Considerations for Health Campaigns' Transition to and Linkages with the Primary Health Care System from a Synthesis of Implementation Research

April 2023

Contents

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Executive Summary

Background: Health campaigns are time-bound efforts to address an epidemiological need, fill a service delivery gap, or provide surge coverage for a health intervention. Historically, campaigns have been primarily funded by donors, but governments are making efforts to reduce reliance on external support and facilitate linkage with ongoing primary health care (PHC) services. Transitioning a campaign into the PHC system may be prompted by external factors such as rising income status, which limits the need for development aid, or the phasing out of campaigns, such as polio vaccination days, after country targets have been met. If the transition of health campaigns into the PHC system is not well planned and managed, such a transition could reduce gains made in population coverage of vaccines, preventive chemotherapy, vitamin A supplementation, and interventions to prevent malaria. Little is known about the process of fostering campaigns' transition to and linkages with PHC systems and its effects.

Methods: In 2021, following development of the Health Campaign Effectiveness Coalition's Research and Learning Agenda, the Coalition issued a request for proposals for implementation research studies from partners in low- and middle-income countries to address questions related to transitioning health campaigns. Six implementation research projects were funded in Cameroon, Côte d'Ivoire, Ethiopia, Ghana, Nigeria, and Vanuatu that related to neglected tropical diseases, malaria, and nutrition. Over 18 months, the projects assessed campaign transitions to the PHC system, the fostering of greater linkages between campaigns and the PHC system, and the support needed to the routine system for a transitioned intervention. Two of the six projects were exploratory. Four projects evaluated a transition in process or that had been completed. Findings from these studies were assessed in a qualitative evidence synthesis to identify common challenges and solutions proposed by the projects, enablers, promising practices. We also describe outcomes related to the beneficiaries of the interventions.

Results: Challenges related to transitioning campaigns to the PHC system included uneven government commitment, sociocultural barriers, stock-outs of drugs, lack of funding, increased health care provider workload, limited monitoring tools, and poor coordination. Solutions and promising practices were identified to both address challenges and inform future campaign transitions to, and linkages with, the PHC system. Ten promising practices within four overarching themes emerged:

Phased Transition Plan

1. Develop a phased campaign transition framework that defines the players and their roles and allocates budget amounts.

2. Continue existing government partnerships and intergovernmental coordination to support campaign activities.

Inclusive Engagement of Stakeholders

1. Include stakeholders from relevant government departments and ministries in an intersectoral approach and assess the availability of resources to support campaign transition.

2. Foster purposeful community engagement as an ongoing activity.

3. Facilitate ownership of transitioned interventions among the community and health workers.

Management and Strengthening of Human Resources

1. Assess existing and needed cadres of health workers and community health workers so that workers' roles and responsibilities align with campaign activities being transitioned to the PHC system.

2. Plan for capacity-building needs, approaches to staff motivation, and supervision to ensure sustainability.

3. Develop a strategy for identifying sources of financing for human resources when additional staffing is required.

Adequate and Efficient Information Systems, Including for Supply Chain Management

1. Develop and strengthen a reliable data management system for service delivery that includes the transitioned intervention.

2. Establish and/or strengthen a system that adequately forecasts and manages drugs and supplies across district and health facility levels to ensure supply availability.

Outcomes related to the interactions with beneficiaries of the interventions were identified in five studies, with different studies measuring different outcomes. In the project in Nigeria, after transitioning neglected tropical disease campaigns to country ownership in four districts, coverage of deworming to address soil-transmitted helminthiasis remained high, whereas coverage for schistosomiasis declined due to drug supply unavailability. The project in Vanuatu also found that coverage of the campaign targeting yaws, scabies, and soil-transmitted helminths was maintained at high levels when integrated with skin exams and referral of suspected skin cases to the PHC system, although coverage was slightly below the target. In projects in Vanuatu and Ghana high acceptability was gained as seen in surveys with health workers and the community.

Conclusion: Planners, managers, and funders of campaigns should adopt the promising practices, adapted to their local context, that focus on how to include all stakeholders at all levels during a phased transition; strengthen and manage human resources; and develop appropriate data and information management systems, including for the supply chain. The knowledge gaps that remain relate to determining the optimal time and stages needed to transition different campaigns across health programs and piloting and evaluating efforts to strengthen the PHC systems taking ownership of transitioned campaign interventions. Stakeholders involved in monitoring programs and conducting research should study the outcomes of adopting the promising practices and filling the knowledge gaps.

Background

Primary health care (PHC) systems include a continuum of services, ranging from health promotion and disease prevention to treatment, rehabilitation, and palliative care. PHC should be provided by the domestic government in a manner as close as possible to people's everyday environment, according to the World Health Organization (WHO) and United Nations Children's Fund (UNICEF) [1]. Since the Alma-Ata Declaration of 1978, PHC systems have been strengthened and expanded [2]. Increasingly, they are developing into holistic, collaborative, far-reaching systems to take on greater demands for delivering health interventions, including those historically delivered by health campaigns [3]. The United Nations' Sustainable Development Goal 3 calls for efforts to "ensure healthy lives and promote well-being for all at all ages," reaffirming the global commitment to PHC [4].

Box 1. Health Campaign and Transition Defined

A **health campaign** is a targeted, time-bound intervention that addresses "specific epidemiological challenges, expediently fills service delivery gaps, or provides surge coverage for health interventions [5]." An effective approach that has been used for decades, health campaigns are used to eliminate vaccine-preventable diseases—including polio, neglected tropical diseases, and malaria—and malnutrition through dietary supplementation [6].

The **transition of a health campaign** is the integration of the delivery of targeted interventions delivered via campaign activities into the primary health care system and the transfer of the interventions to government ownership [7]. Transition may be the full integration of all elements into domestic governance—such as integrated governance, financing, planning, service delivery, and monitoring and evaluation—or it may involve the transfer of one or more components into the primary health care system. The process of transitioning an ongoing health campaign into the primary health care system is complex; it requires careful consideration and planning by the country and any external partners to ensure that the intervention results, in terms of improved health, continue to be achieved [8].

While health campaigns have long been an effective tool to deliver a variety of interventions, countries are increasingly moving toward integrating campaigns into PHC systems [7]. This decision may stem from an interest in moving toward universal health care [1] or simply improving health care delivery, as transitioning isolated, targeted campaigns into the broader PHC system is regarded as increasing efficiency and sustainability, and reducing health worker fatigue [9,10]. The impetus toward domestic ownership may also have external factors, which could leave local systems unprepared to manage the demands [11]. Health programs in low- and middle-income countries are often reliant on external aid. In recent years, there has been a shift toward reducing the level of assistance to countries believed to be capable of self-financing health programs, requiring countries to raise financial resources at the national or subnational level to fund the affected program [12].

The process of transition is complex. Consequently, program managers and implementers of these transitions need guidelines and advice on how to efficiently and effectively navigate the process while continuing to provide the campaigns' essential services [7,11,13,14]. Strategic frameworks and guidelines for the transition and integration of health campaign activities include the WHO's road map to end neglected tropical diseases by 2030, which calls for effective mainstreaming of neglected tropical disease (NTD) campaign activities into the PHC system as a vital step to making further progress in NTD

control and elimination [15]. The WHO's *Global Technical Strategy for Malaria 2016–2030* and *Immunization Agenda 2030,* UNICEF's strategy for vitamin A supplementation programs, and the cross-agency *Polio Endgame Strategy 2019–2023* all echo the need to integrate the interventions currently delivered through campaign activities into a strengthened PHC system to ensure long-term sustainability of these efforts [16–19].

In a rapid literature review in 2020 on transitioning the delivery of health campaign interventions to the PHC system, the Health Campaign Effectiveness (HCE) Coalition highlighted potential benefits and challenges [7]. Benefits included an improvement in health program coverage, acceptability, and financial sustainability; increased training and job satisfaction of health workers; increased utilization of health centers; improved efficiency of interventions; and sustainable political support for the program [7]. Challenges included a lack of or wavering political will at all governmental levels, logistical difficulties of meeting the demands of the program within the PHC system, a potentially overwhelming workload and/or unsatisfactory incentives affecting the motivation of health workers, and a combination of logistical and fiscal challenges with insufficient planning threatening campaign coverage and outcomes [7]. The review also identified a need for country-based examples of recent campaign transitions and implementation research (IR) to move toward evidence-based practices.

In early 2021, the HCE Coalition's Scientific and Technical Advisory Committee developed a Research and Learning Agenda that included the topic of campaign transition [20]. Research questions focused on a) which circumstances lead to the transition of campaign interventions to PHC systems; b) what impact this transition has on programmatic coverage, resource allocation and costs, equity, community demand, satisfaction, and country health goals; and c) whether and how campaign inputs, processes, and resources are used to strengthen essential services and PHC systems. HCE then released a request for proposals to organizations in low- and middle-income countries to conduct IR on health campaign transition into PHC systems, with a budget ceiling of US$150,000 per project. Of the 48 proposals received, the HCE review committee selected six projects on campaign transition. This paper reports on the synthesis, not the findings of the individual implementation research projects.

Objective

Our objective was to identify challenges and proposed solutions, promising practices, and outcomes of campaigns in transition that are forging linkages with the PHC system or transferring to government ownership, as identified in HCE-funded IR projects, in order to inform global and country-level campaign managers and policy makers planning for transitioning campaigns.

Methods

Characteristics of the IR Projects. From March 2021 to August 2022, five projects in sub-Saharan Africa and one in the South Pacific were conducted by nongovernmental organizations (NGOs) or research institutions in partnership with national governments. The projects assessed transitions in three scenarios: (a) campaigns developing greater linkages with the PHC system, (b) campaigns transitioning to country ownership and reducing external partner assistance, and (c) campaigns transitioning to country ownership that subsequently need support for routine service delivery (Box 2). More information on each of the projects is in Annex Table 1.

Box 2. Implementation Research Projects on Health Campaign Transition, 2021–2022 [17]

Campaign Develops Greater Linkages with the Primary Health Care System

- The project team in **Cameroon** explored the potential for partial integration of mass drug administration of ivermectin for onchocerciasis into the primary health care (PHC) system. Integration involved the distribution of ivermectin after campaigns to increase access to the drug for people who miss the campaigns [21].

