

# Impact of the digitised Community Health Toolkit on child health outcomes in rural Uganda

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## Key messages

The digitised Community Health Toolkit:

- enabled availability of services for children under five in the community
- led to a reduction in the burden of illness due to malaria, pneumonia and diarrhoea at the health facility.

## Introduction

- In 2019, Uganda's Ministry of Health (MoH) launched the Community Health Roadmap outlining priority needs for the community health programme, including investing in the scale-up of appropriate technology for community health implementation and supervision.
- Since August 2020, Malaria Consortium has been supporting the MoH to develop its digitised Community Health Toolkit (CHT) within its community health information system.
- We funded and provided technical assistance for the development of the integrated community case management+ (iCCM+) module of the CHT platform by aligning it with updated 2021 iCCM+ guidelines and pilot implementation in Buikwe district.
- The main goal of this study was to assess the impact of digital iCCM on child health outcomes.

## Methods

- To assess impact, Kayunga district was selected as a control area to Buikwe district, with a sample of 20 public facilities from each district.
- To assess trends, data collection was conducted between April 2021 to March 2022 during two time periods:
  - before CHT platform implementation: April to November 2021
  - during CHT platform intervention: December 2021 to March 2022.

## Results

- Combined outpatient department (OPD) attendance due to malaria, diarrhoea and pneumonia among children under five declined significantly, from 46 to 32 percent (p-value: <0.001) in Buikwe, compared to a non-significant change from 47 to 46 percent in Kayunga (p-value: 0.073).
- Malaria-related admissions among children under five declined significantly, from 16 to 13 percent (p-value: <0.001) in Buikwe, compared to a non-significant decline from 16 to 15 percent in Kayunga (p-value: 0.098).
- Malaria deaths among children under five, computed per 100,000 population per year, declined in Buikwe from 71.7 deaths to 59.5 deaths, compared to a slight decline in Kayunga from 76.1 deaths to 73.1 deaths.

Figure 1: Outpatient department attendance due to malaria, diarrhoea and pneumonia among children under five

