GUIDANCE FOR WHO STAFF

A SYSTEMATIC APPROACH FOR UNDERTAKING A RESEARCH PRIORITY-SETTING EXERCISE
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GUIDANCE FOR WHO STAFF
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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CAM</td>
<td>Combined Approach Matrix</td>
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<tr>
<td>CHNRI</td>
<td>Child Health and Nutrition Research Initiative</td>
</tr>
<tr>
<td>COHRED</td>
<td>Council on Health Research and Development</td>
</tr>
<tr>
<td>ENHR</td>
<td>Essential National Health Research</td>
</tr>
<tr>
<td>EPS</td>
<td>Emerging Technologies, Research Prioritization and Support</td>
</tr>
<tr>
<td>G-FINDER</td>
<td>Global Funding of Innovation for Neglected Diseases</td>
</tr>
<tr>
<td>GPW13</td>
<td>Thirteenth General Programme of Work</td>
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<tr>
<td>HALE</td>
<td>Healthy Life Expectancy</td>
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<tr>
<td>ISRIA</td>
<td>International School on Research Impact Assessment</td>
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<tr>
<td>NCBI</td>
<td>National Center for Biotechnology Information</td>
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<tr>
<td>PIPE</td>
<td>Plan, Implement, Publish and Evaluate</td>
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<tr>
<td>PsPs</td>
<td>Priority-setting Partnerships</td>
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<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
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<tr>
<td>RFH</td>
<td>Research for Health</td>
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<tr>
<td>TDR</td>
<td>Special Programme for Research and Training in Tropical Diseases</td>
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Acknowledgements

This guide for WHO staff was developed by a WHO Science Division working group chaired by John Reeder, Director of Research for Health and Director, TDR (the Special Programme for Research and Training in Tropical Diseases).

The lead author was Robert Terry. Working group members were: Moazzam Ali, Fernando Althabe, Tasnim Azim, Christopher Chadwick, Moredreck Chib, Shona Dalal, Philippa Easterbrook, Nathan Paul Ford, Claudia M. Garcia Moreno Esteva, Sami Lynne Gottlieb, Nebiat Gebreselassie, Tanja Kuchenmüller, Rosamund F. Lewis, Ann Moen, Ahmed Mohamed Amin Mandil, Arno Muller, Tim Nguyen, Soatiana Cathycia Rajatonirina, Ludovic Reveiz, Anna Laura Ross, Vaseeharan Sathiyamoorthy, Fatima Serhan, Nahoko Shindo, Jonathon Simon, Olumide Ogundahunsi, Joseph Chukwudi Okeibunor, Maria Van Kerkhove and Sachiyo Yoshida.

The guide was edited by David Bramley. Design and layout was undertaken by Lisa Schwarb.
I see the setting of research priorities, in a credible and transparent way, as a core function of the World Health Organization. Therefore, it was an early priority for me, following the creation of the Science Division in 2019, to develop guidance and provide support for the many WHO staff who manage these exercises.

We recognize staff might be providing technical assistance at country level to develop a national research plan or they could be coordinating a global or regional roadmap to combat a particular disease. As there is no single pathway or approach to setting research priorities, this guidance is designed to be adaptable and relevant for use in many different settings and contexts.

The Science Division working group that developed this guide, including colleagues from the regional offices, worked hard to review the available literature and assess the different tools that have been published to provide a comprehensive range of advice which draws on their own practical experiences. In addition to this guide we shall also support the coordination of a WHO Community of Practice in this area to encourage the sharing of learning and experience from across the Organization.

As I write this foreword the world is in the midst of a global pandemic due to the outbreak of COVID-19. As such, it has never been clearer to me of the importance of identifying correctly the health issues we must prioritize for research. My hope is that this document will provide the guidance needed to strengthen our work in this area.

Dr Soumya Swaminathan
Chief Scientist
September, 2020
WHO IS THIS DOCUMENT FOR?
ALL WHO STAFF

This document provides guidance to all staff of the World Health Organization who need to plan and manage a research priority-setting exercise. This guide is based on a collection of good practice examples and methodologies drawn from across WHO and more widely. The document sets out a systematic approach to guide you to Plan, Implement, Publish and Evaluate (PIPE) your research priority-setting process.

HOW SHOULD THIS DOCUMENT BE USED?
TO GUIDE PLANNING AND IMPLEMENTATION

The document guides you through a series of steps where decisions need to be taken. It provides a template in Annex 1 for designing your priority-setting exercise. The guidance has been developed to enable a flexible approach that is suited to all types of research priority-setting, whether focused on single diseases, national approaches or global roadmaps and whether you involve a small group of experts during an emergency or undertake a global consultation over a number of months.

This document also shows you where to get advice and help.

WHY SHOULD YOU USE THIS DOCUMENT?
FOR CLEAR REPORTING AND EVALUATION

This document provides a systematic guide to assist you in planning and implementing a quality research priority-setting exercise that will match the context you are working in. The resulting exercise should contain legitimate and credible priorities that have been developed in an ethical and equitable manner. The objectives will support achievement of WHO’s Triple Billion Goal: a billion more people with universal health coverage, a billion more people protected from health emergencies and a billion more people with better health and well-being.

The resulting research priorities that are developed can then be reported, clearly describing how and why the priorities were identified and who has responsibility for implementing them.

This document will help you to review and monitor the impact of the exercise in order to measure how it met your original objectives and how it might be improved if repeated.
SETTING HEALTH RESEARCH PRIORITIES
GUIDANCE FOR WHO STAFF

BACKGROUND
A review of WHO research priority-setting (2002–2018) was published in 2019. The review highlighted that plenty of good in-house experience exists across the Organization. The review contained 115 research documents describing more than 2000 priorities. These documents are organized for reference in a simple database that was published with the review. However, the review revealed there is also a high degree of variation in the approaches used to identify these priorities – with limited use of a clear priority-setting methodology, no standard approach to publishing the priorities, and rarely any evaluation to assess the impact of an exercise.

Consequently, the WHO Chief Scientist established a working group under the Research for Health department, Science Division, to develop guidance for staff to improve practice for research priority-setting. This guidance document is one of the outputs of that working group. Other mechanisms of support include the creation of a WHO Community of Practice; staff members can draw on the experience of this group to assist in planning priority-setting exercises.

INTRODUCTION
This guidance draws on work that was first published as part of the WHO Strategy on Research for Health with additional input provided by the working group convened by the Science Division. The document provides WHO staff with a structure to follow, questions to answer and options to choose from when designing a priority-setting exercise that matches the context they are working in. NB: While the guide is organized systematically; you should always be prepared to revisit initial assumptions to ensure that all sections are aligned.

The research priorities that are developed can be reported, clearly describing how and why these priorities were identified and who has responsibility for implementing them. In time you will be able to monitor the impact of the exercise to measure how it met your original objectives. This document will help you to review and monitor the impact of the exercise in order to measure how it met your original objectives and how it might be improved if repeated.

The document will also allow you to compare the impact of different exercises that have taken place at different times and identify where improvements could be made.

