SMC Symposium, 9th June 2016

Transforming the malaria landscape in the Sahel: Seasonal malaria chemoprevention

ACCESS-SMC Event and Objectives

On 9th June, Malaria Consortium hosted an SMC symposium in order to summarize the progress in expanding SMC since 2014, showcasing the results of the ACCESS-SMC project and sharing main lessons learnt from the first at scale SMC implementation in 2015. Furthermore, this event provided the opportunity to discuss the SMC trends for 2016 and beyond. It addressed specific research questions that are being raised by ACCESS-SMC, most notably those related to the feasibility of the intervention at scale, the impact of an SMC intervention on public health, concerns about drug safety and impact on resistance, and assumptions on cost drivers and sustainability.

This event placed SMC within a broader discussion about health system strengthening and health investments, using public health arguments to highlight the potential of SMC in reducing the cost to health care delivery and more broadly to society as a whole, as a consequence of the large reduction in malaria-related morbidity.

Finally, participants examined further opportunities for SMC in terms of innovative delivery and scope, as well as the possibilities of integration with other public health interventions.

Participants

This event hosted people from various sectors, most notably NGOs, multilateral donors and agencies, academic institutions, private companies and foundations, as well as the public sector including Ministry of Health representatives from project- supported countries.

Please see **here** to see the list of participants.

Agenda

One of the main objectives of this symposium was to create dialogue between stakeholders involved in SMC.

Please see **here** to download the agenda

Presentations

Please click **here** to find the presentations made at the symposium

Photos

Please click **here** to see photos of the event

Press

Please click **here** to read press coverage of the event

Sessions and Key Discussion

Welcome Speech
Charles Nelson, Chief Executive Officer, Malaria Consortium

Malaria Consortium's Charles Nelson started the day's discussion with an opening speech welcoming all participants and encouraging open and frank conversation about SMC and the obstacles to be overcome in order to secure a sustainable future for this approach.

Key points:

- No silver bullet has been found to prevent malaria. There are many tools that when used together can be powerful weapons in the fight against malaria. SMC is one of these tools.
- SMC is proving to be a transforming tool, and has the opportunity to make an historic contribution to the fight against malaria.
- SMC has the potential to reduce malaria related mortality by 75%, which is remarkable.
- SMC provides a very high degree of protection against malaria, with roughly 90 percent efficacy for up to four weeks after treatment.
  If all eligible children received SMC, around 175,000 lives could be saved annually & 18 million malaria cases prevented. There are an estimated 23.7 million children living in the Sahel who are eligible for SMC, but in 2014, less than 4% of these vulnerable children were given the SMC preventive treatment. In 2015, around 4 million across the Sahel region received this lifesaving treatment, 3.2 million in seven countries thanks to the ACCESS-SMC project.
- It is crucial that key players in the field of SMC work together to overcome existing challenges to allow for sustainable scale up of SMC in the Sahel region.

Key Note Speech
Dr. Osagie Ehanire, the Honourable Minister of States for Health, Nigeria

Key points:

- In Nigeria Malaria Consortium has distributed over 1 million SMC treatments. This has led to a 50% reduction in morbidity in the areas where it has been implemented.
- There is an urgent need to expand SMC beyond the two current states in Northern Nigeria.

Session 1: Seasonal malaria chemoprevention: a promising option for malaria prevention in the Sahel

Session Chair: Robert Matiru, Director of Operations, UNITAID
Speakers:

- Dr Peter Olumese, Prevention, Diagnosis and Treatment Unit, Global Malaria Programme, World Health Organization
- Diego Moroso, Project Director, ACCESS-SMC, Malaria Consortium
- Dr Yacouba Savadogo, Director of National Malaria Control Programme, Ministry of Health, Burkina Faso
- Sir Brian Greenwood, Professor of Clinical Tropical Medicine, London School of Hygiene and Tropical Medicine

Summary

Seasonal malaria chemoprevention (SMC) is a relatively new strategy for malaria control that is being introduced in the Sahel. The intervention was recommended in 2012 by the WHO after showing its efficacy in a number of clinical trials. However, until recently, the intervention has remained small scale, with only 3.4% of the eligible population being reached in 2014.

