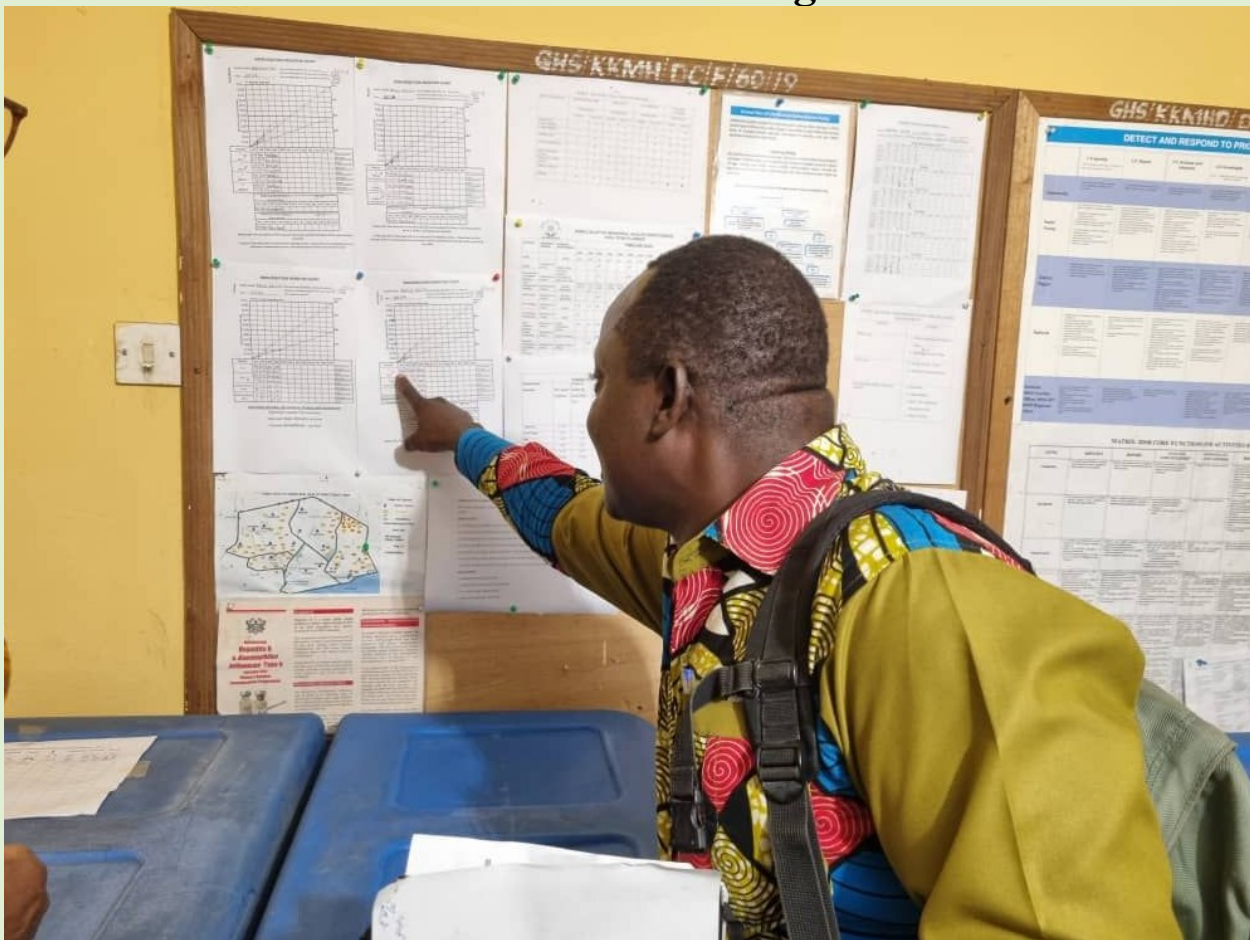


Organizing mop-up activities on immunization and the effect on Measles/rubella vaccine coverage in Ghana - The Greater Accra Region



INTRODUCTION

Mop-up campaigns are door-to-door immunizations conducted in specific areas where infections are known or suspected to be circulating. Priority areas include those where polio cases have been found over the previous three years and where access to health care is challenging. Other criteria include high population density, poor sanitation, and low routine immunization coverage. The Greater Accra Region conducted a 5-day routine EPI and vitamin A mass vaccination campaign across all 29 districts. These mop-up efforts bolster herd immunity by raising the overall immunity level within the community. This defensive barrier is crucial as it stops disease transmission, thereby indirectly protecting individuals who cannot receive vaccinations due to several reasons.