The objectives should support achievement of the WHO goal to ensure that a billion more people have universal health coverage, protect a billion more people from health emergencies, and provide a billion more people with better health and well-being. The research priority exercise should also conform to the guidance and codes of conduct relating to research, as set out in the WHO eManual with particular reference to the WHO Code of Good Research Practice.

WHERE TO FIND HELP
Support for research priority-setting exercises managed by WHO staff is coordinated by the Emerging Technologies, Research Prioritization and Support unit (EPS) in the Research for Health department (RFH) within the Science Division. For further information, contact aross@who.int.

The EPS unit manages a Community of Practice for Research Priority-setting. EPS will put you in touch with staff who have experience in setting priorities and who can guide you on the choice of the best methodology. They can advise and help you to plan and implement your exercise.

The blue urls are links to internal WHO documents that are accessible only to WHO staff.
To help staff quickly understand and remember the process we have organized this guidance into four phases: PLAN, IMPLEMENT, PUBLISH and EVALUATE (PIPE). These four phases comprise a series of steps based on the common themes of good practice identified in previous reviews. The phases are summarized in Figure 1 which gives a quick overview of the research priority-setting cycle.

**Use the template to guide you in planning**

It is recommended to download and use the template provided in Annex 1 as you read through this guide. By using the template as a checklist you will be able to systematically consider the options available to you and match those options to your context. It is very important to note that there is no gold standard or single approach to priority-setting; however, there is a requirement to report transparently how the priorities were set. WHO is asked to provide assistance at many different levels, whether focusing on a single disease or technology, creating a national approach or developing a regional or global roadmap.4,5 Designing the right priority-setting exercise will therefore require you to balance the scope of the project and the objectives you wish to achieve against the available resources and timeframe. Remember that monitoring the implementation of the identified priorities and ultimately evaluating the impact of the exercise could require a plan that covers 5–10 years.

Each exercise in research priority-setting is different and not all the steps will apply or be appropriate in your context. However, as in reporting a research project, all WHO priority-setting processes should contain the same steps, namely: objectives, context, methods, priorities, implementation and a monitoring and evaluation plan. This will enable you to publish your priorities as a quality document in a transparent way and learn from previous exercises to improve your work in the future.

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**Figure 1. Overview: a systematic guide for WHO staff when setting research priorities**

**PLAN**
- Define the objective - what change do you want to make and why?
- Who are the priorities for and in what context?
- Identify resources (time-finance-staff).
- Review what has been done before.
- Design a method to match your context – ask RFH unit for help.
- Review to ensure all sections are aligned.

**IMPLEMENT**
- Decide who needs to be involved - be representative and inclusive in line with context – think about local, economy, equity and gender.
- Involve stakeholders to agree the priority criteria (e.g. public health benefit, feasibility, cost, timescale).
- Agree method for selecting priorities (e.g. consensus versus metrics).

**EVALUATE**
- Decide on an evaluation plan to measure impact.
- From the plan, monitor the changes you wanted to see: awareness, uptake, translation, impact (e.g. +/- funding flows, improved public health).

**PUBLISH**
- Develop a dissemination strategy to maximize awareness and uptake.
- Be transparent: publish a clear report that describes the methods used and the stakeholders involved.
PHASE 1: PLAN

The planning phase is where you design the exercise to match it to the specific context you are working in. You will need to agree who the priorities are for and why the priority-setting is needed. Decisions have to be pragmatic, so designing the right priority-setting exercise will require you to balance the objectives you wish to achieve, usually as a measure of public health benefit, against the resources you have available to you, including staff, time and funding. You will need to make choices and be prepared to publish in an open and transparent manner about why those choices were made. In effect, you are describing a theory of change such that the research priority-setting exercise will influence stakeholders in the research system to support and implement research that will have a positive impact on public health.

Understand your context and define your objectives

Understanding and defining your context is key. A clear focus or scope must be defined for the exercise and should answer the following questions:

- Why are the priorities needed?
- Who are the priorities for?
- Who will take up and implement the work to meet these priorities – individuals, institutions, government?
As this is guidance for WHO staff you will also need to ensure that the objectives contribute to WHO’s Triple Billion Goal: a billion more people with universal health coverage, a billion more people protected from health emergencies and a billion more people with better health and well-being. The accompanying manuals in the General Programme of Work 13 (GPW13) give guidance for deciding on appropriate measures of health impact. In particular, you should read Methods for Impact Measurement to understand Healthy Life Expectancy (HALE) as the preferred WHO indicator that provides a summary measure of average levels of population health. HALE quantifies the expected years of life spent in good health. HALE will be used for GPW13 baseline reporting and for monitoring progress for each Member State. HALE will facilitate cross-country comparisons as well as comparisons within countries over time.

Before you commence your process you will also need to receive clearance if the final output is to be considered one of the WHO Global Public Goods.

Describe the public health need your exercise will address

Public health need can be described by a number or combination of factors. The most common factors you will need to consider are:

- Which disease outcomes and risk factors will you target?
- How will the research priorities address these factors?
- What change do you want implementers to make: greater awareness, an influence on behaviour and/or change in action (e.g. to alter funding patterns)?
- What is the level or scope of your exercise? Is it a global exercise (e.g. a roadmap) or is it regional, national, subnational or even at an institutional or departmental level?
- What time frame will the priorities cover? Will it be immediate as in an emergency, or over a number of years as in a horizon planning exercise that sets priorities for 5, 10 or even 20 years?
- Who and where are the target populations of the research (e.g. children, older persons, poorer populations, those living in urban versus rural areas)?
- How long was it since the last review? Do current strategies need updating?

Agree on the principles and values that guide your priority-setting exercise

Careful planning is important to establish a prioritization exercise that meets the initial expectations and sets achievable objectives. Several contextual factors underpin the process of research priority-setting. As described above, these can be practical considerations about the resources you have available in relation to the focus of the exercise.
However, it is also important to be aware of qualitative considerations such as the values that stakeholders adhere to, and the health, research and political environment in a country. The actions of WHO staff should be in line with the Values Charter of WHO.\textsuperscript{6} Consideration of these qualitative factors will influence the prioritization process and the eventual research priorities. They should therefore be explored explicitly from the beginning of the exercise. Health-care providers may have a different list of what a priority is compared to patients, community workers or policy-makers.

Consequently, the values or principles of an exercise should be agreed and stated. This means a research priority is not based solely on a quantified need, such as disease burden, but on a qualitative decision such as fairness (e.g. to focus on a rare disease to ensure universal health coverage).\textsuperscript{7, 8}

Examples of value judgements include:

- Should priorities be cost-effective or equitable, or should they combine both criteria?
- How do the priorities relate to achieving universal health coverage?
- How will the priority-setting exercise ensure appropriate gender-based analysis?
- Should there be an emphasis on a particular disease or population group (e.g. research for children, sex workers or migrant populations)?
- What are the external demands for the exercise (e.g. political or commercial) that have an influence?