For this reason, in mid-2014, UNITAID awarded a grant to Malaria Consortium to lead the project ACCESS-SMC (Achieving Catalytic Expansion of Seasonal Malaria Chemoprevention in the Sahel), in order to scale up SMC and ensure both an increase in coverage and an increase in funded demand. The project, led by Malaria Consortium in collaboration with CRS, LSHTM, MSH, MMV and Speak up Africa, is supporting National Malaria Control Programs to scale up access to SMC to save children's lives across seven countries in the Sahel. By demonstrating the feasibility and impact of SMC at scale, ACCESS-SMC promotes the intervention's wider adoption.

One year on, after the first year of at-scale implementation and with more than 3.2 children reached, this session discussed the preliminary results, outputs and issues related to research.

After an introduction to the SMC guidelines and recent trends by Dr. Peter Olumese ((WHO), Diego Moroso ((Malaria Consortium) provided a general overview of the ACCESS-SMC project, its goals and a summary of the key outcomes and results from the 2015 SMC campaign. The NMCP representative from Burkina Faso, Dr. Yacouba Savadogo, then shared the experience from the field, in terms of reach, challenges, outcomes and hints of impact. Professor Brian Greenwood from LSHTM

introduced the evaluation process within ACCESS-SMC, highlighting preliminary findings after one year of research, and providing details on other SMC research, eliciting potential synergies with other preventive interventions. Monitoring and evaluation is crucial to ensure that the intervention is being delivered effectively, that it reaches the children that need it, that it remains safe and effective, and that its impact is measured.

KEY POINTS FROM SESSION ONE SPEAKERS

Dr. Peter Olumese

- The objective of SMC is to prevent illness and deaths and reduce the burden of disease. This intervention works in areas where there is a peak period of malaria transmission over three - four months. There are some parts of Africa (eastern and southern regions) where SMC cannot be used as malaria prevention due to high resistance to SP (a key component of SMC medication).
- In 2012, SMC was approved by WHO and by 2014, countries eligible for SMC had included this approach to malaria prevention in their country plans. Moving from WHO policy to country adoption was unusually fast, thanks to coordinated efforts by countries and implementers. However, without the necessary resources, sustained implementation will not be possible. Until 2014, there were only eight countries implementing SMC, and only on a very small scale.
- In 2015, ACCESS-SMC took SMC to scale in the Sahel. ACCESS-SMC is the first project of its type to implement SMC at scale and demonstrate that this is a feasible and effective way to prevent malaria in children under five in areas where there is a seasonal peak in malaria prevention.

Diego Moroso

- Although the distribution of SMC in the Sahel is being scaled up, there is still significant work to be done in order to improve the cost effectiveness of this intervention at scale.
- It is important to demonstrate the feasibility, safety and efficacy of SMC drugs.
- Long term funding for SMC drugs must be ensured in order to shape the pharmaceutical market.
- 23.7 million children can benefit from SMC. Last year, only around 55 million benefitted.
- 30 million treatments are being procured this year to be distributed to different countries. There is still a gap in production capacity, but less than before. However, we need more than 100 million treatments if we are to reach all eligible children, and this will only be possible if a second manufacturer enters the SP+AQ market. This should become a reality by 2018.
- 80% of drugs received by countries this year will be in a dispersible (soluble), sweet formulation, easier to administer and more palatable for young children.
- ACCESS-SMC is proving that it is feasible to do an SMC intervention at scale. In 2015, around 3 million children were reached each month as part of the first ACCESS-SMC SMC campaign.
- We estimate that the average cost of SMC may be just below $5 per child treated (more analysis is being carried out to confirm).
- Preliminary data shows only 9 adverse events were reported for the 3.22 million children reached last year.
- Regional coordination is needed to improve the quality and reach of implementation of SMC campaigns. Joint planning and procurement can help further the reach of the campaign and is recommended

There is the possibility to integrate the SMC campaign with other public health campaigns, such as intermittent preventive treatment in pregnancy (IPTp) and nutrition.

Dr. Yacouba Savadogo

- In Burkina Faso in 2015, ACCESS-SMC, the World Bank and UNICEF are all funding SMC in the Sahel
- After the 2015 implementation of SMC, there was an average reduction of 32% in malaria cases in Burkina Faso, with a peak of 49% reduction in the region of Ziniare (although this analysis is not based on a scientific methodology and includes unconfirmed cases, the effect may be actually higher).
- The SMC drugs are appreciated even demanded by the population. The effect of malaria on the population is visible and people are happy to receive the SMC drugs.
- In 2015, ACCESS-SMC reached just under 70% of the target children in Burkina Faso with all four full courses of treatment (while above 80% received at least three doses). Adherence to the doses to be taken at home was high, above 97%.

