A Plan of Action for Measles Follow up Campaign 2017
Introduction and Rationale:

Sudan is committed to the Global Measles and Rubella Elimination Strategic Plan 2012–2020, which focus on:

- Achieve and maintain high population immunity by: Strengthening routine infant immunization and achieving >95% coverage with first and second dose of measles vaccine (MV1&2) in all districts. Also by second opportunity for measles immunization through conduction of Catch-up campaign for all susceptible age cohorts 9m - 15 yrs and follow-up campaigns every 3 to 4 years
- Monitor disease using effective case based surveillance for Measles and Rubella. And evaluate the program effort to ensure progress
- Develop and maintain outbreak out break preparedness and respond rapidly to outbreak and proper case management
- Communicate and engage to build public confidence and demand for immunization
- Perform research needed to support cost effective operations, improve vaccination and diagnostic tools

End of 2014; Sudan hit by aggressive measles outbreak which almost affected all localities, response measles campaigns were implemented in phases almost covered all localities covered children 6month – < 15 in 2015-16. 2017 witness remarkable reduction in cases and to sustain this achieved population immunity, Sudan plan to conduct follow up campaign. This plan of action for conduction of measles follows up campaign in 2017; which is targeting 10,208,192 child. Based on the risk assessment and the outbreak indicators the campaign will target two age groups:

- Under five children in 114 localities which classified as low risk
- Under 15 in 71 localities which classified as very high to moderate or localities with ongoing measles outbreak

This follow up campaign is very important step in measles elimination in Sudan, as during the last two years MOH with their partners achieved to cover almost all children under 15 years in
outbreak response campaigns; which showed remarkable reduction in child mortality and morbidity due to measles. Sustaining this achieved herd immunity mandates timely implementation of follow up campaign to clear all pockets of susceptible. This decision is highly supported by the NITAG and approved by the NHSCC.

**Plan of Action for measles follow up campaign:**

**General Objective**

To reduce the morbidity and mortality due to measles by; raising population immunity, clear all susceptible and prevent future measles outbreaks in Sudan.

**Specific Objectives**

- To vaccinate at least 95% of the **10,208,192** targeted population (6 month -5 yrs in 114 and 6 month- < 15 in 71 localities)
- To ensure immunization safety practices during the campaign
- To accurately monitor and document the campaign coverage at all levels including hard to reach and in accessible populations.
- To monitor AEFI during the campaign
- To raise public/community awareness towards measles as a fatal disease, mode of transmission, prevention, importance of care seeking and routine immunization of the children with the two doses
- To strengthen measles routine immunization to guarantee sustained high population immunity

**Strategies**

- Service delivery through fixed, outreach and mobile for the hard to reach communities.
- Special plans for the in-accessible areas
- Ensure immunization safety and waste management
- Advocacy, Social mobilization and communication for the campaign and the routine
- Adequate Vaccine supply and vaccine management
- Strong supportive supervision and campaign monitoring
• Ensure data quality and data accuracy
• Monitoring AEFI and post marketing surveillance
• Partnership and inter-sectoral coordination

Pre Proposal Activities:

1. **Agree on the target population:**

   The selection and geographical distribution of the target population has been done by revision and in-depth analysis of the surveillance data; addition to update of the measles risk assessment using the tools developed by WHO/CDC. This has been approved by the NITAG, Measles expert committee and the NHSCC.

2. **Update the cMYP**

   As the current cMYP 2012-2016 has been completed, it was updated for 2017-2020 and it is ensured to be aligned with the national health strategy and to includes all strategies for Measles and Rubella eliminations.

3. **Estimation of the Cold chain capacity and requirements**

   Sudan has conducted cold chain inventory, EVM assessment and based on that improvement plan was developed (all attached). All showed availability of good storage capacity at national and states levels addition to effective vaccine management.

**Components of the Action Plan**

This plan is addressing the micro planning, strategies for conduction of the campaign, logistics (vaccine management, storage and distribution), immunization safety, waste management, recording and reporting system, training, social mobilization, monitoring & evaluation, surveillance, financing and post campaign coverage survey

**Pre- Campaigns Activities:**

1. **Development of campaign micro-plans**

   Detailed campaign micro plans at states and locality level will be developed using the lessons learned from the previous campaigns experience which will include the followings:
Strategies of the measles follow up campaign:
In order to ensure that all the targeted population is reached during the days of the campaign, the following strategies will be used:

- **Fixed sites**: These are mainly fixed & outreach sites of the routine immunization services. They are mainly hospitals, health centers or dispensaries.
- **Temporary posts**: These are mainly established at Kindergartens, schools, markets, community leaders’ houses…etc.
- **Mobile units**: For rural areas and nomads where there are no health facilities, the immunization will be provided through the mobile units.

