Supportive supervision for enhancing quality of immunization program in Jharkhand

Experience of Government of Jharkhand, IMMUNIZATION-Basics and other partners

Supervision: There are several interpretations of the term 'supervision', but typically supervision is the activity of overseeing the productivity and progress of employees who report directly to the supervisors. Occasionally, writers will interchange 'leadership' and 'supervision'. Both activities are closely related. Supervision requires leadership. Leadership does not necessarily have to involve supervision[1].

Similarly, supervision and management are two different things and require different skill sets. A person can be a supervisor (directing people at work) without being a manager and a person can be a manager (planning and control of work) without supervising anyone. In most workplace situations many supervisors also do some management and most managers also do some supervision.

Improved supervision to strengthen health care delivery systems: Supervision is recognized as a critical element of health programs. Continued improvements in technical and operational approaches in health care delivery programs demand a stronger supervision system using techniques that are supportive for learning and improving. However, national health programs often have a weak supervision system with traditional approaches that are more attuned towards fault-finding, mere inspection or collection of data. The learning component is almost always limited to training settings, with no emphasis or operational mechanisms for on-the-job learning and capacity building, particularly with preventive public health and outreach service delivery.

Several donor-supported technical assistance projects, especially the USAID funded reproductive and child health and family planning projects, have tried and tested different models for improving supervisory systems in public health programs at scale in various countries. A conceptual model of the approach called 'supportive supervision' is comprehensively captured in the MAQ paper 4, which is used as a reference[2] in this article related to the adaptation of supportive supervision to strengthen the routine immunization program in Jharkhand state in India.

Supervision in Immunization program in India:. India's Universal Immunization Programme (UIP) is one of the largest in the world in terms of quantities of vaccine used, number of beneficiaries, number of immunization sessions organized and the geographical spread and diversity of areas covered[3]. Ensuring quality of vaccines, injection safety, adequacy of supplies and consistency of service delivery requires coordination at all levels. As in any management system, the supervisory function is critical at each level and it can potentially enhance program quality.

[1] Adapted from the Field Guide to Leadership and Supervision

[2] Making Supervision Supportive and Sustainable: New Approaches to Old Problems -- **MAQ**Papers, Vol. 1, No. **4** . 2002. www.maqweb.org/maqdoc/MAQno4final.pdf

[3] Multi year strategic plan (2005-2010) – Universal Immunization Program; Department of Family Welfare; Ministry of Health and Family Welfare; Government of India – January 2005.

It is critical for immunization programs to have supervisory mechanisms to ensure well functioning services, outreach and cold chain facilities.

In India, Auxiliary Nurse Mid-wives (ANMs) are primarily responsible for providing immunization services. They are to be supervised by Lady Health Visitors (LHVs), who report to the medical officers at primary health centre level. This system is challenged, however, by a high level of LHV position vacancies. Data published by the Government of India (2007-08), showed that of the required 22370 positions, only 18029 were sanctioned, with only 15546 LHVs in place. Most of the large and medium sized states had substantially lower numbers of LHVs then required, with these LHVs often engaged in supporting the facility work at the PHC or to fill-in for vacant or absent ANM. Consequently, the medical officers have become responsible for supervising ANMs. However, they also provide clinical services at the health facility and cannot conduct sufficient supervisory field visits, thus focusing on review meetings and report collection.

Given the staffing constraints, the capacity and motivation of staff varies. LHVs and Medical Officers also often lack supervisory training and skills to be able to handle on-the-ground guidance and support. This has been the case in many states in India, including Jharkhand at the time the state was established.

RI in Jharkhand: Jharkhand state was created from Bihar in 2000. It was reported to have only 9% fully immunized child coverage in the 1998-99 NFHS2. As with other low coverage states, an emphasis was placed by the national and state government on improving basic health service delivery, including immunization, since 2000. Provision of routine immunization services on a regular basis was seen as an opportunity to improve facilities and outreach sites. Various strategies including catch-up rounds, increasing the number of outreach sessions, creation of more vaccine storage facilities, adoption of safer injection practices and waste-disposal measures were introduced in the state.

With additional resources and newer strategies under RCH II (2005) and National Rural Health Mission (NRHM- 2007-12) as well as with coordinated advocacy of development partner agencies at the state level, rapid improvements in coverage are being made. NFHS 3 (2005-06) and the District Level Health Survey (2006-07) show fully immunized child coverage at 35 and 54% respectively in Jharkhand.

