IMPROVING THE EFFECTIVENESS OF MASS LONG-LASTING INSECTICIDE-TREATED NET DISTRIBUTION CAMPAIGNS THROUGH COMMUNITY-BASED HEALTH PLANNING AND SERVICES PROGRAMME IN GHANA (MY-CAMP) PROJECT

[Project Lead: Prof. Phyllis Dako-Gyeke
Associate Professor/Head, Department of Social and Behavioural Sciences
University of Ghana School of Public Health¹]

Names of Project Co-leads: [Dr. Franklin Glozah¹ ; Dr. Emmanuel Asampong¹; Dr. Philip Tabong¹ Dr. Adanna Nwameme¹ ;Dr. Margareta Gloria Chandi (Municipal Health Director, Ghana Health Service (GHS)); Dr. Nana Yaw Peprah (Epidemiologist, National Malaria Control Programme); Prof. Philip Baba Adongo¹]

Institution: University of Ghana
Partner organizations: Ghana Health Service (GHS), National Malaria Control Programme (NMCP)
August 2022
# Overview

<table>
<thead>
<tr>
<th>Introduction and Background</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Objectives, Methods, and Limitations</td>
</tr>
<tr>
<td>Results</td>
</tr>
<tr>
<td>Promising Practices</td>
</tr>
<tr>
<td>Lessons Learned</td>
</tr>
<tr>
<td>Implications for Policy and Practice and Future Research</td>
</tr>
</tbody>
</table>
Introduction and Background

Long-Lasting Insecticide-treated net (LLIN) has been identified by the World Health Organization (WHO) as an effective approach for malaria prevention (WHO, 2017).

In Ghana, the Mass LLIN Distribution Campaign seeks to protect at least 80% of the population at risk with effective malaria prevention interventions, through household registration (90%) and Distribution (90%) in target regions, by adopting WHO’s universal health coverage policy (UNICEF/WHO, 2015).

In spite of the progress made in overall LLIN ownership over the years, the challenge remains to reach the target of 80% utilisation amongst pregnant women and children under 5 years as outlined in the NMCP Strategic Plan. The gap between access to and use of LLINs in Ghana is high.

Though these campaigns expose high proportions of the Ghanaian community to LLIN interventions, they hardly lead to desired health-related behaviours (i.e., LLIN use).
Study Objectives and Research Questions

1. Assess the LLINs Campaign implementation processes at the community level to identify stages involved in the delivery of LLINs by end of August, 2021

2. Identify potential enablers and barriers within the CHPS programme to determine institutional structures that can be leveraged/addressed to support the implementation of continuous Mass LLIN Distribution Campaigns to improve use of LLINs by end of August, 2021

3. Prioritize contextual factors and implementation processes for effective Campaign transitioning to increase household use of LLINs through stakeholder engagement, by end of September, 2021

4. Co-create interventions (i.e. capacity building for CHO, community mobilization) to strengthen the Mass LLIN Distribution Campaign, by the end of October 2021, to increase use of LLINs within households

5. Assess the acceptability and appropriateness of co-created Campaign interventions (i.e. capacity building for CHO, community mobilization) through the conduct of community surveys and interviews by end of February, 2022

6. Assess the feasibility of transitioning the co-created interventions (i.e. capacity building for CHO, community mobilization) into Primary Health Care delivery through the conduct of key informant interviews among health care workers by end of May 2022
Methods 1/3 : Study Sites

The study sites include six communities, across two regions (Eastern and Volta) in southern Ghana. These were communities in districts where the 2021 Point Mass Distribution (PMD) campaigns of LLINs were ongoing and recorded the highest prevalence of malaria as reported in the District Health Information Management System (DHIMS2) Ho West (Tsito-90%), Ho (Takla Hokpeta-75%) and Agortime Ziope (Kpetoe-100%) in the Volta Region; and Birim South (Apoli-94%), Achiase (Achiase-94%) and Abuakwa North (Kukurantumi-93%) in the Eastern Region

(data source: District Health Information Management System 2 - DHIMS 2).
Methods 2/3: Study design, data collection & sample size

The study employed a concurrent triangulation mixed methods research design, involving participatory approaches within an implementation research framework, organized concurrently, albeit at different times.