- Researchers in **Ghana** co-created and assessed the acceptability of a community health advocacy team that operated within the PHC system to strengthen social and behavior change communication during and following campaign distribution of long-lasting insecticide-treated bed nets [22].

- The project team in **Vanuatu** assessed the feasibility of integrating screening for skin diseases and referral of suspected cases to the PHC system into an integrated mass drug administration approach [23].

Campaign is Being Transitioned to Country Ownership

- Researchers in **Nigeria** evaluated the coverage, feasibility, and acceptability of a deworming campaign to control soil-transmitted helminthiasis and a campaign to eliminate schistosomiasis after the campaigns' transition to country ownership [24].

- The project team in **Ethiopia** explored the PHC system's readiness and potential strategies for transitioning/mainstreaming neglected tropical disease activities into the PHC system [25].

PHC System Needs Support for Routine Delivery of a Transitioned Intervention

- The project in **Côte d'Ivoire** evaluated the effectiveness of transitioning vitamin A supplementation to the PHC system and developed supportive strategies to boost routine delivery of vitamin A supplementation [26].

IR Project Study Methods: All IR projects applied mixed-methods approaches, collecting qualitative and quantitative data and analyzing primary and secondary data. Methods used by projects varied according to the specific project objectives and designs. Each project secured institutional and ethical review and approval in the study countries (described in the individual case study reports cited in the References). Project deliverables included a research brief that described promising practices.[1] Several subject matter experts reviewed each project brief and provided technical feedback to the project team.

Synthesis of the IR Findings. A qualitative evidence synthesis approach was followed [30]. A spreadsheet was used for extraction and grouping of key information from the findings, promising practices, and

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[1] A promising practice was defined as an action emerging from the study experiences that campaign planners and implementers should consider doing and building into plans. This was defined after reviewing definitions of evidence-based, best, or promising practices in the literature [27–29].

lessons learned in each IR project brief. The data were organized into categories to generate analytic themes and were also organized visually using Miro, an online whiteboarding tool, to facilitate discussions across the analysis team [31]. Finally, themes on the challenges, enablers, promising practices, outcomes, and remaining knowledge gaps were described, with consideration of the Primary Health Care Performance Initiative Conceptual Framework, supporting evidence and quotes [32].

Results

Results of the synthesis are presented in the following three sections: challenges encountered and solutions proposed by project teams, promising practices, and outcomes assessed. For each challenge, solution, or practice, the most salient example from a country project is presented. Additional findings are in Annex Table 1.

Challenges Encountered and Solutions Proposed by Project Teams

Across the IR projects, challenges can be organized into these themes: government commitment and funding, workload and motivation of health care workers, sociocultural context, coordination and communication, information systems, and supply chain management. The project teams' proposed solutions are in Table 1 and further described below the table.

Table 1. Challenges Encountered and Solutions Proposed by the Project Teams

Challenge	Solutions Proposed by Project Teams
Government commitment and funding: Campaign transition to the primary health care system has not been prioritized, particularly in relation to funding, since campaigns have historically been heavily funded by external donors	Conduct advocacy to prepare all stakeholders for transition, including leveraging funding from existing programs and implementing the transition in stages, using a context-specific framework
Workload and motivation of health care workers: Transition stretched the capacity of the primary health care system and staff	Hire additional staff, build the capacity of primary health care workers, and identify and implement motivation strategies
Sociocultural context: Beliefs, myths, and rumors negatively affected uptake of interventions	Foster community engagement to raise awareness and provide health education to dispel myths and misconceptions and make communities part of the solution
Coordination and communication: Activities were not coordinated across government departments	Harmonize and build trust among stakeholders
Information systems: Decisions were not data driven due to poor-quality or unavailable data	Establish an effective monitoring and evaluation system, including reporting and supervision tools to track and guide transition
Supply management: Stock-outs and weaknesses in supply chain management affected provision of the health intervention	Develop and use a data management system for decision making, plan for and maintain correct stock levels, conduct regular reporting

Government Commitment and Funding

In three IR projects, governments were not prepared to assume all aspects of health campaigns, and therefore the sustainability of campaign interventions after transition could not be guaranteed.

In the study in Ethiopia, NTDs were found to receive less attention and funding compared with other health programs—most regions and districts and almost all PHC facilities had no budget lines for NTDs. Respondents stated that over the 2020–2021 financial period, only 0.08% of health care expenditure was allocated to NTDs, and of that, only 1.9% came from domestic sources. Limited budget contribution by the government, lack of drugs and supplies,[2] and poor health facility infrastructure were the top-rated barriers to NTD mainstreaming, as reported by the project lead, Eyu-Ethiopia.

Additionally, interviewees in the study in Nigeria were apprehensive about the government's ability to wholly manage NTD programs addressing schistosomiasis and soil-transmitted helminthiasis, citing issues related to the availability of and access to the medicine supply. In a post-campaign survey, for over half of the children who were not offered mebendazole, their caregivers cited the reason as the lack of mass drug administration (MDA) in their district. In the qualitative interviews, a school headmaster lamented:

> *"When the government takes over, the financial aspect of the program will suffer terribly, mass drug administration will not be conducted on schedule, and the government may not show commitment toward the program."*

Proposed solutions to uneven government commitment included conducting advocacy, implementing the transition in stages, and leveraging resources from other existing programs. Respondents in Nigeria proposed extensive advocacy and sensitization to prepare for transition—specifically, advocating to the government on the programs' importance, achievements in health outcomes, and need to continue. Another proposal from Nigeria was to utilize new and existing partnerships to supplement the government's efforts. While governments are in the process of identifying local sources of funding, the transition should be carried out in stages, using context-specific frameworks, and should leverage other funded programs, where feasible.

Workload and Motivation of Health Care Workers

One of the key challenges to transitioning a campaign to routine PHC service delivery was a lack of motivation (a term sometimes used to refer to remuneration and incentives) among health care workers—specifically, community health workers (CHWs), which can include community health volunteers and community drug distributors.

In the study in Cameroon, which explored the PHC provision of ivermectin post-campaign, findings revealed that some community drug distributors (volunteers) were unable to distribute ivermectin across their area due to the large geographic area to cover and lack of transport reimbursement. It was believed that the limited government investment was linked to the reliance on international NGOs for campaign financing.

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[2] NTD drug and supply availability in endemic areas was below 50% for drugs such as praziquantel, ivermectin, and azithromycin, except for tetracycline eye ointment (100%), mebendazole/albendazole (92%), and surgical sutures (62%).

In Vanuatu, in a project of partners working with the Ministry of Health to introduce skin disease identification and referrals from the MDA, there was a higher-than-expected number of referrals to health facilities, resulting in higher workloads for the facility-based health workers. This was evident in a survey finding that only slightly more than half of providers believed that the training helped them understand when a community member should be referred to a health center for a skin lesion. Only slightly more than half of providers felt prepared to perform the skin exams. Despite the fact that health care workers at the health centers had been trained to diagnose and treat skin diseases in preparation for receiving campaign-referred patients, a post-training evaluation found the training to be ineffective, according to the project report. Some facilities had personnel challenges and were overwhelmed, and referred patients were turned away in some cases. This finding led to a revision in the training, triage, referral system, and resource materials for health workers to allow for more accurate detection of skin disease cases and to strengthen their ability to treat patients in future campaigns.

Stakeholders in a consultative workshop in Ethiopia identified poor supportive supervision and monitoring among the top challenges to NTD mainstreaming. However, the project team reported that ongoing practical training and supportive supervision of health workers at the PHC level were key for mainstreaming morbidity management and disability prevention services into the PHC system compared with a one-time training. A proposed solution was to identify and implement appropriate motivation strategies.

Sociocultural Context

Uptake of campaign interventions was affected by cultural beliefs, myths, misconceptions, misinformation, as well as the potential misuse of drugs. It is therefore crucial for programs implementing the transition to understand the culture and traditions of local communities and how they influence perception and behavior, as well as to consider the cultural components of the solution.

In Cameroon, study participants believed there was a risk of misuse of ivermectin that was earmarked for treating people to be used for treating animals. There was also a misconception that ivermectin could be used to terminate a pregnancy or for skin care.

In Côte d'Ivoire, study findings revealed that people in rural communities preferred to receive vitamin A supplementation (VAS) at home to avoid disruption in household work and transport costs to travel to the health center. Furthermore, 14% of caregivers surveyed indicated that when VAS was provided outside the home, fathers possessed the decision-making power, whereas when provided in the home, women could consent to the offer of VAS [33]. Therefore, gender norms in the rural areas affected whether children received VAS. The sociocultural context also included social media and misinformation that was spread on health activities, including campaigns.

To promote awareness and education on the transitioned health interventions and dispel myths, misconceptions, and misinformation, community engagement is key. This was the approach undertaken by the University of Ghana when co-creating a community health advocacy team (CHAT). The community intervention was designed to conduct ongoing social and behavioral change communication (SBCC) activities.

Coordination and Communication

Lack of effective coordination and communication between relevant government departments was a barrier. In Côte d'Ivoire, respondents assessing the routine VAS delivery said health centers did not conduct formal meetings to review progress or have tools to track progress toward higher VAS coverage. There was little coordination between several ministries that offered services to children under the age of 5 years, including the Ministry of National Education and Literacy; the Ministry of Women, Families and Children; and the Ministry of Employment and Social Protection. In Nigeria, limited coordination between government departments and a delay in the supply of deworming medication resulted in the inability to integrate deworming into immunization and other health programs.

Transitioning campaign activities to the PHC system is inherently a complicated process. It requires both coordination and communication, which can be achieved by harmonizing the processes and structures in place and building trust among stakeholders.

Information Systems

Inadequate information systems hamper monitoring, supervision, and reporting of campaign interventions under transition. In the consultative workshops in Ethiopia, stakeholders reported that the lack of a standardized and integrated monitoring and supervision system was a top-ranked challenge of mainstreaming, related to poor data recording and reporting. In Côte d'Ivoire, health program staff were supposed to report VAS coverage to the DHIS2 information system monthly, but submissions were irregular, data quality was questionable, and the monitoring tool was not always available at health facilities.