It is likely that principles or values may diverge between different stakeholders or disciplines and, if so, differences should be resolved in a fair and legitimate manner. This is most typically explored through stakeholder engagement and dialogue during the exercise process. The greater your inclusiveness the more likely you are to hear a wider range of opinions. Therefore, it is important that the process to decide what you will prioritize – and, more importantly, what you will NOT prioritize – is open and transparent. This will not protect your exercise from criticism but it will enable you to direct criticism to the method and seek improvement in the deliberations or data you have used in choosing between priorities.

**Understand the political environment**

For country-level exercises, it is important to understand the health, research and current political environment of the country and to be aware that environments are dynamic and will change. Ensuring you have a plan to engage the right stakeholders will promote both their ownership of the process and the subsequent integration of priorities into activities provided by national health research systems. In understanding the political environment you need to understand:
Review what is already known and what has been done before

It is always good research practice to review work that has been undertaken previously in an area. There are many ways to better inform the priority-setting process. One has to choose which types of information are necessary, as identified in the early stages of the planning phase.

To find the most useful types of information:
1. Conduct a review of previous WHO-authored research priority documents.¹
2. Look for answers to the following questions:
   • What are the current health strategies of national and international research agencies to identify which stakeholders are already most engaged in this area?
   • What is currently being funded?
   • What is the current burden of disease – and how does it relate to health issues?
   • What is known about the risk factors or the determinants of the problem?
   • How feasible are potential interventions?
   • What is the cost-effectiveness of interventions versus the need for prevention?
   • What are the current resource flows towards particular research areas and are there funding gaps?
   • What evaluations or implementation research studies exist that may challenge accepted practice?

WHO has a number of resources to assist you. Many sources of data are collected under the WHO Data Platform and the two most relevant are the Global Health Observatory and the WHO Observatory for health R&D. If you are developing a specific health product (pharmaceutical, vaccine, diagnostic or other medical device) you should consult the WHO Health Product Profile Directory to review the current product development landscape. It might also be beneficial to engage with the appropriate WHO collaborating centres to undertake some of this review work and analysis.
Analysing the information collected above should enable you to categorize the need for new research and begin the process of deciding how to choose between the priorities for your exercise.

Much of this information will be published in the academic literature so you will need to find those reviews that are already available or decide if you have the time and money to commission a new review. It is also very important to scan the grey literature for reports, strategies and evaluations which may not be published in English in order to gain more understanding of local context.

An initial survey of broad stakeholder views of priorities or opinions on matters related to the research area, or a review or impact analysis of previously established priorities, can serve as preparation before the main priority-setting exercise.9, 10

The WHO Research for Health Strategy developed a simple framework to map or visualize current research efforts across five categories of research. The framework covers research to:

- describe the epidemiology of a health issue;
- identify the cause and risk factors that are the determinants of the health issue;
- develop solutions and new interventions – often R&D but including new policies and other interventions;
- understand the barriers to implementation;
- evaluate the impact of the intervention.

These are the five areas of activity the RFH department aims to support. The 2018 review used this framework to compare different research strategies across WHO to enable a comparison between research strategies in different areas.1 This simple framework is one tool that can be used to engage stakeholders in a visual way to explore their perception of the current spread of research response. For example, for a specified health issue you can map funding flows or estimate where current research efforts lie – this might highlight a strong emphasis on developing new interventions but limited research on evaluating what works. This mapping can enable you to compare the research strategy across different research areas in order to analyse different strategies. For instance, we can use the framework to create a representation of the research priorities identified by WHO programmes by mapping all the priorities onto the same framework as shown in Figure 2. Figure 2 shows that WHO has prioritized research activity across the spectrum of research with an emphasis on understanding implementation. Stakeholders can then discuss whether this representation of the research strategy matches their perception of public health need.
Research priority-setting is needed at different levels: global, regional, national, local within countries, and within organizations. For some health topics, priorities will be the same at all levels. For most, however, priorities will reflect the context they are seeking to address. Research priorities from different levels can be used to inform each other. For global exercises, awareness of national and regional research priorities is important in reaching an inclusive research agenda that is relevant to national and regional contexts. The development of national health research agendas in turn can benefit from awareness of local research priorities set by primary care teams.\(^1\), \(^2\), \(^3\)

The final step in the planning phase is to develop the indicators you will use to monitor progress towards your objectives. The evaluation phase in this document gives guidance on some of the qualitative and quantitative measures that might be appropriate for your exercise.

Consulting persons or organizations with previous experience in health research priority-setting as part of the preparatory work can help you to obtain a higher quality process for setting priorities. The RFH unit will assist you in identifying contacts through the WHO Community of Practice for Research Priority-setting.

**Inclusiveness – decide who needs to be involved, be as representative as possible and consider equity and gender**

Although objective approaches to health research prioritization that are based solely on burden of disease data or cost-effective analyses
do exist, most literature on health research priority-setting considers stakeholder involvement to be an indispensable part of the process. It is recommended to undertake a stakeholder analysis; a number of practical guides are available to assist you in this exercise. What will your different stakeholders want, what knowledge will they bring? You need to identify which stakeholders need to be involved directly in the research priority-setting exercise, why their opinions need to be sought and what role they should play in the process (e.g. providing opinions, providing evidence or being a part of the group that decides on priorities).

Stakeholder involvement can take different forms, from being made aware through communications to being actively involved through surveys and workshops. For large exercises, such as a national strategy or a 5-year global disease roadmap, you might consider organizing the stakeholders into regional groups to better manage the exercise. While subject experts are definitely needed, creating stakeholder groups that are diverse and representative is better than bringing just one type of expertise together. Again, for large exercises you might consider the establishment of steering groups which may give key stakeholders a more prominent role. Such steering groups could include representatives of patient groups, research funding bodies, economists, ethicists and journalists. The greater involvement of these groups from the beginning will increase their awareness of the process and hopefully their uptake of the final priorities. For global or regional exercises, ensure appropriate representation from WHO headquarters and/or the regional or country office.

Fair involvement of stakeholders is important. Priority-setting exercises should strive for appropriate representation of different areas of expertise and for balanced gender, ethnic and regional participation. In prioritization exercises for country-level research, stakeholders’ involvement in the process ensures legitimacy and fosters the integration of research priorities into the current health system planning cycle and infrastructure in countries.

Different sectors and constituencies that could potentially be involved are, for instance, patient groups, policy-makers, funders/donors, the private sector, and members of the public. The interdisciplinary nature of public health suggests a role for many different disciplines in setting research priorities – including health researchers and medical practitioners (often several medical professions and health research disciplines have relevant knowledge), economists, sociologists and many others. For national exercises, tools are available to assist in the mapping of possible stakeholders. A transparent method should be agreed upon to manage potential conflicts of interest in personal, professional and commercial areas.
In principle, broad stakeholder involvement (multisectoral and multidisciplinary) is beneficial to the outcomes of a research priority-setting exercise for several reasons:

- It minimizes the chances of research topics being overlooked. Different groups of stakeholders tend to prioritize research differently.
- Participation in the exercise fosters ownership of the established priorities among those involved, thus increasing the chances of implementation of the priorities.
- Broad participation enables priorities to correspond to the needs of those who will implement and those who will benefit from the research priorities. As such, the prioritized research will be a better response to societal and policy needs, increasing the overall credibility of the exercise and the potential impact on health and health equity.
- Broad stakeholder involvement may prevent unnecessary duplication of prioritization efforts and hence avoid wasting of resources.

