ACCESS SMC

Achieving catalytic expansion of seasonal malaria chemoprevention in the Sahel

In areas where malaria transmission is highly seasonal, such as the Sahel, SMC has been proven to reduce cases of malaria by as much as 75 percent

Background

In 2012, the World Health Organization endorsed seasonal malaria chemoprevention (SMC) as an important tool in the prevention of malaria. SMC, achieved by administering up to four monthly doses of sulfadoxine-pyrimethamine (SP) plus amodiaquine (AQ), or SP+AQ, is effective in areas with high seasonal variation in malaria transmission and where resistance to SP+AQ is low, with the greatest opportunity for impact being in the Sahel. SMC is targeted at 25 million children aged three to 59 months of age who bear the greatest risk of malaria-related mortality. SMC is highly effective, and has the potential to prevent 75% of uncomplicated and severe malaria cases. If this reduction could be achieved at-scale, it would transform the lives of those avoiding infection, reduce the demand for treatments at community and facility level, improve school attendance, and decrease government expenditure on malaria, making those funds available for productive reinvestment elsewhere.

The ACCESS-SMC Partnership

With a guaranteed funded demand of up to 30 million treatments, as well as additional funded demand, current SMC product suppliers will be incentivized to increase production and new suppliers encouraged to come on line. This market effect – which is already being seen - will positively impact on the most significant issue currently facing governments, organizations and donors interested in implementing SMC: the global shortage of quality assured SMC products.

UNITAID's partnership with the ACCESS-SMC consortium offers a real opportunity to not only concretely improve the health of 10 million children but also sustainably changing the underlying market dynamics that have, to date, contributed to making at-scale administration of SMC illusive.

Seasonal Malaria Chemoprevention

Introduction

In March 2012, the World Health Organisation (WHO) issued a policy recommendation for a new intervention against *Plasmodium falciparum* malaria - seasonal malaria chemoprevention (SMC). SMC is defined as the intermittent administration of a full course of a combination of anti-malarial treatment during the malaria season to prevent malaria illness. It is currently recommended for children aged three to 59 months living in the Sahel sub-region of Africa.

Rationale

The objective of SMC is to maintain therapeutic anti-malarial drug concentrations in the blood throughout the period of greatest risk. This will reduce the incidence of both uncomplicated and severe malaria and may reduce associated anaemia, resulting in healthier children, better able to develop and grow in areas where malaria remains a major cause of severe illness and death. SMC delivered by community health workers has been shown to be highly cost effective, safe and well accepted by communities in areas where the main burden of malaria is confined to four months of the year[1].

Benefits

A review of trials evaluating SMC's impact showed that the intervention prevented approximately three quarters of all clinical malaria episodes and a similar proportion of severe malaria episodes. This was applicable even where insecticide treated net usage is high.

Geographical scope

SMC is recommended for areas with intense, highly seasonal malaria and low resistance to SP+AQ. Based on these criteria, it is estimated that approximately 25 million children aged 3 to 59 months are eligible for SMC, the majority living in the Sahelian countries of Benin, Burkina Faso, Cameroon, Chad, Guinea, Guinea-Bissau, Mali, Niger, Nigeria, Senegal, and Togo.

1 WHO: SMC for Plasmodium falciparum malaria control in highly seasonal transmission areas of the Sahel sub- region in Africa.

Questions & Answers

What anti-malarial drugs are used?

WHO has recommended the use of a combination of sulphadoxine/pyrimethamine and amodiaquine (SP+AQ), which has been shown to be both safe and effective in clinical trials in Burkina Faso, Mali, Senegal and The Gambia.

How often do children have to take the drug?