These mop-up vaccination campaigns in Greater Accra started in 2023. It was typically

used to ensure broader coverage of vaccination efforts. These campaigns are especially important in reaching populations that may have been missed during initial vaccination drives. In the Greater Accra region of Ghana, the low immunization rate poses a significant threat to child health. A 2023 Ghana Health Service (GHS) report identified a critical issue: over 7,000 children in the Greater Accra Region missed the MR2 vaccination (second dose of Measles/Rubella vaccine). This intervention aimed to increase immunization rates and coverage by mobilizing communities and addressing issues such as vaccine hesitancy and the impact of COVID-19 recovery on immunization. Additionally, the growing population has hindered the results of immunization activities. Vaccination efforts are crucial in protecting children from preventable illnesses such as polio, measles, and yellow fever. Implementing best practices in immunization helps improve coverage and outcomes, with activities including vaccination campaigns and mop-up activities. Ghana’s mop-up campaign aims to extend the public health system into the homes and workplaces of at-risk populations. In Accra, the campaign, tagged "Vaccines Work," has successfully discovered previously missed children and ensured mothers are up to date on their children's immunizations, indicating effective education efforts.

GREATER ACCRA REGIONAL MAP WITH DISTRICT

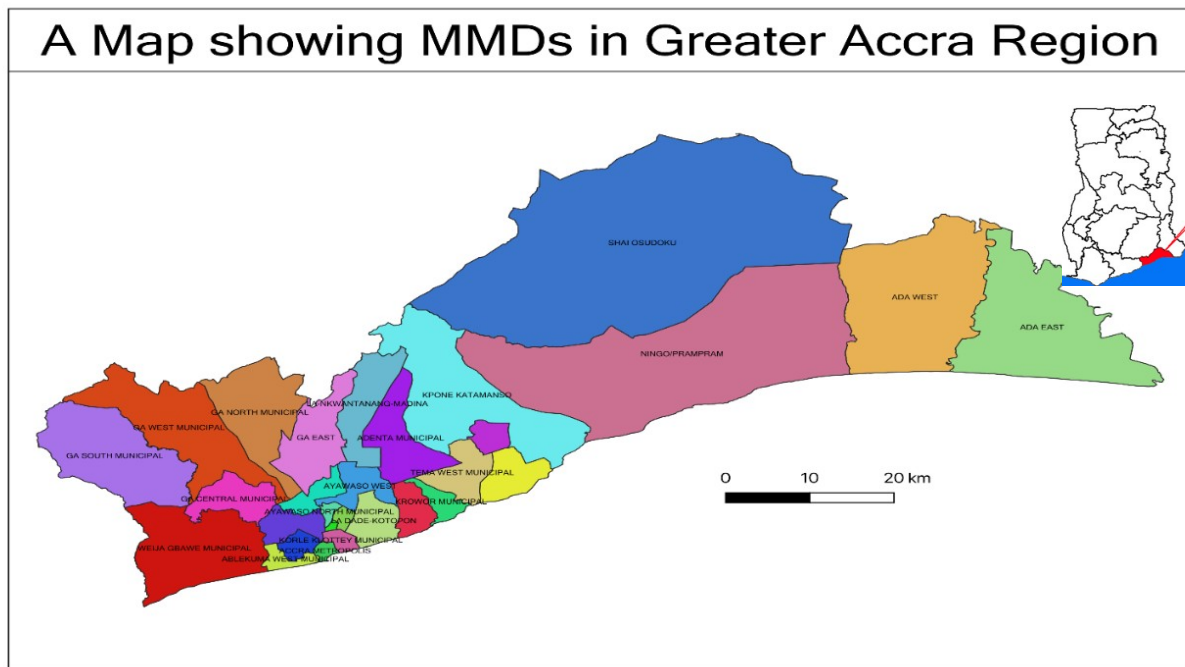


Figure 1: Ghana and the Greater Accra Region medical districts

Note: for mapping purposes, you can visualize the region using geospatial data files.

