Joint Appraisal report 2018

The italic text in this document serves as guidance; it can be deleted when preparing the Joint Appraisal report.

Country | South Sudan
---|---
Full Joint Appraisal or Joint Appraisal update | Joint Appraisal Updates
Date and location of Joint Appraisal meeting | 5th – 9th November 2018, Juba Grand Hotel
Participants / affiliation\(^1\) | MoH, WHO, UNICEF, JSI, CDC, IFRC, Save the Children
Reporting period | 2018
Fiscal period\(^2\) | July–June
Comprehensive Multi Year Plan (cMYP) duration | 2018-2022

1. **SUMMARY OF RENEWAL AND EXTENSION REQUESTS**

1.1. New and Underused Vaccines Support (NVS) renewal request(s)

<table>
<thead>
<tr>
<th>Type of support (routine or campaign)</th>
<th>Vaccine</th>
<th>End year of support</th>
<th>Year requested support</th>
<th>Target (population to be vaccinated)</th>
<th>Indicative amount to be paid by country</th>
<th>Indicative amount to be paid by Gavi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine</td>
<td>Inactivated Polio Vaccine</td>
<td>2019</td>
<td>2018</td>
<td>361,191</td>
<td>US$0</td>
<td>US$911,500</td>
</tr>
</tbody>
</table>

1.2. New and Underused Vaccines Support (NVS) extension request(s)

<table>
<thead>
<tr>
<th>Type of Support</th>
<th>Vaccine</th>
<th>Starting year</th>
<th>Ending year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine</td>
<td>Pentavalent (DTP-HepB-Hib)</td>
<td>2019</td>
<td>2022</td>
</tr>
<tr>
<td>Routine</td>
<td>Inactivated Polio Vaccine</td>
<td>2019</td>
<td>2022</td>
</tr>
</tbody>
</table>

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\(^1\) If taking too much space, the list of participants may also be provided as an annex.

\(^2\) If the country reporting period deviates from the fiscal period, please provide a short explanation.
1.3. Health System Strengthening (HSS) renewal request

<table>
<thead>
<tr>
<th>Total amount of HSS grant</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration of HSS grant (from…to…)</td>
<td>2015 - 2019</td>
</tr>
<tr>
<td>Year / period for which the HSS renewal (next tranche) is requested</td>
<td>2018 - 2019</td>
</tr>
<tr>
<td>Amount of HSS renewal request (next tranche)</td>
<td></td>
</tr>
</tbody>
</table>

1.4. Cold Chain Equipment Optimisation Platform (CCEOP) renewal request

<table>
<thead>
<tr>
<th>Total amount of CCEOP grant</th>
<th>US$ 9,441,768.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration of CCEOP grant (from…to…)</td>
<td>2018 – 2021</td>
</tr>
<tr>
<td>Year / period for which the CCEOP renewal (next tranche) is requested</td>
<td>2019</td>
</tr>
<tr>
<td>Amount of Gavi CCEOP renewal request</td>
<td>US$ 1,939,960.00</td>
</tr>
<tr>
<td>Country joint investment</td>
<td></td>
</tr>
<tr>
<td>Country resources</td>
<td>US$ 387,992.00</td>
</tr>
<tr>
<td>Partner resources</td>
<td>US$0</td>
</tr>
<tr>
<td>Gavi HSS resources(^3)</td>
<td>US$ 1,551,968.00</td>
</tr>
</tbody>
</table>

1.5. Indicative interest to introduce new vaccines or request Health System Strengthening support from Gavi in the future\(^4\)

<table>
<thead>
<tr>
<th>Indicative interest to introduce new vaccines or request HSS support from Gavi</th>
<th>Programme</th>
<th>Expected application year</th>
<th>Expected introduction year</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSS</td>
<td>2019</td>
<td>2020</td>
<td></td>
</tr>
<tr>
<td>PCV</td>
<td>2019</td>
<td>2020</td>
<td></td>
</tr>
<tr>
<td>Men. A</td>
<td>2019</td>
<td>2020</td>
<td></td>
</tr>
</tbody>
</table>

\(^3\) This amount must be included either in an earlier HSS approval or else in the current HSS renewal request in section 1.4 above.

\(^4\) Providing this information does not constitute any obligation for either the country or Gavi, it merely serves for information purposes.
**LIST OF ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPHNS</td>
<td>Basic Package for Health and Nutrition Services</td>
</tr>
<tr>
<td>CHD</td>
<td>County Health Department</td>
</tr>
<tr>
<td>DHIS</td>
<td>District Health Information System</td>
</tr>
<tr>
<td>ECB</td>
<td>EPI Capacity Building</td>
</tr>
<tr>
<td>HPF</td>
<td>Health Pooled Fund</td>
</tr>
<tr>
<td>IGAD</td>
<td>Intergovernmental Authority on Development</td>
</tr>
<tr>
<td>IMA</td>
<td>Inter-Church Medical Assistance</td>
</tr>
<tr>
<td>INGOs</td>
<td>International Non-Governmental Organization</td>
</tr>
<tr>
<td>IPs</td>
<td>Implementing Partners</td>
</tr>
<tr>
<td>JSI</td>
<td>John Snow Inc.</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry Of Health</td>
</tr>
<tr>
<td>MOU</td>
<td>Memorandum of Understanding</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>PIRI</td>
<td>Periodic Intensification of Routine Immunization</td>
</tr>
<tr>
<td>RRHP</td>
<td>Rapid Results Health Project</td>
</tr>
<tr>
<td>RRM</td>
<td>Rapid Response Missions</td>
</tr>
<tr>
<td>SARA</td>
<td>Service Availability and Readiness Assessment</td>
</tr>
<tr>
<td>SSP</td>
<td>South Sudanese pound</td>
</tr>
<tr>
<td>TGonu</td>
<td>The Transitional Government of National Unity</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nation’s Children Fund</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
Background

The Republic of South Sudan remains one of the fragile states in the region, as the conflict continued in the period under review. Despite efforts to revitalize the broken cease fire deal of August 2015 in December 2017, little was achieved to sustain the deal till September 12th 2018 when both warring parties inked yet another agreement to revitalize the implementation of The Transitional Government of National Unity (TGoNU) through the mediation of Intergovernmental Authority on Development (IGAD). The country remains in fragility with a protracted sporadic humanitarian crisis in some states. Over 7.6 million people remain in need, 1.9 million internally displaced and 2 million displaced to neighbouring countries. Accessibility to some displaced and trapped communities remains a challenge limiting all efforts to improve coverage of health care service aimed at alleviating morbidity and mortality. The revitalized peace deal is hoped to end humanitarian crisis, alleviate suffering and lay foundation of development.

The economy remains unstable, due to reduction in the oil production which limits the government access to foreign currencies. The country continued to experience high devaluation of the local currency ” South Sudanese pound” against US Dollar reducing the purchasing power of the local community that intern demoralize the business communities chasing opportunities in in country trade to bring in essential goods. Currently, the forex exchange market trades 1$ for about 149SSP as of October 2018 compared to the earlier 1$=3.12SSP the hyperinflation environment has led to high operational cost and unpredictability of effectiveness of operational plans. Unit cost of items for activities keeps on changing over short time with wider variations between and within states owing to the disruption of regular supply channels for goods and services.

The public health continues to face challenges in across the 6 pillars (human resource for health, Finance, leadership, pharmaceutical supplies and Logistics and infrastructure) of the health system.

Human resource shortages are higher in the skilled workers coupled with high attrition. The ongoing hyperinflation undermines the local currency value which cause diffusion of the qualified health care workers from public health system to NGOs supported programs for better pay, leaving service delivery in the hands of under-qualified volunteers hence low utilization of services. With the intervention of the EPI capacity building (ECB) mentorship training aimed at filling the EPI staffing gaps at national and state level, a total of 56 mentees have played a key role in strengthening management at these levels with technical assistance from partners WHO, UNICEF, Mckings consultants, JSI etc.

Government allocation to the public health services is less than 4% of the GDP; of which less than 0.001% of MOH budget is allocated on immunization. Public Health services are mainly financed by donor including Health Pooled Fund (HPF), World Bank, Global Fund, UN and Gavi. HPF supports counties in 8 former state hubs, while World Bank is supporting the remaining 2 states of Jonglei and Upper Nile. Currently there are major transitions among the fund managers; HPF is transitioning from HPFII to HPF III. The World Bank is also transiting from RRHP II to RRHP III and change of Primary Recipient from former IMA to UNICEF who is newly managing the major primary health care programme. A new 2-year health operations project is under development between UNICEF and the World Bank that is due to commence in February 2019. For the new incoming NGO implementing partners (IPs), surge capacity support to sustain and bolster routine immunization will be required.
Governance and leadership at subnational level remains weak, characterized by inability to demand for accountability from IPs. Supportive supervision remained weak, inadequate on job skills transfer through couching and mentoring, absenteeism of health workers from duty station without permission leading to closure of some health facilities for days or weeks etc. The 22 out of the 32 newly created states in presidential decree of December 2016 remained without mid-level management staff. The plan to recruit 3 essential EPI staff is in progress as advertisements are running in the states interviews and appointment will be completed soon after the deadlines for the advertisement.

Coordination between government and implementing NGOs remains weak at sub-national level. The definition of the content of delivery of BPHNS is between the Fund Managers and NGOs with limited involvement of lower level managers. The MoUs therefore, signed between national MoH and the NGOs are less understood at the County level. This compromises the CHDs ability to monitor the activities of the INGOs and demand for accountability. However, there are Health cluster meetings, quarterly review meetings and integrated joint supportive supervisions are the mechanisms in place for ministry of health at all level to use for monitoring progress of health care program including immunization program.

Figure 1: Map of South Sudan with the 32 new states
The health facility infrastructures remain poor especially in the former conflict affected states of Upper Nile, Jonglei and Unity states. About 44% of the total population has access to healthcare service. It is still unclear as to how many health facilities in the country are open. However, the on-going SARA survey is expected to clear the uncertainty.

Logistics and supplies of pharmaceutical products including vaccines remained challenging in the period under review due to hyperinflation, vandalization of storage facility, maintenance of obsolete equipment and replacement, poor road infrastructures and inaccessible terrains in some states which require chartered flights which made the overall operation for health service delivery very costly. However, early strategic planning such as timely distribution and prepositioning practice highly reduced the burden.

Health management information system remains challenging due to poor ICT infrastructure at subnational level, diffusion of MOH trained staff to the NGOs program, poor distribution of data collection tools at subnational level. Data Collection collation and reporting remains poor. Few data related trainings were conducted and the country’s plan to upgrade from use of DHIS 1 to DHIS 2 may not be a smooth transition due to inadequate ICT facility and capacity related challenges.