Professor Brian Greenwood

- There is encouraging data to show that efficacy of SMC can be sustained. There is more research needed to confirm the efficacy and also feasibility of combining an SMC campaign with other public health campaigns.
- There is strong evidence that SMC drugs are safe. More of a concern is drug resistance, which is inevitable.
- Stopping transmission in children through SMC may reduce malaria in older age groups, through a disruption of malaria transmission known as the 'herd effect'. This has been noted in Senegal, where SMC is given to all children between three months and 10 years of age.
- While the risk of malaria 'rebound' is a concern, it should not be a reason for not implementing SMC. The benefit of doing SMC is much bigger than the risk.

Session 2: The economic impact of seasonal malaria chemoprevention in the Sahel

Session Chair: Dr. Lesong Conteh, Senior Lecturer in Health Economics, Imperial College, London

Speakers:

- Johannah Phumaphi, Executive Secretary, African Leaders Malaria Alliance
- David Collins, Senior Health Finance Advisor, Management Sciences for Health

Summary

Malaria and poverty are intimately connected. Getting malaria is not only deadly but it is also very expensive. In countries with undeveloped healthcare systems, where out of pocket health expenditure is common, malaria can lead to financial impoverishment, even when it is effectively treated.

In some countries with a heavy malaria burden, the disease may account for as much as 40% of public health expenditure.

Eliminating malaria is crucial for the economic development of affected countries. In countries where malaria has been eliminated, economic growth was been greater than in neighboring countries in the 5 years after elimination. It is estimated that even when taking into account initial poverty, economic policy, tropical location, and life expectancy, among other factors, the economy in countries with intensive malaria grew 1.3% less per person per year, and a 10% reduction in malaria was associated with 0.3% increased economic growth.

KEY POINTS FROM SESSION TWO SPEAKERS

Dr. Lesong Conteh

- Malaria is an economic as well as a health burden. It puts significant stress on individuals, families, health systems, and national budgets.
- SMC in the Sahel involves huge numbers of beneficiaries, so the economic aspects will be central and key for future learning.

Joy Phumaphi

- Malaria puts direct, indirect, and opportunity costs on families. Direct costs alone can be around a third of family income.
- The prevention of malaria is crucial to halt deepening poverty. Knock-on economic effects are huge.
- If evidence shows SMC works, we have a duty to fund it, integrate it into health systems in a holistic way, and advocate for universal coverage.
- SMC needs to be fully integrated and country-owned, not set up as a parallel system.

David Collins

- In 2015, the cost of SMC in countries ranged from $3.49 - $8.12.
- The cost of SMC is within the range considered to be cost-effective in terms of disability adjusted life years (DALYs). Although not costly, it is hoped that with competition and increasing volume of demand, the cost of SMC drugs will be further reduced.
- It is estimated that SMC saves around 3/4 of its own costs. The remaining 1/4 can be reduced via integration with other services.
- By reducing the numbers of malaria cases, SMC reduces health systems costs which are significant.
- We must increase SMC coverage, determine most cost-effective distribution method, and transition ownership to governments.
- The ACCESS-SMC project has been exploring ways to make service delivery more cost-effective. For example the use of household, fixed point and mobile approaches, integration with other services, and the use of treatment innovations such as tablet grinders. A cost-effectiveness analysis of these and other approaches will be conducted shortly.

Session 3: Transforming he economic impact of seasonal malaria chemoprevention in the Sahel

Session Chair: James Tibenderana, Development Director, Malaria Consortium.