Various approaches have contributed to this increase, including additional session sites, better micro-planning and supervision, convergence with Integrated Child Development Services (ICDS) program, newer strategies like vaccine delivery to session sites through local courier, social mobilization through volunteers called Accredited Health Activists (ASHAs, known as Sahiyas in Jharkhand) and hiring of ANMs on contractual basis to fill vacant positions.

The heightened emphasis by top leadership to adopt multiple initiatives for greater immunization coverage involved strengthening the delivery system and quality of services, including supervision. Improved monitoring and capacity building became a priority for the RI program in Jharkhand through the government as well as with partners like the USAID-funded IMMUNIZATIONbasics project and CARE. The subsequent discussion in this paper presents the strategy of supportive supervision adapted in Jharkhand to sustain improvements in quality of immunization services.

Supportive Supervision for RI in Jharkhand: Based on other state experiences from agencies like PATH and IB's own experience in other countries, a model of supportive supervision to improve the RI program has been adapted since 2006 by the government of Jharkhand, IB, CARE-India, WHO/NPSP and UNICEF. Along with the ongoing session monitoring in the districts, the supportive supervision exercises are believed by the government of Jharkhand and parters to have contributed significantly to strengthening the health system in the state.

Evolution and progress of supportive supervision in Jharkhand

The supportive supervision initiative began in Jharkhand state with the participation by officials of the health departments and key development partner in the identification of parameters to be included in the supervision protocol. Checklists and tools for consolidation of findings were designed jointly. To accompany these, modules for building technical capacities of supervisors were also developed by the IB team[4].

In Jharkhand, an 'external supervision' mechanism (similar to that defined in the MAQ 4 paper) was adopted. This involved teams of trained individuals external to the mandated supervisory system carrying out periodic site visits with some of the identified supervisors to make on-site corrections and provide feedback to the higher levels. Initially, select staff from the state government, IB team and staff of CARE-India and WHO/NPSP were involved in conducting the supportive supervision exercises. They were trained on all the basic technical aspects of RI and the supervision protocols to be used. Substantial emphasis was placed on a supportive approach, on-site correction, appreciation of good practices in feed-back, provision of verbal and written feedback at every level, clear communication of expectations and demonstration of correct practices, wherever feasible.

The protocol for this supervision focuses at the district level. The process begins with an orientation for the supervisory teams in the district on the supportive supervision process. It is mandatory for team members to then visit all vaccine storage facilities in the district and a select number of session sites attached to each storage facility. Teams of trained external supervisors visit all the cold chain facilities (generally the PHCs) within a span of three to four days and review the equipment, storage practices, capacity of cold chain handlers and the condition of vaccines and ice-packs at the facility (see box 1) . Detailed, standardized checklists are used for each facility, which are then scored based on these parameters. The uniformity of the supervision indicators enables consolidation, comparison and review over time. Members of the visiting supervisory team make on-site corrections to practices and always provide feedback on findings and steps to be taken The emphasis of the supportive supervision implementation is on on-site correction and problem solving rather than routine 'inspection' and fault-finding. This was a new approach, especially

Box 1: Parameters assessed at facilities (PHCs)

- Program management aspects like micro-planning, ANM roaster and coverage data review system
- *Cold chain related*: ILR and Deep-freezer placement and status, Temperature log maintenance, vaccines positioning and status etc
- *Adequacy of supplies*: each Vaccines, diluents, syringes etc
- *Sessions held against planned*: Trend over time and drop out rates
- AEFI and VPD reporting system
- *Environmental safety*: waste disposal mechanisms

[4] Checklists and training material can be accessed from IB's website: www.immunizationbasics.jsi.com/resources

for the state government officers, who were able to adopt their behavior quickly in the field.

Each team visits at least two selected session sites around each PHC and observes the session using the checklist. The areas observed at the session site include cold chain maintenance, status of vaccines and icepacks in the vaccine carrier, injection technique adopted by the ANM, waste-disposal practices at the session site, communication by the health worker with the parent of the child, social mobilization and tracking mechanisms in practice (see Box 2). The supervision team members were instructed to appreciate good practices and to make on-the-site corrections in each session visited.

Based on the consolidated findings from all cold-chain facilities and session sites visited in the district, a comprehensive report is generated using a software package, with the findings and follow up actions shared with the district health officials. The involvement of state level officers in the supervision process ensures follow up.

Results of supportive supervision in Jharkhand

Since the start of the supportive supervision effort in 2006-07, the initial 12 districts in Jharkhand have received at least one round of supportive supervision, with this exercise continuing to be rolled out to all districts in the state. Four districts[5] have had two consecutive rounds and one district had three consecutive rounds. The standard is for two consecutive rounds of supportive supervision to be carried out in a given district, with approximately 6 months between visits. In all the five districts discussed below, IB, CARE-India teams and the WHO-RI officer participated as external supervisors, along with the district immunization officers concerned. The findings for each site visit are recorded using a common set of checklists and are scored and consolidated using a uniform template.