2. CHANGES IN COUNTRY CONTEXT SINCE LAST JOINT APPRAISAL

The country continues to be in a humanitarian emergency situation that has lasted since December 2013. As of September 2018, the total number of internally displaced people in South Sudan increased to 1.96 million with 198,086 in protection of civilian sites. The largest numbers of IDPs still remain in Jonglei, Unity and Upper Nile states. There was renewed fighting in Yei in former Central Equatoria, that displaced civilians in several locations. In Lakes States, there was inter-communal violence and cattle raiding reportedly caused displacement of nearly 8,800 people.

The recently signed revitalized peace agreement in September in Addis Ababa and the celebration of Peace day may result into new opportunities for improved health service delivery including immunization. In the coming few months, IDPs and refugees are expected to start returning to their original areas requiring for additional resources to cope with the number of returnees.

South Sudan has been identified as a fragile country by Gavi and the country will apply for the fragility window for additional funding to be able to accelerate the delivery of immunization services.

Figure 2: Map showing Humanitarian situation of S. Sudan (as of September 2018)
Figure 3: Location of implementing partners supporting immunization in South Sudan

3. PERFORMANCE OF THE IMMUNISATION SYSTEM IN THE REPORTING PERIOD

3.1. Coverage Improvement and Equity

The country continues to implement fixed, outreach and periodic intensification of routine immunisation (PIRI) strategies to deliver immunisation services to children and women across all health facilities. These strategies are implemented through 632 health facilities providing immunisation services. In addition, due to the context in South Sudan, Rapid Response Missions (RRMs) were used to deliver immunisation services in the three-former conflict-affected States. RRM is mobile teams comprising of technical specialists including WASH, Health, Nutrition, Child Protection and Education who are deployed to hard-to-reach locations where they assess and respond to immediate needs on the ground. From January to end September 2018, 32 RRM missions have been conducted in different locations reaching 82,419 children (0-15 years) with Polio vaccine, 89,362 children (6 months – 15 years) with Measles vaccine and 15,929 pregnant...
women with TT vaccine. The RRM data collection tools have been revised to report Measles vaccination by age categories to be able to capture such by the routine EPI database.

The trends in coverage for the all antigens for the period 2015 – 2018; The annualized 2018 coverage shows an apparent decline in coverage between 2017 and 2018 for all antigens as shown below.

**Figure 4: Trends in Coverage for selected antigens 2015 – 2018*(annualized Jan – Sept)**

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018*</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>65</td>
<td>52</td>
<td>62</td>
<td>59</td>
</tr>
<tr>
<td>Pent 1</td>
<td>75</td>
<td>59</td>
<td>45</td>
<td>70</td>
</tr>
<tr>
<td>Pent 3</td>
<td>62</td>
<td>45</td>
<td>59</td>
<td>55</td>
</tr>
<tr>
<td>OPV 3</td>
<td>63</td>
<td>45</td>
<td>58</td>
<td>54</td>
</tr>
<tr>
<td>IPV</td>
<td></td>
<td></td>
<td></td>
<td>48</td>
</tr>
<tr>
<td>Measles</td>
<td>70</td>
<td>52</td>
<td>75</td>
<td>59</td>
</tr>
</tbody>
</table>

**Penta3 Coverage**

The annualized administrative Penta3 coverage (Jan – September 2018) is 55%, with 19/80 Counties reaching >80%. In 2017, the coverage was 59% with 24/80 Counties reaching >80%. The WHO/UNICEF Estimates of 2017 maintained the Penta 3 coverage at 26%. The National EPI Coverage survey conducted in 2017 showed Penta 3 coverage of 49% (Card plus history). The coverage survey finding (49 %) is four percent higher than the routine admin coverage reported in 2016.
Routine immunisation coverage at the state level shows varying trends per Hub for 2016 – 2018 (Figure 6). Based on annualized Penta3 coverage as of end September 2018, there is slight decline across the States compared with 2017, except Jonglei and Upper Nile which have maintained lower coverage. The decline in coverage can be attributed to the persistent insecurity, poor infrastructure, human resources, and displacement of the population. There is a noted increase in Western Equatoria which has been attributed to the implementation of PIRI.

Figure 6: Penta3 coverage by state 2016 – 2018 (Jan – Sept, Annualized)

As shown in Figure 7, Penta3 coverage in the 7 relatively stable former states increased from 58% in 2016 to 81% in 2017, while that for the conflict affected states increased from 15% to 19%. The Jan – Sept 2018 annualized Penta 3 coverage is 71% in the 7 former stable states and 20% in the former conflict-affected States. There is no significant change observed in the 3-former conflict affected hubs.
PIRI was used to reach additional children in the 7 relatively stable former states with all antigens provided through routine immunisation. For the period Jan – Sept 2018, 31,149 children received their 3rd dose of Penta through the PIRI activity. This accounts for 16% of the children vaccinated with Penta 3.

In addition, due to the context in South Sudan, Rapid Response Missions (RRMs) were used to deliver immunisation services in the three-former conflict-affected States. RRMs are mobile teams comprising of technical specialists including WASH, Health, Nutrition, Child Protection and Education who are deployed to hard-to-reach locations where they assess and respond to immediate needs on the ground. From January to end September, 32 RRM missions have been conducted in different locations reaching 82,419 children (0-15 years) with Polio vaccine, 89,362
children (6 months – 15 years) with Measles vaccine and 15,929 pregnant women with TT vaccine.

Without discounting for the number of displaced population, the burden of un-immunised children for Penta3 is stands at 93,290 (Jan – Sept 2018). Majority of the unimmunised children are in conflict affected states (Jonglei, Unity and Upper Nile) and Eastern Equatoria state as shown in Figure 9. The country still has 87,326 who have to be vaccinated with Penta 3 between September – December 2018.

Figure 9: Number of immunized and un-immunized children with Penta-3 by state 2018 (Sept 2018).
Measles:
Based on South Sudan’s Measles Control and Elimination Strategic Plan, 2013 – 2018, key interventions including RI, Surveillance, Follow-up campaigns and outbreak responses have been implemented. MCV1 admin coverage increased from 52% in 2016 to 71% in 2017. But shows a decline to 59% in 2018 (Jan – Sept annualized data).

**Figure 10: Measles Admin, WUENIC & and EPI cluster survey coverage by Year**

![Chart showing annualized measles coverage from 2011 to 2018](image)

Based on annualized measles coverage as of end September 2018, there is a decline in coverage across the States compared with 2017, except Eastern Equatoria and Jonglei where there is noted increase.

**Figure 11: Measles coverage by state 2016 – 2018 (Jan – Sept, Annualized)**

![Chart showing measles coverage by state from 2016 to 2018](image)
For the period Jan – Sept, 41,016 children received their measles vaccination through the PIRI activity. This accounts for 20% of the children vaccinated with measles.

**Figure 12: Number of children vaccinated with measles (Jan – Sept 2018), by strategy**

The second phase of the measles follow-up campaign, whose implementation commenced in 2017, continued into 2018. The campaign was planned in two phases covering: Phase I in the 7 relatively safe former states and Phase 2 in the conflict-affected states. As of October 2018, a total of 1,974,959 (85%) children <5years were vaccinated country wide. The SIAs remain ongoing however for Central Equatoria state (Morobo and Kajokeji counties) and Western Bahr el Ghazal state hubs (Raja County) and, was not reached due to insecurity, there are still plans to cover the remaining 10 counties in the conflict affected states.

**Table 1: Measles Follow-Up Campaign coverage (as at September 2018)**

<table>
<thead>
<tr>
<th>State Hub</th>
<th># of Counties</th>
<th>Target Pop.</th>
<th>Children Immunized</th>
<th>Admin. Cov.</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Covered</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Equatoria</td>
<td>6</td>
<td>4</td>
<td>310,206</td>
<td>205,285</td>
<td>66%</td>
</tr>
<tr>
<td>Eastern Equatoria</td>
<td>8</td>
<td>8</td>
<td>247,941</td>
<td>231,886</td>
<td>94%</td>
</tr>
<tr>
<td>Lakes</td>
<td>8</td>
<td>8</td>
<td>192,050</td>
<td>278,023</td>
<td>145%</td>
</tr>
<tr>
<td>Northern Bahr el Ghazal</td>
<td>5</td>
<td>5</td>
<td>211,187</td>
<td>249,611</td>
<td>118%</td>
</tr>
<tr>
<td>Warrap</td>
<td>7</td>
<td>7</td>
<td>271,415</td>
<td>320,681</td>
<td>118%</td>
</tr>
<tr>
<td>Western Bahr el Ghazal</td>
<td>3</td>
<td>2</td>
<td>95,319</td>
<td>89,667</td>
<td>94%</td>
</tr>
<tr>
<td>Western Equatoria</td>
<td>10</td>
<td>10</td>
<td>167,998</td>
<td>151,417</td>
<td>90%</td>
</tr>
<tr>
<td>Jonglei</td>
<td>11</td>
<td>8</td>
<td>360,504</td>
<td>200,267</td>
<td>56%</td>
</tr>
<tr>
<td>Upper Nile</td>
<td>13</td>
<td>8</td>
<td>277,911</td>
<td>165,616</td>
<td>60%</td>
</tr>
<tr>
<td>Unity</td>
<td>9</td>
<td>6</td>
<td>178,127</td>
<td>82,566</td>
<td>46%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>64</strong></td>
<td><strong>2,312,658</strong></td>
<td><strong>1,974,959</strong></td>
<td><strong>85%</strong></td>
</tr>
</tbody>
</table>
The estimates of susceptibility build-up show that, about 465,133 children less than 1 year remain susceptible to measles. This is about 92% of the birth cohort for 2018. The risk of outbreaks remains high and a plan for another round of follow-up campaign is anticipated in 2019.

3.2. Coverage and equity of immunisation

Figure 6 shows that the number of counties with Penta3 coverage of >80% increased from 10 in 2016 to 24 in 2017, with a slight decline to 19 in 2018. On the other end, there was only a slight decrease in the number of counties with coverage < 50% (48 in 2016 to 41 in 2017 and 46 in 2018), partly attributed to the spread of conflict in 2017 to relatively safer areas and other underlying systemic challenges.

Figure 13: Number of counties achieving Penta 3 coverage

As depicted in the figure 7, the counties with Penta3 coverage below 50% lies mostly at the conflict affected hubs (Jonglei, Unity & Upper Nile) and counties where insecurity has been a severe issue in 2018 (WBG, Eastern Equatoria and Central Equatoria states).
3.3. Key drivers of low coverage/equity

3.3.1 Health Work Force
There is acute shortage of health staff for the delivery of health services including immunisation. Doctors and Nurse Population ratio is 0.35/1000 (DHIS 2010) as against the global standards 2.3/1000. Due to austerity measures since 2012, the Government’s recruitment of critical staff is hampered thus disabling qualified graduates from the training institution from being employed. Currently, implementing partners are supporting new recruitments for service delivery points on contract basis. There are few health training institutions thereby leading to low production of health professionals. The few highly trained health workers are concentrated in the urban areas due to the availability of social services and other opportunities. Due to low and unattractive wages paid by government, there is a high attrition rate among health workers. During the 2013 fighting, many health workers fled to the neighbouring countries and have never came back and this continues to affect the delivery of health services.