In Cameroon, the team proposed a solution to inadequate information systems: tailor the programmatic reporting tools (such as patient registries, reporting forms, and drug accountability forms) and ensure supervision and follow-up activities by regional stakeholders. This approach would streamline data collection and reporting and allow close monitoring of the campaign interventions being transitioned. This was particularly a concern in Cameroon as the drug ivermectin had the potential for misuse and pilferage, according to the project's qualitative study.

Supply Management

Challenges related to stock management were encountered by four project teams. The challenges were due to pilferage, insufficient requisition caused by poor-quality data, inadequate funding, and drug misuse. In Côte d'Ivoire, the project identified a gap in training on data entry and data use at health facilities, which resulted in poor recording and reporting of VAS. This in turn led to inaccurate data and subsequently to poor planning and stock-outs (Figure 1).

Figure 1. Downstream Effects of Insufficient Training on Data Entry and Use

Gaps in data entry and use at health facilities → Inaccurate data and reporting → Poor planning and stockouts

In Côte d'Ivoire, stock-outs were also attributed to discrepancies between estimates of population size and current VAS stock levels. These discrepancies were due to differences between national population projections and district-level census estimates.

In Ethiopia, the project found that lack of drugs and supplies, absence of budget contribution by the government, and poor health facility infrastructure were the top-rated barriers to mainstreaming, according to study participants. In Nigeria, when discussing the transition of the schistosomiasis and soil-transmitted helminthiasis MDA to government ownership, key informants requested the international NGO to continue supervision and monitoring of the transition, including stock management.

To overcome challenges related to supply management, it is crucial to develop or strengthen a data management system that correctly forecasts and reflects current stock levels, allows for monitoring stocks at all levels, detects pilferage, and informs decision making.

Promising Practices for Campaign Transition

Promising practices identified in the IR studies can be organized into four themes: (1) phased transition plan that includes all stakeholders and considers existing programs and resources, (2) inclusive engagement of stakeholders, (3) management and strengthening of human resources, and (4) adequate and efficient information systems, including supply chain management. Table 2 presents the themes and promising practices. Key illustrative examples from the projects and a description of how these findings align with the literature are presented after the table.

Table 2. Promising Practices Identified Across IR Studies, by Theme

Theme	Promising Practice
Phased transition plan that includes all stakeholders and considers existing programs and resources	1. Develop a phased campaign transition framework that defines the players and their roles and allocates budget amounts. 2. Continue existing government partnerships and intergovernmental coordination to support campaign activities.
Inclusive engagement of stakeholders	3. Include stakeholders from relevant government departments and ministries in an intersectoral approach and assess the availability of resources to support campaign transition. 4. Foster purposeful community engagement as an ongoing activity. 5. Facilitate ownership of transitioned interventions among the community and health workers.
Management and strengthening of human	6. Assess existing and needed cadres of health workers and community health workers so that workers' roles and responsibilities align with the campaign

resources	7. Plan for capacity-building needs, approaches to staff motivation, and supervision to ensure sustainability. 8. Develop a strategy for identifying sources of financing for human resources when additional staffing is required.
Adequate and efficient information systems, including for supply chain management	9. Develop and strengthen a reliable data management system for service delivery that includes the transitioned intervention. 10. Establish and/or strengthen a system that adequately forecasts and manages drugs and supplies across district and health facility levels to ensure supply availability.

(Note: the top-left cell continues from the prior page and reads): activities that are being transitioned to the primary health care system.

Theme 1: Phased Transition Plan That Includes All Stakeholders and Considers Existing Programs and Resources

1. Develop a phased transition framework that defines the players and their roles and allocates budget amounts. Transitioning campaigns into the PHC system requires extensive planning, preparation, time, and resources, and should therefore be implemented in phases. Gradual implementation provides opportunities to test strategies and to engage stakeholders at all levels. The planning should include a readiness assessment of the health system supply chain, equipment, and personnel. It also should account for training and capacity building on the intervention, especially of new health workers, and refresher training, as needed.

In the project in Nigeria, interview respondents requested a gradual transition of ownership of campaigns from external implementers to the PHC system, involving all stakeholders. They suggested that the transition should extend over time, at least four years, to allow for trial of new procedures, schedules, and responsibilities. Meanwhile, in Ethiopia, most health workers surveyed (81%, 271/334) were willing to support the mainstreaming of NTD campaign interventions; however, 60% (200/334) believed that only partial mainstreaming was possible, considering limited government resources. A phased approach to transition was seen as a promising practice to allow for collection of data to support mainstreaming efforts. The study in Cameroon developed a framework to facilitate the linkage of ivermectin distribution to the health system. The framework allowed the project to consider the activities at the central, regional, district, and health center levels, as well as the community level, at each time point (prior to, during, and after the transition). The challenges at each time period were also anticipated, along with proposed solutions (see Annex Table 2).

2. Continue existing government partnerships and intergovernmental coordination to support campaign activities. Transitioning campaigns into the PHC system may take several years to achieve as it requires policy changes, careful planning, and training. Consequently, withdrawing donor support prematurely can disrupt services and progress made so far. In a campaign transition, initially it will be prudent to continue with partnerships as external funding is withdrawn. This would enable governments to mobilize resources to finance the transitioned campaign activities. This practice came out strongly from The Carter Center study in Nigeria, in which respondents proposed leveraging new and existing partnerships to supplement the government's efforts, rather than the government struggling to fully fund program elements.

In regard to intergovernmental coordination, findings from the study in Côte d'Ivoire revealed that health centers did not have formal meetings to review progress nor tools to track progress toward the semester coverage of VAS, making it difficult to accurately estimate progress. The study in Ethiopia also reported that PHC facilities had poor information system infrastructure.

How These Findings Align with the Literature

This synthesis identified a need to transition campaigns gradually into the PHC system, with particular consideration of stakeholders, government partners, and available resources. When transitions are not strategic and well planned, the process can lead to service disruption due to shortages in supplies, human resources, and funding, as articulated by a systematic literature review of health campaigns [8]. Furthermore, the common theme of stakeholder and government engagement identified in this synthesis is a primary component of the WHO's health systems framework [34]. It also aligns with findings from the literature that government support is crucial to ensuring dedicated financing, not only throughout the transition period, but also while operating within the PHC system [3]. This principle was clearly demonstrated recently by the Global Partnership for Zero Leprosy calling for high-level country meetings to increase government buy-in and support. Similarly, the US Agency for International Development's Act to End NTDs | West Program named local leadership and governmental ownership as key to ensuring the sustainability of NTD programs [35–37].

Theme 2: Inclusive Engagement of Stakeholders

3. Include stakeholders from relevant government departments and ministries in an intersectoral approach and assess the availability of resources to support campaign transition. The study team in Côte d'Ivoire proposed intersectoral coordination between platforms operated by different ministries that provide services for children 6 to 59 months of age as a promising practice to increase VAS awareness and reach. In the study in Nigeria, respondents proposed integrating the deworming MDA programs into other health programs that reach children in school. Additionally, identifying existing programs and services for overlap with delivery of the transitioning campaign would achieve efficiencies. Examples included leveraging planned vaccination activities to offer VAS in Côte d'Ivoire and leveraging existing programs targeting children, such as education, to carry out deworming in Nigeria.

4. Foster purposeful community engagement as an ongoing activity. Community engagement increases the likelihood that community members would seek out an intervention in a health center or outreach activity that was previously delivered via a campaign. Community engagement should include working with community members to understand and address cultural beliefs and misconceptions about the health intervention and to raise awareness and understanding of the intervention.

The project in Cameroon explored stakeholder perspectives on offering ivermectin at a health facility after a campaign, in order to increase access among community members who might miss the campaign. The project reported that "shifting minds away from the status quo requires continuous educational talks geared toward community members." Because ivermectin, years ago, was believed to have serious adverse effects, some community members were still hesitant to take the drug despite its safety and the rare occurrence of adverse events. There was a need to sensitize communities on the safety of the intervention. Likewise, the study in Nigeria reported that engaging community members and parents increased uptake of deworming medicine. Ghana's CHAT implemented community mobilization and

SBCC on long-lasting insecticide-treated net use and malaria education, specifically prevention strategies. Furthermore, participation in the CHAT's activities was associated with greater community acceptance.

5. Facilitate ownership of transitioned interventions among the community and health workers. When adequately planned, transitioned campaign services can be acceptable to community members and health care workers. Community awareness and acceptance of campaign interventions were observed to be high in five projects (in Ghana, Cameroon, Vanuatu, Côte d'Ivoire, and Ethiopia).

In Ghana, the majority (89% to 90%) of 316 participants surveyed found the CHAT intervention to be acceptable, appropriate, and feasible. The intervention was co-designed locally with the aim of maintaining community members' use of insecticide-treated bed nets post-campaign [38]. A desk review conducted by the Ghana study underscored the importance of continuous engagement, revealing that absence of continuous education and reminders curbed community members' capacity and resources to lead sustainable measures to reduce and eventually eliminate malaria transmission.

In Vanuatu, health care workers embraced the integration of MDA (co-administering ivermectin, albendazole, and azithromycin) with screening for skin diseases and referring suspected cases to health facilities. A post-campaign survey of health workers indicated unanimous agreement that conducting skin exams in the community (and referral) and integrating skin exams with the MDA campaign were valuable health services to the community.

In Ethiopia, nearly all PHC cadres and health extension workers surveyed about NTD mainstreaming (98% or 327/334) indicated a willingness to expand their role to accommodate the additional workload to support the NTD MDA mainstreaming.

How These Findings Align with the Literature

The synthesis identified continual engagement from the beginning of the planning phase through health campaign transition as being of key importance. Clear, collaborative planning involving all key stakeholders (including NGOs and civil society organizations at national and subnational levels) far in advance of the transition and ongoing communication and collaboration throughout the process have been consistently identified as promising practices for avoiding interruptions in service delivery in systematic literature reviews [8,12], recent research briefs and reports across multiple sectors [39–41], and WHO frameworks across multiple domains, including malaria [16], NTDs [42], and immunizations [13].

Further stakeholder engagement identified in this synthesis involved SBCC activities to gain support and investment from the communities. Research in this synthesis, particularly in Ghana, identified SBCC as a necessary component of health care and health campaigns. This perspective aligns with and expands upon resolutions by major global actors at the 2022 International SBCC Summit [43]. The call for creative solutions to engage the community is evident among global actors across many domains, from the strategies outlined in the United Nations Development Programme's Effective Collaborative Action methodology for food and agricultural systems [44] to strategies to address insecticide-treated net hesitancy and misuse in malaria campaigns noted by the Alliance for Malaria Prevention [45].