Each storage facility and session site is ranked during every round on all of the parameters assessed at the respective facility and site. These are then combined for the district and graphed as shown in a few examples in Figures 1-3.

Box 2: Parameters assessed at session sites

- Adherence to micro-plan
- *Cold chain and logistics*: conditioning of icepacks, storage practices for vaccines, availability of all required vaccines and Vitamin A solution, condition of vaccines at session site, usable date of vaccines etc
- *Injection safety*: Availability of clean place, adequacy of required syringes and needles, timely use of reconstituted vaccines, appropriateness of dose, route and site of vaccination, use of hub-cutters and disposal bags etc
- *Records and reports*: including new immunization cards, filling of registers and counterfoils of cards
- *Tracking left outs and drop-outs*: especially role of social mobilizers, use of tracking mechanisms, due lists etc
- *Interpersonal communication and mobilization*: Post-injection messages given by ANM and role played by others like ASHA and ICDS worker in organizing the session etc

As shown in Figure 1, 3 districts had an increase in the proportion of facilities maintaining the required temperature for the ice-lined refrigerators (ILRs), which is an important element for maintaining potency of vaccines. (Lohardaga district was found

[5] The 4 districts are: Deoghar, Dumka, Lohardaga, and Daltonganj. Godda has had 3 rounds; however, data for round 2 are incomplete from the facilities.

to be stable at 80 percent for both rounds. Daltonganj district showed a decline[6].

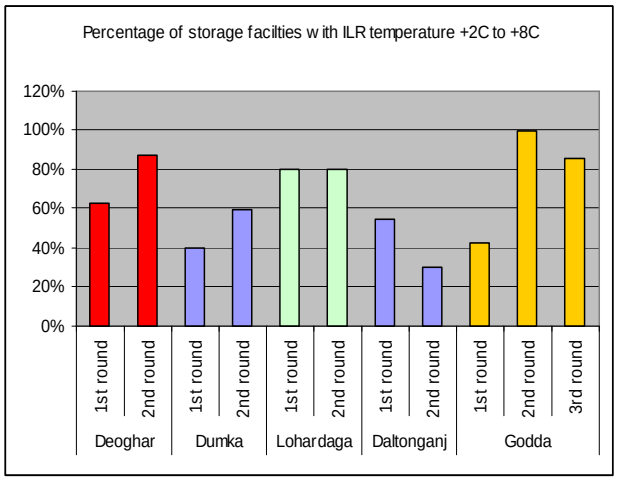

Figure 1

The proportion of storage facilities practicing correct storage of vaccine vials (Figure 2) showed similar trends. In Godda, none of the storage facilities followed correct-arrangement during the first round; however, the 2 facilities for which data were available for the second round followed correct procedures and 5 of the 7 facilities followed correct procedures in round 3.

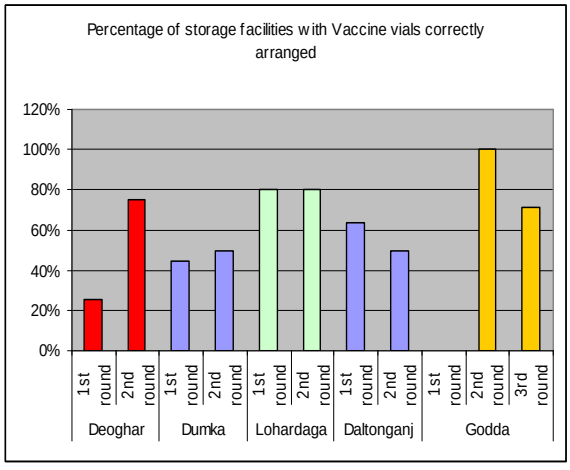

Figure 2

Overall, as shown in Figure 3, the storage facilities improved over consecutive rounds, with the majority of facilities across districts moving from poor to average or average to good.

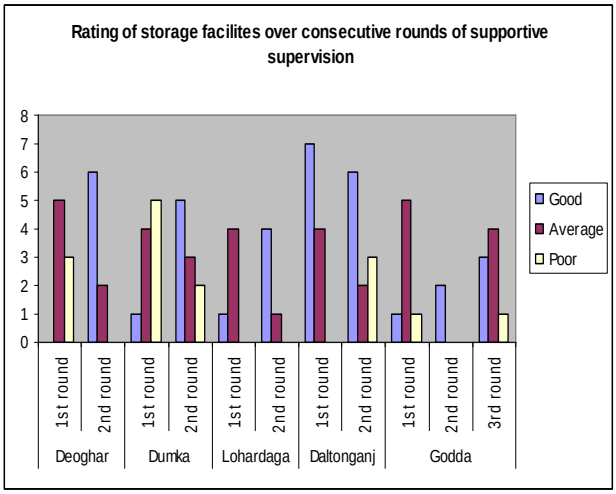

Figure 2

Tables 1-4 in the subsequent pages provide more details from the 5 districts on some select data recorded at the storage facilities and the session sites during the supportive supervision rounds.