The on-going SARA survey is expected to provide information related to the number of available vaccinators in the country including their distribution by 1st quarter of 2019. Based on the findings the program will approach donor/fund managers such as Gavi, HPF, WB, and BMGF, to recruit and deploy vaccinators where the gaps are identified. To improve on the skills of health workers they will be trained using the simplified version of the Immunisation in Practice (IIP) modules, REC trainings as well as on-job training. A mechanism will be established to ensure that resources reach the service delivery levels (Vaccinators) regularly.

3.3.2 Gender-related barriers
Currently, immunisation data are collected using a simple and user-friendly excel tool, which do not capture data by gender. However, there are plans to use DHIS II in 2019, and once fully utilised, it is hoped that data will be captured by gender. No study has been conducted to determine gender related barriers to immunisation services.

3.3.3 Supply chain
• Despite the increase number of cold chain equipment in the country due to the CCEOP Project, there are still about 40% of the health facilities without cold chain equipment. In consultation with State Ministries of Health and Implementing partners, the country will continue to identify health facilities and County Stores requiring new cold chain equipment and including such in the CCEOP project especially in Upper Nile, Unity and Jonglei, where cold chain coverage is very low. In addition, UNICEF will continue to mobilise funding from other sources to procure and install cold chain equipment.

• UNICEF continues to provide supports to transport vaccines and other supplies to all State hubs and 33 Counties (in the former Upper Nile, Jonglei and Unity States) that are not accessible to their State capitals. During the reporting period, no stock-outs have been realized in these areas. However, there are challenges to deliver immunisation supplies from County Stores to Health facilities as the County Implementing partners do not have the capacity due to inadequate budgetary allocations. In most cases, they transport such supplies to the facilities whenever there are opportunities to do so, for example during their supervisory visits, which are often not regular. The country will in 2019 apply for the GAVI Fragility window for additional resources to bolster routine immunisation services and supporting last mile delivery will be one of the critical areas that will be accommodated in the proposal.

• Due to the inadequate number and skilled health workers, Vaccine utilization and wastage monitoring still remains a challenge, despite the availability of data collection tools especially at service delivery level. Data on vaccine vaccines issued, used and balance are difficult to get from the facilities. To address this, the country will continue to conduct trainings on effective vaccine management practices especially for service providers at health facility level. The respective County Health Directorates and County Implementing will continue to be urged to conduct regular supportive supervision to provide ‘hands-on’ training to health staff especially those new and inexperienced ones. Through the Gavi fragility window, more funding will be requested to support County Health Directorates and Implementing partners to be able to conduct regular supportive supervision.

• Currently, there are only three cold chain technicians deployed at three State hubs to respond to cold chain problems. The other remaining Seven States rely on central level technicians based in Juba which has the potential to affect the timely respond to cold chain problems. To address this, the country will in February 2019 deploy three technicians that are currently at central level to four States to support cold chain management. In addition, the country will in 2019, through the Gavi HSS funding recruit and deploy additional four technicians to ensuring that all the former ten States have technicians. These technicians will be embedded within the State Ministries of Health and will be directly supervised by the State Director General of Health services. Their field trip and monthly reports will be sent to central level through the State Director General of Health Services.

• Inadequate transport and weak coordination to support last mile distribution affects uninterrupted vaccine availability thereby leading to stock-outs at facility level. According to the EPI comprehensive review conducted in 2017, about 10% of the health facilities surveyed reported stock-out of vaccines.

• Due to low capacity of vaccinators, there is poor forecasting of supplies; thereby leading to either over stock or stock-out of supplies. Training of vaccinators will be prioritised in 2019 and beyond in all the critical modules of immunisation in practice including effective vaccine management and forecasting. In addition, an integrated training manual for health workers will be developed in 2019 to be used for future trainings and reference tool for the vaccinators.

• High cost of fuel ($1.6 million/year) to maintain cold chain generators at national, state and county levels due to irregularity and shortage/scarcity of fuel in areas outside the capital, Juba. To address this, through the GAVI HSS funding, cold chain equipment have already been ordered to solarize five State stores and equipment are expected by end of December 2018. It is expected that more equipment will be ordered in 2019 for the remaining five states.
The high cost of transportation of vaccines and other supplies using air transport (due to insecurity and poor road infrastructure) poses greater burden on sustainable distribution systems especially with the dwindling down of the Polio funding. More resources will be requested from the Gavi fragility window to ensure an uninterrupted delivery of supplies at all levels.

3.3.4 Demand generation/demand for vaccination

Demand promotion is a process of communication and engagement to enable, inform, motivate and empower specific groups to access a health service, and to claim their right to do so through evidence informed strategy. In the context of South Sudan, where most families have limitations to access other communication channels, more than any other strategy, face-to-face communication through peers, frontline service providers and community mobilizers is central to nurture value of vaccination as important aspect of child caring practice and build trust on vaccination service. In person, community mobilizers can respond to questions and doubts of caregivers immediately, which makes convincing and increase acceptance of immunisation.

C4D Unit of UNICEF commenced an Integrated Community Mobilization Network (ICMN) in South Sudan, which has evolved into a team comprising around 2500 community-level-trained mobilizers and about 500 supervisors to support their activities at the payam and county level. 431000 families reached to provide technically current messages on EPI services during the year 2018. This network will be strengthened more by providing trainings and have been equipped with more communication tools like flip charts and leaflets to provide right information through household level IPC.

It is widely believed that community and faith leaders play a significant role to influence caregivers attitude and action; further, participation of existing community groups and networks to raise awareness and/or educate people on immunisation-related aspects needs to be considered. As community members and peers, they are more likely to be listened to, capable to discuss the issue in a culturally suitable way and win the trust of caregivers. Further, sustained community engagement framework through trained community mobilisers especially in the lowest performing counties and cattle keeping communities where immunisation coverage is critically low; strong community and health facility partnerships and creating a mechanism that bridges between service and client (the community) needs to strengthen.

Community mobilizers are equipped with data collection tool, flip book and RI flyers to disseminate technically correct message to the families during house to house interpersonal communication and group meetings. 24,817 community-engagement activities undertaken, primarily focusing on improving community knowledge, attitudes and practices along with advocating for child rights. 620,425 population reached through these activities.

Building client oriented and demand responsive vaccination service through sustained involvement of community members, facility level micro-planning, creating village health committee and community feedback mechanisms on vaccination services can go a long way to stimulate demand and facilitate ownership. This should be a standard to each vaccination service providing facility.

Additionally, provision of non-monetary incentives and recognition to either community health workers, or community members for providing services related to immunisation; introduce mother’s reminder that helps caregivers plan for completing subsequent visits.

At each and every opportunity, health workers need to provide adequate information for caretakers, particularly when to return for the next immunisation doses, the number of visits/doses remaining the benefits of each vaccine in specific conditions and the need to keep vaccination card. This requires continues skilling of community health workers through well designed training and supervision plan to raise their communication competencies and encourage client orient attitude. To enhance quality of health education and make them more
memorable, develop pictorial job aids and community dialogue aids, wall painting templates, audio-visual materials both for community health workers and mobilisers.

The role of community mobilisers networks goes way beyond delivery of key messages on benefits of vaccination. As first contacts to households and caregiver’s, community mobilisers play critical role in addressing, negotiating and reporting concerns of caregivers on immunisation, promote the value of vaccination, track and register new born(s), defaulters, linking care givers to health facilities, listen to rumours and identify suspected cases etc... This can only be achieved through properly planned capacity building and motivating of community mobilisers.

In South Sudan, decision making power related to child vaccination greatly lies on a male head of family, training more male community facilitators for the immunisation programme needs to be considered.

Radio is the second most important platform to complement community and household engagement activities and ensure a mass reach who are isolated by language, geography, illiteracy etc. designing structured radio programme in various forms, such as educational messages, information exchange, and call-in shows, creative formats such as drama, storyline etc. is highly recommended. Engaging the media sector, trains more journalists and people from local radio stations on the community conversations to help them cover more stories about child immunisation in their work is recommended. Mobile technology may help in various ways, to reminding parents about the vaccination schedule, especially for vaccines that have a relatively long interval between doses. Over 70 mainstream and FM radio channels operate in South Sudan including in the remotest areas, it is estimated that 56% of the South Sudan population has access to the radio, communal listening is common practice in the rural areas. In the recently conducted KAP study on Immunisation 49% of respondents preferred to listen to local FM stations that broadcast in local languages.

Further, organising events such as community health days/fairs, identifying local religious leaders and community icons, friends of children through school child to child learning activities, recognition to caregivers who’s’ children completed vaccination, knowledge competition need to be considered. Community mobilizers will be oriented for organizing activities to achieve desired impact. It is envisaged that, these activities will be implemented through the integrated community mobilisation network in coordination with CHDs and EPI implementing partners.

3.3.5 Leadership, management and coordination

- The management capacity of the EPI team at the national level is still low. The programme is headed by the EPI Manager supported by a deputy and a data officer. The other components (surveillance, logistics, SIA and Operations) of the EPI programme are manned by mentees who are undergoing training and are not on government pay roll. To address this, the new cMYP 2018-2022 proposes an increase and expansion of the sub unit in the EPI Department from 4 (four) to 7 (seven) and increase required staff from 15 to 22. Ministry of health will be funding these positions with support from donors/stakeholders.
- In line with government expansion of administrative structures from 10 to 32 new States, there are plans to recruit additional new staff for the newly created 22 States. These staffs are still not on board due to administrative delays. To ensure that recruitment is finalized by quarter 1 of 2019, the national level will drive the recruitment process rather than the State level.
- The management capacity at sub-national level is inadequate. There has been on-going mentoring of MOH staff in the 10 former States + Abyei administrative area by partners through CDC leadership and support. Scaling up of the mentorship programme at the sub-national level for the 22 new States and conducting mid-level managers and leadership training as provided for in the GAVI-HSS will assist in addressing these gaps.
- There is weak coordination structure (EPI TWG) at sub-national levels. While at the national level there is inadequate participation of implementing partners in coordination forums such as the EPI TWG. The EPI-TWGs will be revitalized in the states where they exist and established where they are non-existent like in the 22 new States.
3.3.6 Public financial management:
- There is weak public finance management capacity at the Ministry of Health. Programme funds (e.g. Gavi HSS) are managed by partners.
- Inadequate banking facilities coupled with liquidity challenges. This is causing delays in disbursement of funds from the banks to the States for operational activities.

3.4 Data
A National Immunisation coverage Survey was carried out 2017 to validate the reported administrative coverage. The survey utilized the revised WHO coverage survey method guidelines. Data collection took place from 3rd October 2017 to 8th January 2018 in the 10 former states. The results of the National Immunisation coverage survey (NICS), which looked at for cohorts born in 2016, show a less than 10% disparity between the 2016 administrative coverage and survey results (card and history) for all antigens. For Penta3 and OPV 3, the survey coverage is slightly higher than the administrative coverage, giving a negative variance.

