

DRAFT

Planning Guide to Reduce Missed Opportunities for Vaccination (MOV)

...For decision makers and programme managers at the national and subnational levels

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Introduction

Reducing missed opportunities for vaccination (MOV) is a strategy to increase immunization coverage, simply by making better use of existing vaccination sites (at health centres, hospitals, outreach/mobile services etc.).

The MOV strategy answers **three important questions**:

1. **How many opportunities** for vaccination are missed at existing vaccination sites?
2. **Why** are opportunities for vaccination being missed at the different vaccination sites?
3. **What can be adjusted or done differently** (e.g. policies and behaviours) so that we do not miss any opportunity to vaccinate?

Beyond improving immunization coverage, the aim of reducing MOVs is to improve health service delivery and promote synergy and integration among programmes.

What is a missed opportunity for vaccination (MOV)?

A missed opportunity for vaccination (MOV) includes any visit to a health facility by a child (or adult) who is unvaccinated, partially vaccinated or, not up-to-date, and free of contraindications to vaccination, which does not result in the person receiving all the vaccine doses for which he or she is eligible.

With the introduction of many new vaccines into national immunization schedules, the opportunities to vaccinate, as well as the opportunities to catch-up on delayed vaccinations during regular health service encounters, have both vastly increased.

About this guide

This guide is for decision-makers and national or district managers interested in using the MOV strategy to improve vaccine uptake and immunization coverage by reducing the number of missed opportunities for vaccination.

This guide gives a brief overview of the MOV strategy from beginning to end. It provides:

1. **Background information** on why reducing the number of missed opportunities can help to provide life-saving vaccines to a large number of children/persons who have not received any doses (unvaccinated) or who are not fully vaccinated (missing doses)
2. **The steps to plan and conduct** an assessment of missed opportunities and **how to analyze** and report on the results of an MOV assessment

3. **Guidance on how to use the findings of an MOV assessment to design and implement interventions** or solutions to reduce missed opportunities for vaccination

This **Planning Guide** is the first of three MOV documents that have been developed to be used together:

1. **Planning Guide** to Reduce Missed Opportunities for Vaccination (this document): *For use by decision-makers and programme managers at national and sub-national levels;*
2. Missed Opportunities for Vaccination **Assessment Protocol**: Provides the detailed instructions, standard methodology, and tools for conducting field work, including: a training manual; sample questionnaires for the health facility exit interviews; health worker knowledge, attitude, and practice (KAP) questionnaire; and detailed guidance for conducting key informant interviews and focus group discussions.
3. **MOV Intervention Guidebook**: This provides guidance for translating the findings of the MOV assessments into actionable work plans. It includes: a list of frequently found reasons for MOVs; a list of potential interventions to reduce MOVs; health facility level guidance for working through facilitator-led activities and processes for exploring locally tailored interventions to reduce MOVs. The MOV Intervention Guidebook could also be used as a stand-alone guide for assessing and reducing MOVs in selected health facilities where the standard assessments are yet to be conducted.

How can the MOV strategy increase immunization coverage?

The MOV strategy is about establishing a system so that any child/person eligible for vaccination who comes to a health facility/mobile health service (for whatever reason), receives the needed vaccines during their visit.

Missed opportunities for vaccination occur:

1. During visits to health facilities/mobile health services for immunization (immunization contact), as well as
2. During visits to health facilities/mobile health services for curative services (e.g. treatment of mild fever, cough, diarrhoea, bruises) or other preventive services (e.g. growth monitoring, nutrition assessments and oral rehydration training sessions, etc.);

How much could immunization coverage increase if MOVs were reduced?

Reducing MOV can contribute towards achieving the 2020 Global Vaccine Action Plan (GVAP) goal of “90% national coverage and 80% in every district or equivalent administrative unit, for all vaccines in the national immunization schedule.”

A 2014 analysis¹ using data from recent DHS and MICS surveys estimated the potential gains in coverage if the children who were in contact with health services received the doses of vaccine(s) that were due. For example, bridging the MOV gap could potentially improve Penta/DTP3 coverage by as much as 10 percentage points, depending on the country (Table 1). At a sub-national level (e.g. poor performing districts or facilities) these coverage gains could be even greater.

Recent field assessments of the magnitude of MOV in AMR (2014) and AFR (2015) regions of the WHO have shown that between 23% to 96% of eligible children who visited a health facility for vaccination or for medical care, left the health facility without receiving the vaccine doses that they needed. These are children who are already being reached by health services (and not necessarily so-called “hard-to-reach” or underserved populations). Missing the opportunity to vaccinate these children, when they are already present at the health facility/outreach site, is unacceptable.

¹ Unpublished data. WHO analysis of potential coverage gains if missed opportunities were eliminated, using recent DHS and MICS surveys and other ancillary data.

