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Maternal and Child  
Survival Program

## Improving control of Malaria in Pregnancy in malaria endemic areas in Kenya

August 2017

[www.mcsprogram.org](http://www.mcsprogram.org)



*A nurse administers SP tablets to a pregnant woman at an antenatal care clinic in Bungoma in 2016. Photo credit: Allan Gichigi/MCSP*

### Goal

Many pregnant women afflicted with malaria in high malaria transmission areas do not experience outward symptoms, but may still suffer from anemia. Malaria in pregnancy can lead to miscarriage, stillbirth, or delivery of low birthweight babies due to impaired nutrient and oxygen supply to the baby. The malaria component of the MCSP Kenya Program is focused on improving pregnancy outcomes and preventing the effects of malaria in pregnancy (MiP) by strengthening administration of sulfadoxine-pyrimethamine (SP) for intermittent preventative treatment of malaria in pregnancy (IPTp), starting early in the second trimester. The MCSP Kenya Malaria program began in October 2014 and will finish in September 2017, having been implemented in 30 sub-counties across Bungoma, Homa Bay, Migori, and Kisumu counties.

## Program Approaches and Interventions

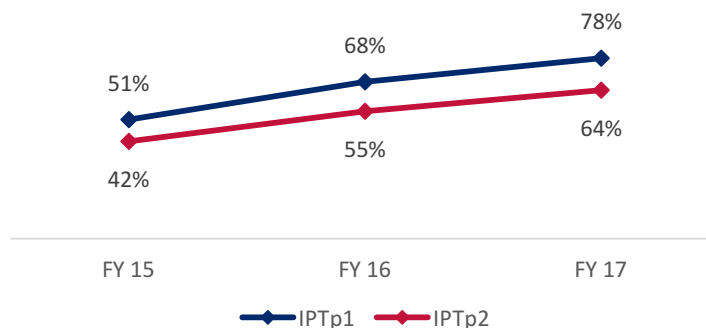
- **Advocating for procurement of SP at the national and county-level to ensure commodity security:** Focusing on data-driven advocacy, MCSP through the MIP Technical Working Group (TWG) supported the quantification of the doses of SP required by pregnant women over one year in each of the malaria Endemic County and over two years at the national level. The Program presented this data to counties, the National Malaria Control Program, and health development partners, requesting financial support to address the immediate and long-term SP deficiency at the county-level. Having bought into this approach, the counties procured SP for a short period to avert stock-outs in the interim, while the National Malaria Control Program used the data to successfully secure funding for SP from the National Treasury. The development partners, including the President's Malaria Initiative (PMI) and UNICEF, the National Treasury procured SP for the country that would last through the end of 2019.
- **Strengthening capacity of county and sub-county health management teams and experienced clinical practitioners to provide MiP services:** In Bungoma, Migori, Homa Bay, and Kisumu counties, the Program formed a cadre of clinical mentors trained on the National Simplified MiP Guidelines (15 standards), commodity management (e.g., distribution/redistribution among facilities), supportive supervision\*, and the training of service providers on the 15 MiP standards. MCSP supported the implementation of the mentorship program that targeted health care workers across the four focus counties. This mentorship and supportive supervision model is expected to be sustainable and allows mentorship of HCWs to continue improving access to quality MiP services at health facilities after the Program closes in 2017 since the counties have now the capacity to implement MIP interventions.
- **Strengthening capacity of service providers at the facility level using the Facility-based orientation approach:** In addition to developing clinical mentors for each service provider, MCSP supported them to conduct facility-based orientation and supportive supervision in all the 615 facilities of the 30 sub-counties across Bungoma, Homa Bay, Migori, and Kisumu. All health facility staff, including facility support staff, were trained together on the 15 MiP standards in order to harmonize practices on provision of MiP services. This approach also included focused, one-on-one training and feedback sessions with specific facility departments, including ANC, pharmacy, laboratory and maternity wards where they exist
- **Conducting behavior change activities at the community level to encourage early uptake of IPTp among pregnant women:** MCSP supported the national MOH with revision of the information, education, and communication (IEC) materials (e.g., job aids, posters, and orientation packages) that were distributed at the community level in all the focus counties. These materials were used to train community health volunteers (CHV) which enabled them understand MiP and deliver simple MiP prevention messages during their regular household visits to generate demand for early antenatal care to receive timely SP. The Program also conducted data quality audits with the community health assistants (CHA) to monitor CHV performance trends by assessing early ANC attendance of pregnant women from the CHVs' catchment villages. This information has allowed CHAs to identify and provide targeted mentorship and supervision to low-performing CHVs.