Lastly, appropriate leadership of the priority-setting process needs to be identified. This can be in the form of, for instance, an executive committee or an advisory group that provides overall guidance on the prioritization process, while a larger core working group or decision-making group actually decides on priorities. Good leadership can be pivotal in creating and sustaining a high-quality priority-setting process.

Conflicts of interest need to be managed particularly where commercial entities are involved. Consequently, it is necessary to follow WHO processes for managing expert groups and managing potential conflict.

**Design a method to match your context**

There are a number of comprehensive approaches to health research priority-setting. These approaches are described as comprehensive because they provide structured, detailed, step-by-step guidance for the entire priority-setting process, covering many of the points in this document.

Note that these approaches start from the assumption that the priority-setting exercise is broadly based in order to select research priorities across a health system at either national or global level. These approaches guide in the preparatory work of an exercise, in deciding on priorities, and in what to do after priorities have been set. Understanding these approaches is therefore advantageous and their use should be considered particularly when support is provided to Member States for national health priority-setting exercises.

However, many WHO-led research priority-setting exercises focus on a single health issue or disease, albeit at global level. Therefore we
recommend that you should inform yourself of published methodologies and, more commonly, you should use this guidance document and the resources referenced to design a method that matches your context.\textsuperscript{30}

Again, the WHO Community of Practice can provide advice and guidance to assist you.

\textit{NB: It will be important to keep a record of the method you decide to use so that it can be clearly reported as part of the publication of the final priorities.}

Table 1 provides a matrix that reviews these approaches in more detail, providing a summary, discussing strengths and weaknesses, and giving links to the original publication. A review of different tools and methodologies used in health research prioritization was also undertaken by the Department of Maternal, Newborn, Child, Adolescent Health and Ageing.\textsuperscript{31}

In addition, the Council on Health Research and Development (COHRED) published a document aimed at supporting the management process for national-level exercises. This high-level approach explains important steps of a priority-setting process for national-level exercises and discusses a wide range of tools and approaches to use in the process shown in Table 1.\textsuperscript{32}

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\hline
\textbf{SUMMARY STRENGTHS WEAKNESSES} \\
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\textbf{Essential National Health Research (ENHR) approach (published 2000)}\textsuperscript{33} & \textbullet Focus on health research priority-setting for national-level exercises. The ENHR approach provides guidance for the entire process of setting priorities for health research on a national level. It is a step-by-step manual for facilitators of a national priority-setting process. & \textbullet Detailed listing of priority possibilities/options. & \textbullet Discussion and decisions on funding based on participants’ own views and knowledge. \\
& \textbullet Defines who sets priorities, how to get participants involved, the potential functions, roles and responsibilities of various stakeholders, information and criteria for setting priorities, strategies for implementation and indicators for evaluation. & \textbullet Involvement of a broad range of stakeholders. & \textbullet Identified interventions and research questions are not compiled in a truly systematic way. \\
& & \textbullet Significant engagement with experts. & \textbullet Minority voices can become lost (e.g. research for orphan diseases or research for new interventions takes priority over research for carers.). \\
& & \textbullet Good for national and health system strategies where universal health coverage is necessary. & \\
\hline
\end{tabular}
\caption{Summary of common research priority-setting methods}
\end{table}
### SUMMARY

<table>
<thead>
<tr>
<th>STYLE</th>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
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| **Combined Approach Matrix (CAM)** *(published 2009)* | • Focus on the structured collection of information. The CAM offers a structured framework for the collection of information according to several important criteria for research priority-setting and takes into account the influence of different actors and factors. The process for deciding on priorities is consensus-based.  
• Focus on the structured collection of information. The CAM offers a structured framework for the collection of information according to several important criteria for research priority-setting and takes into account the influence of different actors and factors. The process for deciding on priorities is consensus-based.  
• Systematic listing of all relevant information so that decisions made by the members of committees are based on all relevant and available information rather than their own personal knowledge and judgement.  
• Consensus on the final priorities is a combination of metric- and value-based decision-making. This can increase ownership of the priorities by participants.  
• Does not in itself represent an algorithm for making decisions on the priorities by ranking competing investment options, or for differentiating the two alternative research strategies according to their priority.  
• Identified interventions and research questions are not compiled in a truly systematic way.  
• Consensus reached by panels of experts and danger is that decisions may be driven by the research interest bias of individual experts.  
• Design by committee can lead to safe or average outcomes.  
• Hard to reach easily-understood priorities (e.g. the Top 10 priorities).  
• Can result in obvious priorities (e.g. a vaccine for x without a strong evidence base). |  |
| **Child Health and Nutrition Research Initiative (CHNRI)** *(published 2006)* | • Fundamental principle of the method is the notice of the “wisdom of crowds” by soliciting collective wisdom of experts by independent scoring of research ideas. The method provides comprehensive guidance to the process of research prioritization.  
• The CHNRI process is coordinated by a management team, consisting of methodological experts and technical experts, which decides on the scope and context of exercises and predefines criteria.  
• The CHNRI approach has been used for both global and national exercises.  
• Systematic listing of research questions.  
• Independent ranking of research ideas minimizes risks of one strong-minded individual’s opinion dominating opinions of others.  
• Process is systematic and repeatable, with flexibility to modify the process; however, it is not possible to modify research questions once scores are assigned. Everything that led to the final list of priorities is recorded, is repeatable, can be reviewed, can be challenged and can be revised at any time based on feedback.  
• The process could result in generation of a large number of research questions. Scoring can be a very exhausting process for participants (can feel very mechanistic at times), resulting in delay in obtaining responses from them.  
• A full CHNRI might be too heavy for certain exercises.  
• Role of non-experts is limited to selection and weighting of criteria.  
• Consensus-building is incorporated in methods (e.g. selection of areas of research, weights given to criteria) but not formally after the priorities are set. |  |
### SUMMARY