PLANNING AND IMPLEMENTATION

The planning of mop-up campaigns involved collaboration among various organizations, including stakeholders, private sector support, and the district assembly. A significant tool used was the ODK data collection tool, designed, which enabled geo-enabled digital micro-planning. This tool was crucial for tracing defaulters and unvaccinated children across sub-districts and Community Health Planning and Services (CHPS) zones.

- a) ***Securing Funding Support:*** Identifying and securing funding was a critical component of the campaign. The Essential Service Support Fund from the Greater Accra Regional Health Services provided vital financial resources. This support enabled the execution of extensive mop-up activities across the region. (*Expanded Programme on Immunization (EPI) – Ghana Health Service, n.d.*)
- b) ***Micro-Planning Meetings:*** Micro-planning meetings with staff and community members were conducted to identify gaps and plan social mobilization activities. These meetings utilized a template to ensure comprehensive coverage of all necessary aspects, ensuring no gaps were left unaddressed and that micro plan is being done to get new strategies to get the children to be vaccinated.
- c) ***Enhanced Supervision and Monitoring:*** Improving the quality of services was a priority to be achieved through the strengthening of supervision and monitoring mechanisms. Daily feedback from field activities ensured real-time adjustments and continuous improvement in service delivery.
- d) ***Integration with Other Health Programs:*** The mop-up activities were integrated with other child health-related programs such as Child Health Promotion Week (CHPW), Integrated Maternal and Childhood Health, and Polio National Immunization Days (NIDs). This integration ensured a holistic approach to child health and maximized resource utilization.
- e) ***Training in Data Generation and Use:*** Training sessions were conducted to enhance data generation and usage for decision-making. Tools such as the ODK were used by supervisors to complete checklists electronically for every team supervised, conducted both inside and outside of house assessment, facilitating accurate and timely data collection and analysis.
- f) ***Strengthening Lower-Level Planning:*** Training in micro-planning was provided to lower-level staff, empowering them to create effective and efficient plans tailored to their specific areas. This localized planning approach ensured that strategies were relevant and practical.
- g) ***Collaboration with Stakeholders:*** Strengthened collaborations with stakeholders were essential for improving surveillance performance. Engaging with community leaders, such as assembly men and chiefs, fostered community support and participation in the mop-up activities.
- h) ***Performance Feedback:*** Regular feedback on performance was provided to reporting institutions. This practice ensured transparency and accountability, allowing for continuous improvement and recognition of achievements.

- i) ***Capacity Building for Cold Chain and Vaccine Management:*** Capacity-building activities focused on cold chain and vaccine management were supported across all districts. Ensuring the integrity of vaccines was paramount, and these activities helped maintain the required standards for vaccine storage and handling.

The quarterly mop-up campaigns were organized in selected districts of the Greater Accra region. Specifically, areas with low coverage, densely populated areas, and hard-to-reach locations were targeted. The campaigns included the introduction of school vaccinations in districts like Kpone and Katamanso. Weekend vaccination programs were held across all districts in Accra, including Ga South municipality, Adenta municipality, and Ashaiman.

Funding for these immunization programs primarily came from the Essential Service Support Fund of GHS and EPI. Micro-planning meetings were pivotal in identifying and addressing gaps in immunization activities. The data collection tools, developed with GIS assistance, included a Google template for efficient on-site data collection. The program was also funded by the regional health service of Greater Accra, driven by the need for COVID-19 recovery and addressing vaccine shortages. The regional director of health services played a key role in securing funding for the mop-up activities. Additionally, the private sector significantly contributed to the financial support, especially during critical immunization campaigns in Ghana.

RESULTS

Mop-up vaccination campaigns in Ghana achieved significant results, demonstrating the effectiveness of the implemented strategies, the acceptance of communities and the dedication of all involved stakeholders. These efforts of mop-up activities in the Greater Accra region resulted in a significant increase in second year-of-life vaccination coverage, particularly for the measles-rubella vaccine. There was an improved vaccine acceptance rate in communities with positive feedback from the community members.