## Key Results

- Reduced incidence of SP stock-outs in malaria endemic districts and ensured commodity security for the future.**

MCSP supported the quantification of SP which enabled resource mobilization by NMCP to procure SP at the national level for all malaria-endemic counties through 2019. This commodity security helps counties avoid stock-outs and reprioritize limited county budgets toward procurement of other commodities and services for reproductive, maternal, newborn, and child health (RMNCH). The proportion of pregnant women who received IPTp1 and IPTp2 after SP procurement (Dec. 2015 – March 2017) increased by 27% and 22% percentage points, respectively.

**IPTp uptake increases over a 3-year period with MCSP support**



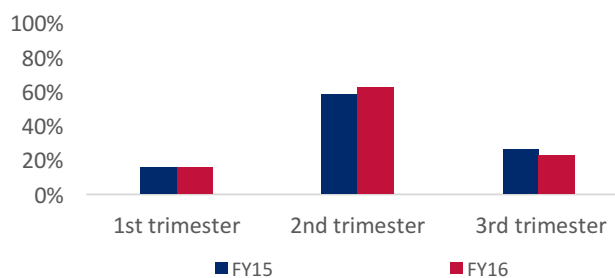
Trends showing increased IPTp uptake at the facility level between October 2014 and March 2017

Data Source: DHIS

- CHVs delivered MiP messages to 161,864 pregnant women (June 2015 – March 2017) through household visits.** Counties leveraged these visits to target MiP messages at women who are not receiving SP, to increase understanding of barriers in receiving SP and to improve overall MiP and RMNCAH programming (e.g., early HIV testing). The aim is to ensure each pregnant women is visited at least 4 to 5 times during pregnancy.

- Increased proportion of pregnant women starting ANC in second trimester and reduction in those starting in third trimester in Bungoma County between October 2014 and September 2016.** Early ANC attendance can help improve the number of pregnant women receiving a timely first dose of IPTp. In Bungoma, where sensitization of pregnant women by CHVs took place, the proportion of women starting ANC in their second trimesters increased by 4 percentage points and the proportion starting ANC in the third trimester decreased by 3 percentage points. This approach appears to have changed the trend in health-seeking behavior of women from starting ANC late to starting early. Based on these findings, the county scaled up the MIP implementation approach to 3 additional sub-counties.

**Proportion of ANC attendance by trimester**



Trends showing increase in early ANC attendance with a corresponding decrease in late ANC attendance

Data Source: DHIS

## Lessons Learned

- **Prioritizing procurement of SP is necessary to maintain high coverage of IPTp.** Fourteen malaria-endemic counties experienced intermittent SP stock-outs, which threatened to disrupt preventative MiP services where demand was still high. MCSP advocated for the counties to prioritize SP procurement by reallocating county MOH funds intended for service provider training. The Program continued to support capacity building efforts so that supply and demand of services are both being met.
- **County-level innovation can help overcome barriers to achieving set targets.** The Program experienced limitations with human resources (e.g., MCSP trainers) and equipment (e.g., transport), which it presented to the counties. County MOH staff were quickly able to derive local, cost-effective solutions, such as training county, sub-county and experienced clinicians as mentors and working with local departments, including police, for transport between training sites
- **Using data for advocacy with policymakers and influencers can facilitate action on key health issues.** Policy makers and influencers are often able to push a decision with the appropriate decision-making entities, such as the Kenyan National Treasury. When appealing to these groups, implementing partners need to have a well-structured message that is supported by data outlining the cost and benefits of making the decision, and identifies multiple options for addressing an issue. This approach assisted in the advocacy efforts needed for procurement of SP.
- **CHAs and CHVs are critical in sensitizing women to start SP early and receive multiple doses that protect them from the effects of MiP and poor pregnancy outcomes (e.g., miscarriages, low birth weight).** Since CHVs are community members, they can more closely track pregnant women and have a greater understanding of opportunities and barriers to early use of IPTp. This information enables them to counsel women on MiP prevention and treatment with more tailored, effective messages. CHVs can also more frequently follow-up with the identified pregnant women to ensure they are accessing MiP services and to prevent missed opportunities for receiving SP.

## Recommendations

- There is need to sustain advocacy efforts at both county and national levels in ensuring adequate stocks of SP are routinely procured by the Government.
- MCSP to advice county health management teams to
  - Advocate for budgetary allocations by the MOH to sustain the supportive supervision activities
  - Ensure other implementing partners adopt as much as possible the established training and supervisory approaches to ensure continuity of the MIP practices

\* Refer to the MCSP Kenya Human Capacity Development Program Brief for detailed information, results, findings, and recommendations on the supportive supervision/mentorship approach.