Table 1: Current and estimated 2013 DTP3 coverage by country, if missed opportunities for vaccination were to be completely eliminated

<i>Country</i>	<i>WUENIC DTP3 (2013)*</i>	<i>Estimated DTP3 (2013)**</i>
Benin	69	77
Cambodia	92	95
Chad	48	*2
DRC	72	80
Ghana	90	92
India	72	84
Kenya	76	81
Liberia	89	95
Malawi	89	96
Mauritania	80	*3
Mozambique	78	92
Niger	70	80
Sierra Leone	92	97
Tanzania	91	99
Uganda	78	89
Zambia	79	88

Table 1 footnotes:

* WHO-UNICEF best estimates of national immunization coverage.

** Using estimates (from recent DHS and MICS) of the proportion of un-/under-vaccinated children who had visited a health facility for treatment of cough, fever and diarrhea in the preceding two weeks, we estimated what the national DTP3 coverage would have been, had they all used the health visit to take all the vaccines for which they were eligible. Such a healthcare encounter was considered a missed opportunity only if the missed vaccine dose was more than 3 months overdue and there were no contraindications to vaccination.

What are the core principles of the MOV strategy?

Principle #1. Focuses on implementing actions at the local level, where most of the reasons for missed opportunities for vaccination are identified

The MOV strategy relies on a bottom-up approach that obtains information on the reasons for MOV from service providers and the users of health services, at the facility level. It then seeks their commitment and knowledge to resolve the identified issues. When health workers and

² Insufficient data from recent DHS to calculate estimated DTP3 coverage

³ Insufficient data from recent DHS to calculate estimated DTP3 coverage

local communities take ownership and responsibility for reducing missed opportunities, the impact on number of children vaccinated is intensified.

Principle #2. Emphasizes country leadership

In order to achieve long-term gains, the MOV strategy in each country begins with an assessment of why opportunities for vaccination are missed and then specifically addresses them using locally-tailored interventions. The MOV strategy is designed to be low-cost and action oriented, and is intended to be fostered by the national and sub-national level, but mostly implemented and managed by the health facility staff. MOV assessments should not be performed as stand-alone research projects by an academic institution; rather every effort should be made to have the EPI team incorporate reducing MOV in their programme improvement plans and to use it to optimize health service processes, policies and mechanisms.

Principle #3. Capitalizes on existing platforms and builds synergies

The MOV strategy should be integrated with other ongoing country work plans and activities for increasing routine vaccine coverage and equity. For instance, where applicable, the MOV strategy can be built into health systems strengthening activities, as it promotes synergies with other programmes. The focus on health facilities seeks to improve the management, organization and integration of service delivery at the lowest level possible. As a result, the coverage of other health services can also be improved.

Principle #4. Invests in sustainable monitoring and supervision

Reducing MOV requires an investment in regular monitoring of coverage and frequent supportive supervision from the next level of the health system. It is important to monitor the number of children vaccinated, and compare this from month to month, as well as compare similar months from year to year. The monitoring charts should be large enough to be displayed and visible to all users of the health facility as well as for review during community meetings. (Figure: attach example of community monitoring template from SE Asia?).

What are the steps for implementing the MOV strategy?

There are ten steps in the MOV strategy, each leading naturally to the next. These 10 steps are summarized below:

Step 1: Plan for an MOV assessment and intervention

Step 2: Prepare for the assessment and secure commitment for follow-up interventions

Step 3: Conduct field work for the rapid assessment of MOV

Step 4: Analyze preliminary data and develop draft recommendations

Step 5: Brainstorm on proposed interventions and develop a work plan for the interventions

Step 6: Debrief with MOH leadership and immunization partners on proposed next steps

Step 7: Implement the interventions

Step 8: Provide supportive supervision and monitor progress

Step 9: Conduct rapid field evaluation of outcomes/impact of interventions (6-12 months later)

Step 10: Incorporate into long term plans to ensure gains are sustainable.

For each step, this *Planning Guide* outlines the key actions that need to be taken and any lessons learned from country experiences. The ten steps are further categorized into:

1. Steps to be completed by the planning team at the national and subnational level:
 - Steps 1 – 2;
 - Steps 7 – 10;
2. Steps to be completed by the field team responsible for conducting and analyzing the assessments:
 - Steps 3 – 6;

Overview Table of the MOV Strategy:

