team brought together members with a broad range of competences relevant to the topic of the EBP from the areas of epidemiology, infectious diseases, pharmacology, health care quality, and health policy. In particular they included team members with relevant experience on the rules and norms governing the local health system (especially in relation to eventual implementation of the policy option(s) chosen). The team members' expertise was later complemented by key informant interviews.



2

Step 2: using data, literature reviews and interviews to understand the problem and develop relevant policy options

The EBP team relied primarily on data on antibiotic consumption in Hungary to understand the extent of the problem. However, other important sources of information included systematic reviews (when available), together with individual studies and grey literature. As a first step, systematic literature reviews were used to obtain a broad overview and identify key potential causes of inappropriate prescribing at different levels of the health system, as well as to develop a problem tree to underpin the EBP (Fig. 1). This was verified by local research and data. The team then analysed data on antibiotic use in Hungary and assessed the culture of the Hungarian health system at different levels.

Having identified key aspects of the problem, the team then relied on expert knowledge to select options to address it. These were developed directly from the problem tree. To assess the potential effectiveness of the options, relevant systematic reviews were searched for and accessed, appraised for their quality, synthesized and complemented by individual studies and grey literature, WHO guidelines, and guidance from the European Centre for Disease Prevention and Control (ECDC), as well as local studies.

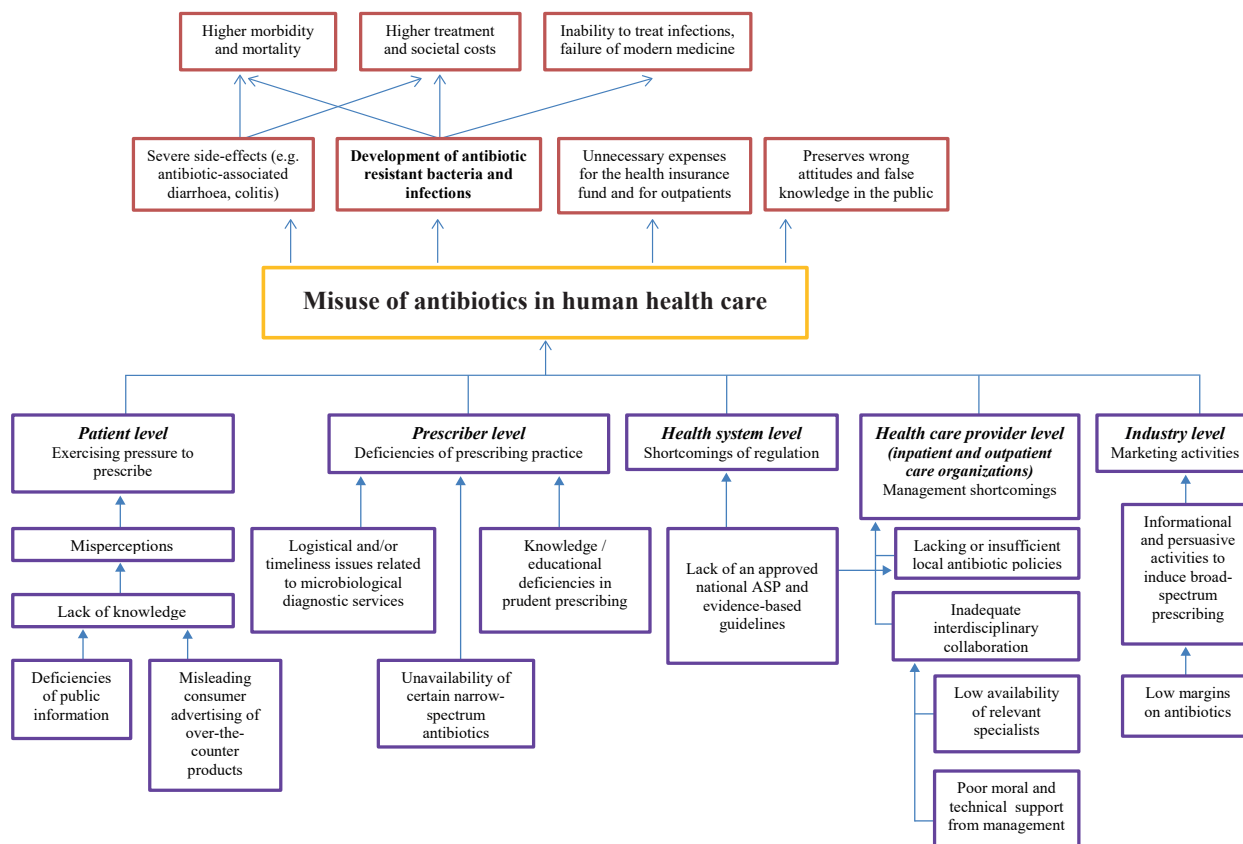


3

Step 3: identifying stakeholders and consulting them at various stages of the process

Mapping stakeholders was the third step involved in preparing for the EBP process. Key informant interviews were conducted with these stakeholders to identify potential barriers to and facilitators for implementing the options. This served to ensure different perspectives were represented during the stage of considering policy responses, and to ensure that the final product would be useful and implementable.

Fig. 1. Problem tree for the EBP on AMR in Hungary



Source: Hajdu Á, Szilágyi E, Kurcz A, Benkő R, Matuz M, Székely É et al. Policy brief. Promoting the appropriate use of antibiotics to contain antibiotic resistance in human medicine in Hungary. Copenhagen: WHO Regional Office for Europe; 2018 [EVIPNet Evidence Briefs for Policy Series No. 2]. Annex 5.

4

Step 4: revising and refining the EBP to consider implementation