Figure 15: Difference between survey and administrative coverage for selected antigens

Using Penta3 coverage, the difference between the coverage survey and administrative coverage varies among the State hubs. Warrap, Lakes and EES have variance of >10%, which is more pronounced in Warrap state (25%). The other state hubs have negative variance implying that there is under-reporting of the children vaccinated in the reporting system. Although we note that home based records were observed with only 20% of the respondents.

Figure 16: Difference between survey and administrative Penta 3 coverage for state hubs
Currently, EPI data is generated from DHIS 1 and there are plans to transition to DHIS II, which is in final stages for roll out. The MoH EPI Department maintains a backup reporting system from the lower levels (health facility, county and State). In both databases, levels of timeliness and completeness have been below optimal as confirmed by the preliminary results of the Data Quality Assessment (DQA) report in 2017.

The DHIS has limitations of spread of use, low reporting rate (averaged 55% since 2013), and lack of additional immunisation variables such as stock management in the DHIS. However, the component has been addressed in the DHIS2 data elements and would be configured in the EPI data elements.

Capacities for regular data analysis and use at the health facility, county and state levels remain a challenge due to the human resources inadequacies. In response to these challenges in 2017, WHO conducted operation level training for lower level staff in 6 states. Data Management and Quality improvements training was conducted for County EPI supervisors and M&E officers in 5 states. New EPI tools, laptops and LCD projectors were provided to the 10 hubs using the Gavi HSS funds.

The country has finalized the data quality improvement plan, which was an outcome of the Data Quality assessment (DQA) conducted in 2017. Several short and long-term activities were proposed and implementation is on-going e.g. withdrawal of old primary data collection tools and distribution of updated version to the states and counties, continuous monitoring of stock levels, enhanced supportive supervision to the lower levels etc. Other key pending activities include revision of national level RI Data management SOPs, training for data recording, reporting, and archiving SOPs at all levels of the health system (routine immunisation), job Aid and logistical support for archiving lower level data, harmonising parallel reporting system etc. The Data Technical Working group meets regularly to review and validates national data. The committee, in consultation with the National EPI TWG, to implement the plan.

The country is currently conducting a SARA survey, which will capture a component of Data quality and findings of such will be used to strengthen the data management capacities at all levels. The report of the SARA survey is expected in the 1st quarter of 2019.
In addition, nSTOP mentees who were trained on data management system are paying visits to Counties and health facilities. They are providing support on proper utilization of EPI tools for recording and reporting of EPI data. They are also involved in the review, consolidation and reporting of county and health facility reports to the national level.

Due to the high numbers of displaced populations in the country and the limitations of the current census population projections, denominators have become unreliable thus, affecting better understanding of coverage and inequities of immunisation services. Its effect on prediction of levels of susceptibility of the population to vaccine preventable diseases including polio and measles are of grave concern. Efforts are in place to obtain operational population figures from other sources, Micro plans, local assessment, other agencies supporting in humanitarian service deliver etc. alongside the official estimates and projection to validate our coverage.

Despite these interventions, the quality of data remains a concern. The current plan, which is also a part of the cMYP outlines strategic interventions for sustained improvement in data quality including carrying out regular Data Quality assessment, training, supportive supervision, and the use of ICT. WHO has recruited a Data Quality Improvement Officer and data clerk as part of 2018 TCA, to support MOH’s EPI Data Management and fast-track implementation of strategic initiatives in the cMYP. A national data verification committee has been re-activated and started functioning in 2017.

3.5 Role and engagement of different stakeholders in the immunisation system

National Coordination Forum and other EPI Committees

The national EPI Programme has a number of stakeholders and name and responsibilities of these stakeholders are:

- The South Sudan Immunisation Technical Advisory Group (SSITAG) met once in 2018 to present the plan for new vaccine introductions including the Td switch as planned in the current cMYP. The committee approved all the proposals of the new vaccine introduction.
- Inter-agency Coordinating Committee (ICC): This met three times in 2018 and among others; the committee endorsed the 2017 JA report, Polio transition plan and Measles SIA application for 2019.
- The National AEFI Committee: The Ministry of Health with support from WHO conducted refresher training for the national AEFI committee on the updated causality analysis tools. In addition, State AEFI committees were trained on basic AEFI surveillance and reporting.
- The EPI Technical Working Group (TWG) held sixteen (16) bi-weekly meeting to address both programmatic and technical issues. The EPI TWG has revived the four sub-Technical Committee on Logistics, Vaccines and Supplies; Data Management; Training and Communication and Social Mobilization through revision of the ToRs.
- The State EPI TWGs have been established in seven states with ToRs. The State coordination teams are responsible for addressing operational issues affecting immunisation services. In the other former three states of Unity, Jonglei and Upper Nile, the Health Cluster Coordination platforms are used to discuss plans and resolve immunisation and related challenges.
- Biannual EPI review meeting was conducted in July 2018 with State EPI managers to review and discuss progresses realized and identified challenges affecting EPI service delivery and proposed solutions to the identified issues. The next review meeting is planned from 10 – 14 December 2018.
• Stakeholders like HPF provide funding to County Implementing partners to coordinate the delivery of health services including immunisation by health facilities.

• JSI is supporting MOH in strengthening coordination and capacity building for improved immunisation service delivery. CDC/AFENET supports MOH by providing additional HR capacity for key EPI functions at National and State level on data quality improvement.

• Core Group for Polio, funded by BMGF, supports MOH on community surveillance for AFP and routine immunisation.

• CSOs e.g. South Sudan Red Cross, Lokh-odhi and Nile Hope were contracted and trained to mobilise communities on the uptake and importance of immunisation services and defaulter tracing.
4 PERFORMANCE OF GAVI GRANTS IN THE REPORTING PERIOD

4.1 Programmatic performance

In 2018, Gavi funding provided support in the areas of NVS, CCEOP and HSS. The funding also supported the outreach component of Routine Immunisation service delivery interventions integrated to child survival and Nutrition Outpatient Therapeutic Programme (OTP) through 17 implementing partners. The support contributed to the achievements shown in Table 2 below.

Table 2: Achievements of Gavi HSS against selected Performance Framework (GPF) indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Coverage 2017</th>
<th>Targets in GPF 2018</th>
<th>Achievement in 2018 *</th>
<th>Annualized Jan-Oct 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentavalent 3 coverage at the national level (Penta 3)</td>
<td>59%</td>
<td>60%</td>
<td>56%</td>
<td></td>
</tr>
<tr>
<td>Measles containing vaccine (first dose) coverage at the national level (MCV1)</td>
<td>75%</td>
<td>75%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Drop-out rate between Penta1 and Penta3</td>
<td>23%</td>
<td>18%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>Percentage of counties with Penta3 coverage ≥ 80%</td>
<td>30%</td>
<td>22%</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>Percentage of counties with Penta3 coverage ≥ 70% to 80%</td>
<td>3.8%</td>
<td>49%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Percentage of counties with Penta3 coverage ≥ 50% and &lt;70%;</td>
<td>15%</td>
<td>18%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Percentage of counties with Penta3 coverage below 50%</td>
<td>45%</td>
<td>11%</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>IPV coverage at national level</td>
<td>54%</td>
<td>60%</td>
<td>49%</td>
<td></td>
</tr>
<tr>
<td>TT2+ coverage</td>
<td>49%</td>
<td>52%</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td>Timeliness</td>
<td>30% started in 2017</td>
<td>60%</td>
<td>58%</td>
<td></td>
</tr>
<tr>
<td>Completeness</td>
<td>84%</td>
<td>70%</td>
<td>83%</td>
<td></td>
</tr>
</tbody>
</table>

During the period under review, the following key activities were implemented using Gavi grants.

**Challenge and way forward:** The funding support for Outreach and mobile component was not enough for interventions in 80 counties across the country. As a result, for the continuation of the outreach services in 2019, the number of partners has been reduced from to 8 to cover at least 20 counties to attain high impact.

**Lesson learnt:** Integration of Immunisation service to OTP had been effective in vaccinating all children with severe acute malnutrition. Expansion of the integrated services in OTP centres would be of added value to reach children unreached.

4.1.1 New Vaccine Support

**Pentavalent and IPV:** Gavi approved 800,500 doses of Pentavalent and 480,000 doses of IPV vaccines in 2018 and all shipments have been received. Gavi granted waiver to the country from paying its co-financing obligations for pentavalent vaccine for 2019 and 2020.

**Oral Cholera Vaccine:** WHO supported oral cholera vaccine (OCV) preventive campaigns in cholera high risk (hotspot) areas to mitigate the risk of recurrent cholera outbreaks. The use of OCV was done alongside WASH and other interventions. A total of 462,745 doses of OCV were received in 2018 in addition to what was already received in 2017. The administrative
vaccination coverage is as shown below; No new cholera cases have been confirmed in South Sudan after the end of cholera outbreak declaration on 7th February 2018.

Table 3: Coverage for Oral Cholera Vaccine Campaign by round

<table>
<thead>
<tr>
<th>Site</th>
<th>Round 1 Target</th>
<th>No. immunized</th>
<th>Coverage</th>
<th>Round 2 Target</th>
<th>No. immunized</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malakal Town</td>
<td>19,200</td>
<td>12,363</td>
<td>65%</td>
<td>19,200</td>
<td>12,363</td>
<td>65%</td>
</tr>
<tr>
<td>Aburac IDPs</td>
<td>8,683</td>
<td>8,484</td>
<td>88%</td>
<td>8,683</td>
<td>8,484</td>
<td>88%</td>
</tr>
<tr>
<td>Malakal PoC</td>
<td>23,447</td>
<td>22,558</td>
<td>96%</td>
<td>23,447</td>
<td>22,558</td>
<td>96%</td>
</tr>
<tr>
<td>Wau IDPs</td>
<td>37,048</td>
<td>35,887</td>
<td>97%</td>
<td>37,048</td>
<td>35,887</td>
<td>97%</td>
</tr>
<tr>
<td>Bidi County</td>
<td>88,377</td>
<td>94,126</td>
<td>105%</td>
<td>88,377</td>
<td>94,126</td>
<td>105%</td>
</tr>
<tr>
<td>Juba</td>
<td>216,852</td>
<td>201,737</td>
<td>93%</td>
<td>216,852</td>
<td>201,737</td>
<td>93%</td>
</tr>
<tr>
<td>Panyijar</td>
<td>75,000</td>
<td>71,378</td>
<td>95%</td>
<td>75,000</td>
<td>71,378</td>
<td>95%</td>
</tr>
<tr>
<td>Lankien+Pieri</td>
<td>38,000</td>
<td>6,264</td>
<td>17%</td>
<td>38,000</td>
<td>6,264</td>
<td>17%</td>
</tr>
<tr>
<td>Leer County</td>
<td>48,125</td>
<td>21,819</td>
<td>46%</td>
<td>48,125</td>
<td>21,819</td>
<td>46%</td>
</tr>
<tr>
<td>Yiro East and Yirol West</td>
<td>156,082</td>
<td>156,082</td>
<td>95%</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Torit</td>
<td>158,297</td>
<td>126,895</td>
<td>80%</td>
<td>158,297</td>
<td>126,895</td>
<td>80%</td>
</tr>
<tr>
<td>Total</td>
<td>544,998</td>
<td>456,833</td>
<td>84%</td>
<td>556,732</td>
<td>474,708</td>
<td>85%</td>
</tr>
</tbody>
</table>

4.1.2 Cold Chain Equipment Optimization Platform (CCEOP)

Gavi approved South Sudan’s Cold Chain Equipment Optimization Platform (CCEOP) proposal and informed the country through decision letter sent on 31st March 2017. As a requirement for year 1 disbursement, the country prepared and submitted to GAVI an Operational Deployment Plan (ODP) and Deviation Protocol. Two Hundred Sixty Eight (268) cold chain equipment have been approved for the country for the first year of implementation (2018) and this will be installed in two phases. The first batch of 109 equipment was received in May 2018. By end of September, 108 equipment have been installed successfully. The installation of the second batch of 159 equipment started in the first week of November 2018; out of which 25 have already been installed. The CCEOP project has increased the coverage of cold chain equipment at health facility level from 35% in March 2017 to about 45% countrywide. The country’s CCEOP co-financing of 20% has already been paid from the Gavi HSS grant.