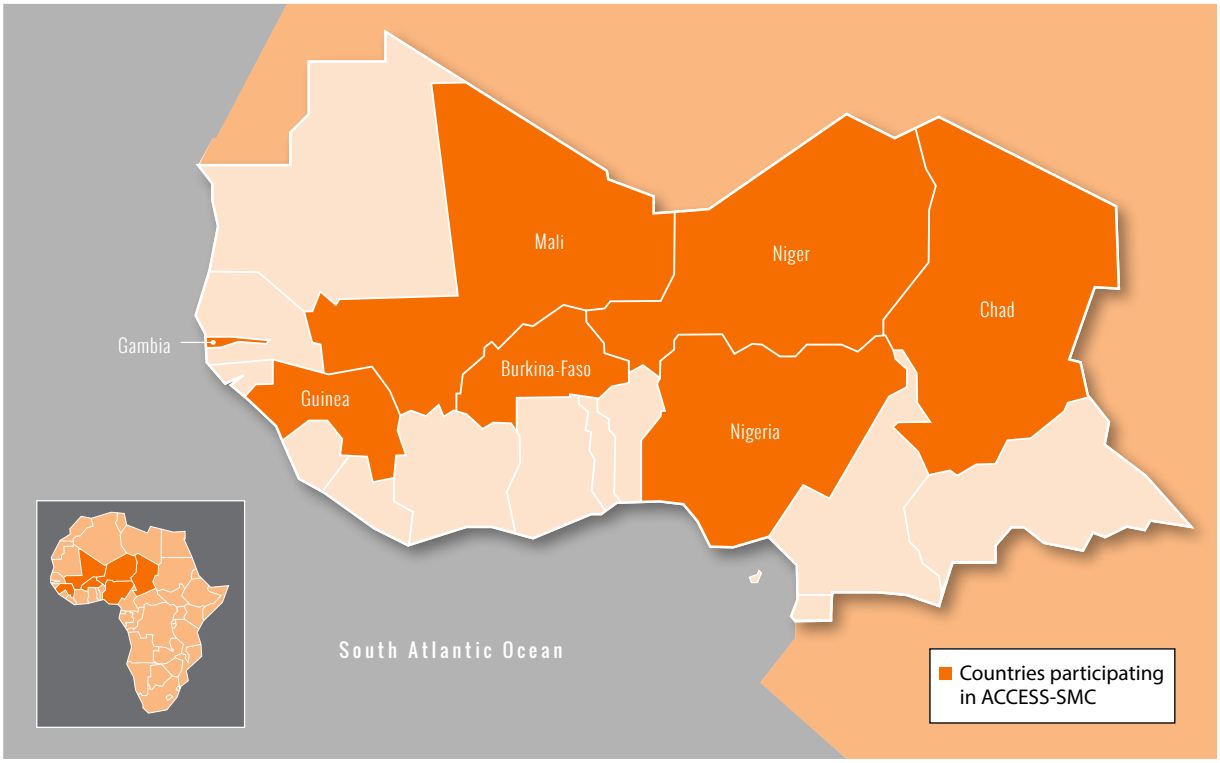
The drug will be given in up to four treatment courses one month apart during the peak transmission season. Each month, the first dose will be supervised by the community health worker, the remaining doses of amodiaquine will be administered by the caregiver on each of the following two days. It will be important for caregivers to ensure that all doses of the drugs are taken properly to ensure full protection.

Why are only young children covered by SMC?

Children under five are particularly vulnerable to the severe forms of malaria that cause death. They are at risk of repeated attacks of the disease as well as the development of anaemia, impairing child growth and development.

How is SMC delivered?

Local announcements each month will inform the community about the date of SMC, which will be delivered by community health workers at pre-arranged locations in the community, or by visiting each household. Health workers will receive appropriate training before the intervention begins and will be supervised by nurses and the district health team.



Accelerating roll-out of ACCESS-SMC

» Administering SMC services for up to 10 million children in seven countries

At-scale roll out of SMC is essential to make a substantial impact in both public health and on the market for SMC products. ACCESS-SMC will provide 15 million SMC treatments in 2015 and 30 million SMC treatments in 2016, potentially averting 36, 000 deaths.

Malaria Consortium will support National Malaria Control and Elimination Programs to lead SMC implementation in Burkina Faso, Chad and Nigeria and CRS will support in Guinea, Mali, Niger and The Gambia.

» Demonstrating effectiveness and safety of SMC implementation at-scale

The long-term efficacy, safety and resistance profiles of SMC drugs, while demonstrated through research, has yet to be proven in large-scale roll-out. Systems to capture severe adverse reactions also require strengthening.

LSHTM will generate evidence on drug resistance; strengthen pharmacovigilance systems; and measure SMC's public health impact.

» Using learning from implementation to improve efficiency of SMC delivery

The average cost per child of delivering SMC is not well established and is not comparable between countries and organizations. Delivery systems, which represent an estimated 80% of SMC's cost, are underdeveloped.

MSH will measure and monitor costs of SMC and work with countries to optimize the supply chain for SMC products.

» Stimulating increased global interest and capacity among manufacturers for quality assured SMC products

As of early 2015, there was only one manufacturer of quality assured/ERP approved co-blistered SP+AQ. While the drugs are intended for children, the current drug formulation is not child friendly; health workers crush bitter tasting tablets and mix with sugar, adding to logistical challenges, creating potential for dosing problems, and reducing at-home regime adherence. As global demand has not previously been well defined, manufacturers were not convinced of financial viability of entering the demanding pre-qualification process for co-blistered SP+AQ nor investing in new product formulations.

MMV will accurately forecast demand and provide targeted support to manufacturers to produce quality assured SMC products, including a child friendly, dispersible formulation.

» Accelerating creation of sustainable, funded demand for SMC

Demand for SMC at community level must be generated through raising awareness about the benefits and safety of SMC among caregivers. Communication of feasibility and cost effectiveness is required to generate continued interest from other donors.

SUA, CRS and Malaria Consortium will create an integrated communication campaign and use project evidence and experience to advocate to funders.