	For the <i>Planning Team</i> at national and subnational level		For the <i>Field Team</i> conducting and analyzing the assessment				For the <i>Planning Team</i> at national and subnational level			
	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
What	<u>Plan for an MOV assessment and intervention</u>	<u>Prepare for the assessment and secure commitment for follow-up interventions</u>	<u>Conduct field work for the rapid assessment of MOV</u>	<u>Analyze preliminary data and develop draft recommendations</u>	<u>Brainstorm on proposed interventions and develop a work plan for the implementation</u>	<u>Debrief with MOH leadership and immunization partners on proposed next steps</u>	<u>Implement the interventions</u>	<u>Provide supportive supervision and monitoring</u>	<u>Conduct rapid field evaluation of outcomes/impact of interventions</u>	<u>Incorporate into long term immunization plans to ensure gains are sustainable</u>
Who	MOH, with support from WHO (CO, RO)	MOV Planning Team, MOH, WHO and other key immunization partners	Assessment coordinator, MOH and in-country immunization partners	Assessment coordinator and representatives from MOH and partner organizations	Assessment coordinator, field supervisors and MOH-EPI leadership (health facility, district and/or national level)	All immunization partners, with leadership by MOH	Health facility staff, MOH and immunization partners	MOH, WHO and other key immunization partners	MOH, WHO and other key immunization partners	MOH, WHO and other key immunization partners
Timing/ Duration	2–4 months before field work	1-2 months before field work	1-2 weeks duration, depending on training needs and travel distances	1-2 days	1 day	½ day	6-12 months	3-12 months	6-12 months following Step 7/8	Ongoing
Tasks	Task 1.1 <u>Decide</u> that an MOV strategy is needed Task 1.2 Achieve <u>high-level support</u> from the MOH Task 1.3 Identify an Assessment Coordinator and members of the <u>MOV Planning Team</u> (preferably	Task 2.1 Collect, compile and <u>review available information</u> on the immunization program, including recent program reviews and coverage estimates Task 2.2 Decide on the <u>scale of the MOV work</u> (national or selected districts(s)) Task 2.3 If appropriate, select subnational areas for field	Task 3.1 <u>Print questionnaires and/or prepare electronic tablets or smartphones</u> for electronic data collection Task 3.2 <u>Train</u> supervisors and interviewers on assessment process and logistics Task 3.3 <u>Administer exit assessments</u> to the mothers/caregivers	Task 4.1 <u>Tally data</u> from sampled questionnaires for analysis, or download preliminary data from the electronic data collection platform Task 4.2 <u>Collate the facilitator notes</u> taken during the qualitative interviews	Task 5.1 <u>Present</u> the preliminary data from Step 4 and ask for reactions from the group Task 5.2 Facilitate a discussion on <u>ideas for reducing MOVs</u> in the selected district(s)/the entire country	Task 6.1 Present the summary objectives of the assessment, the process of the field work and the <u>updated results and recommendations</u> from Step 5 Task 6.2 Present the	Task 7.1 Based on the findings of the MOV assessment, implement interventions to address specific findings, e.g. additional tailored trainings; mass media to build community demand; etc. Task 7.2 Provide additional policy guidance,	Task 8.1 Establish a <u>clear monitoring and supportive supervision plan</u> Task 8.2 Provide funds for supportive supervision and corrective actions Task 8.3 Provide monitoring charts and ensure compliance with visible display of monthly coverage	Task 9.1 Following 6-12 months of implementation of activities, conduct <u>evaluation of effectiveness</u> of the interventions in selected health facilities	Task 10.1 To ensure sustainability, include interventions to reduce MOV in long-term immunization plans (e.g. cMYP and annual EPI plans)

	For the <i>Planning Team</i> at national and subnational level		For the <i>Field Team</i> conducting and analyzing the assessment				For the <i>Planning Team</i> at national and subnational level			
	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
What	<i>Plan for an MOV assessment and intervention</i>	<i>Prepare for the assessment and secure commitment for follow-up interventions</i>	<i>Conduct field work for the rapid assessment of MOV</i>	<i>Analyze preliminary data and develop draft recommendations</i>	<i>Brainstorm on proposed interventions and develop a work plan for the implementation</i>	<i>Debrief with MOH leadership and immunization partners on proposed next steps</i>	<i>Implement the interventions</i>	<i>Provide supportive supervision and monitoring</i>	<i>Conduct rapid field evaluation of outcomes/impact of interventions</i>	<i>Incorporate into long term immunization plans to ensure gains are sustainable</i>
	<p>multi-partner; may be a sub-committee of the Inter-agency Coordinating Committee (ICC) or similar body)</p> <p>Task 1.4</p> <p>Identify <u>funding sources</u> from within and/or outside the EPI program</p> <p>Task 1.5</p> <p>Prepare a schedule of activities and include in annual work plan, with <u>approval of the Inter-agency Coordinating Committee (ICC) or similar body</u></p>	<p>work</p> <p>Task 2.4</p> <p>Agree on <u>sample size</u>, the number of field staff needed and the number of days for field work</p> <p>Task 2.5</p> <p>Finalize the <u>budget</u> for the assessment field work</p> <p>Task 2.6</p> <p>Prepare a <u>draft</u> budget for the <u>post-assessment interventions</u></p> <p>Task 2.7</p> <p>Share plan with ICC or appropriate body (and partners) for final approval of the plan</p> <p>Task 2.8</p> <p>Clarify whether <u>ethical approval</u> is necessary and commence the process.</p> <p>Task 2.9</p> <p><u>Review generic questionnaires</u>, and if necessary adapt to country context and vaccination</p>	<p>of children less than two years old, in the selected health facilities</p> <p>Task 3.4</p> <p><u>Administer health worker KAP (knowledge, attitude and practices) assessment</u></p> <p>Task 3.5</p> <p>Conduct <u>focus group discussions for mothers/caregivers</u></p> <p>Task 3.6</p> <p>Conduct <u>focus group discussions for health workers</u></p> <p>Task 3.7</p> <p>Conduct <u>key informant interviews</u> with the pre-determined number of senior staff and health administrators</p> <p>Task 3.8</p> <p><u>Extract vaccination</u></p>	<p>Task 4.3</p> <p>Conduct a quick-and-dirty <u>analysis of preliminary data</u>, to identify key themes and major results for discussion in Step 5</p> <p>Task 4.4</p> <p>Prepare for detailed analysis of complete data, as well as data cleaning (Cross-reference: Annex 8, MOV Protocol)</p>	<p>Task 5.3</p> <p>Propose a <u>detailed framework, work plan and chronogram</u> for reducing MOVs over the next 6-12 months</p> <p>Task 5.4</p> <p>Assign <u>roles and responsibilities to different partners</u> using the work plan from Task 5.3, including a clear supervision, monitoring and evaluation plan</p> <p>Task 5.5</p> <p>Propose existing systems, opportunities and activities to ensure community</p>	<p>proposed work plan and request feedback and/or endorsement of the work plan from the MOH and partner leadership</p> <p>Task 6.3</p> <p>During the debrief, commence discussions on funding of the interventions or including them in existing immunization or health system improvement plans</p>	<p>directives, job aids and other communication materials from the national level</p> <p>Task 7.3</p> <p>Using the MOV Intervention Guidebook as a starting point (Cross-reference), encourage local/tailored solutions for reducing MOVs in each health facility</p>	<p>estimates</p>		

