

Practical Guidance on Data Collection and Decision-Making



Home fortification with micronutrient powders (MNPs) containing iron in malaria-endemic regions

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Key messages

> The Home Fortification Technical Advisory Group (HF-TAG) has developed a new technical guidance series designed to help program implementers with data collection and interpretation that can provide key insights to inform decision-making in alignment with WHO guidelines.

> WHO guidelines state that in malaria-endemic areas,

the provision of iron to children in any form, including micronutrient powders (MNPs), should be implemented in conjunction with measures to prevent, diagnose and treat malaria.

- > The series provides tools and outlines a process that can be broken down into four stages: (1) review of the malaria situation; (2) engagement with malaria program stakeholders; (3) assessment of the malaria program; and (4) determination of readiness to implement or scale up MNPs.

Introduction

The WHO Guideline: Use of Multiple Micronutrient Powders for Point-of-Use Fortification of Foods Consumed by Infants and Young Children Aged 6–23 Months and Children Aged 2–12 Years provides countries with evidence-informed recommendations on the effects and safety of micronutrient powders (MNPs) when considering this intervention to improve the nutritional status of children.¹ Given the wide range of contexts, needs, resources and challenges faced by countries, the WHO guideline also provides important implementation considerations to help in the decision-making process when designing and scaling up interventions.

One of the key considerations highlighted in the WHO guideline is around the implementation of MNPs in malaria-endemic areas due to the potential adverse effects of iron intake among children affected by malaria.² The WHO guideline clearly recommends that children 6 months to 12 years of age in malaria-endemic areas are not to be excluded from receiving iron-containing MNPs, as these children are also at risk of significant morbidity, including malnutrition. However, because of the association between anemia and malaria, and due to any po-



During an outreach session in Lao People's Democratic Republic, a woman mixes Super Kid – a locally packed MNP (micronutrient power). Under the program, through outreach efforts, local health center staff travel to local communities in order to provide services and conduct nutrition counseling directly within communities.

tential risks, WHO also recommends that MNPs containing iron should be implemented in conjunction with measures to prevent, diagnose and treat malaria. In order to meet this requirement, the use of MNPs should be coordinated with malaria programs in-country to ensure that the MNP intervention is co-located in the same geographical areas where malaria control strategies are being implemented and where children have access to prompt diagnosis of malaria illness and treatment with effective antimalarial drug therapy.

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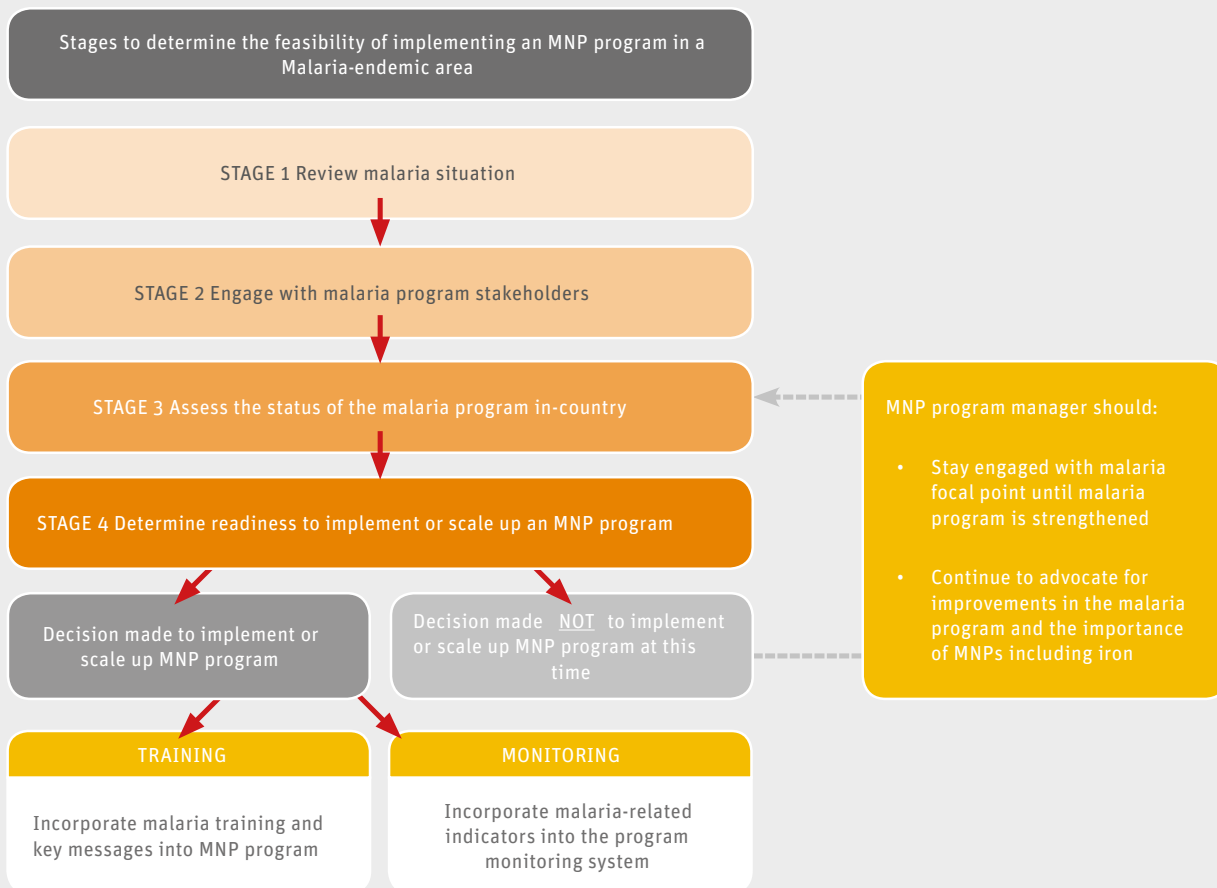
To facilitate operationalization of the WHO guideline at country level, practical guidance and tools have been developed by the Home Fortification Technical Advisory Group (HF-TAG) on how to develop the appropriate strategies to address the use of MNPs containing iron in malaria-endemic regions. These are available on the HF-TAG website.³ This technical guidance series includes four documents designed to help implementers in collecting and interpreting data that can provide key insights and inform decision-making around the appropriateness, ca-