**PHASE 1: PLAN**

<table>
<thead>
<tr>
<th>Child Health and Nutrition Research Initiative (CHNRI) <em>(published 2006)</em></th>
<th><strong>SUMMARY</strong></th>
<th><strong>STRENGTHS</strong></th>
<th><strong>WEAKNESSES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Individual questions are scored against predefined criteria. Technical experts independently score each research option.</em></td>
<td></td>
<td><em>Provides a comprehensive framework for scope, context, research domain, criteria and scoring options.</em></td>
<td><em>Scoring may be affected by ongoing research in which self-selected participants have relevant interests.</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>James Lind Alliance Priority-setting Partnerships (PSPs) <em>(current)</em></th>
<th><strong>SUMMARY</strong></th>
<th><strong>STRENGTHS</strong></th>
<th><strong>WEAKNESSES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>PSPs bring together patients and clinicians within a health system to identify treatment uncertainties as topics for research.</em></td>
<td></td>
<td><em>A clear and proven method to identify the Top 10 priorities which are easy to communicate.</em></td>
<td><em>Narrow focus on clinical settings exploring treatment.</em></td>
</tr>
<tr>
<td><em>The approach describes how to combine the patient experience and the clinician and/or carer experience with systematic reviews to identify where evidence is weak or absent (treatment uncertainties).</em></td>
<td></td>
<td><em>Can engage a wide and representative range of views.</em></td>
<td><em>Works well in a high-income setting with an integrated health system.</em></td>
</tr>
<tr>
<td><em>PSPs adapt the Delphi technique and use workshops to triage preliminary priorities to identify a Top 10 list of priorities.</em></td>
<td></td>
<td><em>Step-by-step guidance that gives a strong voice to patients.</em></td>
<td><em>Requires recruitment of participants by clinicians and online, and availability of relevant systematic reviews.</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Delphi techniques <em>(since 1950s)</em></th>
<th><strong>SUMMARY</strong></th>
<th><strong>STRENGTHS</strong></th>
<th><strong>WEAKNESSES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Delphi is primarily a forecasting technique for surveying the opinions of experts about how a particular area may develop (e.g. grand challenges in a health area).</em></td>
<td></td>
<td><em>Can engage large numbers through online surveys – the wisdom of crowds.</em></td>
<td><em>No single methodology agreed upon so it requires some expertise in development of questions and criteria.</em></td>
</tr>
<tr>
<td><em>In health research priority-setting Delphi can be used to structure a ranking process through repeated surveys of experts.</em></td>
<td></td>
<td><em>Metric-based so the priorities can be ranked and analysed in databases.</em></td>
<td><em>Limited opportunity for dialogue as response is from isolated individuals.</em></td>
</tr>
<tr>
<td><em>This iterative approach can reduce a preliminary list of priorities to a final set of priorities which may or may not be ranked.</em></td>
<td></td>
<td><em>Useful first step in collecting opinions and perception.</em></td>
<td><em>Can be prone to response bias (only interested parties reply) and survey fatigue as diminishing numbers of stakeholders reply to repeat surveys.</em></td>
</tr>
</tbody>
</table>

---

13
Adhering to an existing approach will generally improve the quality of
an exercise and make reporting transparent. However, this depends
entirely on the context of the priority-setting exercise in question and
whether use of such an approach is appropriate, or whether develop-
ment of one’s own method is the preferred choice.

The list of approaches provided here is not exhaustive but the aim of this
guide is to provide a synthesis of the key elements drawn from a review
of the main approaches. Other forms of guidance are available, such as
when setting the research priorities for a particular research method.
Examples of guidance and tools within WHO include health system
research undertaken by the Alliance for Health Policy and Systems
Research and implementation research supported by the Special
Programme for Research and Training in Tropical Diseases (TDR).38,39
While approaches that help set priorities for health service delivery can
provide some useful insight, they should not be confused with methods
for prioritizing health research.40

Planning for implementation

Health research priorities that are set by an organization or country to
inform its own funding policies are likely to be linked with implementation
strategies. For WHO, it is often the case that, while it has responsibility
to convene stakeholders to set research priorities, it is not often directly
responsible for their implementation. Consequently, planning for imple-
mentation should be a key part of the planning phase and should not
be left until after priorities are established.

As stated above, it is important to decide who the priorities are being
set for and what the different target groups need. The stakeholder
exercise should identify in advance which stakeholders are required to
be included in the exercise to ensure a feasible and sustainable imple-
mentation of established research priorities. For instance, the involve-
ment of policy-makers and funding organizations from the beginning
means that support for the priorities is more likely and increases the
opportunity for research priorities to be translated into actual research.
PHASE 2: IMPLEMENT

In this phase you put your plan into action with a timetable agreed with the stakeholders who you identified as appropriate for the context. There is no ideal time limit. In an emergency, timescales need to be truncated wherever possible and might be limited to immediate literature reviews and one or two intensive consultations. For a global strategy focusing on research needs for a specific disease, the process of engagement is very valuable and 6–12 months of implementation is not unreasonable. The WHO Research for Health Strategy took 18 months to develop, including in-depth workshops held at each Regional Office. Deciding on the timescale is one element of the planning process and is also a pragmatic decision based on the resources available to you.

Define your selection criteria with stakeholders

In the planning stage you will have decided on the method you will use to manage the priority-setting process – either one of the methods described in Table 1 or an adaptation that better suits your context. One element of your method will be to decide on the criteria used to define and separate the priorities. An extremely useful exercise to increase ownership of the priority-setting exercise by participants is to use them to develop these criteria and agree how the priorities will be chosen. Involving your participants and stakeholders in this step will underpin your exercise with credible and transparent criteria that demonstrate how the priorities were developed.
The criteria are used to focus discussion on research priorities and to ensure that important considerations are not overlooked. They allow for different research dimensions to be balanced against one another according to the identified values or principles of the exercise, as reflected in variation across different exercises and comprehensive approaches to research priority-setting. For WHO, an overarching consideration is how the priorities contribute to achieving the Triple Billion Goals.

Simply put, these criteria can be categorized across three dimensions (Figure 3):

1. Public health benefit (the potential return from doing the research).
2. Feasibility (whether the research is scientifically possible and the capacity sufficient).
3. Cost (the amount of resources – time, money, staff and equipment – to complete the research).

**Figure 3.** The three categories of criteria against which different research options can be considered.
Choosing and balancing between these dimensions is at the heart of setting priorities because each dimension has constraints. For example, we need a vaccine that may take many years to develop at great expense but ultimately has very high public health benefit. However, while this is a long-term priority, the scientific feasibility might be very low and other public health measures – such as prevention – may need to also be put into the strategy. In many WHO contexts there will be additional limitations about funds for the research – e.g. neglected disease areas, or the local capacity to undertake research in a resource-limited country.

Examples of criteria are listed in the methodologies highlighted in Table 1. Some of the major considerations about the value of undertaking the research include:

- the likelihood of reducing the disease burden;
- cost-effectiveness of the outcome;
- local research capacity to undertake the research;
- access considerations – such as whether the solution will match the needs of a poor population and whether they will be able to afford it;
- the degree of equitability, sustainability and ethical considerations.

### Methods for deciding between priorities

Several different methods can be used to decide between priorities, as shown in Table 1. These methods fall broadly into two groups with different emphases – consensus-based approaches and metrics-based approaches. The former leads to priorities decided by group consensus while the latter focuses on metrics or an algorithm that results in pooling of individual rankings of research options. In addition, consensus-based methods tend towards improving the acceptability of the exercise, while a scoring system dampens down the dominance of minority but vocal stakeholders. An example of a consensus-based approach is in the Combined Approach Matrix (CAM) which allows for value-driven priorities to be made. This means that all identified priorities have some resources put to them as is often the case in national exercises – which is a key outcome to achieve universal health coverage. Given that all stakeholders are typically not equal and are knowledgeable in different areas, it is especially important for consensus-based approaches to take into account the diverging values and viewpoints of stakeholders. There are several methods available to do this, often described as deliberative dialogues.