Writing the initial draft of the EBP involved significant effort to appraise systematic reviews, analyse their content and develop three options to address the problem of inappropriate use of antibiotics in Hungary. The draft version of the problem and the options sections were circulated for review both by the Hungarian EBP team and the WHO Secretariat. Once this initial draft was completed, the Hungarian EBP team worked to fill any gaps in their knowledge on issues related to the implementation of the policy options. They conducted interviews and used analysis of various legal documents and published governmental reports to identify potential barriers to implementation and opportunities for overcoming these.

Interview participants included key national stakeholders identified in the earlier step (Step 3). For example, health professionals and policy-makers were asked about how diagnostics and prescribing practices could be improved and the measures (e.g. legal, educational, infra-structural) necessary to achieve these improvements.

5

Step 5: finalization and publication of the EBP, and convening a policy dialogue

The EBP went through a formal process of external peer- and merit-review and was finally presented at a meeting of stakeholders (known as a policy dialogue) to discuss the EBP findings and its policy implications. A total of 30 stakeholders from Government, health care organizations and academia actively contributed to the discussions. They acknowledged the high quality and value of the EBP and expressed a willingness to work together to overcome obstacles to rational antibiotic use in Hungary.

The final EBP went through a formal WHO clearance process, which takes into consideration both the methodological and technical aspects of the document. The final EBP is accessible on the WHO Regional Office for Europe's website.⁵

⁵ Hajdu Á, Szilágyi E, Kurcz A, Benkő R, Matuz M, Székely É, et al. Policy brief. Promoting the appropriate use of antibiotics to contain antibiotic resistance in human medicine in Hungary [EVIPNet Evidence Briefs for Policy Series No. 2]. Copenhagen: WHO Regional Office for Europe; 2018 (http://www.euro.who.int/_data/assets/pdf_file/0004/373918/ebp-hun-eng.pdf?ua=1, accessed 14 June 2019).



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4. 10 lessons learned from Hungary's experience with developing an EBP on AMR

The Hungarian experience of successfully developing an EBP provides some valuable lessons about the potential challenges faced and ways to overcome these.



1. Keep the *target audience* in mind

An EBP should be adapted to policy-makers, and when considering how to frame the problem, the target audience should always be considered.

In the case of Hungary it was found that the qualifications, professional standing and interests of readers should be kept in mind.

The language should also be easy to understand and it is important to avoid overly technical jargon.



2. Define the *key terms* early

Key terms relating to the problem and options addressed by the EBP must be clearly and carefully defined, from the beginning of the process.

For the Hungarian EBP, some terms were found to be too broad or ambiguous in the literature (e.g. antibiotic stewardship), making it difficult to frame the options precisely.