For 2019, the country is eligible for the CCEOP Project worth $2,645,080; of which Gavi will pay $2,116,064. The country will pay the difference of $529,016 as the joint investment portion from the HSS Grant.

4.1.3 HSS Grant

Due to several challenges, there were delays in the implementation of GAVI HSS grant approved in 2014. As such, the country requested for re-programming of the HSS activities. The reprogramming budgets were finalized in quarter one of 2018 and disbursements made in May/June 2018 to WHO and UNICEF. The current reprogrammed HSS grant is being implemented under four broad objectives. The status of implementation is highlighted below by broad objective.

Objective 1: To scale up access to routine immunisation services and address inequalities in coverage

- Development and updating of micro-plans which started in 2017 continued into 2018. Out of the targeted 600 health facilities, 432 (72%) were supported to develop/update their immunisation micro-plans. Utilization of these plans varies from One County to another and
is affected by availability of health workers, funding especially for the outreach sessions and accessibility.

- Periodic Intensification of Routine Immunisation (PIRI) is a strategy that is used to addresses short term coverage gaps by reaching out to unimmunised populations. The strategy is used to provide the missing doses or initiate first doses as evidenced by the appropriate records such as the child health card, register or defaulter records. By September 2018, data on PIRI implementation had been received from the 7 relatively stable states. For the period Jan – Sept, 31,149 children received their 3rd dose of Penta through the PIRI activity. This accounts for 16% of the children vaccinated with Penta 3. For the same period, 41016 infants received measles vaccine through PIRI, accounting for 20% of measles vaccination.

- A national and state level TOT in preparation for refresher training of vaccinators on Immunisation in practice (IIP) for the 7 relatively stable state hubs is on-going. McKings consultants (consulting for BMGF), are supporting training of health workers in the 3 conflict affected states.

- Supportive supervision visits was carried by national, state and county level MOH officers, AFENET mentees, consultants and partners (UNICEF, JSI, BMGF, WHO). Where possible, solutions were proffered to the gaps identified during the visits.

- To facilitate movement for outreaches and supportive supervision, 460 Bicycles and 61 Motorbikes were assembling and handed over to EES, CES, WES, Lakes, Warrap, WBeG, NBeG, and 3 counties in Jonglei. 190 Bicycles and 14 Motorbikes for counties in Unity and Upper Nile remaining, pending finalization of MoU.

**Objective 2: To Improve demand for immunisation services.**

On demand creation, the following key interventions were made to improve vaccination coverage

**Evidence building:**
KAP study on child immunisation among care givers and communities has been completed. Data compilation, analysis and reporting done, validation and dissemination planed 2 week of November. Key findings of the study are as follows:

- As per KAP study findings higher percentage of respondents from the cattle camp, 91% could mention polio.
- Majority of respondents knew at least 1 benefit of immunisation 52% protects from diseases, 23 makes children healthier and 22% prevents paralysis. Only 3 % stated they did not know any of the benefits of vaccination.
- Greater percentage of respondents 73% knew vaccination service is delivered at health facilities
- Higher number of respondents 71% from the rural areas, and 26% of urban respondents stated they do not think vaccination is important to children.
- Among those who think vaccination is not important to children 39% was due to past experience 17% had other priorities while another 17% stated my child is healthy, 7% of respondents think God protects their children implying no need for vaccination.

Social mapping has been completed in 67 out of 80 counties is completed. The completed and printed social map is currently being used to develop community level micro planning, tracking chronically missed children, selection of outreach sites for routine EPI as well as deployment of community mobilizers during Supplementary immunisation and routine EPI.

**Community and media partnerships and engagements:**

UNICEF formalized partnerships with 11 local implementing partners coordinating 2,506 trained community mobilizers in 77 counties. The implementing partners continue to plan, roll-out and monitor community and household engagement activities in routine immunisation on a regular
A complete set of planning, monitoring and reporting tool has been developed and being operational since March 2018.

A total of 53 trainings were organized for community mobilizers including national, state level TOTs for coordinators and C4D field staff. Total 2388 mobilizers including supervisors attended these trainings. Training is an on-going process, which will be continued as a major activity during 2019 to refresh knowledge and to enhance the capacity of community mobilisers.

key C4D staff in the field offices, implementing partners and integrated community mobilization networks (ICMN) at national, state, county, payam and Boma level were trained on how to use the tool for planning and reporting community and household engagement activities, enter data collected from household surveys, record defaulters / 0 dose children and report for action and follow up.

Between March and September 2018, a total of 363,995 households from 50 counties reached using the survey tool, covering an average of 200 - 300 household per month by each community mobilisers

In order to strengthen the capacity of implementing partners, three national level, 10 state level and 21 counties and Payam level trainings has been conducted. Participants of the training include programme coordinators, M&E, state, county and Payam Integrated community mobilization supervisors and community mobilisers. Through integrated community mobilization networks, UNICEF-supported partners facilitated 10,888 mother’s forums and 6030 youth club meetings on routine immunisation and hygiene promotion topics. Additionally, 1 drama group consisting of 14 youth were trained through an Implementing Partner and 84 drama sessions were conducted in CES, EES, Jonglei and WBeG.

A total of 600 megaphones and 9,938 batteries were procured and prepositioned at service delivery level and being used to sensitize communities and generate demand for immunisation services. During the reporting period, every month, 350,000- 500,000 people were reached with key messages on immunisation through megaphone announcements. This will improve the knowledge and information about EPI services and will give impact on RI services.

Training of EPI vaccinators on Inter Personal Communication (IPC) and mobilization for 11 counties of 3 former states (WBGS, NBGS and CES) have been conducted and 310 vaccinators are knowledge, skill and behaviour practices for mobilizing caregivers visiting at health facilities for vaccination enhanced. All EPI vaccinators are targeted to train on mobilization during the 2019.

As part of equipping health facilities with immunisation key messages and job-aid for community health workers, 47,386 communication materials with key messages on immunisation reached end-users in Health facilities, vaccination and nutrition points, schools and community centres. Materials includes: posters, EPI charts, polio FAQ, job aids for health workers and community mobilisers, field guide for community mobilisers, routine household’s survey tool and flipcharts. Media is the second most important platform used to amplify the value of vaccination to caregivers and communities, 22 radio spots, and 45 radio talk-shows each in 3- 9 local languages, focusing on benefits of routine immunisation for children under one years were produced and broadcast through 32 national, sub-national and community radio channels.

**Improving Health Workers IPC Skills**
- 300 Training manuals on community mobilization for routine immunisation have been developed, produced and distributed in all the 10 state hubs.
- 147 vaccinators and 18 supervisors were oriented on interpersonal communication (IPC) skills
- Job Aids for HW - hangings for routine immunisation, wall charts, posters designed and produced, being disseminated targeting functional Health facilities and vaccination sites.
Objective 3: To Strengthen the capacity of the Ministry of Health for Cold chain and Vaccine Management.

- **Supply Transportation**: All the vaccine shipments have been received and stored. Vaccines and other supplies for both RI and SIAs have been transported regularly from National Vaccine Stores to eight State hubs and over 33 Counties to the three former-conflicts affected States using chartered flights and in some instances organized convoys for dry materials eg. Syringes and cold chain equipment. Invoices for the transportation of such supplies have been paid using Gavi funding.

- Fuel was regularly procured for the national, state and county level cold chain stores. This has no doubt contributed to the effective functioning of the cold chain system at these levels.

- **Cold Chain Strengthening**: To reduce the cost of fuel for the running of the cold chain systems, cold chain equipment have been ordered to solarized five State vaccine stores in Torit, Bor, Aweil, Kaujok and Yambio.

- **Capacity Building**: 78 County Cold chain assistant and supervisors have been trained on integrated Effective Vaccine and Cold Chain Management practices. These supervisors are expected to conduct cascade trainings for health facility staff in their respective Counties for improved supply management practices. In addition, the supervisors have been provided with motorbikes and are expected to conduct regular supportive supervision to provide ‘hands-on’ trainings and as well detect problems and propose solutions to the identified problems.

- **Technical Assistance**: An international cold chain advisor has been recruited and deployed to the Ministry of Health to provide technical support and guidance on activities related to Immunisation Supply Chain Management. He also provides ‘hands-on’ training to the national logistician newly recruited by the Ministry of Health. In addition, five Field Health Officers have been recruited and are providing support to State MOH in Upper Nile, WES, EES, WBEG and Lakes state to deliver effective health services including immunisation.

- **Construction of State Level Stores**: In order to improve the quality of vaccine storage facilities, support has been received to construction three State Vaccine stores in Kapoeta, Malakal and Bentiu. Already, a company was contracted to produce the designs, which were later approved by the Ministry of Health. The contract for the construction has been awarded and works are expected to start in January 2019.

- **Coverage Survey**: A coverage survey was conducted to validate routine administrative data and propose strategies to improving routine immunisation services. The survey was completed and findings presented to the Ministry of Health for validation. Key findings include Children vaccinated by history and card: Penta 3 was at 49 per cent; Measles at 67.7 and 43 per cent of unimmunised children was due to lack of awareness of parents.