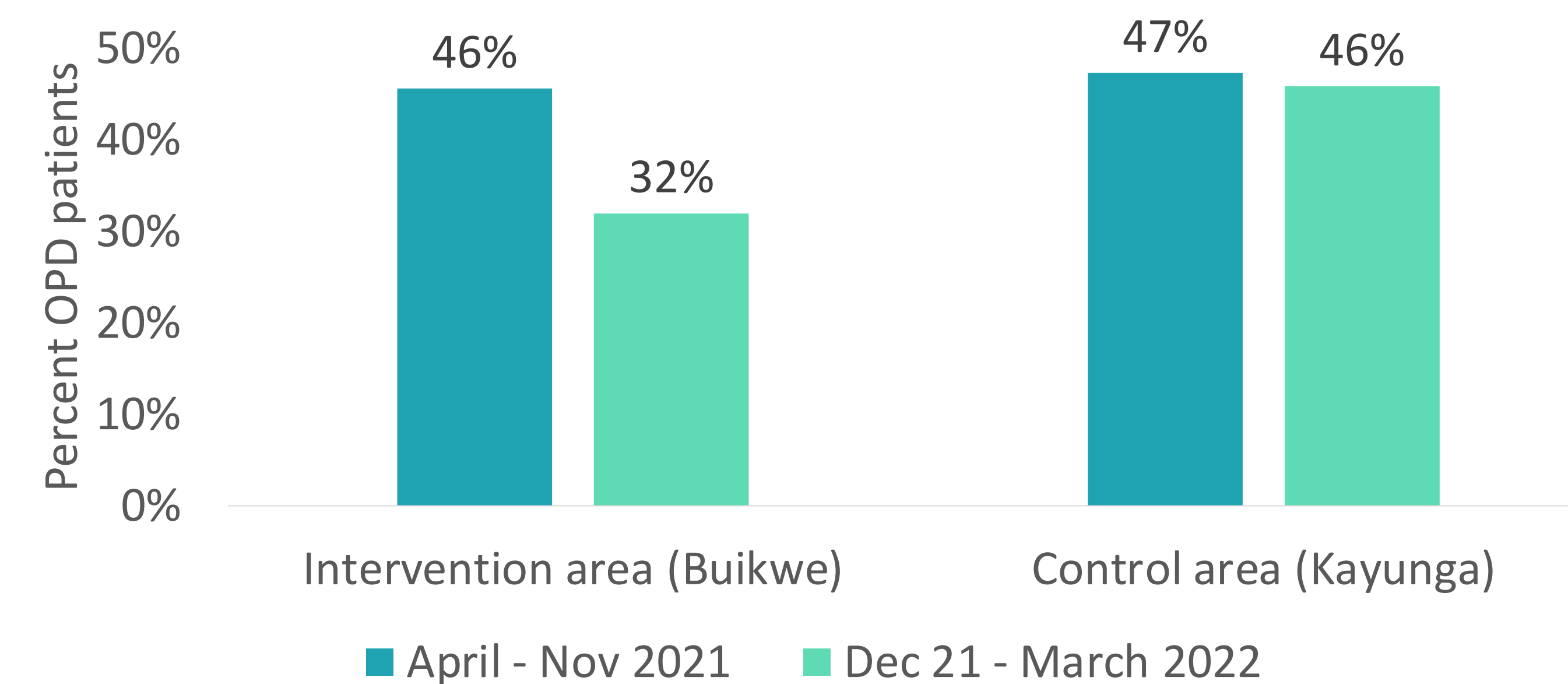


Figure 2: Outpatient department attendance due to malaria among children under five