capacity and feasibility to design, implement and scale up MNP interventions. Among the documents included in this series are a technical brief, ‘Frequently Asked Questions’ (FAQs), and slide decks providing guidance on the interpretation of the WHO World Malaria Report and key messages for the training of health workers.⁴ Information provided in these documents is based on literature reviews, country experiences and the opinion of technical experts working in the nutrition and malaria fields.

Audience, aim and approach

The technical guidance series is intended for use by country nutrition program specialists who are planning to implement or are already implementing an MNP intervention in areas where malaria is endemic. For programs in the planning phase, the aim of the guidance is to help in making the decision as to whether and where the MNP intervention can be safely implemented. For programs already distributing MNPs, the aim of the guidance is to help forge stronger links with existing malaria programs and guide the decision as to whether and where to scale up MNP interventions.

The overall approach of the guidance is to break down the data collection, interpretation and decision-making about program design and scale-up into four main stages. **Stage 1** involves conducting an initial review of the malaria situation from existing data; **Stage 2** centers around engaging with malaria

FIGURE 1: Stages to determine the feasibility of implementing an MNP intervention in a malaria-endemic area

Source: Home Fortification Technical Advisory Group

program stakeholders in-country for coordination and co-location; **Stage 3** is an assessment of the status of the malaria program in-country; and **Stage 4** is a determination of the readiness to implement or scale up the MNP intervention (**Figure 1**). Once these stages are followed through by an in-country technical advisory group responsible for decision-making, further guidance is provided on integrating the context-specific information related to malaria and iron into training, behavior change communication and monitoring systems of the country.

“Children receiving MNP should have access to malaria prevention strategies, prompt diagnosis of malaria illness, and treatment with effective anti-malarial drug therapy”

Stage 1: Conduct an initial review of the malaria situation

This stage involves the collection of data that will provide an initial review and snapshot of national and, if available, regional, state/province or district level policies on malaria prevention and control in the country of interest. For nutrition specialists who may not be as familiar with malaria programming, the guidance also provides an outline and description of the main pillars of malaria control programs, including vector control (primarily the use of insecticide-treated nets [ITNs]), seasonal malaria chemoprevention, and case management (involving parasitologic diagnosis and treatment with an effective artemisinin-based combination therapy [ACT]). The initial source for data collection recommended to program implementers is the World Malaria Report (WMR) published annually by the World Health Organization (WHO), which includes data for 12 globally relevant indicators against which progress in malaria control and elimination can be monitored. Data is also presented by the WMR in the format of one-page country profiles, which provide a summary of the main malaria interventions and WHO-recom-

mended policies that are in place. A presentation tool entitled ‘Interpretation of the World Malaria Report Country Profile’ is provided by the HF-TAG, including an example of a country profile that has been annotated with guidance notes and explanations (Figure 2).⁵

