Fighting against malaria: The case of the U.S. President's Malaria Initiative Malaria Action Program for Districts

Sam Siduda Gudoi, 1 Emily Goodwin, 1 Patricia Nawa, 1 Daniella Busharizi, 1 Badru Gidudu, 1 Chris Rwabwogo, 1 Robert Abiriga, 1 Harriet Abesiga, 1 Patrick Bukoma, 1 Thomson Ngabirano, 1 Stella Nakabugo, 1 Paul Tumbu, 1 JB Bwanika, 1 Ruth Kigozi, 1 Jimmy Opigo, 2 Mame Niang, 3 Kassahun Belay, 4 Gloria Sebikaari, 4 Godfrey Magumba, 3 James Tibenderana 5

- ¹ U.S. President's Malaria Initiative (PMI), Malaria Action Program for Districts (MAPD), Uganda
- ² Uganda National Malaria Control Program (NMCP)
- ^{3.} PMI, Malaria Branch, Centers for Disease Control and Prevention
- ⁴ PMI, US Agency for International Development (USAID), Uganda
- 5. Malaria Consortium

Introduction

Malaria remains a major public health challenge globally, and in Uganda specifically. The USAID MAPD program was implemented from 2016 to 2021 to reduce malaria-related morbidity and mortality in the country. All 53 project districts signed a memorandum of understanding to commit to supporting the implementation of effective malaria interventions in line with the national malaria strategy, and to build the capacity of the NMCP and districts to effectively manage malaria programs. Key activities included the development of annual district malaria plans; routine distribution of long lasting insecticidal nets (LLINs) and intermittent preventive treatment in pregnancy (IPTp); technical assistance for malaria case management with regular health facility supportive supervision; surveillance, monitoring and evaluation, including performance reviews; social behavior change; and gender and youth interventions.

Methods

- This study assessed how the MAPD program affected the coverage of malaria interventions, as well as malaria morbidity and mortality in all 53 project districts.
- Comparing first and fourth project years, all health facility data reported into the district health information system (DHIS2) were used to retrospectively assess progress in malaria health service delivery and in mortality and morbidity indicators.

Results

- The proportion of women receiving three or more doses of IPTp increased from 1.9 percent (95% CI 1.8–1.9) to 72.9 percent (95% CI 72.8–73.1); the proportion of pregnant women receiving LLINs increased from 48.7 percent (95% CI 48.5–48.8) to 78.8 percent (95% CI 78.6–78.9).
- The proportion of suspected malaria cases tested increased from 76.0 percent (95% CI 75.9–76.0) to 98 percent (95% CI 97.9–98.1); and the proportion of patients with a negative malaria test who were treated with an antimalarial decreased from 46.8 percent (95% CI 46.7–46.8) to 1.4 percent (95% CI 1.47–1.51).
- Moreover, we saw a 49 percent reduction in annual reported malaria deaths, from 2,142 to 1,098, and a 15 percent reduction in annual parasite incidence (API), from 109 to 92 per 1,000 population.
- Analysis of national data, excluding MAPD districts, showed a seven percent reduction in malaria deaths (from 3,178 to 2,943), but API data lack reliability for analysis.

Conclusion

These results suggest that support from PMI and collaboration with Uganda's NMCP through MAPD and districts were successful in contributing to the considerable reduction in malaria morbidity and mortality reported in Uganda between 2016 to 2021.

Malaria health service delivery and mortality and morbidity indicators improved in MAPD-supported implementation districts







Read more

http://bit.ly/MC-ASTMH-MAPD

Supplementary visuals

Figure 2: Percentage of pregnant women who received long lasting insecticidal nets at antenatal care clinics

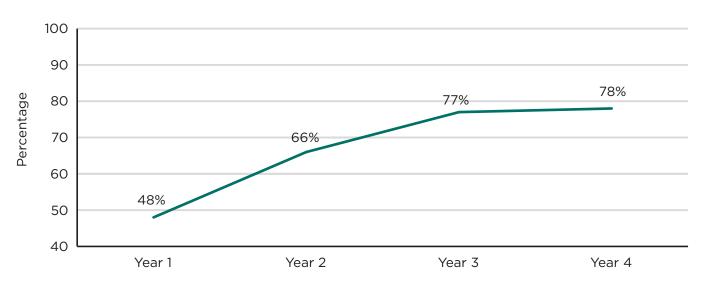


Figure 3: Proportion of those with a negative malaria test receiving malaria treatment

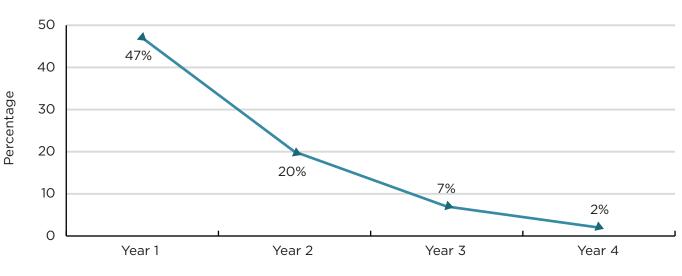
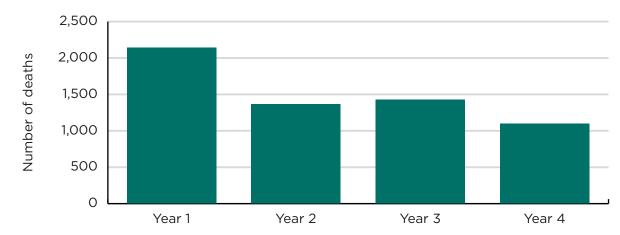


Figure 4: Malaria-related deaths reported annually



Acknowledgements

This study and poster were made possible by PMI/USAID and MAPD and do not reflect the views of USAID or the United States Government.