	For the <i>Planning Team</i> at national and subnational level		For the <i>Field Team</i> conducting and analyzing the assessment				For the <i>Planning Team</i> at national and subnational level			
	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
What	<i>Plan for an MOV assessment and intervention</i>	<i>Prepare for the assessment and secure commitment for follow-up interventions</i>	<i>Conduct field work for the rapid assessment of MOV</i>	<i>Analyze preliminary data and develop draft recommendations</i>	<i>Brainstorm on proposed interventions and develop a work plan for the implementation</i>	<i>Debrief with MOH leadership and immunization partners on proposed next steps</i>	<i>Implement the interventions</i>	<i>Provide supportive supervision and monitoring</i>	<i>Conduct rapid field evaluation of outcomes/impact of interventions</i>	<i>Incorporate into long term immunization plans to ensure gains are sustainable</i>
		schedule Task 2.10 If needed, finalize arrangements for the <u>translation</u> of the updated questionnaires and training materials into the local language(s)	<u>data</u> from health facility registers for children with no vaccination cards		participation during the intervention phase					
Expected outcomes	<ul style="list-style-type: none"> - High level commitment from MOH - MOV strategy listed in the annual EPI work plan - National Planning Team for MOV constituted 	<ul style="list-style-type: none"> - Finalized chronogram for MOV activities - Finalized budget for MOV assessment - Draft budget for MOV post-assessment interventions - Exemption from ethical approval process, or approval, as appropriate - Finalized questionnaires and training materials for field work training (including plans for translation, if needed) 	<ul style="list-style-type: none"> - Printed questionnaires and interview guides - Field staff fully trained on assessment process - Field staff proficient in completing the questionnaires on paper as well as on the tablets - Completed exit interviews, KAP assessments and qualitative interviews (focus group discussions and key informant interviews) 	<ul style="list-style-type: none"> - Basic frequencies from the questionnaire data to elicit discussions in Step 5 - Critical quotes from the focus group discussions that capture the essence of the key findings - A list of proposed interventions to reduce MOVs from all assessment components 	<ul style="list-style-type: none"> - List of proposed activities to reduce MOVs (to be prioritized by MOH) - Frame work and 6-12 month work plan for reducing MOVs - Outline of roles and responsibilities of different partners 	<ul style="list-style-type: none"> - Finalized recommendations - Finalized and endorsed work plan, with clear implementation timelines - Catalytic funding and/or plans for integration with existing programs - Plans for social mobilization and communication materials 	<ul style="list-style-type: none"> - Interventions implemented nationally or in selected districts/health facilities 	<ul style="list-style-type: none"> - Supportive supervision reports with corrective measures - Monitoring charts duly completed and visibly displayed in all health facilities 	<ul style="list-style-type: none"> - Reduction in MOVs reported in evaluations - Increase in number of children vaccinated when compared to previous year's numbers - Reduction of MOVs and general health service improvement are ingrained as a routine process in evaluated health facilities - Results of evaluations shared with ICC or similar body 	<ul style="list-style-type: none"> - MOV interventions and processes included as part of country plans such as cMYP and annual EPI plans - Funding is available for implementation

STEP 1: Plan for an MOV Assessment

STEP 1: Plan for an MOV assessment and intervention

Task 1.1: Decide that an MOV strategy is needed

Task 1.2: Achieve high-level support from the MOH

Task 1.3: Identify an Assessment Coordinator and members of the MOV Planning Team (preferably multi-partner; may be a sub-committee of the Inter-agency Coordinating Committee (ICC) or similar body)

Task 1.4: Identify funding sources from within and/or outside the EPI programme

Task 1.5: Prepare a schedule of activities and include in annual work plan, with approval of ICC or similar body

Task 1.1: Decide that an MOV strategy is needed

The causes of missed opportunities for vaccination and the interventions to reduce them vary widely in different countries. Experience from countries where the strategy has been implemented, shows that the MOV strategy and tools are applicable across low-, medium- and high-coverage immunization programmes. Each country needs to critically appraise the findings of its recent immunization programme reviews and decide whether addressing MOV will be a useful strategy to increase immunization coverage.