- **EVM Assessment**: With support from the regional Cold Chain Advisor, an assessment was conducted at national vaccine stores in May 2018 to determine strengths and weaknesses on immunisation Supply Chain Management. The findings revealed that three out of the nine components assessed had minimum scores above 80 per cent as shown in the chart below.
Objective 4: To Strengthen the capacity of the Ministry of Health to provide stewardship

- To maximize the security of the 11 vehicles that were procured for MOH in 2017, tracking devices were installed to all the vehicles. The Ministry of Health would be expected to set up an account and identify a focal person to manage the database by end December 2018.
- Operations at the MoH/EPI unit are being supported. There is a gap in fuelling of the generator that makes office operations a challenge. The team is reviewing the budget to identify a potential budget line to support fuel for the generator.
- Implementation of the Service Availability and Readiness Assessment (SARA) commenced in March 2018, and is still on-going. Progress and achievements include:
  i. Development of SARA Gantt Chart and survey management and coordination structures at national and sub national levels.
  ii. Adapting, testing and finalization of data collection tools including translation of core SARA into Arabic;
  iii. Development of the Master Facility List and sampling strategy
  iv. Development of data management plan as well as designing and customization of all the survey tools in CSPro, development of data analysis plan and training of data managers.
  v. Developing/adapting training materials. The fieldwork manual for supervisors and data collectors were designed and adopted.
  vi. Several trainings were carried in preparation for the data collection. These included Training of Trainers - 74 Trainers/central/state supervisors were trained in preparation for cascade training at state level; Training of survey personnel that included field supervisors and data collectors (298) in the 33 states from 30 April to 9 May 2018. Training of interviewers and filed supervisors from hard to reach/inaccessible areas was conducted from 30th May to 7th June in Juba with support and participation from partners (national and international NGOs/CSOs) working in those locations. Due to delay in the onset of data collection, a 5-day refresher training was conducted in all states before commencement of data collection.
vii. Data collection started in most counties from 12 Oct 2018 and some have completed data collection. Data collection is still on-going in the hard to reach locations. The final report of SARA survey is expected in Q1 of 2019.

- The Terms of Reference for the consultant to support development of the Human Resource for Health strategy were finalized and a roadmap drafted. The implementation of activity has been delayed as the MOH and HRH Technical Working group need to agree on the timing and road map for HRH strategy development. The activity will be completed by June 2019.

- Development of the Health Financing strategy has been delayed because of the ongoing National Health Accounts. The latter has taken more than the duration initially planned and its findings will form part of the data and evidence needed to develop the health financing strategy. The strategy will be developed in Q1 of 2019.

Challenges in implementing the HSS grant include

1) Delays in disbursements
2) Delays by MOH to request funds
3) Delays in submitting integrated work plans

The Quarterly HSS review meetings will be used as an opportunity to streamline flow HSS funds and improve utilization.

4.2 Financial management performance (for all cash grants, such as HSS, vaccine introduction grants, campaign operational cost grants, transition grants, etc.)

<table>
<thead>
<tr>
<th>Grant reference</th>
<th>Expiry date</th>
<th>Purpose</th>
<th>Amount programmable</th>
<th>Amount Spent/committed</th>
<th>Balance</th>
<th>Utilization rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC170152</td>
<td>30-6-18</td>
<td>TCA 2017</td>
<td>435,520.00</td>
<td>435,520.00</td>
<td>0.00</td>
<td>100</td>
</tr>
<tr>
<td>SC150567</td>
<td>24-9-18</td>
<td>HSS 2016-2017</td>
<td>5,427,469.32</td>
<td>5,427,107.32</td>
<td>362.00</td>
<td>100</td>
</tr>
<tr>
<td>SC180268</td>
<td>30-06-19</td>
<td>TCA 2018</td>
<td>562,465.50</td>
<td>285,261.37</td>
<td>277,204.13</td>
<td>51</td>
</tr>
<tr>
<td>SC180398</td>
<td>30-04-20</td>
<td>HSS 2018</td>
<td>6,145,396.82</td>
<td>4,932,956.34</td>
<td>1,212,440.48</td>
<td>80</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>12,570,851.64</td>
<td>11,080,845.03</td>
<td>1,490,006.61</td>
<td>88</td>
</tr>
</tbody>
</table>
4.3 Sustainability and (if applicable) transition planning

4.3.1 Polio transition planning:

The country is transiting out of Global Eradication Initiative and has developed a Polio Transition Plan with support from UNICEF, WHO and other partners.

The plan highlights the critical role Global Polio Eradication Initiative (GPEI) has played towards funding polio eradication efforts in South Sudan for over two decades. That it has been the main health programme reaching children across South Sudan, with around USD 20 million per year. The country reported the last case of wild polio virus in June 2009. In addition, GPEI has helped to create the key structures for both vaccination campaigns, vaccine preventable disease (VPDs) surveillance and routine immunisation (RI) in the country. The plan further went on to highlights the following fundamental and critical questions/ issues:

What does this mean for the health system?

- For South Sudan, the GPEI ramp down means declining support to critical functions within the health system that could lead to the collapse of immunisation systems.
- Disease surveillance: Active case-based surveillance, for acute flaccid paralysis (AFP) and other VPDs, would effectively end and the quality of available data would dramatically decline.
- Outbreak response: The ability to detect and respond to outbreaks of vaccine preventable disease and to support critical frontline staff in the field will severely deteriorate.
- Immunisation: All immunisation figures for the population would further decline. Supplementary immunisation campaigns – for polio, other vaccinations and vitamin A distribution – would suffer from reduced quality or stop altogether, ending the most effective health interventions in the country.

What are the barriers to the critical functions being absorbed?

The end of the Polio Programme must be seen in the context of South Sudan as a fragile state. The prevailing situation has prevented the Government from investing time and resources into developing health systems – while donors have been focusing on the humanitarian response.

What is at stake?

- Stakeholders are concerned that the ramp down in funding will result in increased rates of child morbidity and mortality due to the ripple effect on the immunisation programme and broader health system.
- Immunisation systems are at risk of collapse. Polio vaccination coverage in South Sudan is reliant on campaigns (achieving over 80 per cent per round on average) because coverage during RI is much lower. Meanwhile, RI heavily depends on elements of the
cold chain that are funded by GPEI, along with trainings and supervision also dependent on either the SIA or polio surveillance network.

- There is the risk of an outbreak in South Sudan of polio and possibly other diseases, such as meningitis and measles that rely on the surveillance system supported by the Polio Programme.
- Diminished capacity of the surveillance systems will impede detection and response of any disease outbreak.

Regional and global public health could be compromised and health sector stakeholders have an obligation to global health security.

**What action is required?**

To avert a public health crisis, South Sudan needs to maintain, as a minimum, active surveillance, better immunisation coverage, strong resilience – through social mobilization – and robust outbreak response capacity.

**What can be done?**

The advocacy document, "Collapse: What the end of polio funding could mean for South Sudan's immunisation systems and what we can do about it", recommends the following actions:

- Support routine immunisation and continue campaigns.
- Maintain funding for health-based community mobilization.
- Maintain active VPDs surveillance
- Monitor relevant initiatives
- Re-organize current funding streams to include vital parts of the polio structure
- Initiate a Fragile State Fund for Routine Immunisation, surveillance and social mobilization

Finally, to avert a public health crisis, South Sudan needs to maintain, as a minimum, active surveillance, better immunisation coverage, strong resilience – through social mobilization – and robust outbreak response capacity. Supporting fragile states through a longer transition period must be a political priority nationally, regionally and globally. We call upon high-level stakeholders to come together to acknowledge the special case of South Sudan and other fragile states in the context of the global GPEI ramp down and formulate plans to help these states fortify routine immunisation and supporting systems.
4.4 Technical Assistance (TA)

To support the implementation of activities on Immunisation in country, Gavi is providing technical assistance through WHO, UNICEF, CDC and JSI.

A. WHO: The existing TA was involved in the implementation of activities contained in the TCA and HSS work plan. These included coverage improvement activities (health facility micro-planning and PIRI activities), implementation of the data quality improvement plan (sections 3.4 & 4.13). Under VPD surveillance, rotavirus sentinel surveillance sites were initiated in Al Sabbah hospital and Kator PHCC; with the stool specimens handled by the Public Health Laboratory. Other on-going activities include the SARA survey and cascaded training for operational level health workers. Technical support was also provided to the technical committees; capacity building of the national and state level AEFI committees as well the operations of the National Technical Advisory committee (NITAG). Four consultants and three staff were supported with the Gavi TCA funds - Immunisation Services Officer, NPO Routine Immunisation Officer, and NPO Vaccine Preventable Diseases Surveillance; while two TAs are supported through the HSS grant – NPO HSS Planning and NPO HSS service delivery.

In 2019, additional TA will be required to support the planning, training, monitoring and supervision, and post-campaign evaluation of the measles follow up campaign; and focussed support to the low performing states to facilitate the implementation of identified specific coverage improvement activities in these states, within the emergency and fragility policy.

B. UNICEF: The UNICEF Country Office received support for Technical assistance (TA) from both Gavi HSS and TCA grants. These staff provides technical support and guidance to the Ministry of Health to Plan, implement, monitor and evaluate activities related to Immunisation Supply Chain management and Communication For development and are stationed both at central and sub-national levels. These are:

- I. One Cold Chain Logistics Advisor to MOH – P3 (100%)
- II. One Cold Chain & Logistic Specialist – P3 (100%)
- III. One Cold Chain Officer. (NOB) (100%)
- IV. Three UNICEF Field Health Officers (NOB) (100%)
- V. Three UNICEF Field Health Officers (NOC) (100%)
- VI. One Immunisation Manager P4 (50%)
- VII. One C4D Specialist P3 (100%)
- VIII. One C4D Officer NOB (100%)

Key activities implemented

A National data base on the number and functional status of cold chain equipment is in place. Monitoring of the cold chain equipment is on-going and the national data base is being updated accordingly using data from the cold chain technicians' field visit reports.

By end September, 78 County Cold Chain Assistants and Supervisors from 8 out of the 10 States were trained on Effective Vaccine and Cold Chain Management practices. Such trainings will continue in the remaining two States to be completed by end December 2018. SOPs were also distributed for use in cascade trainings at health facility level. In addition, three computers have been ordered for pilot of Stock Management Tool in three State Stores for improved Stock Management at State level.
The National Cold Chain inventory is currently being conducted alongside with the Service Availability and Readiness Assessment (SARA) survey, as earlier planned. The data collection tools were reviewed and finalized to suit local context. This was followed by the training of trainers at national level for 74 national and State level participants, which was later cascaded at State level for 250 data collectors. The data collection exercise was expected to begin in the second week of June 2018 but due to administrative bottlenecks, this could not take place as scheduled. Due to these delays, refresher training was conducted at national level for data collectors from October 1-5, 2018, which was followed by the deployment of data collectors and supervisors to the field to start work from October 8 and this is expected to last approximately six (6) weeks. After the data collection exercise, an expert will be recruited from the new GAVI HSS grant to help analyse and develop a five-year CC expansion plan for the country. Already, the Terms of Reference for the consultancy has been developed and the country office is engaging the Regional office to scout for a suitable consultant.

