Malaria Consortium has a strong history of working hand-in-hand with governments to design and implement cutting-edge research alongside innovative and evidence-based health and surveillance programmes. We offer a wealth of technical expertise in disease prevention and control — underpinned by a commitment to strengthening national health systems and promoting universal health coverage — to improve lives in Africa and Asia. What we learn from our implementation we share widely, actively participating in national-level technical working groups and high-level coordination committees.
As an organisation, we have been undertaking research to provide the necessary evidence for ministries of health and other partners to make informed decisions about adaptation and innovation in seasonal malaria chemoprevention (SMC) programming, both in Burkina Faso and other SMC countries. We have recently begun to explore the potential of digital solutions to strengthen health systems in the country.

We have been present in Burkina Faso since 2014. Since 2015, we have supported the national malaria control programme (NMCP) in the phased scale-up of SMC, with all 70 health districts in Burkina Faso, including the urban districts in Ouagadougou, covered since 2019. Our SMC programme works with government and implementing partners to plan campaigns, select and train community distributors, facilitate supervision, increase community engagement, procure and distribute antimalarials, and provide technical advice on implementing SMC at regional and national levels. In 2021, Malaria Consortium is supporting SMC in 27 health districts across six regions of Burkina Faso, with a target population of 1.9 million children under five.

Extending SMC to five cycles in Burkina Faso

SMC involves administering monthly courses of antimalarials during the peak malaria transmission period to those most at risk — children under five. In Burkina Faso, SMC has typically been administered in four cycles each year between July and October in concurrence with the rainy season and the period of peak transmission. However, in the south and southwest of the country, the rainy season can start as early as June. Consequently, malaria incidence among children can be high even before implementation of the first SMC cycle. In response to this emerging observation, we proposed exploring the feasibility of implementing an additional SMC cycle in an area where the rainy season sets in earlier.

Concept to delivery

In June 2019, we conducted an operational research study to understand whether extending SMC to five cycles is feasible and acceptable, and if an additional cycle would have an impact on SMC coverage. We implemented a fifth cycle in Mangodara district in the Cascades region, targeting more than 30,000 children under five. This was the first study to explore this question under programmatic conditions in Burkina Faso.

We found that adding a fifth cycle was well received by SMC stakeholders in Burkina Faso, who emphasised the potential positive health impacts from an additional cycle. Further, an additional cycle did not have a negative impact on coverage, which was similarly high across all five cycles.

This study was conducted in collaboration with the NMCP. Together with a stratification exercise conducted through the High Burden to High Impact initiative, it informed their decision to conduct five cycles in specific regions, including the Cascades, as of 2021.
Looking ahead
As we build on the findings of this study, there is a need for further advocacy and sensitisation at the community level to spread information and improve stakeholder understanding of the additional SMC cycle. Along with new data on malaria and parasite transmission, this could be shared with the NMCP and other partners to help monitor the impact of an additional cycle in areas where the rainy season begins earlier. Further research on the cost-effectiveness of an extra cycle will also be valuable.
New horizons

The success of SMC in Burkina Faso has enabled us to explore alternative opportunities to support some of the country’s most pressing health needs. Much of our technical expertise in other areas of malaria prevention and control could be deployed in the Burkinabè context — from training and community engagement to the use of novel platforms to enhance disease management. In Nigeria, for example, we piloted the use of the Reveal geospatial platform to support SMC planning, distribution and tracking.

Digital health solutions

We believe that effective digital health strategies are key to supporting governments to better manage malaria and disease control programmes. We have explored the potential of technology to improve the motivation and supervision of community health workers (CHWs), to provide effective diagnostic tools, and to strengthen surveillance and data management.

One such innovation is our upSCALE digital health platform, which has been implemented in Mozambique with great success. Working closely with the Ministry of Health (MoH) and UNICEF, we created upSCALE to improve the quality of care provided by CHWs. We provided technical assistance to the MoH to enhance their capacity to implement and manage the platform at all levels of the health system. MoH ownership, and its drive to scale the platform nationally, has been key to upSCALE’s sustainability.

The platform consists of a smartphone app that walks CHWs through patient registration and assists with diagnosis, treatment and referrals; and a tablet-based app that allows supervisors to monitor CHW performance and manage stock levels. Specific modules additionally cover services relating to health promotion, birth and death registrations, pregnancy support, nutrition and HIV.

upSCALE allowed Malaria Consortium and the national government to respond rapidly to the COVID-19 pandemic, minimising disruptions to our programmes. By integrating a COVID-19 diagnostic algorithm into the existing platform, we were able to support CHWs and the wider health system in pandemic response.

While far more is known about COVID-19 than at the onset of the pandemic, the extent of the longer term impacts on malaria programmes is unclear. Digital health tools and the connectivity they provide health systems could play a vital role in reducing this uncertainty.

We are confident that Burkina Faso could realise significant benefits from implementing digital health solutions such as upSCALE, and we welcome the opportunity to work with the government to improve the health outcomes of communities across the country.