Two examples of approaches with an emphasis on metrics are the Delphi techniques and the CHNRI method. The Delphi method was first developed by the RAND corporation in the 1950s but has subsequently been adapted for many situations. Within the realm of health it is most commonly used to survey the opinions of experts in order to forecast the development of a health area – e.g. the future health needs of a health system with respect to ageing populations. For health priority-setting it can be used to narrow down a preliminary...
set of priorities through a series of repeated surveys in an iterative process.47

The CHNRI approach to research priority-setting provides specific guidance for the process of setting research priorities from planning to implementation. It offers a comprehensive framework for the identification of research priorities that pools independent scores of research options. The CHNRI approach has been used for both global and national exercises.36,37

The final output of a CHNRI exercise is a list of research priorities ranked in order of the aggregated research priority scores. The process provides guiding principles and specific guidance to users. Research ideas are generated by experts on the basis of the current evidence. Each participant is asked to provide research ideas in the prespecified domain of health research. The ideas are usually submitted online and consolidated by a management team. Once research ideas are compiled, they are sent back for independent scoring to the same group of experts who generated the ideas. This method allows for predefined criteria to be adjusted to reflect the values of the broader community, resulting in recommendations that are more relevant and acceptable. The endpoint of the research prioritization process usually leads to publications that present the top priorities.5,37,42,43,44,45

However, most exercises, such as the Priority-setting Partnerships (PSPs) of the United Kingdom-based James Lind Alliance, use such a list to inform a deliberative dialogue. This can explore such questions as: are these the priorities we want, does it provide the best coverage of the area we want, are there obvious gaps? Using the framework set out in the WHO Strategy on Research for Health you can quickly represent the spread of the proposed research strategy across the research purpose to see if it adequately covers the five areas and to assess whether that approach is appropriate.

The James Lind Alliance has published a step-by-step guidebook on working with patients and clinicians within a health system as PSPs to identify treatment uncertainties as topics for research. The approach describes how to combine the patient experience and the clinician and/or carer experience with systematic reviews to identify where evidence is weak or absent (treatment uncertainties). Patients and clinicians in the PSPs are recruited online and are surveyed in one or two rounds of enquiry using an adaptation of the Delphi technique.46

This generates a preliminary list of priorities for research. Subsequently, groups that are representative of all the participants in the PSP are brought together in a face-to-face workshop. The preliminary list of priorities (treatment uncertainties) is then ranked to provide a Top 10 list of research questions. These Top 10 lists are used by different health research groups within the the United Kingdom of Great Britain and Northern Ireland, including the National Institute for Health Research.
Health Technology Assessment Programme. The United Kingdom research charity the Alzheimer’s Society used this method to provide a Top 10 set of priorities which changed the focus of its research portfolio from one that concentrated solely on treatments for patients to one that also included research to understand and better support the needs of those caring for persons with dementia. The James Lind Alliance website contains links to the guidebook and is updated regularly. This method has been successfully adapted for use in Ethiopia and Uganda to frame stakeholder engagement.

One needs next to decide how to delineate between priorities. This can be done by, for instance, grouping the priorities into “essential”, “desirable” or “beneficial”, or by ranking – i.e. the Top 10 priorities. Participants can be given a system of voting across all the identified priorities in order to produce a metric to help the decision, or participants can be given a certain number of votes to distribute across all the priorities. Where there is a large number of priorities and the coverage needs to be broad, participants can be given a theoretical quantity of units – e.g. 100 which they can decide either to allocate evenly (5 units to each priority) or to weight certain priorities with a higher number of units. This decision-making is an iterative process and can be completed either within a workshop cycle or by using a Delphi approach to undertake a wide stakeholder engagement following a workshop.

The key aim is to reach a consensus with a coherent list of priorities rather than a long narrative (shopping list) of everything that needs to be done. This will make communication easier and will encourage uptake and implementation.
PHASE 3: PUBLISH

This is the phase in which you develop a clear and transparent report of the research priority-setting process and outcomes and generate a communication and dissemination plan to ensure awareness, uptake and implementation of the research priorities.

Plan a publication

When writing a report of the research priority-setting exercise, it is crucial to be as transparent as possible. Potential implementers of health research priorities are unlikely to adopt or use priorities unless they are fully informed of all aspects of the priority-setting process. Transparency increases the credibility, and thus the acceptability, of the final result. Consequently, the report should not be limited to a list of priorities; it should also explain how those priorities were established, and by whom. This entails providing details on which choices were made for the exercise you are describing and why those choices were made.

This guidance makes clear that each research priority-setting exercise is unique and is tailored to match the context. However, just as when reporting a research project, all WHO priority-setting processes should report the steps which are covered by this guide in order to plan, implement, publish and evaluate (PIPE) the research strategy.
Phase 3: Publish

All reports should include a description of the:
• objectives;
• context;
• methods;
• research priorities;
• implementation plan; and
• monitoring and evaluation plan.

The report should also provide references to the background information used and to any related published material such as systematic reviews, information on the stakeholders and their degree of involvement, and how conflict of interest was managed. This will enable you to publish your priorities as a quality document in a transparent way and learn from previous exercises to improve your work in future.

When designing a report, these sections do not need to be in a fixed order as you may wish to highlight the priorities at the beginning and place the methodology and stakeholder sections in a separate appendix. Seek advice from the communications experts in your department and involve them in the process early.

All WHO publications must follow the correct WHO workflow for planning, executive clearance and production clearance. Guidance is regularly updated on the publishing section of the WHO Intranet.

All WHO publications must follow the WHO Policy on Open Access. All WHO publications placed on the web should linked to the document that is deposited in IRIS. This means there will be a permanent digital record and a reliable url.

If publishing an academic paper, you may find the reporting guideline REPRISE useful in structuring the paper.49

Develop a communication and dissemination strategy

Publication is only one part of your dissemination strategy. Work with the communications specialists in your department to devise a plan for dissemination that maximizes awareness and facilitates uptake. You may find it useful to review the WHO Strategic Communications Framework to ensure that your communications are accessible, actionable, credible and trusted, relevant, timely and understandable.

During the implementation phase you may identify stakeholders who can act as champions and can amplify your key messages. These stakeholders may have formed part of a steering group. You might also consider reconvening your stakeholders face-to-face or online to identify the best way to disseminate your priorities.
Consider editorials and attendance at conferences or online webinars. Prepare materials such as PowerPoint slides for your stakeholders to use when talking of the agreed priorities. Keep in mind the need to be inclusive and to ensure that the dissemination strategy uses a mixed method approach to reach all the stakeholders identified in the Planning stage.

Social media is increasingly important in getting your messages widely circulated. Plan to use appropriate images and text to maximize the impact on different platforms.
PHASE 4: MONITOR AND EVALUATE

This is where you develop a plan to measure the impact of your original objectives – usually an improvement in public health which can result from an aggregate of awareness, uptake, implementation, translation and impact of the research priorities.