[6] Reason for decline was change in leadership at the district level and long gap between the 2 rounds of SS

Table 1: Findings on key parameters at vaccine storage facility level in districts over consecutive rounds of supportive supervision
(Percentage of vaccine storage facilities in the district)

Parameter	Deoghar (n = 8)		Dumka (n = 10)		Lohardaga (n = 5)		Daltonganj (n = 11)		Godda (n)		
	1st round	2nd round	1st round	2nd round	1st round	2nd round	1st round	2nd round	1st round (n=7)	2nd round (n=2)	3rd round (n=8)
Storage practices and maintenance of equipment related parameters											
ILR temperature +2C to +8C	63	88	40	60	80	80	55	30	43	100	86
Vaccine vials correctly arranged	25	75	44	50	80	80	64	50	0	100	71
No items other than vaccines in ILR	75	63	50	60	60	80	80	60	43	100	86
Vaccines in ILR within expiry dates	75	88	70	70	100	100	100	70	100	100	100
OPV within usable stage of VVM	75	100	80	90	100	100	100	80	86	0	86
No reconstituted BCG & Measles vials in ILR	50	100	67	70	100	100	82	70	100	100	86
DF Temperature -15C to -18C	38	75	50	40	100	100	73	30	57	100	71
Ice packs correctly arranged in DF	38	88	56	50	80	100	73	50	71	100	71
ILR / DF temperature record maintained	38	88	60	50	60	80	55	30	71	100	71
Absence of ice more than 5mm in ILR/DF	75	75	60	60	60	100	80	50	86	100	86
Correct state of freeze-sensitive vaccines	75	100	70	80	100	100	91	70	57	100	86
Some of the service delivery management practices											
Sessions conducted as planned >80%	25	86	17	100	60	40	91	91	17	50	50
Dropout Rates <15%	63	0	38	90	80	100	55	90	57	100	17
AEFI reported or Zero Report	0	13	50	20	0	0	27	27	29	50	20
Vaccines issued from PHCs accounted for	75	100	70	90	40	100	82	91	100	100	75
Supervisory visits by district officials	88	88	40	100	80	100	100	73	71	50	100
Environment management practices related to waste-disposal											

Disposal pit used for disposal of sharps	0	75	20	60	0	40	82	73	57	100	71
Use of safety box	63	63	80	80	60	100	90	100	86	50	86
Correctly handling used syringes	38	63	40	60	40	60	90	73	57	0	29
Correct use of hub-cutters removers	25	50	20	70	0	0	73	91	29	50	57

Table 2: Rating of storage facilities in each round based on composite score on all parameters at storage facility level

Rating	Deoghar		Dumka		Lohardaga		Daltonganj		Godda		
	1st round	2nd round	1st round	2nd round	1st round	2nd round	1st round	2nd round	1st round	2nd round	3rd round
Good	0	6	1	5	1	4	7	6	1	2	3
Average	5	2	4	3	4	1	4	2	5	0	4
Poor	3	0	5	2	0	0	0	3	1	0	1

Table 3: Findings on key parameters at session site level in districts over consecutive rounds of supportive supervision *(Percentage of session sites visited in the district)*

Parameter	Deoghar		Dumka		Daltonganj		Godda		
	Round 1 n = 9	Round 2 n = 15	Round 1 n = 6	Round 2 n = 14	Round 1 n = 19	Round 2 n = 22	Round 1 n = 7	Round 2 n = 5	Round 3 n = 14
Cold-chain and vaccine safety practices									
Use of vaccine carrier with 4 ice packs	67	100	67	79	100	100	86	100	100
Freeze-sensitive vaccines in liquid form	100	100	83	100	100	100	100	100	100
VVM stage usable on OPV	100	100	83	100	89	100	86	40	93
Vaccines within usable date	100	100	83	100	89	100	100	100	92
Vaccines have readable labels	78	100	83	100	74	95	86	100	100
Reconstituted vaccines used within 4 hours of reconstitution	56	93	83	71	79	100	86	60	100
0.5 ml AD syringes for all vaccines except BCG	100	100	83	93	100	100	86	100	100
AD syringes 0.1 ml for BCG	89	100	83	79	100	100	86	100	100
Frozen or partially frozen icepacks in the vaccine carrier	56	80	67	71	89	50	43	100	100