The National Effective Vaccine Management Assessment (EVMA) will be conducted in February 2019 instead of November 2018 as earlier planned. This is due to the fact that the Effective Vaccine Management Assessment has to be proceeded by two important Studies: Temperature Mapping and Monitoring Studies; which are currently on-going and would be completed by December 2018. Already, the Terms of Reference (ToR) for the EVMA has been developed and shared with Regional Office. In consultation with the Regional Office, the Country Office is currently searching for a consultant for the EVM assessment.

The development of State Communication plan has been delayed pending the completion of the national communication strategy for routine EPI which will be used as a framework for the development of state level communication plans. It is planned to be implemented in the first quarter of 2019.

In addition to the existing TA currently being supported, the following TAs would be needed to provide the much-needed support in 2019/2020 to smoothly implement the forth-coming Measles mass vaccination campaign and these are:

1. One Immunisation Officer NOB (100%): In order to consolidate the gains achieved by the GPEI, a national Routine Immunisation Officer would be needed to support the acceleration of routine immunisation service delivery.

2. One Consultant for MFUP C4D P3 (100%). To support the C4D unit to effectively plan, implement, monitor and evaluate communication interventions for the 2019 Measles Follow Up campaign.
C. JSI: Following the two Gavi HSS reprogramming meetings held in Nairobi and Juba affirmed by the 2017 Joint appraisal, the committee recommended JSI to;

- **Increase Technical Assistance Capacity in the MOH from one technical officer to 3 technical officers and one finance and admin officer**
  - Recruited HSS Technical Officer to support MOH in Harmonization, monitoring and coordinating HSS activities and other Gavi funded activities.
  - Recruited Communication Technical Officer to work MOH communication team to provide technical assistance in development, implementation and monitoring of routine immunisation communication plan for South Sudan.
  - Finance and Operation Officer to support local JSI financial/operation activities for the in-country staff

- **Strengthening leadership and governance at all level**
  - Assisted EPI Manager on day today management, Planning, coordination implementation and monitoring
  - Assisted MOH in planning recruitment in the 23 new states by drafting concept note with the TOR for the recruitment committee for the recruitment process. Recruitment committee formed constitutes MOH, WHO, UNICEF, JSI, CDC AFENETE, Mackings Consultants, State MOH. The committee ratified the draft Job Descriptions for the 3 essential officers use for the advertisement in the states

- **Supported the County Implementing partners and civil Society organizations for equitable service delivery and demand generation**
  - Through Supportive Supervision on job training on planning and organizing immunisation activities was done for ARC Health Officers in Kapoeta South and East, Save the children International in Kapoeta North. Supported in trainings on Health facility Based Micro planning for IPs (ARC-I in greater Magwi Counties of Magwi, Pageri and Ayaci)
  - Joint training venture by MOH, JSI and UNICEF for improving knowledge, skill and behaviour practices has been made to train implementing partner’s managers and C4D team for engaging IPs and mobilizers. This will enhance strong coordination between IPs, JSI and MOH/CHDs.
  - Supported IIP training for Core group for Polio project implementing partners Health Officers, Polio Supervisors and EPI coordinators in selected counties of former Jonglei and Upper Nile and Unity and Eastern Equatoria states.
  - Supported MOH in collaboration with UNICEF in training of CSOs contracted by UNICEF through PCA using HSS fund on planning implementing and monitoring Social mobilization to increase demand for RI. In Juba. 9 CSOs in total conducting Social mobilization for immunisation in all the 10 former states of South Sudan.

- **Strengthening the system to improve access and use of data to improve immunisation program**
  - Participated in the data quality improvement plan
  - Data collection tools needs identification through supportive supervision visits to the states and direct communication from partners in the states.
  - Advocated through Data working group and EPI TWG for data collection tool printing and distribution and supported data working group in planning for the printing of the tools
D. Centers for Disease Control and Prevention (CDC):

Data Improvement Plan (DIP). The CDC requested 2018/2019 TCA funding to support the South Sudan Ministry of Health (MOH) implement objectives outlined in the national Data Improvement Plan (DIP).

In May 2018, the South Sudan MOH and partners, including CDC, finalized a draft DIP based on findings from the South Sudan Immunisation and Vaccine-Preventable Disease Surveillance Data and System Assessment; the draft DIP was shared with the Technical Working Group (TWG) and South Sudan MOH for endorsement. After receiving endorsement in mid-2018, the South Sudan MOH organized the National Data Coordination Team, including CDC, to support implementation of the DIP.

The CDC will use the 2018/2019 TCA funds to hire a consultant to be based in Juba, South Sudan, to support the South Sudan MOH develop and disseminate routine immunisation and vaccine-preventable disease surveillance data management standard operating procedures (SOPs) at all levels of the health system. CDC is currently recruiting for the consultancy position; the proposed terms of reference (TOR) for the consultancy were shared with the South Sudan MOH before beginning the process of recruitment.

EPI Capacity-Building (ECB) Project. There are 56 mentees: 8 mentees at national level and 48 at state level. Mentorship is on-going under the stewardship of the technical advisor assisted by several in-country EPI experts from different partner groups as MoH, WHO, UNICEF, JSI and BMGF, at both state and national levels.

Due to their on-the-job learning and mentorship, mentees have conducted 72 supportive supervision visits to counties and 204 to health facilities. The visits were conducted in counties with relative stability. During these visits, county team staff and vaccinators were in turned mentored by the mentees in the ECB project.

State data mentees serve as focal points for receiving EPI county reports, consolidating the reports and reporting to the national level. The data mentees conduct data analysis and provide monthly/quarterly feedback to the counties. The national level data mentee works closely with the data technical subcommittee to consolidate a national report that is shared beyond South Sudan. The mentees efforts have contributed to the improvement of timeliness and completeness of reporting from county to the national level in 2018.

Surveillance mentees support overall efforts to detect and investigate VPDs. Mentees conduct active surveillance in 89 high priority, 46 medium priority and 30 low priority facilities. Mentees efforts have contributed to about 40% of the all measles cases reported and investigated in the country.

Two cold chain technicians are embedded in UNICEF as part of the national team. They frequently visit different states to install new/maintain equipment, they regularly perform preventive maintenance services at the national vaccine store, they have installed 19 new pieces of equipment and have repaired 21 equipment. The national team have sensitized/trained 52 health workers on preventive maintenance.

The routine immunisation mentees are regularly monitoring vaccine utilization in 34 sentinel facilities across the country except Unity state. This effort is geared towards finding information on vaccine utilization and describing the reasons behind any vaccine wastage. Preliminary data shows high vaccine wastage rates especially of BCG and measles, which is probably attributed to the low numbers of children in the geographical area of the health facilities and the disposal of multi-dose vaccines used in outreach sessions.
5 UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

<table>
<thead>
<tr>
<th>Prioritised actions from previous Joint Appraisal</th>
<th>Current status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develop Asset Register</td>
<td>MOH has developed asset registers, SOPs and MOUs for the management of all assets including Gavi procured assets.</td>
</tr>
<tr>
<td>2. Disbursement of USD541,000 to MoH</td>
<td>The Ministry of Health communicated to Gavi on the status of the funds.</td>
</tr>
<tr>
<td>3. Finalise the plans of the proposed National Vaccine Store Complex</td>
<td>The plans have been finalised and cost estimates provided to MOH.</td>
</tr>
</tbody>
</table>

6 ACTION PLAN: SUMMARY OF FINDINGS, ACTIONS AND TECHNICAL ASSISTANCE NEEDS IDENTIFIED AND AGREED DURING THE JOINT APPRAISAL

Overview of key activities planned for the next year (2019):

The country has a two-year Gavi HSS grant that will continue to be implemented in 2019. The key activities in Table 4 are being planned for implementation.

South Sudan has been identified as a fragile country by Gavi and the country will apply for the fragility window for additional funding to be able to accelerate the delivery of immunisation services. This will also be used to top-up funding for some activities in the HSS grant.

The country has also received approval from Gavi to implement a measles follow-up campaign targeting children 6-59 months in 2019-2020. In 2019, the campaign will be implemented in 55 counties. Additional technical assistance will be required by WHO and UNICEF for planning, training, Communication monitoring and supervision and post-campaign evaluation of the measles follow up campaign.

Table 4: South Sudan EPI Calendar for Key Gavi HSS Activities in 2019

<table>
<thead>
<tr>
<th>Activity</th>
<th>Lead agency</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accelerate coverage improvement activities</strong></td>
<td>WHO &amp; UNICEF</td>
<td>Q1 Q2 Q3 Q4</td>
</tr>
<tr>
<td>(outreaches, PIRI, RRM)</td>
<td></td>
<td>x x x X</td>
</tr>
<tr>
<td><strong>Conduct integrated Service Availability, Readiness and Assessment, and Cold Chain Equipment Inventory</strong></td>
<td>WHO</td>
<td>Q1 Q2 Q3 Q4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>x x</td>
</tr>
<tr>
<td><strong>Recruit staff for the 22 new states and implement the performance based incentive package</strong></td>
<td>WHO</td>
<td>Q1 Q2 Q3 Q4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>x x x X</td>
</tr>
<tr>
<td><strong>Implement CCEOP plan for year 2 and conduct installation of new, assessment and maintenance of existing cold chain infrastructure.</strong></td>
<td>UNICEF</td>
<td>Q1 Q2 Q3 Q4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>x x x X</td>
</tr>
<tr>
<td><strong>Solarisation of Five State Vaccine Stores</strong></td>
<td>UNICEF</td>
<td>Q1 Q2 Q3 Q4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>x x X X</td>
</tr>
<tr>
<td>Construct three regional vaccine stores</td>
<td>UNICEF</td>
<td>x</td>
</tr>
<tr>
<td>Conduct EVM Assessment</td>
<td>UNICEF, JSI, WHO</td>
<td>x</td>
</tr>
<tr>
<td>Develop EPI Demand Creation Strategy and expand on demand creation activities through integration of social mapping into current micro plans</td>
<td>UNICEF</td>
<td>x</td>
</tr>
<tr>
<td>Sustain the gains made by supporting the current EPI Capacity Building mentorship project</td>
<td>CDC</td>
<td>x</td>
</tr>
<tr>
<td>Trainings covering leadership, middle level management, EVM, and Immunisation in Practice; CSOs skills for immunisation advocacy, demand generation and service provision</td>
<td>WHO, UNICEF &amp; JSI</td>
<td>x</td>
</tr>
<tr>
<td>Implement data quality improvement plan</td>
<td>CDC, WHO, JSI, UNICEF</td>
<td>x</td>
</tr>
<tr>
<td>Strengthening coordination committees and TWGs at national and state levels</td>
<td>JSI, WHO, UNICEF</td>
<td>X</td>
</tr>
<tr>
<td>Develop communication strategy and facilitate implementation</td>
<td>UNICEF, JSI</td>
<td>X</td>
</tr>
<tr>
<td>Conduct high level advocacy engagements for increased budgetary allocation for Vaccine Independence Initiative</td>
<td>WHO</td>
<td>x</td>
</tr>
<tr>
<td>Conduct Measles Follow Up campaign in 55 Counties</td>
<td>MOH,</td>
<td>x</td>
</tr>
</tbody>
</table>