Social Mobilization plan
A comprehensive social mobilization plan for all levels i.e. national, state and locality level will be developed to raise the awareness and create demand. Strategies considered appropriate for various levels, taking in consideration the past experiences will be included in the plan. Special attention will be given to female vaccinators and their role for prompting the campaign within their area of influence and families.

Main activities to be conducted are:

- Preparation, printing and distribution of the social mobilization materials timely
- Advocacy meetings with the authorized bodies
- Preparation of the suitable Mass media messages
- Press release about the disease and availability of the vaccine
- Clear information about the required dose/person, age of the targeted population will be communicate and measles
- The social mobilization activities will be jointly implemented for the campaign and routine

Training and capacity Building plan

Update the Field guideline for measles campaign
Using the past experience of 2015/2016 Measles response campaign the available field guideline for the health workers and supervisors will be updated which includes but not limited to:
- Measles disease and elimination strategies
- Target population;
- Measles vaccine administration (dose, injection site etc);
- Social mobilization;
- Recording and reporting of the immunization;
- AEFI and their field management;
- Vaccine management;
- Injection safety including safe disposal of the waste;
- Monitoring and evaluation.

Cascade training will be adopted firstly by conduction of a TOT training at the national level for states’ trainers using the updated field guide/manual with supervision from WHO and UNICEF. TOT at state levels will be conducted for the locality trainers followed by a series of training sessions for providers two weeks before the campaign with a close supervision from national, WHO and UNICEF staff. A list and number of the health workers that will be involved in the campaign will be prepared by each state for all their levels to be included in the training plan of each state.

**Logistics and Supply Distribution plan**

A detailed logistics and supply plan will be developed to assure an efficient supply system for the campaign.

The plan will consider the supply custom clearance by identifying a clearing agent, transportation and distribution timely to the states, the dry store capacity will be revised and the warehouse is prepared to store the campaign supplies.

Based on the targets for the campaign, a plan for required logistics (printing of recording and reporting books, social mobilization materials, vaccines, safety of injection equipment, cards, cold boxes and vaccine carriers, ice pack/ice blocks, transportation and distribution …etc) will be developed and then distribution of all logistics will be done to the selected states/localities for each phase as early as possible (at least 14 days) before the timing of the campaign to give the states enough time to distribute the logistics to the lower levels in ample time before the start of the campaign. The distribution of the logistics will be done by air and trucks, depending on the
feasibility for each state from national to state level and then by trucks for the internal
distribution within the states. Detailed supply plan during the campaign for each level will be
developed for which a supply officer will be assigned to each level to secure the availability of
logistics during the campaign and avoid any type of stock out.

Vaccine management

Regular training activates are conducted to strengthen vaccine management practices for all
levels on regular biases, Refresher training will be included among the training package for the
campaign which will address the vaccine forecasting, storage, administration and stock records
keeping.

Supply forms will be prepared, printed and distributed with the campaign supplies to monitor the
vaccine stock at all levels.

AEFI committees at all levels will be activated and updated; reporting of the events will be
immediately during the campaign and through the routine EPI system after the campaign for at
least one month

Recording & reporting

The coverage will be reported and monitored during the campaign through the following
process:

- The national campaign guidelines will contain a clear guideline for coverage recording
  and reporting at different levels during the campaign.
- A log book with tally sheets will be designed for all the campaign days (1 sheet /day)
  showing the different age groups, this will be prepare, printed and distributed to all
  vaccination posts to record the vaccinations on.
- A summation sheet will be designed for the team leaders to report on the total coverage
  from related vaccination posts in their sector, this data from all sectors will be compiled
  at district level and reported from all districts to state level, All districts data will be
  compiled at state level in one report to be reported to the Central level daily or in the
  second day from the remote areas. Central level will compile the data from all states in
  one National report.
- Pre campaign training will contain a session for recording and reporting during the
  campaign and all personnel will be practically using the sheets before the campaign.
- Field supervisors during the campaign will be monitoring the registrations and reporting
  as an essential part of their check list, they will be trained to detect any registration
  mistakes and correct it timely.
o Geographical coverage will be assessed through different levels of supervisors in the field.

o Independent monitoring: Independent monitors for coverage will be used (same as in polio & previous measles campaigns) to assess the coverage in some selected areas in all states, this will help detecting any poorly covered areas to be revisited by the vaccination teams.

o Post campaign coverage survey by independent institute

**Immunization safety and Waste management**

**Waste Management Plan**

Immunization safety is of paramount importance in any mass vaccination campaign since big numbers of injections are given in a short time. The program will give the immunization safety a considerable attention. The campaign should be implemented with a high levels of quality of immunization safety that reflect positively on all the beneficiaries (Health care facilities, Injection providers and communities).