Task 1.2: Achieve high-level support from the MOH

Once **Task 1.1** is completed, the EPI programme should put together a detailed plan to obtain high-level MOH support. Such a support is usually obtained by making presentations to the MOH leadership that include: a listing of some of the known problems with the immunization programme and how the MOV strategy could provide solutions; a listing of possible sources of funding, such as an upcoming Health Systems Strengthening (HSS) application or similar funds; etc.. This task is critical for the post-assessment phase, when new activities and policy changes may require high-level political support for sustainable funding and implementation.

Task 1.3: Identify an Assessment Coordinator and members of the MOV Planning Team (preferably multi-partner; may be a sub-committee of the Inter-agency Coordinating Committee [ICC] or similar body)

Identifying MOV champions early in the planning phase is one of the critical steps for success. The Assessment Coordinator may be the EPI Manager or other official from the MOH or WHO Country Office. Ideally, the MOV Planning Team should include a representative from each of the key immunization partners, for example, one person each from the MOH, WHO and UNICEF. A team of 3 – 5 persons is ideal. This does not need to be a new committee, but could be a sub-committee/working group of the ICC or similar body.

Task 1.4: Identify funding sources from within and/or outside the EPI programme

Although the cost of MOV field work is not very high, it is necessary to identify potential sources of funding for the field work as well as the post-assessment interventions. This is to ensure that the entire MOV strategy can be fully implemented. Conducting the MOV assessment and determining the causes of MOV (Steps 3-6), without supporting the implementation and monitoring of corrective interventions/actions (Steps 7-10) is a failure of the strategy. For long-term funding of intervention and supervision activities, explore early synergies with existing (funded) programmes and/or other platforms (e.g. HSS funds) to enhance sustainability.

Task 1.5: Prepare a schedule of activities and include in annual work plan, with approval of ICC or similar body

The final task in the planning phase is to ensure that the ICC or similar high-level body backs the activities proposed. Country experience shows that including the MOV assessment and interventions in an annual EPI work plan, remarkably improves the chances that sufficient time and resources are allocated for its implementation.

STEP 2: Prepare for the assessment and secure commitment for follow-up interventions

STEP 2: Prepare for the assessment and secure commitment for follow-up interventions

Task 2.1: Collect, compile and review available information on the immunization programme, including recent programme reviews and coverage estimates

Task 2.2: Decide on the scale of the MOV work (national or selected districts(s))

Task 2.3: If appropriate, select subnational areas for field work

Task 2.4: Agree on sample size, the number of field staff and the number of days for field work needed

Task 2.5: Finalize the budget for the assessment field work

Task 2.6: Prepare a draft budget for the post-assessment interventions

Task 2.7: Share plan with ICC or appropriate body (and partners) for final approval of the plan

Task 2.8: Clarify whether ethical approval is necessary and commence the process.

Task 2.9: Review generic questionnaires, and if necessary adapt to country context and vaccination schedule

Task 2.10: If needed, finalize arrangements for the translation of the updated questionnaires and training materials into the local language(s)

Task 2.1: Collect, compile and review available information on the immunization programme, including recent programme reviews and coverage estimates

Where available, recent coverage survey and programme review reports are invaluable in preparing for the MOV assessments, particularly for prioritizing districts or areas to focus the interventions.

Task 2.2: Decide on the scale of the MOV work (national or selected districts(s))

The MOV methodology is adaptable to different levels of the health care system. This is because the solutions to the problems identified are mostly applicable at the service delivery point, but national policies and guidelines may sometimes need to be modified. It is noteworthy that even though the assessments may be performed in a limited number of sentinel districts/health facilities, the follow-up interventions may be scaled-up nationwide.

Task 2.3: If appropriate, select subnational areas for field work

Some countries have selected the largest or worst-performing districts for the MOV assessments and interventions, with the understanding that this would provide the greatest benefit as well as the best use of limited resources.

Task 2.4: Agree on sample size, the number of field staff needed and the number of days for field work

Decisions about sample size and scope will likely be impacted by the availability of financial, human and time resources. Selection of districts is expected to be performed at the national level, by the MOV Planning Team. If a national sample is being selected, the MOV assessment should include 8–10 districts.