Injection safety practices									
Correct injection site	89	93	67	93	100	100	100	100	100
Correct injection route	78	80	67	79	100	100	86	100	93
Correct dose of vaccine given	78	100	67	79	100	100	100	100	100
Needle NOT touched with swab or finger	100	87	67	79	100	95	100	100	93
Injection surface is cleaned with clean water swab	44	60	67	50	79	95	86	100	71
Vaccine vial NOT seen attached with needle	100	87	83	86	100	100	100	100	93
Use of separate needle and syringe for each injection	89	100	83	93	100	91	57	100	100
No needle stick injuries to ANM	78	67	83	50	74	86	71	100	64
Planning and management practices									
Session held as per microplan	78	100	83	100	89	100	43	80	93
At least 28 days gap between DPT doses	56	93	83	100	100	95	71	100	100
Correct age for measles vaccine	67	87	83	79	100	100	71	100	86
Few Waste-disposal practices									
NO recapping AND bending used syringes	56	73	100	71	94	100	71	80	79
Hub cutter for cutting used syringes	22	33	83	93	47	95	14	40	21
Use of polythene bag for all vaccines	100	87	67	86	95	100	57	100	92
Safety boxes in use	44	60	100	79	84	91	100	20	29

Table 4: Rating of visited session sites in each round based on composite score on all parameters at session site level

Rating	Deoghar		Dumka		Daltonganj		Godda		
	Round 1	**Round 2**	**Round 1**	**Round 2**	**Round 1**	**Round 2**	**Round 1**	**Round 2**	**Round 3**
Good	7	15	6	13	19	22	6	5	14
Average	2	0	0	0	0	0	1	0	0
Poor	0	0	0	1	0	0	0	0	0

The electronic data collection and consolidation tool used for the supervision exercises generates graphs on the storage centers and session sites in the districts for every round. Separate graphs in the shape of 'spider-webs' (see example) are also generated for each set of indicators, such as: storage practices, condition of vaccines, management and waste disposal practices, cold-chain maintenance, injection safety practices, vaccine condition, and skills of health worker. Using these graphic visual aids, the health facility staff and district health officers can easily determine areas which are progressing and those that require attention.

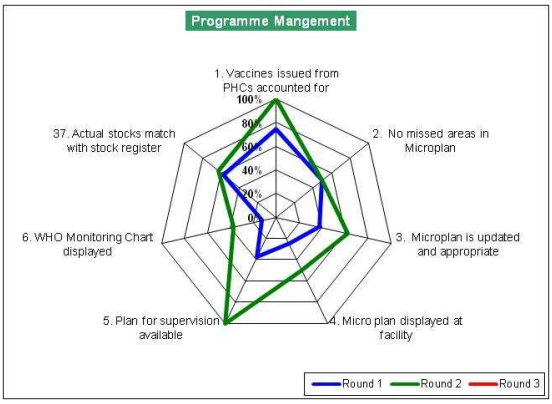

Figure 3

Key learnings and conclusions

As this process progresses the districts of Jharkhand continue to show improvement in the quality of their immunization program implementation. The government of Jharkhand and its partners are applying the supportive supervision model to all districts in the state and the approach is also being adapted for immunization programs in other states. There are some important lessons being learnt from the Jharkhand experience which can inform further scale up of efforts:

- Engaging all stakeholders, especially development partners to leverage resources and ensure buy-in of the government are critical for collaboration.
- It is worthwhile to make additional resource investments to establish standard processes and increase the quality and performance of the program to higher levels. As a result, improved practices become part of the routine and are built into the system.
- With limited personnel and supervision capacity within the health system, time-bound technical assistance with the government (e.g. as the USAID-funded JSI/IMMUNIZATIONbasics provided) can assist with improving quality at scale through structured exercises like supportive supervision.
- Periodic supervisory visits by teams of internal external experts enhanced the emphasis on and adoption of correct practices in immunization and cold-chain management at all levels. Despite apprehensions of additional costs for engaging external teams and sustainability, the exercises created opportunities for raising the quality of processes at scale in a short timeperiod. As most external experts were already involved in RI programming the additional cost was marginal. Based on the usefulness of these exercises over the last three years, the government of Jharkhand and other partners have adopted the process.
- Through the supportive supervision exercises, all vaccine storage points in the selected district were visited and on-site corrections were made. Alhough the visiting teams could not reach all of the vaccination sites, through the sample visits, key issues were brought to the notice of district and PHC level officers for appropriate follow-up actions to be taken to improve quality throughout the district.
- Common checklists for use by supervisory teams for all visits are helpful to establish standard processes and communicate uniform performance expectations to workers. However, periodic updates of the checklists are necessary to address new issues as the older ones get resolved, notably at session sites.