Theme 3: Management and Strengthening of Human Resources

6. Assess existing and needed cadres of health workers and CHWs so that workers' roles and responsibilities align with the campaign activities that are being transitioned to the PHC system. There

is a need to identify health care workers who can sustainably deliver health interventions that previously were delivered by campaigns, along with the capacity building/training and supportive supervision that will enable them to deliver the intervention with high confidence. In Cameroon, some community members said that they did not take ivermectin due to personal conflicts with community drug distributors. They implied that they may take the medicine if it were offered at a health facility. In the study in Côte d'Ivoire, while health workers at the facilities offered VAS routinely, CHWs were motivated to assist and offer VAS in the community. One CHW said:

> *"I am motivated to do this work for the village. The nurses do not have the courage to go into the village, [so] there has to be an intermediary, the CHWs. My motivation comes from women who congratulate me. Without CHWs, the health information is not well delivered."*

7. Plan for capacity-building needs, approaches to staff motivation, and supervision to ensure sustainability. For a smooth transition, additional skilled staff are needed to manage tasks previously performed during campaigns. This entails (re)training staff where new skills are needed and/or developing tools to assist workers to offer interventions in a standardized way. In Vanuatu, health workers received training and job aids for conducting skin exams so that they could refer community members with skin lesions related to yaws and leprosy to health facilities. Cases of scabies were inappropriately referred, however, which prompted a revision of the job aids. Surveyed health workers reported that they would feel more prepared with more training.

In Nigeria, there is a need to pay attention to sources for capacity building/training of government workers, some forms of daily reimbursement or per diem, and supervision. In some districts where delivery of deworming to school-aged children was transitioning from the health sector to the schools, the study found that only refresher training for new teachers would be required. However, key informants wanted to ensure that local staff would be thoroughly trained and requested that NGO staff remain for some time in a supervisory capacity. Going beyond capacity building, several districts relied on the education sector to cover teachers' transportation costs for obtaining the deworming medicines and then distributing them; when government funds covered teachers' transportation reimbursements, this was appreciated by staff and enabled achievement of high coverage.

8. Develop a strategy for identifying sources of financing human resources when additional staffing is required. Transition of campaigns to PHC may require additional human resources in the PHC system. One of the lessons learned from Côte d'Ivoire was that limited staff and inadequate staff training resulted in poor recording of VAS, which in turn contributed to stock-outs. Therefore, a strategy endorsed by all stakeholders in governments, communities, and potentially the civil society and private sector is needed to secure financing for human resources for delivery of the intervention being transitioned.

In Cameroon, interview participants believed that the offer of ivermectin post-campaign would be sustainable if authorities (described as administrative, traditional, and religious) were involved and offered resources. It was suggested that supervision of health interventions by other health programs could also benefit the supervision and delivery of ivermectin.

How These Findings Align with the Literature

This synthesis found that government buy-in and resource mobilization are necessary to support ongoing capacity building and adequate remuneration of health care staff in order to prevent a costly breakdown in the supply chain. A 2023 United Nations Foundation report on recent polio campaign transitions identified similar necessities, noting strikes by health staff when remuneration was inadequate or delayed [39]. The *Global Report on Neglected Tropical Diseases 2023* also identified supply chain and health care staff capacity as key to supporting NTD intervention delivery to prevent reversal in gains made in eliminating NTDs [46]. Expanding on this, the synthesis specifically identified the need to build health care staff capacity to deliver the intervention following its incorporation into the PHC system, with a focus on financing and sustainability.

Theme 4: Adequate and Efficient Information Systems, Including for Supply Chain Management

9. Develop and strengthen a reliable data management system for service delivery that includes the transitioned intervention. This system should track progress, inform decision making, be interoperable, and be linked to the national health information management system. Several IR projects underscored the importance of having a good data management system, including the use of technology, which would enable tracking progress of the campaigns in transition. Also, a strong monitoring and evaluation framework with roles and responsibilities would ensure gaps in campaign performance are promptly resolved. Researchers in Vanuatu proposed expanding monitoring and evaluation of the MDA to include the collection of dried blood spots and stools for surveillance. This would generate data on diseases of interest to the Ministry of Health, including and beyond NTDs, after assessing and preparing for the acceptability of specimen collection.

In Ethiopia, all health facilities had a system to collect and report monthly health service data, but more than half (58%) of NTD stakeholder survey respondents believed that the existing health management information system did not capture information on key NTD indicators. One of the national-level participants stated that "only three indicators are included in the current DHIS2 data capturing and reporting format." This made it difficult to estimate, plan for, and offer NTD services. In Côte d'Ivoire, a quarter of CHWs stated that they did not have access to data and saw this as a gap in the service delivery system.

10. Establish and/or strengthen a system that adequately forecasts and manages drugs and supplies across district and health facility levels to ensure supply availability. Contributing to the unavailability of drugs were the lack of funds to buy drugs, poor planning (stock-outs), and pilferage. In Nigeria, drug logistics was identified as the most important reason for continued external support. The praziquantel supply for schistosomiasis was reported to be inconsistent as there was no system to ensure that quantities ordered matched the demand. An effective information system should include an estimation of the population receiving the services (and missed), the resources and supplies available (including medications), regular reporting on activities, monitoring of performance against targets, and steps agreed to during supportive supervision.

> *"Effective monitoring will help to keep track of the medicines and prevent them from getting into the wrong hands, as some greedy individuals might remove the labels on the containers and sell them in the market."* —Community member in Nigeria

In Côte d'Ivoire, a system for setting targets and correctly estimating the number of clients expected at health facilities for VAS was considered necessary to ensure adequate stocks and supply of VAS. Monthly monitoring of VAS targets at peripheral facilities would improve supply forecasting, outreach activities, and acceptance of coverage data.

How These Findings Align with the Literature

This synthesis identified good data management systems as key to managing supplies and data, and ensuring appropriate coverage and implementation. Effective monitoring and supervision were also viewed as essential for deterring misuse of campaign materials, managing any pilferage or misuse, and ensuring that proper amounts are ordered and delivered in time. The need to have effective information systems and to manage the supply chain and stock-outs is a common concern for health campaigns [8]. It is typically accompanied by a call for digitization to manage these demands, according to a systematic literature review [47]. Careful consideration of the supply chain is one of the six WHO health systems building blocks [48]. It also is a key component of strategic microplanning for implementing NTD campaigns, as identified by the WHO and Pan American Health Organization [42]. Furthermore, WHO's *Global Report on Neglected Tropical Diseases 2023* called for NTD indicators to be included into data management systems [46].

Outcomes

Outcomes related to the participation of, or interactions with, the beneficiaries of the interventions were measured in five IR studies, with different studies measuring different outcomes (Table 3). In the project in Nigeria, after a transition of NTD campaigns to country ownership in four districts, campaign coverage of deworming to address soil-transmitted helminthiasis remained high, whereas coverage for schistosomiasis declined due to issues with the supply of praziquantel. The project in Vanuatu also found fairly high coverage of the campaign (targeting yaws, scabies, and soil-transmitted helminths) that was integrated with skin exams and referral to the PHC system, although coverage was slightly below the target. In Ghana, in a pilot of a co-created community intervention to sustain insecticide-treated net use post-campaign, high acceptability was gained, as seen in a community survey.

Table 3. Outcomes Measured in IR Studies of Campaign Transition and Linkages With PHC

Outcome	Description/Finding
Coverage of the intervention(s) delivered or formerly delivered in campaigns	• Survey data showed that coverage of mebendazole (for STH) remained stable; prior to the transition, it was 80.9% (95% CI, 76.3%–84.9%), and after transition, it was 75.9% (95% CI, 71.6%–79.7%; p = 0.093), a non-significant difference. For schistosomiasis, praziquantel coverage decreased from 72.5% (95% CI, 62.7%–89.6%) to 55.4% (95% CI, 46.9%–63.5%), a significant difference (p = 0.007). *(Nigeria)* • MDA coverage post-mainstreaming did not differ by sex. *(Nigeria)* • A campaign against yaws, scabies, and STH, which also integrated serosurveillance and identification of skin disease, yielded an overall coverage of 73%; the WHO and country targets were 80%. *(Vanuatu)* • The campaign-like strategy called "intensification" accounted for the majority of coverage of the VAS offered in the PHC system prior to activities to boost routine coverage. *(Côte d'Ivoire)*

Referrals from campaign site to health facility	● Suspected cases of skin disease were referred from an integrated MDA site to the health center. Of those referred, 4.7% were clinically confirmed as having a severe skin disease and were referred to the health facility, including 12 cases of yaws confirmed with assay that were treated *(Vanuatu)*
Linkages of campaign to multi-disease surveillance	● Community members taking part in the integrated MDA were also able to give specimens for multi-disease surveillance; 83% of the targeted sample of MDA beneficiaries gave dried blood spots, and 20% of the targeted sample gave specimen for stool testing. *(Vanuatu)*
Estimation of disease prevalence	● STH prevalence was found to be high in the communities among those who gave stool samples: 46.9% for ascariasis, 43.4% for trichuriasis, and 25.2% for hookworm. *(Vanuatu)*
Acceptability of transition to or linkages with PHC system	● The project introduced the community health advocacy team intervention to continue social and behavioral change communication after the mass long-lasting insecticide-treated net campaigns. About 90% of the community members surveyed found it acceptable, appropriate, and feasible. *(Ghana)* ● An online survey found high acceptance among health care workers for adding skin exams to integrated MDA and moderate confidence in their ability to discern whether a community member self-reporting a skin disease needed to be referred to a health center. *(Vanuatu)*
Cost to treat one person	● The cost of ivermectin per person reached in a campaign was estimated at 53 CFA Francs per person (95% CI, 32.8%–73.0%), with wide variability between regions. This cost can inform the decision to extend ivermectin availability in health facilities; it involved no comparison. *(Cameroon)*

Abbreviations: CFA, Communauté Financière Africaine; IR, implementation research; MDA, mass drug administration; PHC, primary health care; STH, soil-transmitted helminth; WHO, World Health Organization.