Sharp waste management plan is an important component of the immunization safety strategy within the main campaign plan. The waste management plan will be implemented in collaboration with the environmental health department.

The immunization safety & waste management strategy will contain the following core elements:

**Safe practice:** all immunization posts will be well prepared to handle immunization procedures properly (fix, outreach and Mobile services). All personnel will be well trained on immunization safety with inclusion of waste management in the curricula of the national training package for the campaign. In addition, that the training will include education on health risks and on safe practice for waste management. Special attention will be made for those who are not regular vaccinators to ensure uniformity in the method of injection and waste disposal.

Locally adapted technical guidelines on how to deal with the sharp waste will be prepared based on the local context of the area, by reviewing the available options for waste management (Waste burial pit or encapsulation, Burning <400oC, including brick oven burners, drum burners, pit burning, or Incineration> 800oC)
**Equipment and supplies:** All vaccinations will be conducted using AD syringes and safety boxes. The logistic plan will be elaborated for distribution of bundled supplies, i.e. one vaccine – one AD syringe; one vial – one reconstitution syringe; 100 syringes – one safety box.

**Sharps waste management:** Safe collection and management of sharp waste. The guidelines will be developed to include the designation of focal persons at all levels with clear responsibilities to follow on the plan implementation, training and monitoring during the campaign for safe collection, handling, storage, safe treatment and disposal.

**Monitoring and evaluation:** Extensive supportive supervision activities during the campaign will give attention to immunization safety and safe waste management, using a supervisory check list to monitor indicators during the campaign e.g.:

- Proportion of facilities where used injection equipment can be seen in the surrounding environment,
- Proportion of immunization sites provided with adequate safety boxes

All supervisors will be trained on the injection safety and safe waste management practices to detect problems and take corrective measures and actions immediately in the field. Daily feedback will be provided to the higher levels regarding the findings and actions. Overall monitoring of safety and efficiency by conducting an assessment for injection safety and waste management during the campaign will be implemented in all states with standardized sampling and questionnaire form, which will be analyzed at the end of the campaign to look at the weaknesses and address them in the future campaigns. A report on the finding and recommendations will be prepared.

**Adverse Events Following Immunization (AEFI) surveillance** will be strengthened to detect, report, treat, and/or refer any case of severe AEFI to the nearest national reference hospital. Vaccination teams will be trained for this purpose.

**Monitoring & Evaluations**

Using the past experience of campaigns a monitoring plan will be developed which will include monitoring during the preparatory phase for the campaign (updating the field guidelines, micro planning, social mobilization, cold chain and vaccine management, printing of required forms, training, and distribution of logistics…..ect) and the implementation phase (field work).
The supervision plan will include supervision from national level to state and localities during the training for health providers and then during the field work using a comprehensive checklist with quality indicators. It will also have a plan for a third independent party to monitor the campaign which will provide an unbiased approach to determine the successfulness implementation of the follow up campaign.

All supervisors will be trained on the whole issues of the campaign to detect problems and take corrective measures immediately in the field. Daily feedback will be provided to the higher levels regarding the findings and actions. Post coverage survey will be conducted 6 - 8 weeks after the campaign. A final report after completion of the campaign will be produced including the coverage by state, key lessons learnt and recommendations for any future campaign.

To measure the vaccination campaigns impact certain monitoring data, indicators from the measles and rubella case base surveillance

Despite the fact that the monitoring of the coverage during the campaign will be continuously monitored with respect to the gender, sex aggregated data will be obtained and the analysis at end will include lessons learnt in this respect.