- Structured exercises like supportive supervision and session monitoring are useful for functional convergence among different technical assistance projects and organizations. Uniformity in content of technical assistance and evidence- based advocacy on common issues are possible. The government counterparts are also empowered with information, given the system of regularly sharing findings after each round of supportive supervision.

  Along with bringing a uniform platform for technical assistance, the supportive supervision exercises demonstrated a possible model for periodic district level review and action for health programs. Although this process focused on immunization, it can be adapted for other priority intervention areas. A mix of experts external and internal to the health system could design and implement similar exercises for other core interventions like maternal health, child health and fertility reduction.

Immunization Checklist - Health Center

Date of Visit___/___/_____ Monitor_____ PHC ID_____
Name of PHC_____Popn Covered by PHC_____

Programme Management	
1. Vaccines issued from PHCs accounted for	Yes ☐ No ☐
2. No missed areas in Microplan	Yes ☐ No ☐
3. Microplan is updated and appropriate	Yes ☐ No ☐
4. Micro plan displayed at facility	Yes ☐ No ☐
5. Plan for supervision available at PHC	Yes ☐ No ☐
6. WHO Monitoring Chart (dropouts -DPT1 to DPT3) displayed at PHC	Yes ☐ No ☐

Immunization Sessions (in previous month)

	Planned (P)	Conducted (C)	% Conducted (C/P x 100)
Immunization Sessions			

7. Sessions conducted as planned (more than 80%)	Yes ☐ No ☐ NA ☐

Doses administered (cumulative for previous three months)

	DPT1 (D1)	DPT3 (D3)	% Dropout ([D1-D3]/D1 x 100)
Doses			

8. Dropout Rates Acceptable (less than 15%)	Yes ☐ No ☐

Vaccine Wastage (in previous month)

Doses	Issued (I)	Administered (A)	% Wasted ([I-A]/I x 100)	Acceptable
9. BCG				(less than 25%)Yes ☐ No ☐
10. DPT				(less than 25%)Yes ☐ No ☐

Cold Chain Maintenance (at time of visit)	
11. Cold chain equipment placed properly	Yes ☐ No ☐
12. ILR / DF temperature record properly maintained	Yes ☐ No ☐
13. ILR temperature +2 C to +8 C	Yes ☐ No ☐
14. Correct storage of vaccines in ILR	Yes ☐ No ☐
15. Absence of ice more than 5mm in ILR or DF	Yes ☐ No ☐
16. Correct state of freeze-sensitive vaccines (Liquid and shake test ok)	Yes ☐ No ☐
17. Absence of used measles and BCG vials from earlier sessions	Yes ☐ No ☐
18. Absence of vaccines with expired dates	Yes ☐ No ☐
19. Absence of medicines and other items in ILR	Yes ☐ No ☐
20. DF temperature -15C to - 20C AND/OR Ice packs are hard-frozen	Yes ☐ No ☐
21. Correct placement of ice packs in DF	Yes ☐ No ☐
22. VVM stage usable on OPV	Yes ☐ No ☐

Immunization Supplies (actual stock at the time of visit)			
23. DPT vaccine	Doses_____	30. BCG Diluents	Ampoules_____
24. DT vaccine	Doses_____	31. Measles Diluents	Ampoules_____
25. TT vaccine	Doses_____	32. ADS (0.5ml)	Numbers_____
26. OPV vaccine	Doses_____	33. ADS (0.1ml)	Numbers_____
27. Measles vaccine	Doses_____	34. Reconstitution syringes 5ml	Numbers_____
28. BCG vaccine	Doses_____	35. Reconstitution syringes 2ml	Numbers_____
29. Vitamin A	Doses_____	36. Immunization cards	Numbers_____
37. Actual vaccine stocks & other logistics match with stock register			Yes ☐ No ☐

Service Delivery	
38. Use of safety box for collection of used syringes, if provided	Yes ☐ No ☐ NA ☐
39. Evidence of correctly handling used syringes	Yes ☐ No ☐
40. Correct use of safety pits, if provided	Yes ☐ No ☐ NA ☐
41. Correct use of hub-cutters, if provided	Yes ☐ No ☐ NA ☐
42. Block level meeting conducted with Health/ ICDS/ PRI in last month	Yes ☐ No ☐
Reports (during last three months)	
43. AEFIs including abscesses reported	Yes ☐ No ☐
44. AFP cases reported	Yes ☐ No ☐
45. Measles cases reported	Yes ☐ No ☐
46. Supervisory visits by officials from district or other organizations	Yes ☐ No ☐

