

EXECUTIVE SUMMARY

Thirty-nine countries across the world are making progress toward malaria elimination. Some are committed to nationwide elimination, while others are pursuing spatially progressive elimination within their borders. Influential donor and multilateral organizations are supporting their goals of achieving malaria-free status.

With elimination back on the global agenda, countries face a myriad of questions. Should they change their programs to eliminate rather than control malaria? What tools are available? What policies need to be put into place? How will they benefit from elimination? Unfortunately, answers to these questions, and resources for agencies and country program managers considering or pursuing elimination, are scarce.

The 39 eliminating countries are all positioned along the endemic margins of the disease, yet they naturally experience a variety of country characteristics and epidemiologies that make their malaria situations different from one another. The Malaria Elimination Group (MEG) and this *Prospectus* recognize that there is no single solution, strategy, or time line that will be appropriate for every country, and each is encouraged to initiate a comprehensive evaluation of its readiness and strategy for elimination. The *Prospectus* is designed to guide countries in conducting these assessments.

The *Prospectus* provides detailed and informed discussion on the practical means of achieving and sustaining zero transmission. It is designed as a road map, providing direction and options from which to choose an appropriate path. As on all maps, the destination is clearly marked, but the possible routes to reach it are numerous.

The *Prospectus* is divided into two sections:

Section 1 Eliminating Malaria, comprises four chapters covering the strategic components important to the periods before, during, and after an elimination program.

Section 2 Tools for the Job, comprises six chapters that outline basic information about how interventions in an elimination program will be different from those in a control setting.

Chapter 1, **Making the Decision**, evaluates the issues that a country should consider when deciding whether or not to eliminate malaria. The chapter begins with a discussion about the quantitative and qualitative benefits that a country could expect from eliminating malaria and then recommends a thorough feasibility assessment. The feasibility assessment is based on three major components: operational, technical, and financial feasibility. Cross-border and regional collaboration is a key subject in the chapter.

Chapter 2, **Getting to Zero**, describes changes that programs must consider when moving from sustained control to an elimination goal. The key strategic issues that must be addressed are considered, including supply chains, surveillance systems, intersectoral collaboration, political will, and legislative framework. Cross-border collaboration is again a key component in **Getting to Zero**.

Chapter 3, **Holding the Line**, provides recommendations on how to conduct an assessment of two key factors that will affect preventing the reemergence of malaria once transmission is interrupted: outbreak risk and importation risk. The chapter emphasizes the need for a strong surveillance system in order to prevent and, if necessary, respond to imported cases.

Chapter 4, **Financing Elimination**, reviews the cost-effectiveness of elimination as compared with sustained control and then presents the costs of selected elimination programs as examples. It evaluates four innovative financing mechanisms that must support elimination, emphasizing the need for predictable and stable financing. Case studies from Swaziland and two provinces in China are provided.

Chapter 5, **Understanding Malaria**, considers malaria from the point of view of elimination and provides a concise overview of the current burden of the disease, malaria transmission, and the available interventions that can be used in an elimination program.

Chapter 6, **Learning from History**, extracts important lessons from the Global Malaria Eradication Program and analyzes some elimination efforts that were successful and some that were unsuccessful. The chapter also reviews how the malaria map has been shrinking since 1900.

Chapter 7, **Measuring Malaria for Elimination**, provides a precise language for discussing malaria and gives the elimination discussion a quantitative structure. The chapter also describes the role of epidemiological theory and mathematical modeling in defining and updating an elimination agenda for malaria.

Chapter 8, **Killing the Parasite**, outlines the importance of case detection and management in an elimination setting. Options for diagnosis, the hidden challenge of *Plasmodium vivax* in an elimination setting, and the impact of immunity are all discussed.

Chapter 9, **Suppressing the Vector**, explores vector control, a necessary element of any malaria program. It considers optimal methods available to interrupt transmission and discusses potential changes, such as insecticide resistance, that may affect elimination efforts.

Chapter 10, **Identifying the Gaps—What We Need to Know**, reviews the gaps in our understanding of what is required for elimination. The chapter outlines a short-term research agenda with a focus on the operational needs that countries are facing today.

The *Prospectus* reviews the operational, technical, and financial feasibility for those working on the front lines and considers whether, when, and how to eliminate malaria. A companion document, *A Guide on Malaria Elimination for Policy Makers*, is provided for those countries or agencies whose responsibility is primarily to make the policy decisions on whether to pursue or support a malaria elimination strategy. The *Guide* is available at www.malaria-eliminationgroup.org.