The Technical assistance needs were discussed under five groups during the Joint Appraisal meeting. These were

i. Leadership, Management & Coordination
ii. Programme implementation, coverage & equity incl. supportive supervision
iii. Data management, VPD & AEFI surveillance
iv. Demand creation and CSO engagement
v. Vaccine supply and management beyond CCEOP
The outcomes from the group discussion are summarised below:

<table>
<thead>
<tr>
<th>Key finding 1</th>
<th>Despite the increase in Penta3 coverage from 45% in 2016 to 59% in 2017, there remain a high number unvaccinated population especially in the conflict affected states of Unity, Jonglei, Upper Nile, and Central Equatoria.</th>
</tr>
</thead>
</table>
| Agreed country actions | A mixed strategy focusing on rapidly reaching populations over a short time in the 45 low performing counties should be implemented. The strategy should:  
- re-establishing regular outreach sessions through proper micro planning and operational support for counties that are relatively stable;  
- continue the conduct of 3 rounds of PIRI in highly populated counties with weak Routine system, strengthen fixed and outlets approaches in stable counties,  
- Establish & Implement Routine Immunisation Control room targeting the former three Conflict affected states (Unity, Jonglei, Upper Nile), Maximize opportunities for distribution to conduct Rapid Respond Missions in specific locations that are hard-to-reach |
| Associated timeline | January – December 2019; the dry season that ends in April should be maximised |
| Technical assistance needs | Yes |

| Key finding 2 | Weak capacity on vaccine supply and cold chain management  
Weak last mile delivery |
| --- | --- |
| Agreed country actions | Post EVM training follow-up and on-job mentoring  
Procure computers and printers and rollout SMT at State and County level.  
Conduct review meeting to evaluate the effectiveness of SMT and EVM  
Recruit, train, and deploy additional three cold chain technicians to state hubs for cold chain management at State, County and Health facility levels. They will be embedded within the State Ministry of Health and be supervised by State EPI managers.  
Conduct temperature mapping and monitoring studies to identify gaps and take measures to improve vaccine storage/handling practices  
Conduct systematic assessment of vaccine wastages and utilization  
Finalize CCE Inventory and develop multi-year plan to improve the functionality and coverage of cold chain system at counties and health facilities.  
Solarisation of state and county cold chains to reduce heavy dependence on fuel to power cold chain generators  
Conduct EVM Assessment and develop multi-year (continuous) improvement plan  
Conduct supportive supervisions, support improvement of coordination to aid last mile vaccine and supplies delivery |
<p>| Associated timeline | Jan- Dec., 2019 |</p>
<table>
<thead>
<tr>
<th>Technical assistance needs</th>
<th>Yes</th>
</tr>
</thead>
</table>

**Key finding 3**

**Demand generation**

- Absence or erratic immunisation services in areas where demand is generated and defaulters are traced
- Disconnect and lack of coordination between CHW and community mobilisers. (CSOs and health facilities)
- Weak defaulters tracing and follow-up mechanism of unimmunised and new born children with care-givers.
- One time off vaccination without follow-up plan resulting into high number of partially immunised children.
- Absence of EPI communication officers to coordinate demand promotion at a lower level of government structure especially in the newly created states, county, payam and Boma level.
- Demand promotion activities are mostly implemented by CSOs with little supervision and coordination with SMOH and CHDs.
- Low demand/uptake of immunisation services and card retention rate
- Underutilization IEC materials, - most IEC materials remain stored at health facilities, CHDs or not used for the intended purpose. -
- Low work ethic and motivation among Health workers due to lack incentives and capacity
- Lack of commitment and accountability of implementing partners to HF.
- Missed opportunities – poor linkage to other social service delivery strategies
- Engagement of religious leaders is limited at micro level only

**Agreed country actions**

- Develop context based strategies and demand promotion action plan that fits the situation of communities (urban, rural, cattle camps, POCs etc.).
- Revitalize or create coordination mechanism among CSOs at state, county and facility level
- Focus on prioritised low performing counties and population with high dropout rate and unimmunised children.
- Train, coach and incentivize health workers based on performance.
- Strengthen accountability to the communities- religious leaders and community leaders to be part of micro-planning, implementation and monitoring.
- Create harmonized defaulters tracing and re-linking and follow up mechanism
- Review and tailor IEC materials toward community and frontline HW information needs and ensure appropriate use, through regular supportive supervision and strengthened end-users monitoring. Create mobile platform to remind caregivers with child vaccination dates
- Promote two-way dialogue with caregiver and communities using radio.

**Associated timeline**

Jan- Dec., 2019

**Technical assistance needs**

Yes
### Key finding 4

**Data**
- Different channels for reporting (DHIS and EPI)
- Missing reports from some partners
- Weak DHIS capacity at county level
- Ensuring the capacity of CHD to manage data (materials, equipment and HR)
- Inadequate Sops and manuals and guidelines for HMIS
- Insufficient quantity of EPI staff at the state level
- Inadequately trained EPI staff on effective data management at state level

**Agreed country actions**
- Training and re-training of State, County and Health facility staff on effective data management
- Institute Data Quality Self-assessment especially at service delivery level
- Comprehensive on-the-job EPI mentorship for state level mentees will continue and be provided by mentors from the state, region and national-level.
- Quarterly workshops reinforce and complement the mentoring process and provide the mentees another learning opportunity to share experiences and show case their work.

**Associated timeline**
- Jan-Dec., 2019

**Technical assistance needs**

### Key finding 5

**Disease Surveillance**
- Knowledge gap at lower level (state, county and communities).
- Main focus on AFP and Measles.
- Need to expand the scope to include other VPDs. ToR change to include other VPDs.
- HR gaps - Need for MoH focal points (in the additional 22 states) for VPD Surveillance at the state and lower levels
- Sample collection limited to a few VPDs in a few areas.

**Agreed country actions**
- Government to identify VPD focal points at state, county and facility levels
- Training, supportive supervision and provision of tools
- Continue supporting Rotavirus sentinel surveillance sites

**Associated timeline**
- Jan-Dec., 2019

**Technical assistance needs**
- Yes

### Key finding 6

- Insufficient number and skilled EPI staff at the state level
- Inadequately trained EPI staff at state level
**Agreed country actions**

- Comprehensive on-the-job EPI mentorship for state level mentees will continue and be provided by mentors from the state, region and national-level.
- Quarterly workshops reinforce and complement the mentoring process and provide the mentees another learning opportunity to share experiences and show case their work.
- Sixty-six recruited, trained and mentored EPI staff for the new 22 states.

**Associated timeline**

Jan 2019 – June 2020

**Technical assistance needs**

7 **JOINT APPRAISAL PROCESS, ENDORSEMENT BY THE NATIONAL COORDINATION FORUM (ICC, HSCC OR EQUIVALENT) AND ADDITIONAL COMMENTS**

The Ministry of the Health and in-country partners scheduled the 2018 Joint Appraisal (JA) on 6th – 9th November 2018.

The Expanded Programme on Immunisation Technical Working Group (EPI TWG) meeting on 21st September 2018 formed an in-country JA Committee comprising the Ministry of Health, WHO, JSI and UNICEF and CDC/AFENET. The committee was tasked with developing the agenda for the meeting, compilation of data, completing the draft JA report and reporting progress to the EPI TWG.

Preliminary JA report was shared with the External JA team on 2nd November 2018. Comments were received and incorporated into the main JA report.

On 6th – 9th November 2018, the JA meeting was held. The participants were drawn from Ministry of Health, Gavi Secretariat, WHO - IST/ESA/AFRO/HQ /country office, UNICEF – ESARO and country office, JSI, CDC- Atlanta/AFENET, IFRC, SCI, USAID, MSF, Mcking Consultant, Dalberg consultants, Intrahealth, South Sudan Red Cross and Core Group. There was an update of the EPI program progress and performance of the Gavi HSS, TCA and CCEOP support. On the second day of the JA, consultants from Dalberg led the participants through an exercise of identifying innovative strategies that can be implemented to rapidly increase immunisation coverage in South Sudan. Five groups were formed to define the technical assistance needs and these were; Leadership management and Coordination, Program Implementation, coverage and equity, data management and VPD surveillance, Demand creation and CSO engagement, vaccine supply and management beyond CCEOP.

The ICC meeting was held on 13th December 2018, chaired by Dr. Samson Paul Baba, Advisor on Community Health and Special Programmes in the Ministry of Health, delegated by Hon Dr. Riek Gai Kok, the Minister of Health. In attendance were also the Country Representatives of WHO, UNICEF, JSI, Health Pooled Funds (HPF), IMA World Health, CDC and South Sudan Red Cross Society. The presentation of the JA report was made and discussed with comments by members of the ICC.

The Final JA report was approved by all ICC members. The dates for the 2019 JA will be fixed during the next ICC meeting.
## Annex

### Compliance with Gavi reporting requirements

Please confirm the status of reporting to Gavi, indicating whether the following reports have been uploaded onto the Country Portal.

It is important to note that delayed reporting may impact the decision by Gavi to renew its support.

<table>
<thead>
<tr>
<th>Reporting Requirement</th>
<th>Yes</th>
<th>No</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant Performance Framework (GPF) reporting against all due indicators</td>
<td>Yes</td>
<td></td>
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<tr>
<td><strong>Financial Reports</strong></td>
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<tr>
<td>Periodic financial reports</td>
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<tr>
<td>Annual financial statement</td>
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<tr>
<td>Annual financial audit report</td>
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<tr>
<td>End of year stock level report</td>
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<tr>
<td><strong>Campaign reports</strong></td>
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<tr>
<td><strong>Immunisation financing and expenditure information</strong></td>
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<tr>
<td><strong>Data quality and survey reporting</strong></td>
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<tr>
<td>Annual desk review</td>
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<tr>
<td>Data quality improvement plan (DQIP)</td>
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<tr>
<td>If yes to DQIP, reporting on progress against it</td>
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<tr>
<td>In-depth data assessment (conducted in the last five years)</td>
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<tr>
<td>Nationally representative coverage survey (conducted in the last five years)</td>
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<td>Annual progress update on the Effective Vaccine Management (EVM) improvement plan</td>
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<td>Post Introduction Evaluation (PIE)</td>
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<tr>
<td>Measles-rubella 5 year plan</td>
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<td>Operational plan for the immunisation program</td>
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<td>HSS end of grant evaluation report</td>
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<td>HPV specific reports</td>
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<tr>
<td>Transition Plan</td>
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</table>
In case any of the required reporting documents is not available at the time of the Joint Appraisal, provide information when the missing document/information will be provided.