Independent of the number of districts selected, the following principles should be applied (For more details, cross-reference: *MOV Protocol*, Section 8.2):

1. At least 300–500 observations are necessary for any meaningful analysis and interpretation of the exit survey data;
2. Data collection should be spread across several unique health facilities (for example, 10 interviews in each of 50 health facilities [n=500], rather than 25 interviews in each of 20 health facilities [n=500]);
3. Where possible, a mix of health facilities should be assessed, in terms of size (small/medium/large), type (private/public) and location (rural/urban), etc.;

Task 2.5: Finalize the budget for the assessment field work

Based on the decisions in Task 2.4 (above), a budget should be fairly easy to work out. It is important to include costs associated with the training of field staff, printing of materials, and daily transport during field work. (Cross-reference: Example budget template in Annex 6 of the *MOV Protocol*).

Task 2.6: Prepare a draft budget for the post-assessment interventions

In addition to the MOV assessment budget, it is advisable at this stage to start preliminary discussions around different cost scenarios for potential interventions, given what is known about the performance of and bottlenecks in the immunization programme. Possible funding sources should be contacted at this time. The inclusion of potential funders in the planning and assessment phases increases the likelihood that they will be able to fund the needed interventions. In addition, such early engagement may necessitate modifications in the design of the MOV assessment to meet funding requirements.

Task 2.7: Share plan with ICC or appropriate body (and partners) for final approval of the plan

At the next meeting of the ICC, the MOV Planning Team should present the proposed plan, budget and timelines for approval. The primary purpose of the MOV assessment is to use the data and results for action (e.g. adapt policies, processes) and design corrective interventions/solutions that will reduce MOVs. Solid endorsement from such a body is therefore a critical factor for success.

Task 2.8: Clarify whether ethical approval is necessary and commence the application process.

In most countries, the MOV assessment has been undertaken as a routine programme evaluation. In such situations, it may be exempted from formal ethical clearance. This should be clarified with the responsible body as early as possible.

Task 2.9: Review generic questionnaires, and if necessary adapt to country context and vaccination schedule

With leadership from the Assessment Coordinator, the MOV Planning Team should review and adapt the generic exit interview questionnaire (Cross-reference: *MOV Protocol*, Annex 2) and Health Worker KAP Questionnaire (Cross-reference: *MOV Protocol*, Annex 3) to the country context. Such adaptations may include updating the generic questionnaires with the local vaccination schedule, health facility and health worker classifications, etc. Comparability of the results with other country assessments should be kept in mind during these adaptations.

Task 2.10: If needed, finalize arrangements for the translation of the updated questionnaires and training materials into the local language(s)

If needed, translation of all instruments should commence as soon as possible. This is because training cannot start until translation is completed and validated. In addition, if electronic data collection is planned, the time needed to programme the translated questionnaires into the software in the electronic tablets or smart phones should be accounted for.

STEP 3: Conduct field work for the rapid assessment of MOV

STEP 3: Conduct field work for the rapid assessment of MOV

Task 3.1: Print questionnaires and/or prepare electronic tablets or smartphones for electronic data collection

Task 3.2: Train supervisors and interviewers on assessment process and logistics (3 days)

Task 3.3: Administer exit surveys to the mothers/caregivers of children less than two years old, in the selected health facilities (2–3 days)

Task 3.4: Administer health worker KAP (knowledge, attitude and practices) assessment (2–3 days)

Task 3.5: Conduct focus group discussions for mothers/caregivers (1/2 day)

Task 3.6: Conduct focus group discussions for health workers (1/2 day)

Task 3.7: Conduct key informant interviews with the pre-determined number of senior staff and health administrators (1/2 day)

Task 3.8: Extract vaccination data from health facility registers for children with no vaccination cards (1/2 day)

(Cross-reference: Please see details of field work implementation in the *MOV Protocol, Section 8*).

The MOV strategy uses a bottom-up approach that seeks to assess the reasons for missed opportunities as well as potential interventions at the vaccination point - from the service providers and the mothers/caregivers. The assessment strategy uses triangulation from multiple assessment components, as listed in the schematic below:

Step 3 (Tasks 3.1-3.8): Schematic for understanding the contributions of the five assessment components

Expected outcomes	Assessment components
A. Identify the magnitude, extent and causes of missed opportunities	1. Health facility exit interviews (interviewer-administered) 2. Health worker KAP interviews (self-administered) 3a. Focus group discussions (for caregivers and health workers) 4a. Key informant interviews (for health administrators)
B. Identify potential interventions to reduce MOVs	3b. Focus group discussions (for caregivers and health workers) 4b. Key informant interviews (for health administrators) 5. Work group brainstorming sessions

STEP 4: Analyze preliminary data and develop draft recommendations

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Task 4.1: Tally data from sampled questionnaires for analysis, or download preliminary data from the electronic data collection platform

Task 4.2: Collate the facilitator notes taken during the qualitative interviews

Task 4.3: Conduct a quick-and-dirty analysis of preliminary data, to identify key themes and major results for discussion in **Step 5**

Task 4.4: Prepare for detailed analysis of complete data, as well as data cleaning (Cross-reference: Annex 8, *MOV Protocol*)

Task 4.1: Tally data from sampled questionnaires for analysis, or download preliminary data from the electronic data collection platform

If the Assessment Coordinator is familiar with a simple analytic software such as *Visual Dashboard* in EPIInfo, this is ideal for quick analysis and for drawing and updating simple charts automatically. Listing of simple frequencies is all that is needed at this time.