Discussion

Health campaigns have at times operated independently of the PHC system, in most cases with separate budgets and personnel from and little coordination, but this changes when campaigns are transitioned to the PHC system. This synthesis offers a list of promising practices from diverse geographic, cultural, and health contexts to guide and facilitate a smooth transition of campaigns to PHC. The ten promising practices that emerged from these IR studies can be grouped into four themes: (1) phased transition plan that includes all stakeholders and considers existing programs and resources, (2) inclusive engagement of stakeholders, (3) management and strengthening of human resources, and (4) adequate and efficient information systems including for supply chain management. The results and promising practices identified in this synthesis added to what other literature has found on the process of transitioning campaigns into the PHC system.

Operationalizing the promising practices will require collaboration among government leadership and health programs, campaign funders, planners, managers, implementing partners, the WHO, NGOs (including the HCE Coalition), community-level workers, volunteers, and community-level authorities. This wide range of stakeholders should be made aware of the promising practices. There should be considerable focus on global donors' multi-year phased exit strategies and on how national and subnational governments take on the responsibilities related to financial management, procurement, and human resources management. Campaign stakeholders will benefit from identifying existing resources, skills, systems, and processes for the transition, all while striving to achieve the goals of

campaign effectiveness, efficiency, equity, and country ownership. The WHO, supported by the HCE Coalition, should develop guidelines on how country governments can minimize disruption of services and maintain coverage of campaign interventions.

The financial and resource implications of these promising practices include sufficient budget allocation by governments and subsequent release and receipt of funds at all levels. Further, the transition needs should be reflected in national policies. Supply chain stakeholders should ensure timely movement of drugs and supplies from the manufacturer to the point of service delivery. Additionally, non-state actors should advocate for continued prioritization of the campaign intervention in the PHC system.

The research informing this synthesis took place during 2021 and 2022; as such, it was influenced by the COVID-19 pandemic. It is important to note the relevance of this research in the context of ensuring health intervention delivery through PHC systems in low- and middle-income countries in the aftermath of the pandemic. In the *Global Report on Neglected Tropical Diseases 2023*, the WHO detailed how disruptive the pandemic was to the NTD supply chain and health staff, and highlighted how the steady progress toward combating NTDs was halted and reversed in many sectors [46]. The updated *Global Technical Strategy for Malaria* mentioned the need to build resilience, alignment, and coordination among health programs into health systems to ensure that goals can be met for all public health challenges and not at the expense of other programs [16]. These exemplify the necessity of obtaining thorough, actionable insights into effectively and consistently delivering key health interventions.

Knowledge Gaps

The WHO health system building blocks outline essential areas of work that lead to outcomes of better health, responsiveness, risk protection, and efficiency [48]. The promising practices that emerged from this IR synthesis and their four overarching themes align with the building blocks of leadership/governance, health workforce, medical supply, health information systems, and service delivery. While this synthesis addressed financing, future studies need to pay greater attention to identifying promising practices related to greater collaboration and sustainable financing, particularly as these relate to health campaign transition activities for neglected health programs like NTDs. Several additional knowledge gaps remain and can be addressed in future research and learning activities.

Test the cost-effectiveness and impact of specific campaign transition strategies on routine coverage of interventions. Various transition strategies may be feasible depending on the geographical locations and different types of campaigns. The impact of these strategies on coverage and other health system outcomes, as well as their cost-effectiveness, should be evaluated. It will also be important to test different community engagement strategies and to understand and address cultural beliefs related to the transitioned interventions. This would allow programs that are transitioning campaign interventions to deploy tailored SBCC campaigns. Such evaluations would inform program planners on whether strategies lead to the desired uptake and coverage of transitioned campaign interventions. In terms of equity, coverage should be assessed not only at a population level, but also among subgroups and in remote areas that may experience challenges accessing the services.

Identify strategies to strengthen capacity and supply chains to support campaign transition and maintain coverage with minimal to no external support. External partners, such as NGOs or civil society organizations, may be heavily involved in every stage of the transitioning campaign, from funding to advocacy, training, or supply chain management. Uncoupling a health campaign from external support

requires an in-depth understanding of what roles the external partners fill so that countries may move deliberately toward ownership. Additional considerations may include the political will and advocacy power involved in inter-organization or stakeholder network collaboration and the potential disruption of funding to civil society organizations, which may disproportionately impact vulnerable populations [8,39].

Establish the optimal time and stages needed for successful transition of different campaigns.
Implementation of a phased transition program was identified as an enabler. However, even similar campaigns (e.g., MDA) will require different time frames and elements based on the epidemiology and local context. The team in Nigeria tailored the transition plan to the needs and resources of each district and worked across sectors (with education) and health programs (immunizations). This level of microplanning is necessary in order to establish systems appropriate to the local context [42]. It requires additional resources, time, and consideration when planning the transition of a health campaign.

Strengths and Limitations

This synthesis summarized findings from six IR studies conducted in different countries in sub-Saharan Africa and in the Pacific. The studies had different protocols, were carried out in different geographic and sociocultural contexts, and covered diverse NTD, malaria, and nutrition health programs. A strength of this work is the breadth of learning that arises from campaigns in different phases of transition to the PHC system. The IR studies captured diverse perspectives of stakeholders and from multiple regions in the country. All studies were initiated and completed during the COVID-19 pandemic and adhered to all COVID-19 protocols.

Several limitations should be noted. The results of one integrated campaign cannot be directly compared with another and may not be generalizable to other settings. Additionally, each method of evaluating campaign transition was unique to the program and environment, and therefore no standard method of evaluating outcomes was implemented, which limits comparability and potentially contributes to knowledge gaps. Few previous IR studies had been done on each health program, so this body of work represents a start to understanding campaign transition to PHC. The project teams were highly motivated to try and evaluate integrated campaigns, having been selected after a rigorous review process in a competitive request for proposals, and therefore may not be representative of all country programs considering or engaged in campaign transition. The 18-month project period may not have been long enough to allow for measurement of change in outcomes.

Conclusion

This synthesis surfaced evidence that contributes to answering the HCE Coalition's research questions and offers campaign managers and researchers many considerations needed for planning, implementing, and evaluating transition of a campaign to the PHC system. While providing breadth in terms of geographic contexts and being inclusive of several health programs, the HCE Coalition's portfolio of IR studies and the subsequent synthesis serve as an initial foray into campaign transition-related research.

References

1. A vision for primary health care in the 21st century: towards universal health coverage and the Sustainable Development Goals [Internet]. Geneva: World Health Organization; 2018 [cited 2023 Mar 6]. Available from: https://www.who.int/docs/default-source/primary-health/vision.pdf

2. International Conference on Primary Health Care. Declaration of Alma-Ata International Conference on Primary Health Care, Alma-Ata, USSR, 6–12 September 1978. Development. 1978 Sep;47(2):159–61.

3. World Health Organization. Review of 40 years of primary health care implementation at country level [Internet]. 2019 Dec [cited 2022 Nov 28]. Available from: https://cdn.who.int/media/docs/default-source/documents/about-us/evaluation/phc-final-report.pdf?sfvrsn=109b2731_4&download=true

4. Transforming Our World: The 2030 Agenda for Sustainable Development [Internet]. 2015 [cited 2022 Dec 5]. Available from: https://sdgs.un.org/sites/default/files/publications/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf

5. Health Campaign Effectiveness Coalition. Defining Health Campaigns and Health Campaign Effectiveness. Health Campaign Effectiveness Coalition; 2020 Sep.

6. Health Campaign Effectiveness Coalition. Health Campaigns Intelligence Hub - Health Campaign Effectiveness Coalition [Internet]. 2022 [cited 2023 Jan 23]. Available from: https://campaigneffectiveness.org/campaign-calendar/

7. Health Campaign Effectiveness Coalition. Transitioning Delivery of Health Campaign Interventions to the Primary Health Care System: Achieving a Strategic Balance of Independent and Integrated Delivery of Interventions. 2021 Jan;18.

8. Huffstetler HE, Bandara S, Bharali I, Kennedy Mcdade K, Mao W, Guo F, et al. The impacts of donor transitions on health systems in middle-income countries: a scoping review. Health Policy Plan. 2022 Jul 29;37(9):1188–202.

9. Reich MR, Harris J, Ikegami N, Maeda A, Cashin C, Araujo EC, et al. Moving towards universal health coverage: lessons from 11 country studies. The Lancet. 2016 Feb 20;387(10020):811–6.

10. Atun R, de Jongh T, Secca FV, Ohiri K, Adeyi O. Clearing the Global Health Fog: A Systematic Review of the Evidence on Integration of Health Systems and Targeted Interventions [Internet]. The World Bank; 2009 [cited 2023 Mar 6]. (World Bank Working Papers). Available from: http://elibrary.worldbank.org/doi/book/10.1596/978-0-8213-7818-2

11. Grépin KA, Reich MR. Conceptualizing Integration: A Framework for Analysis Applied to Neglected Tropical Disease Control Partnerships. PLoS Negl Trop Dis. 2008 Apr 30;2(4):e174.

12. Wallace AS, Ryman TK, Dietz V. Experiences integrating delivery of maternal and child health services with childhood immunization programs: systematic review update. J Infect Dis. 2012 Mar;205 Suppl 1:S6-19.