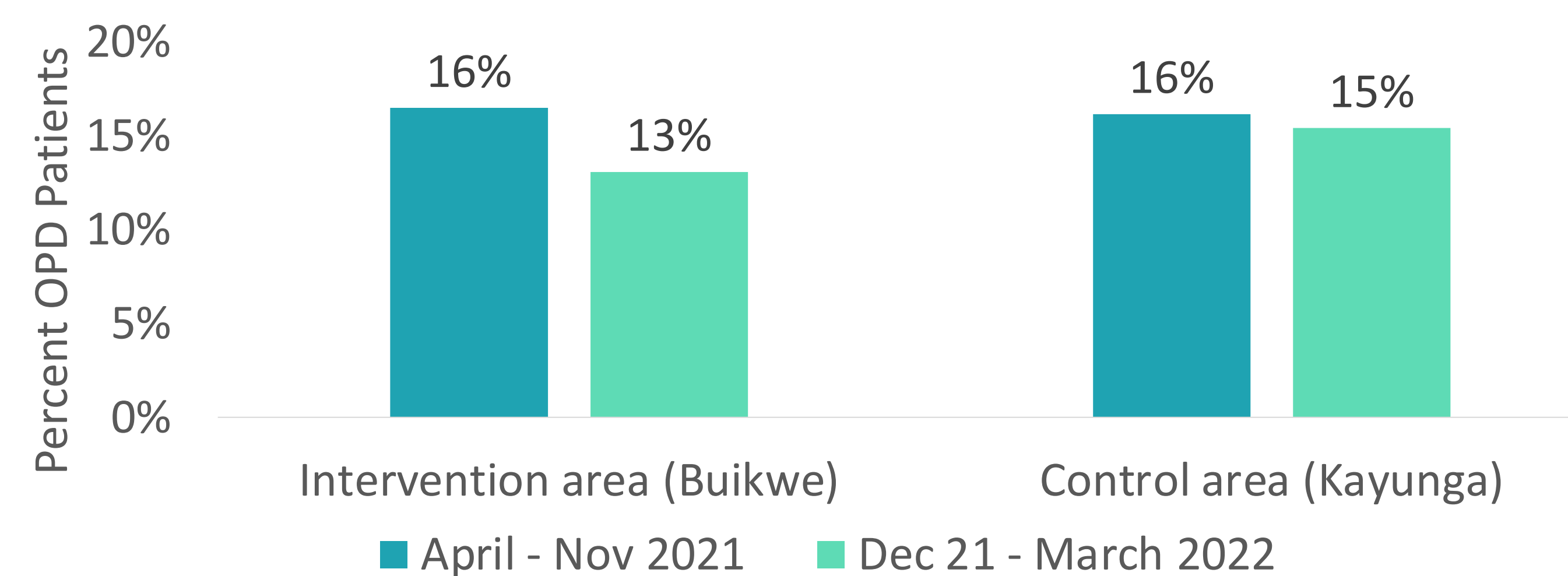
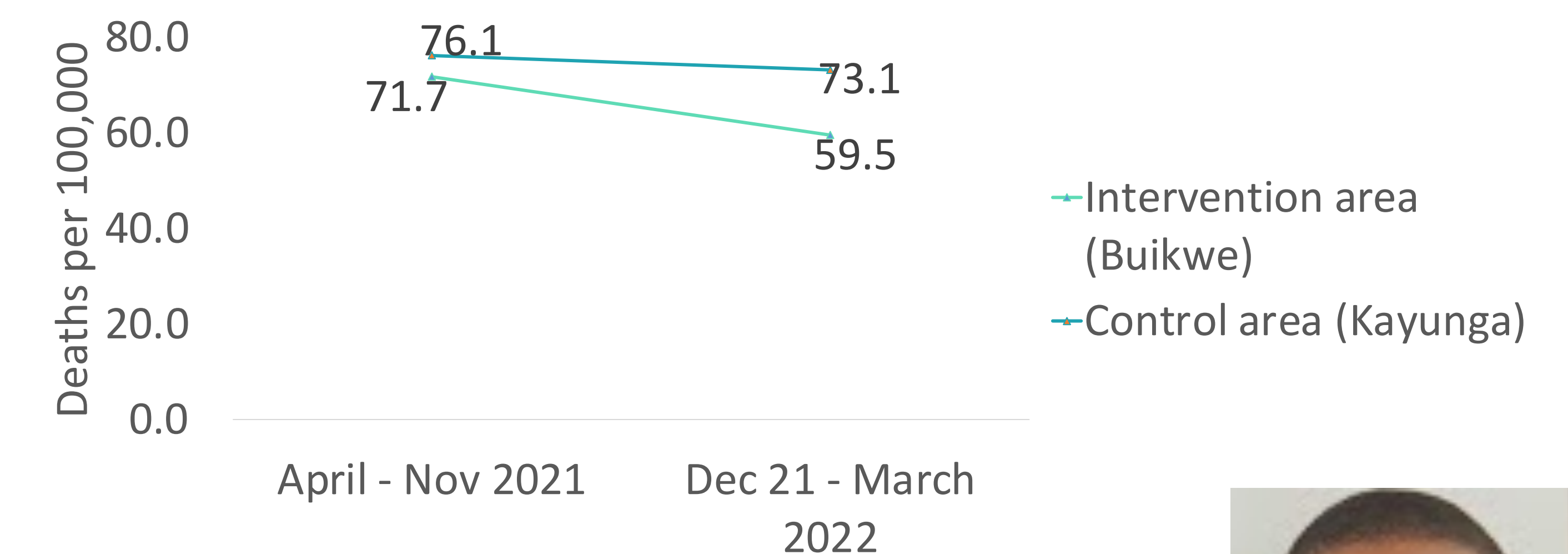


Figure 3: Deaths among children under five due to malaria per year, per 100,000 population