Monitor and evaluate the priorities – measuring what change the exercise made

While there are many publications on research prioritization exercises, evaluation of the impact of such exercises is the least developed area of research priority-setting. When designing a priority-setting exercise, it is critical to identify what change you are seeking to achieve. In the Planning phase, when deciding on objectives, it is good practice also to decide how you will monitor progress towards those objectives. Undertaking this iterative process will also enable you to align your objectives with your monitoring and evaluation plan and vice versa. There are useful indicators in the GPW13 manual *Methods for Impact Measurement*. In particular, it is important to understand that Healthy Life Expectancy (HALE) is the preferred WHO indicator that provides a summary measure of average levels of population health.

The International School on Research Impact Assessment (2013-2018) was a 5-year international project that produced guidance on measuring the impact of research. The archived website includes many tools and
resources to measure the impact of research. These should be considered and can be adapted to measure the impact of the research priority-setting exercise.50

The first measure of impact of your health research priority-setting exercise is the degree of support for the exercise itself. What did stakeholder participants think of the exercise – are they supportive of the outcome? You can also ask if they will change their behaviour as a result of the exercise. This initial evaluation should be recorded and can be used to inform future work.

The second most important measure of impact is awareness. Therefore it is important that the Publication phase is aligned with a communication and dissemination strategy. The third measure of impact is the degree of uptake of the priorities – i.e. has anything changed as a result of the exercise? Table 2 gives some suggestions of how uptake might be monitored and evaluated.

If the aim is to influence funding flows, it is important to have a baseline measure of current funding levels as part of the Planning phase and a strategy for monitoring changes in funding flows. Changes may result in a reallocation of existing funds to change the shape of the funding portfolio (e.g. increased support for implementation research). Alternatively, the objective may be to increase the total amount of funds either from existing funding sources or by bringing in new sources of funds.

Be cautious about limiting the objective only to seeking an increase in funding as there are many priorities within public health that lack adequate funds. More importantly, a quality priority-setting exercise should be used to describe how to maximize the use of existing resources to achieve public health benefit – analogous to creative thinking inside the box. Similarly, it will have more impact to identify and communicate a specific set of priorities (e.g. the Top 10) than to create a long list of everything that needs to be done. The final scope will need to relate to your original objectives.

The identification of health research priorities should be seen in the broader context of health research coordination and inform funding and policymaking for health research in a sustainable manner. The progress to the objectives should try and incorporate mixed methods with both quantitative and qualitative approaches. Table 2 below gives some guidance on the types of indicators you might consider. Of course, direct attribution between a research priority-setting exercise and outcomes in relation to HALE will be difficult to make. Remember the average time-lag between research being undertaken and its translation into activity can be 10-20 years.

The WHO Community of Practice can also provide advice and will welcome feedback and further input to this section.
<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>HOW</th>
<th>RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Support:</strong> Stakeholders’ satisfaction with the priority-setting process</td>
<td>• Evaluate stakeholder satisfaction during and at the end of the process.</td>
<td>• Survey the original participants (WHO has a licence for Survey Monkey).</td>
</tr>
<tr>
<td><strong>Awareness:</strong> Are stakeholders aware of the priorities and the need to reference them?</td>
<td>• Number of views and number of downloads of published reports.</td>
<td>• Altmetric score.</td>
</tr>
<tr>
<td></td>
<td>• Reference to priority-setting document in academic literature.</td>
<td>• Google analytics on WHO website.</td>
</tr>
<tr>
<td></td>
<td>• Reference in policy briefs, strategy documents of country ministries, national/international funders.</td>
<td>• References in newsletters, links in other websites.</td>
</tr>
<tr>
<td></td>
<td>• Reference in health product profiles.</td>
<td>• NCBI PubMed, Web of Science, Google Scholar.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Health Product Profile Directory.</td>
</tr>
<tr>
<td><strong>Funding volume:</strong> Change in volume of research funding (from baseline recorded during Planning phase).</td>
<td>• Use data from existing surveys, published figures in the literature.</td>
<td>• Global Observatory on Health R&amp;D Report.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• G-FINDER report for poverty-related neglected diseases.</td>
</tr>
<tr>
<td><strong>Funding shape:</strong> Change in shape of research undertaken at national, regional and/or global levels.</td>
<td>• Mapping of R&amp;D efforts, change in scope, coverage, shift of existing funds to priorities.</td>
<td>• In addition to the above, consider bespoke surveys of national, international funders.</td>
</tr>
<tr>
<td><strong>Coordination:</strong> A change in the shape of funding aligned with the priorities is also a measure of improved coordination as an outcome.</td>
<td>• Aggregate of research mapping from above.</td>
<td>• In addition to the above, record invitations to meetings, conferences, invitations to speak.</td>
</tr>
<tr>
<td></td>
<td>• Meetings held with a focus on the priorities.</td>
<td>• Review of published strategies.</td>
</tr>
<tr>
<td></td>
<td>• Published strategies that attribute the priorities.</td>
<td></td>
</tr>
<tr>
<td><strong>Research:</strong> Research undertaken that references the priorities.</td>
<td>• Review of published research outputs – map onto original objectives.</td>
<td>• Bibliometric studies, published research findings, bespoke surveys and evaluations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use of Europe PMC Grant Finder tool to link grants to published research.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Web of Science.</td>
</tr>
<tr>
<td><strong>Translation:</strong> Did the research lead to new interventions or changes in behaviour?</td>
<td>• Analysis of product pipelines, medical devices pipeline or other health interventions.</td>
<td>• In addition to the measures listed above;</td>
</tr>
<tr>
<td></td>
<td>• Reference to the research in international or national guidelines.</td>
<td>• Use of Bookshelf in NCBI Resources to search guidelines.</td>
</tr>
<tr>
<td></td>
<td>• Estimate undertaken of the economic returns on the research.</td>
<td>• Use of ISRIA guidelines.</td>
</tr>
<tr>
<td></td>
<td>• Improvement in the delivery of practice by health workers.</td>
<td>• Use of operational or implementation research to measure behaviour change.</td>
</tr>
<tr>
<td><strong>Impact:</strong> Review of health impact measures (HALE) over time.</td>
<td>• Changes in HALE or health gain over the period since the exercise was undertaken.</td>
<td>• Aggregate review from the measures listed above.</td>
</tr>
</tbody>
</table>

NB: Direct attribution may be impossible to describe and time period between research and impact might be decades.
REFERENCES


35. A new approach for systematic priority setting in child health research investment. Delhi: Child Health and Nutrition Research Initiative (CHNRI); 2006 (NB: No longer online. Request a pdf from EPS).


ANNEX 1.
A SYSTEMATIC APPROACH TO UNDERTAKING A RESEARCH PRIORITY-SETTING EXERCISE: GUIDANCE FOR WHO STAFF

Use this template to guide you in planning

You are recommended to download and use this template as you read through this guide. By using the template as a checklist you will be able systematically to consider the options available to you and match those options to your context. It is important to note that there is no gold standard or single approach to priority-setting. Designing the right priority-setting exercise will therefore require you to balance the objectives you wish to achieve, usually as a measure of public health benefit, against the resources, time and funding you have available.

Where to find help

Support for research priority-setting exercises managed by WHO staff is coordinated by the Emerging Technologies, Research Prioritization and Support (EPS) unit in the Research for Health (RFH) department within the Science Division. For further information please contact aross@who.int.