Stage 2: Identify and engage with malaria program stakeholders

Children receiving MNPs should have access to malaria prevention strategies, prompt diagnosis of malaria illness and treatment with effective antimalarial drug therapy. Therefore, to ensure the co-location of an MNP intervention in the same geographical area as a malaria control program, effective co-ordination and engagement between nutrition and malaria stakeholders in the country is required. One of the key tasks outlined in the guidance is who to engage as a malaria focal person, as well as how to engage them as active members on an MNP technical advisory group. This includes sharing updates on malaria program indicators and other activities relevant to

the MNP intervention. A key role of the malaria focal person will be to help gather malaria program information and data, interpret that information in the next stage (Stage 3) and assist with the decision-making process.

Stage 3: Assess the status of the malaria program in-country

Stage 3, which determines the feasibility of implementing an MNP intervention within a malaria-endemic area, involves a more detailed review of the data and information initially collected in Stage 1. This detailed assessment should be a collaborative effort between the nutrition and malaria teams and should include a review of the status of the malaria program in the country, as well as an assessment of the level or degree of implementation. Here, the HF-TAG provides a tool in the form of a checklist that will guide the collection of relevant data and information, ideally focusing on the area of the country where MNPs are to be implemented (Figure 3). To account for any in-country variance, the level of data disaggregation for the assessment should begin at the national level and then proceed to

FIGURE 2: Example of annotated presentation, developed to help explain the components of the World Malaria Report Country Profile

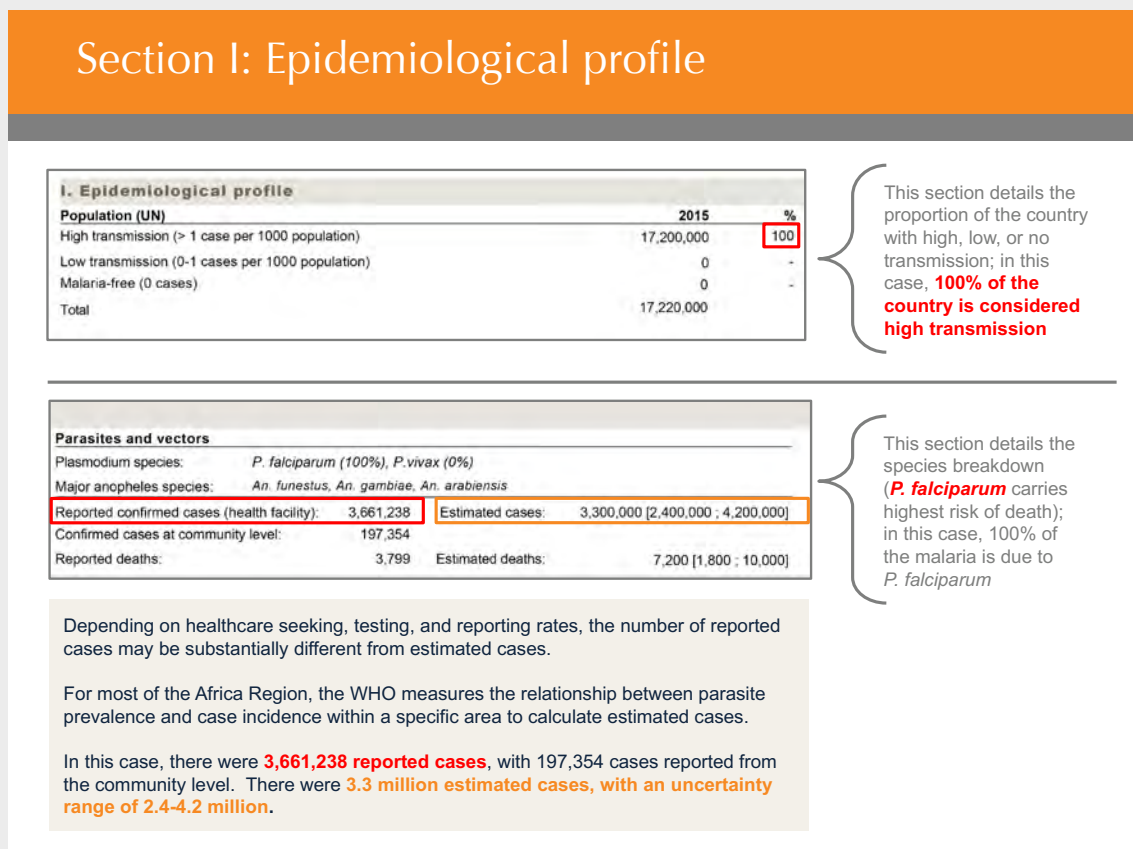
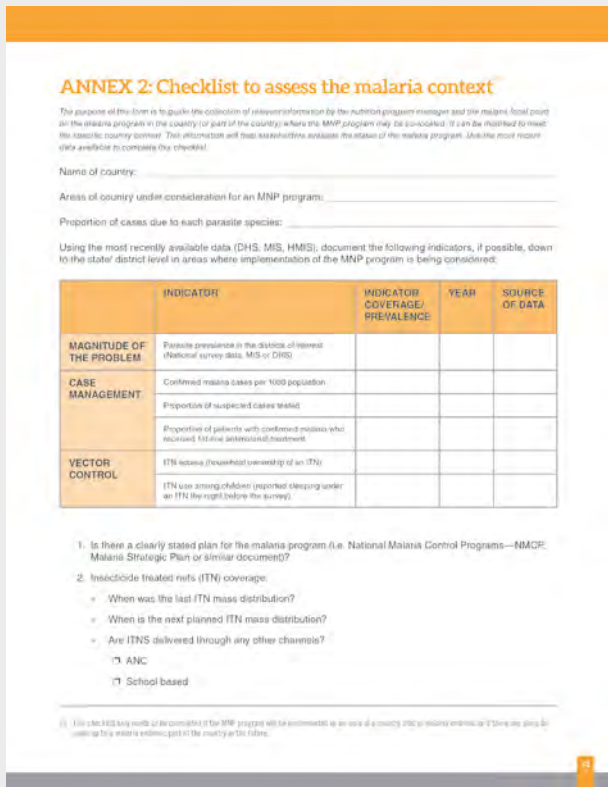