13. World Health Organization. Working together: an integration resource guide for immunization services throughout the life course [Internet]. Geneva: World Health Organization; 2022 [cited 2022 Nov 29]. Available from: https://apps.who.int/iris/handle/10665/276546

14. Ozaltin A, Owino E. At-A-Glance: Primers on campaigns and financing [Internet]. Health Campaign Effectiveness Coalition; 2022 [cited 2022 Nov 29]. Available from: https://campaigneffectiveness.org/wp-content/uploads/2022/08/FINAL080822-Consolidated-Primers-on-Campaigns-and-Financing-FINAL.docx.pdf

15. World Health Organization; Control of Neglected Tropical Diseases. Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030 [Internet]. Dr Malecela Mwelecele Ntuli / Neglected tropical diseases, editor. World Health Organization; 2021. 196 p. Available from: https://www.who.int/publications/i/item/9789240010352

16. World Health Organization. Global technical strategy for malaria 2016–2030, 2021 update [Internet]. Geneva: World Health Organization; 2021. 40 p. Available from: https://mesamalaria.org/resource-hub/global-technical-strategy-malaria-2016-2030-2021-update

17. World Health Organization; Immunization, Vaccines and Biologicals. Immunization Agenda 2030: A Global Strategy To Leave No One Behind [Internet]. World Health Organization, editor. World Health Organization; 2020. Available from: https://cdn.who.int/media/docs/default-source/immunization/strategy/ia2030/ia2030-draft-4-wha_b8850379-1fce-4847-bfd1-5d2c9d9e32f8.pdf?sfvrsn=5389656e_69&download=true

18. UNICEF. Coverage at a Crossroads: New directions for Vitamin A supplementation programmes [Internet]. New York; 2018 [cited 2023 Jan 30]. Available from: https://data.unicef.org/resources/vitamin-a-coverage/

19. World Health Organization. Polio Endgame Strategy 2019–2023: Eradication, integration, certification and containment [Internet]. Geneva: World Health Organization; 2019 [cited 2023 Feb 2]. 64 p. Available from: https://polioeradication.org/wp-content/uploads/2019/06/english-polio-endgame-strategy.pdf

20. Health Campaign Effectiveness Coalition. Research and Learning Agenda - Health Campaign Effectiveness Coalition [Internet]. 2021 [cited 2023 Jan 19]. Available from: https://campaigneffectiveness.org/researchandlearningagenda/

21. Wafeu GS, Makoge V, Simo LS, Nana-Djeunga HC, Didier B, Kamgno J. Perceived Barriers and Opportunities to Offering Ivermectin Continuously in the Primary Health Care System: An Exploratory Study of Stakeholders in Cameroon [Internet]. Decatur, GA (USA): Health Campaign Effectiveness Coalition, Task Force for Global Health; 2022. Available from: https://campaigneffectiveness.org/research_project/barriers-and-opportunities-to-offering-ivermectin-continuously-in-the-primary-health-care-system/

22. Dako-Gyeke P, Glozah FN, Asampong E, Tabong PT, Nwameme A, Hornuvo R, et al. 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) [Internet]. Decatur, GA (USA): Health Campaign Effectiveness Coalition, Task Force for Global Health; 2022

[cited 2023 Jan 23]. Available from:
https://campaigneffectiveness.org/research_project/improving-the-effectiveness-of-long-lasting-insecticide-treated-net-llin-campaigns-in-ghana/

23. Jacobson J, Pantelias A, Dreher M, Umbelino I, Brooks A, Taleo G, et al. Building the Links between Campaigns and PHC: Evaluating Serosurveillance and PHC Referral during Integrated NTD Campaigns in Vanuatu in 2021 [Internet]. Decatur, GA (USA): Health Campaign Effectiveness Coalition, Task Force for Global Health; 2022 [cited 2023 Jan 23]. Available from:
https://campaigneffectiveness.org/research_project/building-the-links-between-campaigns-and-primary-healthcare-in-vanuatu/

24. Rakers L, Griswold E, Coalson J, Gallagher J, Eigege A, Emukah E. Evaluating a Transition to Government Ownership of Schistosomiasis and Soil-Transmitted Helminth Control Programs in Four Districts in Nigeria [Internet]. Decatur, GA (USA): Health Campaign Effectiveness Coalition, Task Force for Global Health; 2022 [cited 2023 Jan 23]. Available from:
https://campaigneffectiveness.org/research_project/evaluating-a-transition-to-government-ownership-of-schistosomiasis-and-soil-transmitted-helminth-control-programs/

25. Ali EH, Gebre T, Seife F, Embiale W, Merdekios B. Mainstreaming Neglected Tropical Diseases Campaign Interventions Into the Primary Health Care System: Exploratory Implementation Research in Ethiopia [Internet]. Decatur, GA (USA): Health Campaign Effectiveness Coalition, Task Force for Global Health; 2022. Available from:
https://campaigneffectiveness.org/research_project/mainstreaming-ntd-campaign-interventions-into-the-primary-health-care-system/

26. Toure D, Oka R, Kouadio L, Ibrahim B, Klemm R, Dissieka R. Evaluation of the transition of Vitamin A supplementation to the Routine Health System in Côte d'Ivoire using a Health Systems Framework [Internet]. Decatur, GA (USA): Health Campaign Effectiveness Coalition, Task Force for Global Health; 2022. Available from:
https://campaigneffectiveness.org/research_project/evaluation-of-the-transition-of-vitamin-a-supplementation-to-the-routine-health-system-in-cote-divoire-using-a-health-systems-framework/

27. U.S. Department of Health and Human Services. How the Community Preventive Services Task Force (CPSTF) develops recommendations [Internet]. 2022 [cited 2023 Jan 17]. Available from:
https://www.thecommunityguide.org/pages/who-we-are-what-we-do.html

28. Fazal N, Jackson SF, Wong K, Yessis J, Jetha N. Between worst and best: developing criteria to identify promising practices in health promotion and disease prevention for the Canadian Best Practices Portal. Health Promot Chronic Dis Prev Can Res Policy Pract. 2017 Nov;37(11):386–92.

29. Bosch M, Tavender E, Bragge P, Gruen R, Green S. How to define 'best practice' for use in Knowledge Translation research: a practical, stepped and interactive process. J Eval Clin Pract. 2013;19(5):763–8.

30. Thomas J, Harden A. Methods for the thematic synthesis of qualitative research in systematic reviews. BMC Med Res Methodol. 2008 Jul 10;8(1):45.

31. Miro. The Visual Collaboration Platform for Every Team | Miro [Internet]. https://miro.com/. 2023 [cited 2023 Feb 20]. Available from: https://miro.com/

32. The Primary Health Care Performance Initiative. The PHCPI Conceptual Framework | PHCPI [Internet]. PHCPI. 2018 [cited 2023 Jan 31]. Available from: https://improvingphc.org/phcpi-conceptual-framework

33. Krentel A, Gyapong M, Titaley C, Dalaba MA, Rajabali A, Sakeah JK, et al. Exploring Patterns of Non-Participation Across Multiple Health Campaigns: An Exploratory Study Using Qualitative Methods in Ghana and Indonesia [Internet]. Decatur, GA (USA): Health Campaign Effectiveness Coalition, Task Force for Global Health; 2022 [cited 2023 Jan 23]. Available from: https://campaigneffectiveness.org/research_project/exploring-patterns-of-non-participation-across-multiple-health-campaigns/

34. World Health Organization. Everybody's business -- strengthening health systems to improve health outcomes : WHO's framework for action [Internet]. Geneva: World Health Organization; 2007 [cited 2023 Feb 21]. Available from: https://apps.who.int/iris/handle/10665/43918

35. Global Partnership for Zero Leprosy. Concept Note: High-Level Country Meetings. TThe ask Force for Global Health; 2023.

36. Global Partnership for Zero Leprosy. Country Partnerships - Global Partnership for Zero Leprosy [Internet]. Country Model. 2022 [cited 2023 Feb 16]. Available from: https://zeroleprosy.org/country-partnerships/

37. USAID: Act to End NTDs, West. Act | West's Pause and Reflect Workshop on Sustainability in NTD Programs [Internet]. 2022 [cited 2023 Feb 9]. Available from: https://www.actntdswest.org/news/act-wests-pause-and-reflect-workshop-sustainability-ntd-programs

38. Glozah F, Asampong E, Tabong PTN, Nwameme A, Hornuvo R, Chandi M, et al. Creating interventions to transition long-lasting insecticide net distribution in Ghana. BMJ Open. 2022 Jun 1;12(6):e063121.

39. Leveraging CSO Contributions to Advance Polio Transition and Integration Efforts in the African Region [Internet]. 2023 Feb. Available from: https://unfoundation.org/what-we-do/issues/global-health/leveraging-civil-society-contributions-to-advance-polio-transition-and-integration-efforts-in-africa/?utm_source=newsletter&utm_medium=global-health-email&utm_campaign=February&utm_source=GH+Newsletter+Contacts&utm_campaign=73cdd193ce-EMAIL_CAMPAIGN_2023_02_21_06_10&utm_medium=email&utm_term=0_-73cdd193ce-%5BLIST_EMAIL_ID%5D&mc_cid=73cdd193ce&mc_eid=967a528843

40. Act to End NTDs, West. Facilitating Multisectoral Coordination and Engagement for Neglected Tropical Disease (NTD) Sustainability [Internet]. Washington, DC: Act to End NTDs | West; 2022 Apr [cited 2023 Feb 24]. Available from: https://drive.google.com/drive/folders/1SAGC5ZgPeHZgFG3CP86QegCfixKY_qPK

41. Rassi C. Strengthening primary healthcare for neglected tropical diseases in Ethiopia.pdf [Internet]. Malaria Consortium; 2018 Dec [cited 2023 Mar 2]. Available from: https://www.malariaconsortium.org/media-downloads/1190/Strengthening%20primary%20healthcare%20for%20neglected%20tropical%20diseases%20in%20Ethiopia

42. World Health Organization and Pan American Health Organization. Microplanning manual to guide implementation of preventive chemotherapy to control and eliminate neglected tropical diseases [Internet]. Geneva: World Health Organization; 2022. 68 p. Available from: https://www.who.int/publications/i/item/9789240049482

43. After 2022 International SBCC Summit, 'The Work Continues' [Internet]. International SBCC Summit. 2022 [cited 2023 Mar 1]. Available from: https://sbccsummit.org/en/2022/12/12/after-2022-international-sbcc-summit-the-work-continues/

44. Melvin L, Wood K, Andraka S, Petit N. Effective Collaborative Action | United Nations Development Programme [Internet]. New York: United Nations Development Programme; 2021 [cited 2023 Mar 1]. Available from: https://www.undp.org/facs/publications/effective-collaborative-action

45. Managing rumours during an ITN distribution [Internet]. The Alliance for Malaria Prevention. [cited 2023 Mar 1]. Available from: https://allianceformalariaprevention.com/managing-rumours-during-an-itn-distribution/

46. World Health Organization, editor. Global report on neglected tropical diseases 2023. Geneva: World Health Organization; 2023. 82 p.

47. Banda GT, Deribe K, Davey G. How can we better integrate the prevention, treatment, control and elimination of neglected tropical diseases with other health interventions? A systematic review. BMJ Glob Health. 2021 Oct;6(10):e006968.