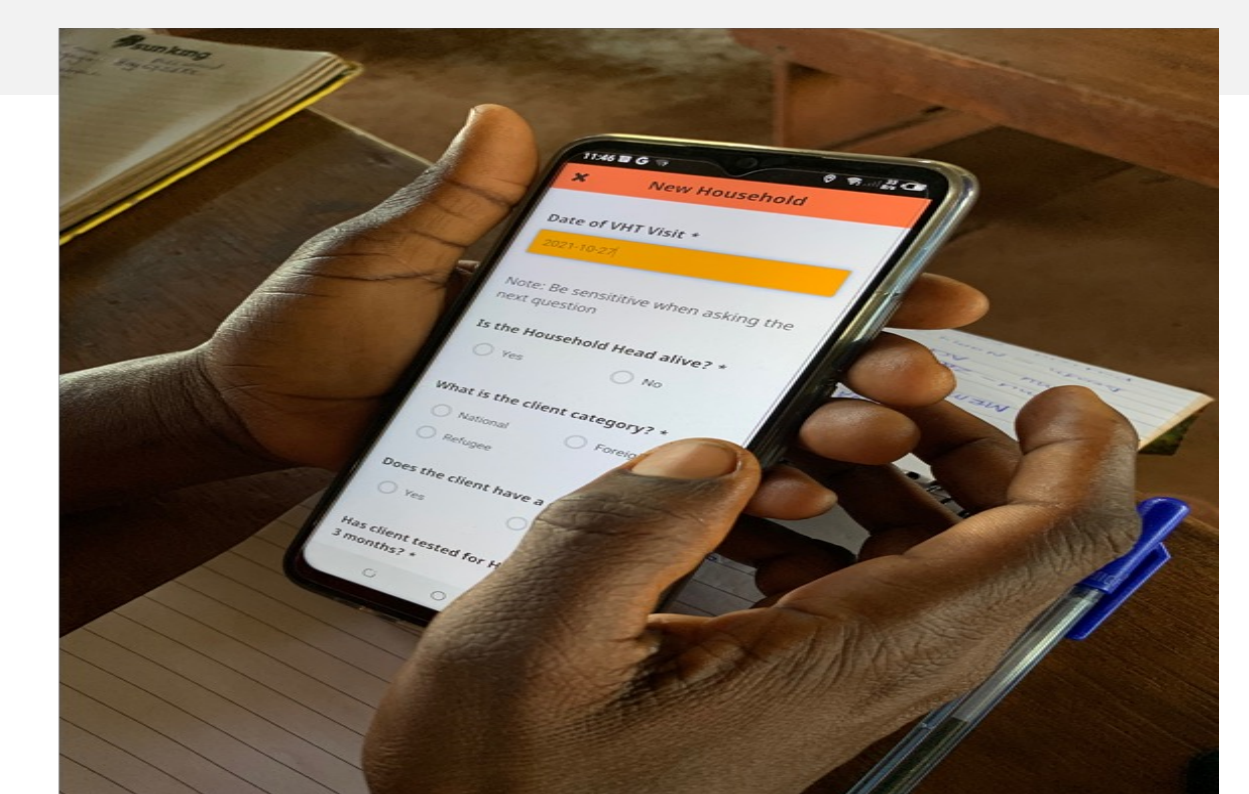
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John Baptist Bwanika is a senior monitoring and evaluation (M&E) specialist with 18 years' experience in designing public health information systems; assuring data quality; M&E capacity strengthening for districts; study design; data management; and analysis. This includes five years as the Senior Monitoring, Evaluation and Learning Advisor on the USAID's Malaria Action Program for Districts. He holds a master's degree in health science (biostatistics and epidemiology), funded by the Fogarty NIH, from the Johns Hopkins Bloomberg School of Public Health.



MoH officials during a support visit to village health teams implementing the CHT, Uganda



Village health team member uses the digitised CHT in Buikwe, Uganda

## Conclusion

The digitised CHT intervention in Buikwe district was instrumental in enabling the availability of services for children under five in the community. This led to a reduction in the burden of illness and death at the health facility level. The MoH should further examine using the digitised CHT as a complementary intervention and consider its scale-up in rural areas.