FIGURE 3: First page of the checklist tool to assess the malaria context



Source: Home Fortification Technical Advisory Group

the appropriate level of decision-making, whether it be state/province level or district level.

“One of the components of the decision pathway requires interpreting the data to confirm whether a malaria program is ‘active’”

Stage 4: Determine readiness to implement or scale up an MNP program

The purpose of Stage 4 is to provide implementers with a framework to assess the readiness to implement or scale up an MNP intervention. A decision pathway is provided as guidance that incorporates the data and information collected from the preceding stages (Figure 4).

To ensure that the provision of MNPs is done in conjunction with public health measures to prevent, diagnose and treat ma-

laria, one of the components of the decision pathway requires interpreting the data to confirm whether a malaria program is ‘active.’ Although there are no internationally defined benchmarks by which to decide if a program is operating adequately, for the purpose of this guidance, the HF-TAG defines an ‘active’ program as one where all elements of malaria control are being implemented, namely prevention, diagnosis and treatment. Furthermore, the malaria program should be considered stable or improving, with no anticipated challenges including funding gaps or substantial reductions in funding that can have a negative impact on operations.

Conclusions

After following the four stages and taking into account the country-specific data and information collected, the decision pathway should guide the MNPs technical advisory team to reach a decision on whether or not to proceed with the implementation or scale-up of the MNP intervention. Such a decision is generally taken in conjunction with the country’s Ministry of Health or appropriate authority. If a decision is made to proceed with implementing or scaling up the MNP intervention, then information related to malaria and iron supplementation should be incorporated into the following program components: (1) training of healthcare workers and any other frontline workers dealing directly with program recipients; (2) behavior change communication materials targeted at program beneficiaries; and (3) relevant indicators (including malaria indicators) within the program monitoring system. The technical guidance provides further recommendations and tools to support these actions.⁶ In addition, the HF-TAG resource Planning for Program Implementation of Home Fortification with Micronutrient Powders (MNP): A Step-by-Step Manual provides detailed guidance on the planning and implementation of MNP interventions that implementers can reference.⁷

In the case where the decision-making pathway and review of the data demonstrate that the MNP intervention may not be appropriate within the given context, it is suggested that the nutrition and malaria teams continue to discuss and collaborate on ways to strengthen the malaria program in the areas of interest. This should also include planning for a repeat of stages 1–4 as a reassessment to determine if conditions have improved sufficiently for the implementation or scaling-up of the MNP intervention.