48. World Health Organization. Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies [Internet]. Geneva: World Health Organization; 2010 [cited 2023 Feb 26]. Available from: https://apps.who.int/iris/handle/10665/258734

49. Damschroder LJ, Reardon CM, Widerquist MAO, Lowery J. The updated Consolidated Framework for Implementation Research based on user feedback. Implement Sci. 2022 Oct 29;17(1):75.

50. Health Campaign Effectiveness Coalition. Implementation Research Projects - Health Campaign Effectiveness Coalition [Internet]. 2022 [cited 2023 Feb 20]. Available from: https://campaigneffectiveness.org/implementation-research-projects/

51. Means AR, Kemp CG, Gwayi-Chore MC, Gimbel S, Soi C, Sherr K, et al. Evaluating and optimizing the consolidated framework for implementation research (CFIR) for use in low- and middle-income countries: a systematic review. Implement Sci. 2020 Mar 12;15(1):17.

Annex

The six implementation research projects assessed transitions in three scenarios: (1) campaigns developing greater linkages with the PHC system; (2) campaigns being transitioned to country ownership and reducing external partner assistance, and 3) supporting routine delivery of services after a campaign had transitioned to country ownership. Project methods included conducting scoping literature review, pre - and post-campaign coverage surveys, facility-based surveys, key informant interviews, in-depth interviews, focus group discussions, and stakeholder workshops. The Primary Health Care Performance Improvement (PHCPI) framework was used to guide the analysis of the project in Ethiopia [32] and the Consolidated Framework for Implementation Research (CFIR) was used to guide data collection tools and analysis in Ethiopia and Côte d'Ivoire [49]. The table below includes information on each of the projects.

Annex Table 1. IR Projects on Campaign Transition: Country, Health Program, Project Lead, Government Agencies Involved, Study Objectives, Study Methods, and Results [50]

Project Title, Project Lead, Gov. Agencies Involved, Health Program	Study Objectives and Methods	Results and Key Promising Practices
Perceived Barriers and Opportunities to Offering Ivermectin Continuously in the Primary Health Care System: An Exploratory Study of Stakeholders in **Cameroon** *[21]* **Center for Research on Filariasis and Tropical Diseases (CRFilMT)** (Lead)**,** and Ministry of Health (Ministère de la Santé Publique - MINSANTE) **Primary Health Program: Neglected Tropical Diseases**	*Objectives* ● Assess challenges encountered in the continuous distribution of ivermectin (IVM) through local health facilities after MDA campaigns, as well as the opportunities for the integration of IVM delivery into PHC system ● Determine the challenges and opportunities of partial integration of IVM mass drug administration into the PHC system. ● Determine the cost-effectiveness of IVM mass drug administration through campaigns. *Methods* ● 98 in-depth interviews with key informants from NGOs, central, regional, and district-level positions and 20 focus group discussions with 161 community members ● Implementation-related data, including human and financial resources, were collected from all 259 participants	● Integration of IVM distribution into PHC was perceived by stakeholders and community members as simple and easy to implement. ● Staff at the hospitals and the district level support MDA campaign sensitization and are willing to help with drug intervention post campaigns. ● Key challenges to offering IVM in the PHC system include: motivation of community drug distributors (CDDs), management of adverse events, and risk of misuse of IVM. ● The challenges can be addressed by involving the same CDDs in other health programs, using the same resources as during MDA to manage adverse events, and ensuring close supervision and regular reporting of IVM stocks. ● A framework for the transition was developed. ● To inform the government on the costs of delivery of intervention, the cost of IVM treatment per person was estimated using an ingredients-based costing method to be 53 CFA Francs (95% CI, 32.8–73.0), with wide variability between regions due to population sizes. ● Offering ivermectin post-campaign in the health system was

Project Title, Project Lead, Gov. Agencies Involved, Health Program	Study Objectives and Methods	Results and Key Promising Practices
		described as simple and easy to implement and acceptable by stakeholders at different levels of the health system. Community health workers, health workers, and district hospital staff expressed a willingness to help with offering the medicine post-campaign even though there were concerns about adverse events. The proposed strategy to manage such concerns from health workers and possible side effects that might go unreported would be to involve community health workers in follow-up as normally done during campaigns, and also to provide resources for reporting and management of adverse events to health centers. ● Survey respondents proposed that close monitoring and a system of traceability be put in place to ensure stocks and deter misuse of medicines. Some health workers were concerned about possible misuse or selling of ivermectin at health facilities. They recommended regular reporting of program data and adjustment of tools like patient registries, reporting forms, and drug accountability forms. ● **Key Promising Practices:** (1) Implement motivation strategies for health workers who are taking on new responsibilities; (2) Develop a monitoring system to trace drug supplies to avoid illegal uses; (3) Articulate a policy that details how to manage adverse events; (4) Include strategies to document reasons for refusal that can inform health education that addresses fears and concerns.
*Evaluation of the Transition of Vitamin A Supplementation to the Routine Health System in **Côte d'Ivoire** Using a Health Systems Framework [26]*	*Objectives* ● Evaluate the effectiveness of the transition of vitamin A supplementation (VAS) to the routine health care system in 24 districts of Côte d'Ivoire using a health service delivery framework and to identify corrective strategies to improve coverage ● Identify barriers in the delivery of routine vitamin A supplementation at all health system	● In the 2021 survey by Helen Keller International, 73% of children from 1826 households surveyed were reached with VAS in the studied districts, with the majority (65%) of these children receiving VAS at home (through campaign-style intensification).[3] ● Constraints: 1) targets are determined at the district level, but health posts and CHWs do not have monthly targets. Corrective action to achieve targets is impossible to map, resulting in very low facility-based coverage and the need to organize ad-hoc campaigns

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[3] A post-transition project coverage survey evaluating the strategies used to boost routine VAS delivery was held after this project period.

Project Title, Project Lead, Gov. Agencies Involved, Health Program	Study Objectives and Methods	Results and Key Promising Practices
Helen Keller International (Lead), and Ministry of Health & Public Hygiene; National Nutrition Program **Primary Health Program: Vitamin A Supplementation**	levels using the Consolidated Framework for Implementation Research ● Determine coverage of vitamin A supplementation among children 6 – 59 months in districts providing VAS through routine health facilities ● Identify specific strategies to boost the implementation of routine VAS *Methods* ● Surveys of 1826 caregivers in households with children aged 6 to 59 months, 112 community health workers (CHWs) and 96 health center workers (HCWs) representing 28 of the 41 districts who were implementing routine VAS in 2019. ● 53 semi-structured interviews, focus group discussions, and quantitative surveys of health staff, caregivers, and community members. ● After transitioning to routine VAS delivery, by mid-2021, 28 districts were delivering VAS within the PHC system. However, due to low coverage, a complementary strategy of intensification (district-level campaign-style catch-up events routinely organized at the end of each semester) was in use.	to reach more children; 2) stock-outs of capsules and management tools are widespread. Unavailability of monitoring tools, difficulty in accurately estimating target population size, and discrepancies in the reported and actual number of children supplemented all contribute to stock sourcing issues; 3) caregivers are unaware of the availability of routine VAS; 4) Lack of remuneration for CHWs and a high perceived workload leads to insufficient motivation. ● A quarter of CHWs stated that they did not have access to data and this was seen as a gap in the service delivery system. ● **Key Promising Practices**: 1) set up, monitor, and evaluate a system for developing and monitoring monthly VAS targets at the most peripheral unit; 2) improve intersectoral coordination for communication and coverage.
Mainstreaming Neglected Tropical Diseases Campaign Interventions Into the Primary Health Care System: Exploratory Implementation Research in **Ethiopia** *(25)* **Eyu-Ethiopia (Lead),** and the Ministry of Health	*Objectives* ● Determine what preconditions and strategies facilitate partial or full mainstreaming of NTD activities into the PHC in the Ethiopia health care system context ● To mainstream community-based campaign and facility-based NTD interventions into the PHC system, ● Investigate the operational capacity and readiness of the Ethiopia PHC system	● Literature review: 5 articles and 4 guidelines identified from 48 publications indicated that adequate governance, financing, and community engagement are vital for NTD programs. ● Top mainstreaming challenges identified (of 73) were: poor data recording and reporting, poor drug management and logistics, and poor supportive supervision and monitoring ● Top strategies to aid mainstreaming (of 185) were: implementing standardized budget distribution criteria, establishing an effective drug management system, and applying a standardized and integrated monitoring and supervision tool.

Project Title, Project Lead, Gov. Agencies Involved, Health Program	Study Objectives and Methods	Results and Key Promising Practices
Primary Health Program: Neglected Tropical Diseases	● Identify acceptable and feasible strategies and support needed for full or partial mainstreaming *Methods* ● Scoping Literature Review of mainstreaming practices focusing on current research, guidelines, and reports ● 2 consultative workshops with 33 stakeholders from across all levels of the health system to identify NTD campaign intervention mainstreaming challenges and strategies ● A 51-question assessment of Health System Readiness (HSR) administered to 334 people representing 26 primary health centers and 86 health posts ● Co-development of mainstreaming strategy	● The health system readiness assessment revealed that only about 25% of 334 health center staff surveyed had received training on NTD diagnosis and management. PHC workers had received two supportive supervision visits on average in a six-month period, which they considered insufficient. ● Despite a national policy for addressing NTDs, only 4% of surveyed health centers had guidelines in place. ● Budget constraints were identified as a primary barrier to addressing NTDs as only 0.08% of the total domestic expenditure for health care was for NTD (only 1.9% domestic) ● While workforce, storage and administration space, and drug availability is largely adequate at local and national levels (with some pharmaceutical exceptions), they were unevenly and inadequately distributed, leading to vital gaps in some regions. ● Only 32% of the 26 surveyed health centers had services for all endemic NTDs and 25% of staff had NTD training. ● While nearly all surveyed PHC cadres supported mainstreaming and expressed willingness to expand their role, 60% thought only partial mainstreaming of NTDs was possible due to noted budget, medications, supply, and infrastructure constraints. ● The overall median score of readiness for change for(mainstreaming was 7.5 (IQR 6.9 – 8.0). ● The Consolidated Framework on Implementation Research (CFIR) was used to inform data collection and explain the acceptability [49,51]. Related to CFIR's focus on intervention characteristics, study participants believed that NTD campaign mainstreaming had strong evidence and was advantageous and adaptable. Related to the outer and inner settings, participants believed mainstreaming would meet patient needs, and that the need for mainstreaming was aligned with staff and organizational values and goals. Among individual characteristics, health workers believed in their self-efficacy and had a sense of ownership related to mainstreaming. ● **Key Promising Practices:** 1) Conduct a sequence of inter-related studies that informed one another, facilitating learning and allowed the collection of data to support mainstreaming efforts in Ethiopia.