Reach and Coverage

- **Communities Reached:** A total of 322 communities were targeted and successfully reached during the mop-up vaccination campaign.

-The quarterly mop-up activity by the Greater Accra region was effective in region children who have missed vaccines. The 4th quarter mop-up campaign in 2023 in the Greater Accra region vaccinated 6678 and 7559 children for measles/rubella (MR) dose one and dose two respectively. This represented a mean coverage of 10.3% for MR1 (ranging from less than 1% in Krowor district to 173.2% in Ada East district) and a 9.3% coverage for MR2 (ranging from less than 1% in Tema West district to 358.8.2% in Ada East district) in the 2023 4th quarter mop-up campaign alone.

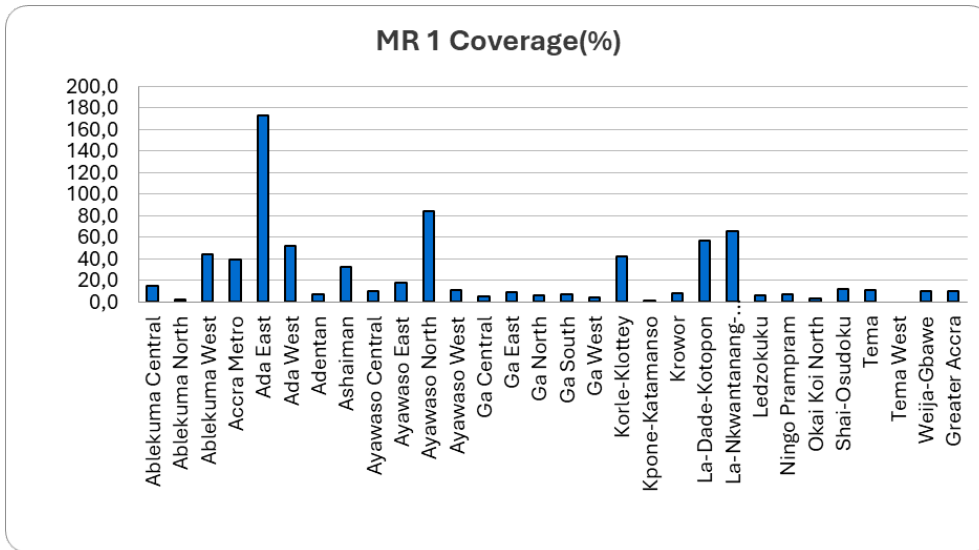


Figure 2: Coverage of first dose measles/rubella vaccine in districts after mop-up campaign

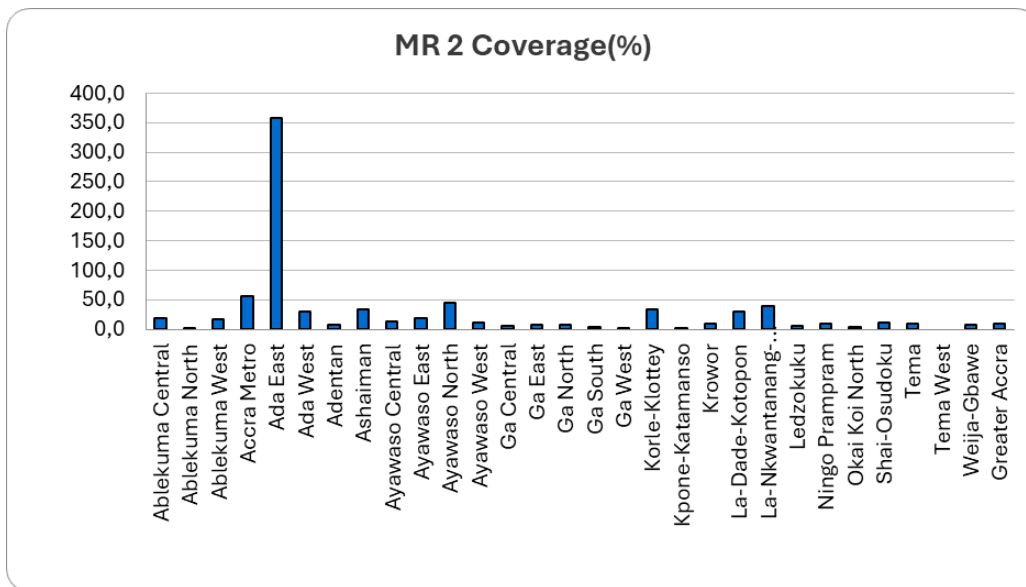


Figure 3: Coverage of second dose of measles/rubella vaccine in districts after mop-up campaign