Geographical coverage and accessibility will be considered during the micro planning process and mapping of hard to reach population will be addressed; special plans and interventions will be prepared and implemented for those population

**The Plan of action of Measles Follow up Campaign, January 2017:**
<table>
<thead>
<tr>
<th>Activities</th>
<th>Status of implementation</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coordination and Resources mobilization:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identification of financial gap</td>
<td>First estimation</td>
<td>A gap might come out after the development of micro plans of the localities which will reflect the real situation at the ground</td>
</tr>
<tr>
<td>Meeting with the partners for resource mobilization</td>
<td>Done</td>
<td></td>
</tr>
<tr>
<td>Inform the states, Partners and related departments</td>
<td>Not Yet</td>
<td>July</td>
</tr>
<tr>
<td>Formulation of coordination committees at states and localities</td>
<td>Not Yet</td>
<td>July</td>
</tr>
<tr>
<td>Submit budget requested to the partners for Support</td>
<td>Done</td>
<td>18-Jan-17</td>
</tr>
<tr>
<td>Release of the budget to the states</td>
<td>Not due</td>
<td>20-Sep-17</td>
</tr>
<tr>
<td><strong>Guidelines and manuals:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of the Federal Master Plan</td>
<td>Done</td>
<td>10-Dec-16</td>
</tr>
<tr>
<td>Development of micro planning guidelines</td>
<td>Done</td>
<td>Nov-16</td>
</tr>
<tr>
<td>Update of training material for TOT</td>
<td>Done</td>
<td>Dec-16</td>
</tr>
<tr>
<td>Update of training material for Providers</td>
<td>Done</td>
<td>Dec-16</td>
</tr>
<tr>
<td><strong>Training and micro planning:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training of Trainers (TOT) - Federal &amp; States supervisors</td>
<td>Not due</td>
<td>3-5 September -2017</td>
</tr>
<tr>
<td>Development of states &amp; Localities micro plans</td>
<td>Not due</td>
<td>3-5 September -2017</td>
</tr>
<tr>
<td>Training of Trainers (TOT) - Localities’ supervisors</td>
<td>Not due</td>
<td>6-8 September -2017</td>
</tr>
<tr>
<td>Revision and approval of the micro-plans</td>
<td>Not due</td>
<td>3-5 September -2017</td>
</tr>
<tr>
<td>Training of the providers</td>
<td>Not due</td>
<td>8-Sep</td>
</tr>
<tr>
<td><strong>Printing materials:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of the required training &amp; micro planning documents (Guidelines, manuals, daily tally sheets, register books, cards…)</td>
<td>Not due</td>
<td>Aug-17</td>
</tr>
<tr>
<td>Printing of the campaign materials</td>
<td>Not due</td>
<td>Aug-17</td>
</tr>
<tr>
<td>Distribution of campaign materials to the states</td>
<td>Not due</td>
<td>Sep-17</td>
</tr>
<tr>
<td>Distribution of campaign materials from the states to the localities</td>
<td>Not due</td>
<td>Sep-17</td>
</tr>
<tr>
<td><strong>Supplies:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receipt of the vaccine, syringes and safety boxes</td>
<td>Not due</td>
<td></td>
</tr>
<tr>
<td>Procurement of the cotton and soap</td>
<td>Not due</td>
<td>Sep-17</td>
</tr>
<tr>
<td>Distribution of the supplies to the States</td>
<td>Not due</td>
<td>Sep-17</td>
</tr>
<tr>
<td><strong>Supervision:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of the supervisory check list</td>
<td>Done</td>
<td></td>
</tr>
<tr>
<td>Identification, training and distribution of the supervisors (Federal)</td>
<td>Not due</td>
<td>Aug-17</td>
</tr>
<tr>
<td>Identification, training and distribution of the supervisors (States)</td>
<td>Not due</td>
<td>Aug-17</td>
</tr>
<tr>
<td><strong>Social mobilization:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printing of social mobilization materials &amp; procurement of supplies</td>
<td>Not due</td>
<td>Aug-17</td>
</tr>
<tr>
<td>Distribution of the materials</td>
<td>Not due</td>
<td>Sep-17</td>
</tr>
<tr>
<td><strong>AEFI</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formulation of the Federal committee by the Minister of health</td>
<td>Done</td>
<td></td>
</tr>
<tr>
<td>Activation of the states’ committee by the DGs of SMoH</td>
<td>Done</td>
<td>All 18 states formulated their committees</td>
</tr>
<tr>
<td>Launching of the campaign</td>
<td>Not due</td>
<td>1-Oct-17</td>
</tr>
<tr>
<td><strong>Implementation of the campaign</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring &amp; reporting</td>
<td>Not due</td>
<td>1-10/October 2017</td>
</tr>
<tr>
<td>Coverage survey</td>
<td>Not due</td>
<td>25-Oct-17</td>
</tr>
</tbody>
</table>