

Supplemental Table 1. Barriers and Mitigation Related to Integrated Health Campaign Planning in Projects Supported by the Health Campaign Effectiveness Coalition

Project	Challenges/Barriers Faced	Mitigation
Colombia/ Universidad de los Andes [21]	<ul style="list-style-type: none"> Socio-cultural beliefs about infectious diseases and treatment Language barriers (indigenous languages) Remote locations/travel cost (many hours via boat) Demand for services in non-study communities COVID-19: delays for travel & administration 	<ul style="list-style-type: none"> Hired local indigenous health promoter Using microplanning for engaging with the community (knowledge; implementation) Involving local stakeholders (communication) Involve non-study communities from early planning phase
Ghana/ UNICEF/ Ghana Health Service [22]	<ul style="list-style-type: none"> Late-stage decision to integrate campaigns (there was pre-campaign messaging for only 1 intervention) Refusal in community since some people thought COVID vaccine was included Sporadic shortages of vitamin A, supplies Heavy rainfall disrupted the campaign Security issues (escorts, additional team) Delay in disbursement of funds Low coverage of vitamin A (age confirmation) Children missed (absent/refused/ not visited) 	<ul style="list-style-type: none"> Intensified social mobilization and communication with key community leaders to address fears that the integrated campaign included COVID-19 vaccine Daily data monitoring via the Emergency Operations Center which enabled real-time identification and timely solutions A regional team provided security escort and an additional regional team Supervisors redistributed vitamin A and supplies, as needed
Guinea/ FOSAD- CEFORPAG) [23]	<ul style="list-style-type: none"> Missed chances to integrate other campaigns Delays from funding, administrative procedures from new Ministry of Health Program Vaccinators dissatisfied (workload, poor motivation, administrative procedures) Community concerns (on vaccine safety, side effects) 	<ul style="list-style-type: none"> Prioritize integrated campaigns in most affected areas during other outbreak Decentralization of decision-making Opportunities to express concerns/ideas during pre-planning (vaccinators, communities) Timely remuneration, sufficient training, and manageable workloads of vaccinators Community sensitization to mitigate fears or adverse events.
India/ IIHMR) [24]	<ul style="list-style-type: none"> COVID-19 & natural disasters caused delays Different understanding of integration Dependence on overburdened community-level cadre called ASHAs for service delivery (concern about decreased/delayed incentives) Inadequate training for ASHAs Sporadic community resistance to campaign components (antifilarials). 	<ul style="list-style-type: none"> Campaigns tailored to local needs, resources Integration process was allowed to vary across campaigns and districts Capacity building of the districts for needs assessment, campaign implementation Earlier planning of campaign + pilot campaign Systematic training of ASHAs; single training manual in local language ASHA: technical support, real time supervision, security, incentives. Campaign monitoring, delivery evaluation

India/ PATH [25]	COVID-19 pandemic made face-to-face interviews difficult. Long approval processes. Diverse ideas of the concept of integration. Competing priorities (COVID vaccine)	Most interviews were virtual. Face-to-face interviews with safety precautions Sensitized participants on integration, prepared uniform definition through interview. Regular communication/coordination with participants.
Nepal/ HEAL [26]	Competing priorities (COVID-19) Officials' schedules make it difficult for planning meetings Lack of policy, guidelines for integration Difficulties managing integrated logistics No budget for awareness-raising activities Confusion among community volunteers called FHCVs in sharing information (differences in the ages for the two interventions (vitamin A and lymphatic filariasis medication, different reporting structures) Drug hesitancy in the community Difficulty swallowing pills (among children, disabled)	Focus on integrated project plan development Collaborative planning to identify solutions Continued communication with officials Rescheduled LF campaign enabled use of 'complementary monitoring and supervision' approach Developed and distributed local, culturally-sensitive information and education materials Tablet swallowing per WHO recommendations
Nigeria/ CHAI [27]	Incomplete identification and involvement of stakeholders in planning of an integrated immunization campaign Poor management of conflicting priorities Delayed funding (mobilization, logistics), microplanning (population targeting, resources) COVID-19 impacted planning, implementation	Regular coordination platform/forum (clear terms, aims, responsibilities) Targeted social mobilization, timely advocacy (integrated decision-making) Clear processes, procedures, communication (national, state, delivery-level) Pre-planning for: security, transportation, infection prevention and control Use virtual tools for planning meetings
Nigeria/ Ibilda Health [28]	Confusion over the concept of integration Inadequate federal, state and local government area funding, over-dependence of donors Concurrent health interventions used same pool of personnel Insecurity, communal clashes across regions Uncertainty of shipping and quality assurance and duration for insecticide treated nets Drug administration schedule lacked flexibility for net distribution (inability to delay one intervention for another) Different target age groups for interventions (more time, remuneration)	Sensitizing all players on benefits of integration Advocacy to political leaders (at all levels), existence of a government counterpart fund and fund releases Early planning, approval of campaign at all levels Notifying relevant security agents on campaign Alignment of personnel remuneration and campaign days Development of integrated national campaign guideline Ownership of the integration process by the State Primary Health Care Development Agency