Experience in countries that have completed the MOV assessments shows that this step is facilitated by the use of electronic data collection platforms (electronic tablets or smartphones). When possible, use of such electronic platforms is highly encouraged.

Task 4.2: Collate the facilitator notes taken during the qualitative interviews

If a social scientist is a part of the Field Team, they would be responsible for conducting the qualitative interviews. They can submit preliminary analysis results and important quotes for inclusion in the presentation for the brainstorming (**Step 5**) and debrief sessions (**Step 6**). Otherwise, Assessment Coordinator should compile important quotes and themes discussed during the focus group discussions for presentation.

Task 4.3: Conduct a quick-and-dirty analysis of preliminary data, to identify key themes and major results for discussion in Step 5

Together with the MOV Planning Team, the Assessment Coordinator should compile the results from the different assessment components into a set of presentation slides. It should be emphasized that these data and results are preliminary. However, experience shows that the final results rarely differ markedly. Please note that it will be nearly impossible to derive an "estimate" of the proportion of children missed at this stage of the analysis. This requires further data cleaning, reclassification and subgrouping (Task 4.4).

Task 4.4: Plan for detailed analysis of complete data, as well as data cleaning (Cross-reference: Annex 8 of the Protocol)

Detailed data analysis should commence as soon as possible after the debrief, and certainly final results should feed into the planning of the post-assessment interventions. If analysis cannot be performed in-country due to time and capacity constraints, it should be outsourced as soon as possible.

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STEP 5: Brainstorm on proposed interventions and develop a work plan for the implementation

STEP 5: Brainstorm on proposed interventions and develop a work plan for the interventions

Task 5.1: Present the preliminary data from **Step 4** and ask for reactions from the group

Task 5.2: Facilitate a discussion on ideas for reducing MOVs in the selected district(s)/the entire country

Task 5.3: Propose a detailed framework, work plan and chronogram for reducing MOVs over the next 6 -12 months

Task 5.4: Assign roles and responsibilities to different partners using the work plan from Task 5.3, including a clear supervision, monitoring and evaluation plan

Task 5.5: Propose existing systems, opportunities and activities to ensure community participation during the intervention phase

Task 5.1: Present the preliminary data from Step 4 and ask for reactions from the group

A facilitated open discussion format with note-taking is encouraged for this task.

Task 5.2: Facilitate a discussion on ideas for reducing MOVs in the selected district(s)/the entire country

We suggest the following **ideas** for conducting effective brainstorming sessions:

- Present the key findings to the entire group;
- Split the group into separate working groups (WG):
 - Each WG should consist of 3-5 participants;
- Each group to discuss two aspects of the approach – potential interventions and the chronogram of activities over the next 6-12 months;
 - To the extent possible, each idea should leverage existing funding streams and country plans;
- Identify Technical Assistance needs and indicate clear timelines, etc.;
- At the end of the WG sessions, each WG will present their discussions to the plenary:
 - For input and synthesis in preparation for final debrief;
 - PowerPoint templates will be provided;

Task 5.3: Propose a detailed framework, work plan and chronogram for reducing MOVs over the next 6-12 months

Following the discussions in Task 5.2, compile ideas from all working groups into an integrated list of activities, responsible persons and timelines for the debrief presentation. (Cross-reference: See a generic example in Annex 9 of MOV Protocol).

Task 5.4: Assign roles and responsibilities to different partners using the work plan from Task 5.3, including a clear supervision, monitoring and evaluation plan

Ensure that immunization partners with expertise in different aspects of the programme are willing to take their respective roles and responsibilities (e.g. communications, health worker trainings, improvements in the cold chain, funding of interventions, etc.).

Task 5.5: Propose existing systems, opportunities and activities to ensure community participation during the intervention

Long-term sustainability of immunization programmes require ongoing community participation and community demand for high quality services. Plan to invite community service organizations (CSOs) and community development committees to the final debrief session (Step 6). Use the opportunity to solicit their input and assistance with implementing the proposed interventions.

STEP 6: Debrief with MOH leadership and immunization partners on proposed next steps

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Task 6.1: Present the summary objectives of the assessment, the process of the field work and the updated results and recommendations from **Step 5**

Task 6.2: Present the proposed work plan and request feedback and/or endorsement of the work plan from the MOH and partner leadership

Task 6.3: During the debrief, commence discussions on funding of the interventions or including them in existing immunization or health system improvement plans

Task 6.1: Present the summary objectives of the assessment, the process of the field work and the updated results and recommendations from Task 5

The objectives and results of the assessment components and the districts covered should be presented in a set of PowerPoint slides.

Task 6.2: Present the proposed work plan and request feedback and/or endorsement of the work plan from the MOH and partner leadership

Sufficient time should be allocated to discussion of the proposed work plan. Additional ideas should be included and a final version should be endorsed by the end of the debrief.