Question	Explanatory Note
Programme Management	
1. Vaccines issued from PHCs accounted for	Check stock book and see vaccine issued and compare numbers of individual antigens with actual stocks at the PHC. If the actual stocks match with stock book, say Yes If the actual stocks do not match, say No
2. No missed areas in Microplan	Consult ANM/Other PHC staff/NGOs/PRIs who are familiar with area covered by PHC. Ask if there are any missed villages/hamlets/localities in the microplan. If all areas are included say Yes. If some areas have not been included say No
3. Microplan is updated and comprehensive	Check microplan and determine whether it is comprehensive and up to date. If it is updated and comprehensive, say Yes. If it is out of date and incomplete say No.
4. Immunization action plan displayed at facility	If PHC is displaying the Immunization action plan on boards for view by general public say Yes. If it has not been publicly displayed say No
5. Plan for supervision available at PHC	If PHC has a written plan that indicates a roster for supervisors/LHVs, including Medical officers indicating areas of supervision and dates of visits, say Yes. If no such plan exists, say No
6. WHO Monitoring Chart (dropouts -DPT1 to DPT3) displayed at PHC	If PHC is displaying the . WHO Monitoring Chart (dropouts -DPT1 to DPT3), or a similar graphic monitoring tool, and updated till last completed month say Yes. If it does not exist or is out of date, say No
Immunization Sessions	
7. Sessions conducted as planned (in previous month)	Calculate if sessions have been conducted as planned (C/P x 100). If answer is more than 80%, say Yes. If answer is less than 80%, say No
Number of Immunization Sessions Planned (in previous month)	Ask for and calculate the immunisation sessions (including fixed centres and outreach) from PHC immunisation plan, if available. Write the numbers in corresponding column. If the plan is not available say NA
Number of Immunization Sessions Conducted (in previous month)	Count the Fixed centre data from VLF and derive the number, also check the issue of vaccines in the stock register for valid information. Write the numbers in corresponding column.
Percentage conducted	Calculate percentage of sessions against planned % Conducted (C/P x 100)
DPT1 doses administered (cumulative for previous three months)	Calculate DPT1 doses administered cumulative for previous three months from Monthly Reports Write the doses in corresponding column
DPT3 doses administered (cumulative for previous three months)	Calculate DPT3 doses administered cumulative for previous three months from Monthly Reports Write the doses in corresponding column
8. Dropout Rates Acceptable	Calculate percentage of dropout ([D1-D3]/D1 x 100) If answer is less than 15% (acceptable), say Yes. If answer is more than 15% (unacceptable), say No
BCG Vaccine Issued in doses (in previous month)	Calculate BCG vaccine issued in previous month from Monthly Report. Write the doses in corresponding column
BCG Vaccine administered (in previous month)	Calculate BCG vaccine administered in previous month from Monthly Report. Write the doses in corresponding column
9. BCG Vaccine wastage acceptable	Calculate wastage of BCG vaccine ([I-A]/I x 100). If answer is less than 25% (acceptable), say Yes. If answer is more than 25% (unacceptable), say No
DPT (1, 2 ,3 & Booster) Vaccine Issued in doses (in previous month)	Calculate DPT (1, 2 ,3 & Booster) vaccine issued in previous month from Monthly Report. Write the doses in corresponding column
DPT (1, 2 ,3 & Booster) Vaccine administered (in previous month)	Calculate DPT (1, 2 ,3 & Booster) vaccine administered in previous month from Monthly Report. Write the doses in corresponding column
10. DPT Vaccine wastage acceptable	Calculate wastage of DPT vaccine ([I-A]/I x 100). If answer is less than 25% (acceptable), say Yes. If answer is more than 25% (unacceptable), say No
Cold Chain Maintenance	
11. Cold chain equipment placed properly	If DF and ILR are placed with at least 10 inches distance from wall and away from directly sunlight, say Yes If DF and ILR are placed within 10 inches distance from wall OR directly within sunlight, say No
12. ILR temperature +2 C to +8 C (at time of visit)	Check for temp as you open the ILR, check and find the temperature, If the temp ranges between 2-8C say Yes If its less than 2 and or more than 8 say No
13. DF temperature -15C to - 20C AND/OR Ice packs are hard-frozen (at time of visit)	Check for temp as you open the DF, check and find the temperature, If the temp ranges between (-) 15-20C say Yes If its less than (-)15C and or more than (-)20C say No