- Another mop-up campaign organized in the second quarter of 2024 also had good coverage, with MR1 achieving 10.4% coverage (6703 children) and MR2 achieving 9.1% coverage (7376 children).

Achieving Vaccine Equity

Significant strides were made toward achieving vaccine equity, ensuring that more districts reached higher immunization coverage levels. This effort reflects the campaign's success in reaching underserved and hard-to-reach populations, thereby enhancing overall public health outcomes.

BEST PRACTICES

This improvement in immunization coverage was attributed to effective coordination and supportive supervision of the EPI activities in the region. Multiple specific best practices were reported:

Instant data monitoring and analysis:

The tools used during campaign implementation provided instant information on team performance and coverage trends. The results that could be observed through different figures indicated the extent of the efforts to be made. The analysis of the data recorded during the campaign and the integration of the data from the files and evaluation of the various EPI campaigns, carried out using DHIS management systems, also facilitated the teams' supervision activities. It also allowed workers to produce reports and graphs to judge the achievement of objectives.

Reactive vaccine provision:

During immunization activities, it can happen, for various reasons, that vaccination teams run out of vaccine. The results of the data analysis and performance also allowed the supervisory teams to supply the vaccination teams with vaccine when needed. These steps have made it possible to improve the continuity of service in the field while ensuring the efficiency of the activity.

Improved vaccine confidence and acceptance:

In the opinion of the respondents, the organization of catch-up campaigns has improved the population's knowledge on vaccination and on the different vaccines. In doing so, catch-up campaigns have been effective approaches to improving vaccine confidence and acceptance at the community level. Communication activities carried out before and during these activities make it possible to reach even the hardest-to-reach populations.

LESSONS LEARNED

1. There are some gaps and challenges in the implementation of the best practices that are related to the capacity of providers at all levels. However, challenges are more important at proximate levels, ie, those who work closely with vaccine recipients. The abilities of the teams at these levels determine the success of the mop-up activities. Thus, there are needs for capacity building of the lower-level staff on vaccination activities. Training in demand generation will help to improve EPI access and utilization.

2. Immunization activities take place every month and almost every time. This may lead to the conclusion that everyone is informed about immunization. This is a wrong perception because knowledge that immunization is good is different from being ready to engage for immunization activities. There is a need to educate the public on vaccination. Knowledge of the importance of immunization is not the problem, what is at stake is to help the public know what is in detail in the activities.
3. Organizing mop-up activities requires preparation and comprehensive coordination. This is more important at equipment level. All initial logistical hurdles in vaccine procurement and distribution need to be addressed effectively. All cold chain system needs to be checked before, and any problem identified needs to be addressed before the campaign.
4. Mop-up activities are organized to reach the unreached. Various reasons may explain why these children were not reached. This may include the wrong information aired on the immunization in general and specifically on the vaccines that are being delivered. It is important to address all misinformation and rumors about vaccines.
5. The creation of more outreach points helps improve immunization coverage and leave no child behind. These challenges gave a broad view of how to implement best practices on immunization.

CONCLUSION

The success of the mop-up activities on immunization in Greater Accra underscores the importance of tailored strategies, strong partnerships, and adaptive management in achieving high vaccination coverage. These lessons learned are crucial for future immunization efforts, recommending sustained community engagement, robust data management, and flexible funding mechanisms to address evolving health challenges effectively. Quarterly mop-up campaigns, when adopted will help improve immunization coverage and vaccine acceptance rate therefore a need to replicate it in other countries. A strategic EPI implementation guideline and training manuals should be made available for successful implementation in other countries. This structured reflection captures key insights and areas for improvement based on the experience of implementing immunization mop-up activities in Greater Accra, highlighting both successes and challenges encountered in the process.

Further reading

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