Task 6.3: During the debrief, commence discussions on funding of the interventions or inclusion in existing immunization or health system improvement plans

To ensure that the proposed intervention activities are implemented in a timely manner, concrete discussions on new funding sources or the re-programming of existing funds should commence during the debrief. In addition, new ideas for including the MOV strategy in upcoming funding applications should be explored.

STEP 7: Implement the interventions

STEP 7: Implement the interventions

Task 7.1: Based on the findings of the MOV assessment, implement interventions to address specific findings, e.g. additional tailored trainings; mass media to build community demand; etc.

Task 7.2: Provide additional policy guidance, directives, job aids and other communication materials from the national level

Task 7.3: Using the *MOV Intervention Guidebook* as a starting point (Cross-reference), encourage local/tailored solutions for reducing MOVs in each health facility

Task 7.1: Based on the findings of the MOV assessment, implement interventions to address specific findings, e.g. additional tailored trainings; mass media to build community demand; etc.

It is important that the proposed interventions to reduce MOVs target the problems that were identified during the assessment. These problems may differ by district or by type of health facility (e.g. urban/rural or public/private).

Task 7.2: Provide additional policy guidance, directives, job aids and other communication materials from the national level

The MOV Planning Team should work with the MOH and ICC to institute policy and other types of guidance to address specific issues, e.g. on vaccination of children who are older than 24 months, implementation of the open vial policy, contra-indications, etc. Measures to ensure that such new or updated policies are implemented at the vaccination point should be addressed.

Task 7.3: Using the *MOV Intervention Guidebook* as a starting point (Cross-reference), encourage local/tailored solutions for reducing MOVs in each health facility

The *MOV Intervention Workgroup* provides guidance and options for interventions at the national, district or health facility level. The *MOV Intervention Guidebook* should assist the MOV Planning Team in designing workable solutions for the country at the different levels of the health system. It also provides suggestions for supportive supervision, monitoring and evaluation of proposed activities.

STEP 8: Provide supportive supervision and monitor progress

STEP 8: Provide supportive supervision and monitoring

Task 8.1: Establish a clear monitoring and supervision plan

Task 8.2: Provide funds for supportive supervision and corrective actions

Task 8.3: Provide monitoring charts and ensure compliance, with visible display of monthly coverage estimates

Please refer to the *MOV Intervention Guidebook* for additional details (Cross-reference).

Task 8.1: Establish a clear monitoring and supervision plan

The focus of the supervisory visits should be on correcting any identified implementation problems. To avoid duplication of efforts, the monitoring and supervision plan should strengthen existing systems whenever possible. These need to be systematized and regular, preferably monthly and from the next level of the health system. Templates for reporting to higher levels should be provided and a collation method should be established for onward reporting and feedback.

Task 8.2: Provide funds for supportive supervision and corrective actions

It should be emphasized that the supervisory visits should not be designed merely for reporting to higher levels. In most countries, additional funding for supervisory visits may be required at the initial phases, and these should be budgeted for as appropriate. Similarly, corrective actions may require funds for implementation, and these should be accounted for in the intervention budget.

Task 8.3: Provide monitoring charts and ensure compliance, with visible display of coverage estimates

Clear and easy-to-use wall monitoring charts should be printed centrally and distributed to all health facilities. The charts should provide a blank space for personalization, such as facility/village name, date, etc. Emphasis should be placed on numerator tracking for different antigens, as this is sufficient to monitor changes from month to month, or to compare with similar months from previous years. Examples of charts are provided in the *MOV Intervention Guidebook*.

STEP 9: Conduct rapid field evaluation of outcomes/impact of interventions (6-12 months later)

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Task 9.1: Following 6-12 months of implementation of activities, conduct evaluation of effectiveness of the interventions in selected health facilities
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Following 6-12 months of implementation of interventions and supportive supervision, a re-assessment of MOVs should be conducted in (a subset of) the original health facilities (Step 3). This evaluation should use a similar methodology as the initial assessment. The objective is to assess any changes in practice styles and vaccination coverage that may have occurred as a result of the interventions. The MOV Planning Team should ensure that the results of this evaluation are shared widely and that the MOH leadership are updated with the outcomes.

As an ancillary assessment, if there was no MOV interventions in some parts of the country, such areas could serve as controls to further illustrate the impact of the interventions on service quality and vaccine coverage.

STEP 10: Incorporate into long term immunization plans to ensure gains are sustainable.

STEP 10: Incorporate into long term immunization plans to ensure gains are sustainable
Task 10.1: To ensure sustainability, include interventions to reduce MOV in long-term immunization plans (e.g. cMYP and annual EPI plans)

The MOV strategy should not be conceived as a one-time activity to increase vaccine coverage, rather as a health system-wide service integration effort to improve vaccination as well as other health services. As such, from the outset, the MOV Planning Team should ensure that MOV activities and processes are included as part of country plans such as the cMYP and the annual EPI plans. The intervention activities should be routinized and sustained, by ensuring the availability of sufficient funding and political will. Periodic supportive supervision and monitoring of MOVs should continue on a monthly or quarterly basis, as part of the monitoring and supervision plan for health services in general.