Question	Explanatory Note
14. Absence of ice more than 5mm in ILR or DF (at time of visit)	Check physically once you open the equipment and touch and see, If Ice is NOT more than 5mm say Yes. If ice is more than 5 mm say No
15. ILR / DF temperature record properly maintained (at time of visit)	Check if all columns are properly filled. If temp noted during your visit is not matching and has (+_) 3 points variation ask for clarification and say No, If there is no variation and all the columns are filled say Yes.
16. Correct placement of ice packs in DF (at time of visit)	Check the placement of Ice packs in the DF. They should not be attached to the body of DF and placed scientifically. If, they are arranged properly say Yes If they are kept as thrown in the DF say No
17. Correct storage of vaccines in ILR (at time of visit)	If BCG/OPV/Measles kept below basket and all other vaccines kept above the basket say Yes. If vaccines are not kept as mentioned above, say No (BCG and measles along with OPV should not be kept above the basket. If they are kept in DF it does not cause any harm)
18. Correct state of freeze-sensitive vaccines (Liquid and shake test ok) (at time of visit)	Check the T-series vaccines. If found frozen or if there is sedimentation at the bottom of the vial say No. If they are found unfrozen or without sedimentation say Yes.
19. VVM stage usable on OPV (at time of visit)	See the VVMs; If the square is lighter than the circle (usable), answer Yes. If the square matches or is darker than the circle (not usable), answer No.
20. Absence of used measles and BCG vials from earlier sessions (at time of visit)	Check in the ILR/DF for used measles/BCG vials and if found say No If they are NOT found say Yes
21. Absence of vaccines with expired dates (at time of visit)	Check in the ILR/DF for expired vaccines vials and if found say No. If vials are NOT expired say Yes
22. Absence of medicines and other items in ILR (at time of visit)	Ask and Check in the ILR/DF if vaccines/medicines other than UIP vaccines vials, and if found say No. f they are NOT found say Yes
Immunization Supplies	
23-36	Verify stocks physically at the time of visit Write the doses/ ampoules/numbers in corresponding column
37. Actual vaccine stocks & other logistics match with stock register (at time of visit)	Check the stock register and match with the available stock in ILR/DF, for the current period. If it matches say *Yes.* If it does not match say No
Service Delivery	
38. Use of safety box for collection of used syringes	Ask and Check with the ANM who is performing Immunization at PHC/SCs. Check for remaining syringes from last session (if any) Some ANMs retain safety boxes that are to be filled 3/4th. If they are using the safety box supplied to the PHC say Yes. If they are not using say No
39. Evidence of correctly handling used syringes	Ask ANM, health staff.\ If used syringes are NOT being recapped and even in absence of safety boxes, are disposed of in a manner that is not harmful either to the community or provider, say Yes. If used syringes ARE being recapped and are disposed of in a manner that poses a risk either to the community or provider, say No
40. Correct use of safety pits	If PHC has safety pit with lid and small opening and is using the pit, say Yes. Check for approach way up to the Pit. If the approach way is fully covered with bushes and/or does not seem to be used say No
41. Correct use of hub-cutters, if provided	Check for remaining needles in the hub-cutter, and also in safety box if present. You can also ask the ANM to explain the use and give a demonstration of use. If all above aspects or any part are seen say Yes. If none of the above are seen say No
42. Block level meeting conducted with Health, ICDS & PRI in last month	Ask staff whether any joint meetings have been conducted with Health, ICDS & PRI in last month. If meetings have been held, say Yes If meetings have not been held, say No.
Reports	
43. AEFIs including abscesses reported (during last three months)	Ask with the staff available about AEFI, If some description is given of AEFI cases reported during last three months, say Yes. If no AEFI cases have been reported say No.
44. AFP cases reported (during last three months)	Ask with the staff available about AFP cases reported. If some description is given of AFP cases reported during last three months, say Yes. If no AFP cases have been reported say No.
45. Measles cases reported (during last three months)	Ask with the staff available about Measles cases reported. If some description is given of Measles cases reported during last three months, say Yes. If no Measles cases have been reported say No.

Question	Explanatory Note
46. Supervisory visits by officials from district or other organizations (during last three months)	Check attendance registers and ask staff present, if supervisory visits have been made in previous three months for immunization by officials from district or other organizations. If supervisory visits for immunization have been made in the previous three months, say Yes. Even if the visit is related to multiple programs, and immunization has been reviewed say Yes. If no such visits have been made, say No. If visits from districts are only for other activities such as computer data bases/family planning/TB etc. say No.