The desk review involved a comprehensive literature search and reviews to identify relevant published and grey literature on potential barriers, enablers, lessons learnt and recommendations from similar interventions.

A baseline and end-line survey (n=800) was conducted across the six districts to identify baseline parameters to be used for assessing the effectiveness of our co-created intervention. The survey data were collected using REDCap software on android tablets.

The qualitative component comprised ten KII s (n=10) and twenty FGDs (n=166) from six communities in the Volta and Eastern Regions of Ghana. FGDs involved purposively selected household heads (6), caregivers of children under 5 (8), and Community Health Officers (6).
Methods 3/3: Analysis, Ethics & Limitations

Findings from the Desk Review, FGDs, KII, and baseline surveys were synthesized, grouped and further distilled to guide the participatory co-creation workshops.

Data Analysis: The quantitative data was statistically analyzed using the SPSS software. The qualitative data was thematically analyzed using the NVivo software version 13.

Ethics: Ethical clearance was obtained from the Ghana Health Service Ethics Review Committee (GHS-ERC: 002/06/21).

Limitations: Challenge matching baseline and endline assessment, only 6 out of the total number (216) of districts in Ghana were engaged in the study.
Photos

Community Health Advocacy Team (CHAT) members on home visits, creating awareness on malaria prevention and LLIN use

CHAT members educating caregivers of children under 5 years on LLIN use and malaria prevention

CHAT members educating school children on LLIN use and malaria prevention
Results 1/2

The desk review revealed that, though majority of households receive LLINs for free mainly through mass distribution campaign, the distribution of LLINs without Social and Behavioural Change Communication (SBCC) activities make beneficiaries less likely to use LLINs to reduce the transmission of malaria.

Although some community members (i.e. traditional authorities, volunteers, etc.) are engaged to support the campaign, local structures are not fully optimized to effectively address misconceptions and misunderstandings surrounding LLINs within communities and such misconceptions linger within communities to drive the non and misuse of LLINs.
Results 2/2

Also, identified enablers such as community receptiveness to CHPs, language and cultural competencies of community health workers and awareness creation on health-related activities within the CHPs system can be leveraged. Potential barriers can be addressed to support the implementation of continuous Mass LLIN Distribution Campaigns to improve the use of LLINs. The co-created intervention (Community Health Advocacy Team) constitutes significant actors within the study communities whose roles include awareness creation on LLIN use and malaria prevention, Community/Social mobilization, capacity building and SBCC.

After successful implementation of the intervention, majority (90%) of community members in all six districts perceive the CHAT intervention to be acceptable, appropriate and feasible.
Promising Practices

- Design/Develop a manual to guide the preparation, use, and maintenance of LLINs and key myths/misconceptions within communities.
- Leverage the presence of CHPS in the communities to advance the Mass LLIN Distribution Campaigns.
- Integrate CHAT into the existing Community Health Committees.
Lessons Learned

- Continuously engage community members to properly educate, promote, and monitor the use of nets, whilst deterring misuse of LLINs in the communities.
- Maximize the use of the Community Information Centers for the Mass LLIN Distribution Campaigns.
- When community stakeholders are systematically constituted within the Community Health Management Team, it can sustain LLIN use in the communities.
Implications for Policy, Practice and Future Research

- Integrate the Community Health Advocacy Team (CHAT) to strengthen the community-based health planning and Services (CHPS). CHAT will focus on LLIN use/malaria prevention and their capacity regularly strengthened.

- Reconsider the members of the Community Health Committee (CHC) to include the CHAT. This could be re-aligned so that the CHAT will be a sub-committee or team focusing on malaria control.

- Determine how to mobilize funds to sustain the activities of CHAT.

- Determine the effectiveness, cost, and cost-effectiveness of the CHAT across Ghana.
Summary of Key Messages

The National Malaria Control Programme (NMCP) rolls out mass long-lasting insecticide net (LLIN) distribution campaigns in communities. However, it has not been embedded into the primary healthcare structures.

A community health advocacy team should be constituted to support the LLIN distribution campaign in communities.

LLIN distribution campaign would be transitioned into the community-based health planning and Services (CHPS), improve use of LLIN within communities, thereby reduce malaria morbidity and mortality.
THANK YOU.