The EPS unit manages a Community of Practice for Research Priority-setting. EPS will put you in touch with staff who have experience in setting priorities and can guide you in the choice of the best methodology. They can advise and help you plan and implement.

PHASE 1: PLAN

The planning phase is where you design the exercise to match it to the specific context you are working in. You will need agree who the priorities are for and why the priority-setting is needed.

1 - UNDERSTAND YOUR CONTEXT AND DEFINE YOUR OBJECTIVES

Questions to consider¹- write your notes to map out your research priority-setting exercise

1.1 Why are the priorities needed? ...............................................................
Describe your objectives for the exercise ..............................................................
...........................................................................................................................................
...........................................................................................................................................

1.2 Who are the priorities for? ...............................................................
...........................................................................................................................................

1.3 Who will implement these priorities? ...............................................................
...........................................................................................................................................

1.4 What resources – timescale, staff and funds – do you have? ...............................................................
...........................................................................................................................................

1.5 Do you need clearance to produce a WHO global public good? ...............................................................
...........................................................................................................................................

¹ This template provides only a summary. The guide contains further details.
PHASE 1 - DESCRIBE THE PUBLIC HEALTH NEEDS THAT YOUR EXERCISE WILL ADDRESS

1.6 Which disease outcomes and risk factors will you target?

1.7 How will the research priorities address these factors?

1.8 What change do you want implementers to make: greater awareness, an influence on behaviour, and/or a change in action (e.g. to alter funding patterns)?

1.9 What is the level or scope of your exercise? Is it: a global exercise (e.g. a roadmap) or regional, national, subnational or even at an institutional or departmental level?

1.10 What time frame will the priorities cover? Will it be immediate, as in an emergency, or a number of years, as in a horizon planning exercise setting priorities for 5, 10 or even 20 years?

1.11 Who and where are the target populations of the research (e.g. children, older persons, poorer populations, those living in urban versus rural areas)?

1.12 How long was it since the last review? Are current strategies in need of updating?

PHASE 1 - WHAT PRINCIPLES AND VALUES GUIDE YOUR PRIORITY-SETTING EXERCISE?

1.13 Should priorities be cost-effective or equitable, or should they combine both criteria?

1.14 How do the priorities relate to achieving universal health coverage?

1.15 How will the priority-setting exercise ensure appropriate gender-based analysis?

1.16 Is there a target population?

PHASE 1 - DO YOU UNDERSTAND THE POLITICAL ENVIRONMENT OF YOUR CONTEXT?

1.17 Who has the political power to set priorities?

1.18 Who has previously set priorities?
1.19 How do policy-makers perceive universal health coverage? .................................................................  
................................................................................................................................................................

1.20 What kind of capacity exists to undertake, use and/or fund research? ....................................................  
................................................................................................................................................................

PHASE 1 - REVIEW WHAT IS ALREADY KNOWN AND WHAT HAS BEEN DONE BEFORE

1.21 Review:
- previous WHO-authored research priority documents;
- current health strategies of national and international research agencies;
- current burden of disease, HALE;
- risk factors or the determinants of the problem;
- the cost-effectiveness of interventions versus the need for prevention;
- evaluations or implementation research studies that may challenge accepted practice.........................  
................................................................................................................................................................
................................................................................................................................................................
................................................................................................................................................................

1.22 Will you do an initial survey of stakeholders? Will you use a Delphi technique to refine priorities? ........  
................................................................................................................................................................
................................................................................................................................................................

1.23 Will you use a tool to map the current shape of research across the five categories in the WHO Strategy on Research for Health? .................................................................  
................................................................................................................................................................

PHASE 1 - INCLUSIVENESS: DECIDE WHO NEEDS TO BE INVOLVED – BE AS INCLUSIVE AS POSSIBLE  
AND CONSIDER EQUITY AND GENDER

1.24 Undertake a stakeholder mapping exercise ..............................................................................................  
................................................................................................................................................................

1.25 Will you establish a steering committee? ..................................................................................................  
................................................................................................................................................................

1.26 Can you identify champions in your stakeholder groups? ...........................................................................  
................................................................................................................................................................
................................................................................................................................................................
PHASE 1 - DESIGN A METHOD TO MATCH YOUR CONTEXT

1.27 What method will you use to undertake your priority-setting exercise?

Refer to the guide to make an informed choice based on:

1.28 What objectives do you have?

1.29 What is your context?

1.30 What time, staff and funds do you have available?

PHASE 1 - PLAN FOR IMPLEMENTATION

1.31 How will you engage with key stakeholders to ensure awareness, uptake and translation of the priorities into implementation?
ANNEX 1. A SYSTEMATIC APPROACH TO UNDERTAKING A RESEARCH PRIORITY-SETTING EXERCISE: GUIDANCE FOR WHO STAFF

PHASE 2 - DEFINE YOUR SELECTION CRITERIA WITH STAKEHOLDERS

Questions to consider – write your notes to map out your research priority-setting exercise

2.1 How and when will you work with stakeholders to agree the criteria to select priorities?

2.2 How will you evaluate each research question?

Consider:
• the potential health benefit versus feasibility versus cost;
• the likelihood of reducing the disease burden;
• cost-effectiveness of the outcome;
• local research capacity to undertake the research;
• access considerations (whether the solution matches the needs of a poor population and whether they will be able to afford it);
• the degree of equitability, sustainability and ethical concerns

PHASE 2 - METHODS FOR DECIDING BETWEEN PRIORITIES

You will need to refer to the guide to make an informed choice. Agree with stakeholders and participants on the way you will separate priorities.

2.3 How will you balance consensus and metric-based approaches?

2.4 What type of output do you seek – a Top 10, a ranking of multiple priorities, an equitable spread?
PHASE 3: PUBLISH

This is where you develop a publication and a dissemination plan to ensure awareness, uptake and implementation of the research priorities.

PHASE 3 - DEVELOP A PUBLICATION AND DISSEMINATION STRATEGY

Ensure that you can report on:

• objectives;
• context;
• methods;
• research priorities;
• implementation plan; and
• monitoring and evaluation plan.

3.1 Have you followed the WHO publishing workflow in Biblio? ..........................................................
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3.2 Will you produce an academic paper? Ensure compliance with the WHO Open Access Policy.
Consider using the REPRISE reporting guidelines – see the guide for reference ..................................
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3.3 What other types of communication are in your plan – social media, policy briefs, web-based platforms?
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3.4 Do you have the appropriate baseline data to measure changes? ..........................................................
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PHASE 4: MONITOR AND EVALUATE

This is where you develop a plan to measure impact on your original objectives – usually an improvement in public health which can be an aggregate of awareness, uptake, implementation, translation and impact of the research priorities.

PHASE 4 - HOW WILL YOU MEASURE WHAT CHANGE THE EXERCISE MADE?

4.1 Have you designed a stakeholder survey to measure support for the exercise?

4.2 How will you measure:

- awareness:
- changes in funding volumes;
- changes in funding shape;
- improved coordination;
- uptake of the priorities by researchers;
- translation of the research priorities into new interventions or changes in behaviour;
- the impact on public health?