Project Title, Project Lead, Gov. Agencies Involved, Health Program	Study Objectives and Methods	Results and Key Promising Practices
		2) Engage in a participatory approach with stakeholders at various levels of the health system through consultative workshops, interviews, and mainstreaming strategy co-development, to ensure ownership of recommendations. 3) Adapt and employ a health system approach (using Primary Health Care Performance Initiative framework) to assess the capacity/readiness of the health system for NTD campaign intervention mainstreaming.
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) (22)* **University of Ghana (Lead)**, and Ghana Health Service, National Malaria Control Programme **Primary Health Program: Malaria**	*Objectives* ● Assess the LLINs campaign implementation processes at the community level to explore the integration of the LLIN campaign into Community-based Health Planning and Services (CHPS) PHC system ● Identify potential enablers and barriers within the national CHPS programme to support LLIN use ● Co-create interventions (i.e., capacity building for community health officers (CHOs), community mobilization) in a package called Community Health Advocacy Team (CHAT) to strengthen the mass LLIN distribution campaign ● Assess the acceptability and appropriateness of co-created campaign interventions through the conduct of community surveys and interviews *Methods* ● Desk Review of published and gray literature on potential barriers, enablers, lessons learned and recommendations from similar social and behavioral change communication (SBCC) interventions. ● Baseline and endline surveys of 800 participants (community members). ● Interviewed a total of 176 participants, composed of investigators, NGO representatives, School Health Education Programme Coordinators, Antenatal Care (ANC) Nurses,	● Desk Review found that most LLIN distribution is free from the public sector, is most effective when accompanied by hang-up activities, and often accompanied by SBCC activities that strengthen anti-malaria education and behaviors. ● Focus Group Discussions (FGDs) found that SBCC was instrumental in LLIN adoption and combating negative perceptions and misunderstandings. ● Potential enablers for CHAT: Community receptiveness, presence of community health officers (CHOs) in community, the ability of CHOs to speak the local language and engage the community, the raising of LLIN awareness and continuous LLIN distribution. ● Potential barriers to CHAT: remoteness and difficulty reaching communities, inadequate staffing, lack of accommodation for health staff in communities, and the fee for the use of community information centers. ● Determined that the CHAT would consist of volunteers that would use SBCC methods focused on LLIN use as continuous support to intermittent campaigns at the community level. ● About 90% of community members surveyed found the CHAT to be acceptable, appropriate and feasible across all six districts. Note: The effectiveness will be assessed two years after introduction of the CHAT (outside the project period). ● **Key Promising Practices: 1)** High participation in the activities of CHAT by community members can sustain a positive attitude towards bed net use; 2) Continuous engagement with community members in education, promotion and, monitoring the use of nets increase use and, deter misuse; 3) Maximize the use of the Community Information Centres for the mass LLIN distribution campaigns.

Project Title, Project Lead, Gov. Agencies Involved, Health Program	Study Objectives and Methods	Results and Key Promising Practices
	Disease Control Officers, District Health Management Teams (DHMTs), Community Health Officers (CHOs), community leaders and opinion leaders. Interviews consisted of 6 KIIs and 20 (n=166) focus group discussions (FGDs).	
*Evaluating a Transition to Government Ownership of Schistosomiasis and Soil-Transmitted Helminth Control Programs in Four Districts in **Nigeria** (24)* **The Carter Center (Lead),** and Federal Ministry of Health, Federal Ministry of Education, Primary Health Care Development Agency, and State Universal Education Boards **Primary Health Program: Neglected Tropical Diseases**	*Objectives* ● Determine the impact of mainstreaming on the deworming program in four districts in Nigeria ● Transition, and evaluate the transition to government, of schistosomiasis and soil-transmitted helminth (SCH/STH) treatment programs to the primary health care system in select districts supported by The Carter Center ● Determine coverage among the target population and acceptability before and after the transition ● Develop recommendations to inform SCH/STH transition plans for other districts and states in Nigeria. *Methods* ● Transition planning with stakeholders representing ministries of health, ministries of education, the Primary Health Care Development Agency, the State Universal Basic Education Boards, the immunization program, and others from 4 districts ● 56 KIIs and 9 FGDs at the outset and 22 KIIs and 14 FGDs at the close with health care and education experts and community members. ● Survey of 30 communities of MDA coverage	● Coverage surveys enrolled 11,901 school-age children (5 through 14 years). Coverage was defined as the proportion of eligible children who reported having taken (swallowed) mebendazole in all sites and praziquantel in schistosomiasis-endemic villages. Coverage of mebendazole (for STH) remained stable (prior to the transition it was 80.9% (95% CI, 76.3%–84.9%) and after transition it was 75.9% (95% CI, 71.6%–79.7%; p = 0.093), a non-significant difference. ● For schistosomiasis, praziquantel coverage decreased from 72.5% (95% CI, 62.7%–89.6%) to 55.4% (95% CI, 46.9%–63.5%), a significant difference (p = 0.007). Praziquantel supply is prone to disruption and is needed in specific, endemic wards ● The KIIs and FGDs indicated that informants had little to no faith in the government's capacity to successfully assume and manage the campaign—and that funding, personnel, and drug acquisition/distribution would suffer the most. ● The second round of KIIs and FGDs illustrated emphasis for The Carter Center to advocate for NTD programs, to continue involvement (specifically in training and monitoring), and to only gradually mainstream the program. ● Access issues were the main drivers of coverage due to high acceptance rates (98.2% for mebendazole, 99.1% for praziquantel, and 82.8% for both). ● Personnel were generally able to adapt to the withdrawal of NGO support, as long as medicines were available and institutional memory persisted. ● **Key Promising Practices:** (1) Clarification and documentation of what NGO support is relied upon (or not) and the roles and responsibilities of other stakeholders (like an MOU); (2) begin planning at least four years beforehand; (3) consider whether the health system may also benefit from rethinking its supply chain at the periphery (maybe deliver medicines to health posts/schools

Project Title, Project Lead, Gov. Agencies Involved, Health Program	Study Objectives and Methods	Results and Key Promising Practices
		instead of having teachers to retrieve them); (4) conduct extensive advocacy and sensitization so all parties are prepared.
*Building the Links between Campaigns and PHC: Evaluating Serosurveillance and PHC Referral during Integrated NTD Campaigns in **Vanuatu** in 2021 (23)* **Bridges to Development (Lead),** and Ministry of Health **Primary Health Program: Neglected Tropical Diseases**	*Objectives* ● Test feasibility of: (a) integrating skin exams with, and creating a referral pathway between, the community-based MDA campaigns for NTDs yaws, scabies, and soil-transmitted helminths (STH) and the PHC system in a pilot in Tafea province and (b) leveraging routine M&E for MDA campaigns to collect samples for integrated serosurveillance and surveillance of multiple cross-program and emerging health priorities to help inform country-level decision making on health priorities and where disease interventions are needed. *Methods* ● Evaluation MDA campaigns for yaws, scabies, and soil-transmitted helminths (STH) were integrated with skin exams and referral to PHC. ● 1462 community members from 17 villages (age 1 year and older) surveyed for feasibility and acceptance of the intervention (included a consent form, household questionnaire, collection of dried blood spots and stool samples for testing for ascariasis, trichuriasis, and hookworm) ● 31 health workers and volunteers surveyed about feasibility of conducting skin exams in the community and referring severe cases to the health facility	● Overall coverage of the MDA campaign was 73% (26,895 people participated and were treated). ● 7,212 people self-reported severe skin disease and were referred to a nurse for examination. Of them, 342 were clinically confirmed as having a severe skin disease and received a referral to a PHC facility. During this process, 164 suspected cases of yaws were identified with 12 confirmed with the DPP assay. ● As part of the M&E activities, 243 dried blood spot (DBS) samples (83% of target) and 149 stool samples (20% of target) were collected - indicating resistance to provide stool samples. ● STH prevalence was determined to be quite high in the communities: 46.9% for ascariasis; 43.4% for trichuriasis; and 25.2% for hookworm. ● Of 31 health workers and volunteers surveyed, 100% agreed that community-based exams and referral to PHC is a valuable health service for the community; 100% felt very prepared to respond when community members report having skin diseases; 55.6% felt very prepared to evaluate which community members should be referred to a PHC facility (22.2% felt somewhat prepared and 22.2% did not feel prepared); 55.56% felt very prepared to perform skin examinations; 8.7% felt very prepared to act as per their role during the campaign. ● **Key Promising Practices:** (1) provide health workers and nurses with practical and in-depth training on conducting screening and skin disease exams that require follow-up in the PHC system, (2) expand the reach of M&E activities for MDA by integrating sample collection for serosurveillance, (3) incorporate participatory and peer-to-peer approaches to learning into health worker training to enable dialogue between NTD/MDA programs and clinics.

* Long-Lasting Insecticide-Treated Nets (LLIN), Mass Drug Administration (MDA), Nongovernmental Organization (NGO), Primary Health care System (PHC), Schistosomiasis (SCH), Social and Behavior Change Communication (SBCC), Soil-Transmitted Helminths (STH), Vitamin A Supplementation (VAS)

Annex Table 2. Conceptual Framework for the Transition of Campaign Services into the Primary Health Care System

A phased plan can be visualized in a conceptual framework. Such a framework was developed by the project in Cameroon, a shell of which is shown in Annex Table 2. This is a tool for planners to describe activities at each level and during each phase of transition.

Level	Prior to transition ⟷ (2-3 months)	During campaign ⟷ (2-4 weeks)	During transition ⟷ (3-4 months)	After transition ⟷ (2-4 weeks)
Central level				
Regional level				
District level				
Health center				
Community level				
Challenges to address				

Source: Center for Research on Filariasis and Tropical Diseases (CRFilMT). See how the framework was filled in the project's research brief [21].