Panellists:

- Dr Ebenezer Sheshi Baba, Africa Technical Director, Malaria Consortium
- Dr Osagie Ehanire, the Honourable Minister of States for Health, Nigeria
- Mark Eldon-Edington, Director of Country Programmes, Global Fund
- Dr Marie-Reine Fabry, Health Specialist, Child Survival & Development Section, UNICEF
- Dr Hadiza Jackou Djermakoye, Director of the National Malaria Control Program, Niger
- George Jagoe, Executive Vice President, Medicines for Malaria Venture
- Dr Douglas Keene, Vice President, Pharmaceutical Management and Health Technology
- Group, Management Sciences for Health
- Ben Le Roith, Human Development Team Leader, Africa Regional Department,
- Department for International Development, UK
- Dr Shannon Senefeld, Vice President, Program Impact & Quality Assurance-Overseas
- Operations, Catholic Relief Services

Summary

SMC is implemented through mass drugs administration. As a relatively new intervention, SMC suffers from the typical short-coming of vertical, one-off interventions: lack of strong links with routine health services; disruption of routine health services; potentially high immediate costs. It also has similar advantages, such as increased reach, increased access and better focus and understanding of outcomes, results and impact.

While the health benefits and savings from new preventive interventions are not always easy to quantify, the cost of preparing for and implementing these interventions is clear, and it is often difficult for countries to leverage enough funds in the long term to make them sustainable standalone interventions.

During this session, panellists discussed the key dimensions of sustainability for SMC within the framework of health systems strengthening.

KEY POINTS FROM SESSION THREE PANELLISTS

- Sustainability of SMC means integrating it into the health system. That is the future and we must engage all sectors.

- Capacity to carry out monitoring and evaluation as well as pharmacovigilance must be improved at country level.

- ACCESS-SMC has allowed countries to integrate SMC much quicker than if the project had not taken place.

- ACCESS-SMC has changed how people think about malaria drugs. This project lit a fire under drug developers; it has been transformational for drug development.

- The political-economy in each country is an important aspect when considering transition and integration of SMC. Good stewardship is crucial.

- Progress has been made but a number of challenges unearthed. Some level of prioritisation is needed, but through partnership we can address the existing obstacles.

- Coordination between partners has been key to the success of ACCESS-SMC, particularly with drug supply and procurement. This collaboration should be strengthened as we move forward.

- A transition plan is key to the sustainability of SMC. It is important to analyse how this intervention may become part of the health system.

Closing speech

Charles Nelson, Chief Executive Officer, Malaria Consortium

- SMC is one of the tools available to fight malaria, but is one of several tools that together can contribute towards the goal of eliminating malaria.
- While there is more that can, and should, be done to reduce the overall cost of the intervention, it is already a cost-effective intervention.
- SMC has the potential to significantly reduce the burden to the health system. When malaria burden is relieved, resources are freed up and there is time to deal with other health issues.
- Funding for SMC last year exceeded the capacity to supply the SMC drugs; the market is now catching up which is encouraging for the sustainability of SMC.
- SMC should be delivered at scale, at community level, with a continued focus on gathering evidence on effectiveness, safety and growth of resistance of the parasite to the drug combination.
- Integration with other interventions that happen at community level is vital, if SMC is going to be an ongoing activity for the foreseeable future in the Sahel.

The ACCESS-SMC Project

For the 23.7 million children who live across Africa's Sahel region, the rainy season produces a seasonal surge in sickness and death from malaria. The World Health Organization recommends seasonal malaria chemoprevention (SMC) as an effective tool to prevent malaria in children under five, but in 2014 only about 800,000 children received this preventive treatment.

Achieving Catalytic Expansion of Seasonal Malaria Chemoprevention in the Sahel (ACCESS-SMC) is the first project of its kind promoting the scale-up of SMC across the Sahel. Thanks to ACCESS-SMC, a UNITAID-funded project led by Malaria Consortium in partnership with Catholic Relief Services, more than 3.2 million vulnerable children across seven countries [1] in the Sahel received this lifesaving treatment in 2015. In 2016, 30 million treatments will be provided to the target countries, reaching more than 6.4 million eligible children.

The first season of mass drug distributions was completed in November 2015. Using the momentum and lessons learnt from the 2015 SMC campaign, the seven ACCESS-SMC supported countries are now planning for the implementation of the 2016 campaign, working to guarantee support from relevant stakeholders and ensure timely distribution of drugs.

ACCESS-SMC's goal is not only to prevent malaria among children under the age of five for the duration of the project, but to mobilize donors and host governments to commit to sustaining and scaling up SMC to ensure that the 25 million eligible children receive this treatment.

To learn more about the ACCESS-SMC project, click here.