To help develop the EBP with a focused approach, all team members must agree on central definitions and terminology and how these apply in the country context.



3. Define the *scope* of the EBP

The scope is limited, so it needs to be made explicit to decision-makers that the EBP is not a full policy programme document.

The Hungarian team decided the level of detail that it was feasible to include in the proposed policy options, and ensured stakeholders maintained realistic expectations by communicating clearly the scope of these options.



4. Allow sufficient *preparation time*

It is crucial to estimate the preparation time and workload that will be required of team members as precisely as possible and to communicate this to them in advance, so that they can decide on their participation with full awareness of what will be involved and expected.

In Hungary, it took over a year to develop the first EBP. The team needed to explicitly discuss the time commitment at the beginning of the process and it was important to emphasize the workload involved beforehand. For the first part of the EBP, it was thought that at least 40 days full-time equivalent expert working hours were required.

It was also found to be important to clarify how much time each team member could commit, and then assign responsibilities accordingly, to avoid anyone feeling overwhelmed.



5. Recruit knowledgeable and committed *reviewers*

Recruiting knowledgeable and committed reviewers is paramount in making this work successful.

The Hungarian team found that reviewers should be contacted well in advance – the time needed to incorporate their comments into the EBP should not be underestimated, as it may necessitate several rounds of rewriting.

The WHO Regional Office for Europe Secretariat for EVIPNet Europe played a key role in reviewing the Hungarian EBP, and the Hungarian team also reached out to national and international experts in a range of disciplines through the Network.



6. Define a broad *search strategy*

The team should use a broad literature search strategy at the beginning of the review process, including all related key words, to reduce the chances of missing relevant literature.

The Hungarian team defined a relatively narrow search strategy at the start and found that as they progressively gained a clearer idea of the problem and the content of policy options, they needed to add to their search to find relevant documents. They felt that it would have been more efficient to have a broader search strategy from the beginning, even if it resulted in more sources to review initially, as well as possibly to ask an English-speaking expert on the subject matter to review the search terms.



7. Maintain continuous *communication* among the working group

To ensure agreement on the definitions and key concepts being used, it is important to have regular exchanges and discussions, especially face-to-face meetings, despite their potentially high cost in expert time.

For the Hungarian EBP, workshop days were found to be useful, whereby the experts and members of the EBP team could work together. However, the effectiveness of these workshops tended to decrease if the number of participants was too high – it worked best to have four to five members for conceptualization, and two for the actual writing part of the process.



8. Involve people from a *broad range of competences*, but *keep the working group small enough to work efficiently*

A broad composition of expertise is an important strength in the process of developing an EBP, but sometimes having too many high-level experts involved can be cumbersome.

One of the key strengths of the EBP process in Hungary was the contribution of medical and health policy experts, who had substantial prior knowledge on the issue of AMR. However, the Hungarian team found that these people were more effectively included as key informants, rather than working group members, due to their busy schedules and competing priorities, and that keeping the core EBP team small was an efficient approach. Proficiency in (especially written) English was also essential to the team, in order to conduct, review and appraise international reviews.



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9. Clearly define *roles* at the beginning of the process

Developing an EBP requires substantial team effort and time commitment. Thus, it is crucial to identify suitable experts and define team roles clearly at the beginning of the process.

The EBP team in Hungary tried to allocate suitable responsibilities to the relevant experts, but sometimes the assignment of these responsibilities to high-ranking officials with little time to spare created confusion.

In addition, the administrative and political landscape of AMR in Hungary was found to be highly complex, with a multitude of stakeholders involved and each with diverse responsibilities. It was important to obtain a sound understanding of what role each stakeholder would play in advance of the policy dialogue.



10. Identify a *dedicated support team to coordinate and monitor the development of the EBP*

A dedicated team in place to help to manage the whole process of EBP development can ensure that goals are achieved.

In the case of Hungary, some members of the EVIPNet country team, including knowledge translation and policy experts, acted as a support team throughout the EBP. They coordinated the process and supported the team of experts writing the EBP as much as possible, including by ensuring methodological rigour, accessible language, coordination with stakeholders, and so on.

The final EBP being handed over to former WHO Head of Country Office, Hungary, Dr Zsafia Pusztai



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