Neglected tropical diseases (NTDs) are considered “neglected” because they lack funding and attention to promote proper care practices. Lack of access to morbidity management and disability prevention services results in significant physical and psycho-social consequences. The root of this is often delayed identification, confirmation and treatment.

American Leprosy Missions (ALM) has demonstrated that integrating NTD care improves health outcomes for all. From January to December 2020, ALM implemented a new integrated optimal model to support people living with NTDs in Bong County in Liberia. This successful project produced positive change across several health indicators.
SUMMARY OF INTEGRATED NTD CARE PROJECT

ALM’s Integrated Approach
Integrated approaches are often presented as a solution for NTD management despite limited evidence on efficacy. Working in collaboration with community and health systems stakeholders, this project aimed to add to this evidence base through the co-design of an optimal model to improve early case detection of skin NTDs, such as leprosy, Buruli ulcer, lymphedema, hydrocele and yaws. An initial assessment of the strengths and weaknesses of current models being applied in Bong and Maryland Counties was conducted between January 2019 - April 2019. These findings were used to inform the development of the optimal model. The optimal model was then implemented in Bong County as a pilot throughout 2020.

Evaluating the Integrated Approach
This report presents the evaluation of the optimal model. The optimal model included a comprehensive training on integrated approaches to identify, refer, diagnose and manage NTDs at the community level. This also included a referral process, supervision structure and incentive packages. We conducted a mixed methods evaluation to understand strengths and weaknesses of the optimal model through key informant interviews, focus group discussions, and sessions with community and health system stakeholders as well as quantitative analysis of routinely collected health systems information on the utilization of NTD services.

Integrated Approach Findings
Across several different evaluation metrics, the integrated optimal model showed improvements in health outcomes for those living with NTDs. Improved case finding and referral through the newly developed training and tools has equipped health workers from all levels of the health system to effectively identify and treat NTDs and to prevent lifelong disability. This pilot has taught us important lessons and created an evidence-based foundation to implement and scale up an integrated model of care.

Partners
This study was funded by the Coalition for Operational Research on Neglected Tropical Diseases (COR-NTD), and was implemented in partnership between the Ministry of Health Liberia, American Leprosy Missions, UL-PIRE Africa and the Liverpool School of Tropical Medicine.

Overall, the optimal model has been effective in improving early case detection and referral of NTD cases, addressing healthcare access issues and preventing disability.
KEY RESULTS OF INTEGRATED CARE

Integrated NTD care leads to identification of more cases, connecting more people with the medical help they need.

Results from evaluation of the optimal model show that between 2019 and 2020, more cases were detected of all measured diseases (Figure 1). For hydrocele and Buruli ulcer, more than twice the number of cases were reported. Additionally, for the first time since integrated case detection has been implemented in the county, cases were reported from all county health facilities. This suggests that the optimal model has significantly expanded the reach of the NTD program.

![ANNUAL COMPARISON OF NTD CASES](image)

Figure 1: Annual number of cases detected per disease

Integrated NTD care increases early detection of cases, allowing individuals to receive treatment before disability worsens.

In 2020, a greater proportion of Buruli ulcer cases were detected with less developed lesions as compared with 2019. This means that patients endured less suffering before receiving needed treatment, and that more long-term disability was prevented.

The integrated model teaches community health workers (CHWs) not only to detect cases more effectively, but also to fight stigma in their communities.

The optimal model was used to train 704 community health workers. The knowledge they gained through training allowed workers to effectively battle stigma and to ultimately improve health outcomes for their communities.
The integrated model employs supervisors and peer advocates to support and complement the work of CHWs.

Supervisors continued health worker training in the field by visiting CHWs to answer their questions and improve their work practices, while peer advocates worked to identify and refer cases within their own communities. Over 100 supervisors and peer advocates were trained through the integrated model in 2020.

“But since this … new approach came out, it [is] helping our community, our parents, our brothers and sisters to know that this is not a witch. This is a disease condition that happen to people and they can get cure from it.” (Community Health Service Supervisor, Bong County)

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Community health worker training on the optimal model in Bong County, Liberia