Finally, while the practical guidance described here supports data collection essential to evidence-informed decision-making, the series also provides an accompanying resource to address common technical considerations based on reviews of the literature and the opinion of technical experts in the fields of nutrition and malaria. For example, answers to questions related to the following can be found under ‘FAQs’: what is known about the

provision of iron supplements (including MNPs) to children at risk of illness from malaria; what is known about the safety of MNPs at varying levels of coverage of ITNs; and what is known about the relationship between folic acid intake and the efficacy of malaria treatment.⁸ The HF-TAG will continue to follow the research development of MNPs and update the series periodically as new data become available. The development of technical guidance in this manner (i.e. collaboration between nutrition and malaria programs) highlights the importance of intersectoral coordination, in which data collection is an essential component in the decision-making process, and may be helpful in promoting synergies between other public health interventions.

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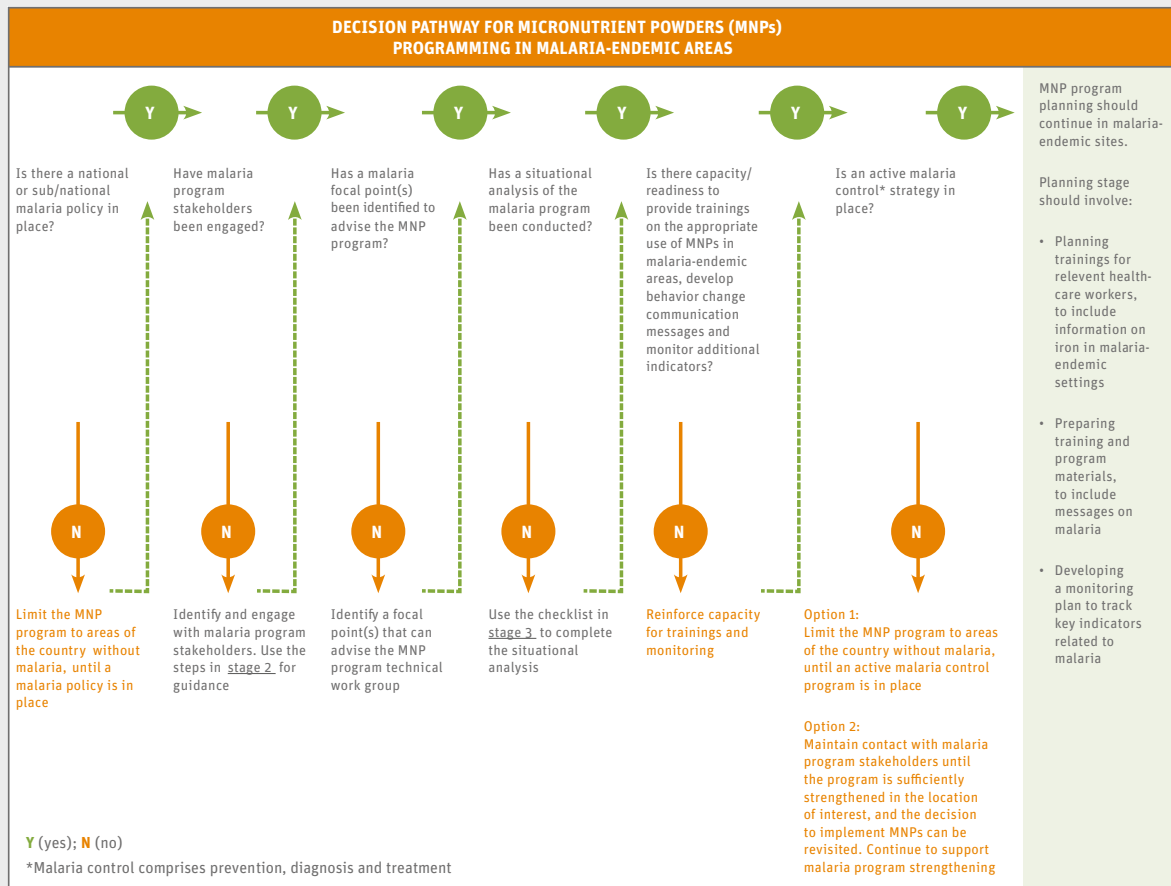
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FIGURE 4 Decision pathway for micronutrient powders programming in malaria-endemic areas





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This mother and her 2-year-old child in the northeast of Côte d'Ivoire have been sleeping under mosquito nets to reduce the chances of contracting malaria

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