Joint Appraisal report 2017

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	Full Joint Appraisal
Date and location of Joint Appraisal meeting	5 – 9 February 2018
Participants / affiliation[1]	MoH, WHO, UNICEF, JSI, CDC
Reporting period	2016 - 2017
Fiscal period[2]	July – June
Comprehensive Multi Year Plan (cMYP) duration	2012 - 2016

1. SUMMARY OF RENEWAL AND EXTENSION REQUESTS

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

Type of support (routine or campaign)	Vaccine	End year of support	Year of requested support	Target (population to be vaccinated)	Indicative amount to be paid by country	Indicative amount to be paid by Gavi
Routine	Inactivated Polio Vaccine	2018	2018	361,191	US$0	US$911,500

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

Type of Support	Vaccine	Starting year	Ending year
Routine	Pentavalent (DTP-HepB-Hib)	2018	2018

1.3. Health System Strengthening (HSS) renewal request

Total amount of HSS grant	TBC by GAVI	US$
Duration of HSS grant (from…to…)	2018	2019
Year / period for which the HSS renewal (next tranche) is requested	2018	2019
Amount of HSS renewal request (next tranche)	TBC by GAVI	US$

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

Total amount of CCEOP grant	US$ 9,441,768.00
Duration of CCEOP grant (from…to…)	2018 – 2021
Year / period for which the CCEOP renewal	2019

[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.

(next tranche) is requested		
Amount of Gavi CCEOP renewal request	US$ 1,939,960.00	
Country joint investment	**Country resources**	US$ 387,992.00
	Partner resources	US$ 0.00
	Gavi HSS resources[3]	US$ 1,551,968.00

1.5. Indicative interest to introduce new vaccines or request Health System Strengthening support from Gavi in the future[4]

	Programme	Expected application year	Expected introduction year
Indicative interest to introduce new vaccines or request HSS support from Gavi	HSS	2018	2020
	NVS (Rota)	2018	2020
	NVS (MCV2)	2018	2019
	NVS (Yellow Fever and Men A)	2018	2019

[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.

2. BACKGROUND

CHANGES IN COUNTRY CONTEXT SINCE LAST JOINT APPRAISAL

In December 2017, South Sudan peace efforts were revived by the Intergovernmental Authority on Development (IGAD) with the signing of the second ceasefire Agreement in Addis Ababa and the second round of the peace revitalization talks commenced on 5th February 2018 and was recalled for the second round of talks. The country remains in fragility with a protracted crisis in nine of the ten former states accounting for a huge human cost evidenced by over 7.6 million in need, 1.9 million internally displaced and 2 million displaced to neighbouring countries[i]. There are persisting health system barriers affecting key outcomes on morbidity and mortality.

Government's budget allocation to health is less than 4% of GDP and <0.001% expenditure is made on the Immunization programme. The local currency, South Sudanese Pounds (SSP) has further lost value against the US dollar depreciating from 85.00SSP in November 2016 to 181.2SSP in December 2017. Salary adjustments in 2016 aimed at mitigating hardship has therefore eroded, and payments to staff has become irregular and outstanding for months due to lack of liquidity. 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 Government of South Sudan continues to suffer from shortage of critical skilled health staff. There is high attrition of both management and service delivery staff from the National to the health facility levels, thus, further depleting the already fragile situation. The scanty staff members at post are poorly motivated and less committed to their responsibilities. The intervention of the National STOP mentorship training to fill national and state level EPI staffing gaps has a total of 56 mentees, but it is at risk due to sustainability and retention challenges. There is no clarity regarding commitment to transitioning of the mentees, coupled with the fact that attrition has been recorded among them at all levels.

The additional 22 states created in 2016 are still underdeveloped in terms of structures for social services including health. The MoH is using the capitals of the former states as coordination Hubs to ensure effective administration of health services delivery. However, this policy is not properly adhered to by the new State authorities, thereby creating challenges with programme planning and management. The creation of additional states also came with migration of qualified staff to their newly created home states. Thus, creating further inequities and mal-distribution of skilled staff across the country.

The provision of health services is still heavily dependent on partners with Non-Governmental Organizations (NGOs) managing more than 80% of functional health facilities. Funding mechanism for the implementation of the Basic Package of Health and Nutrition Services (BPHNS) including immunisation is subcontracted through Fund Managers (HPF and IMA) to NGOs or Implementing Partners (IPs). The contractual arrangements between the Health Pooled Fund and NGOs for 8/10 former states came into full force in April 2017 and that between the IMA World Health and NGOs, covering the rest of the two former states (Jonglei and Upper Nile) were finalized, in December 2017. This has improved on the presence of Implementing Partners to a total of 23 NGOs and additional 35 special purposed NGOs from the Health Cluster. However, the contribution of partners to immunisation system strengthening and coverage improvement are limited primarily attributed to limited budgetary allocations to EPI and lack of service integration coupled with low coverage of cold chain equipment at health facility level (37%), inadequate staffing, and looting and destruction of health infrastructure. In addition, there is gradual reduction of the overall envelope of funding from the key donors, thereby limiting recruitment of skilled staff and service delivery.

There is weak oversight and coordination between the lower levels of Government representation and NGOs (Implementing Partners). 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, is less understood by the County Health Departments (CHD) authorities. This affects transparency of operational responsibilities and consequently, the effectiveness of comprehensive service delivery plans and mechanisms for coverage improvements. In addition, per the MoUs, though the NGOs are to strengthen the leadership and management responsibilities of the CHD, they are not accountable to the CHDs. The Government's aim at addressing this concern through establishing a coordination mechanism is yet to be materialised. or realised

The perennial operational services delivery challenges due to the flooding during the rainy season and poor road infrastructure exist. In the phase of persisting insecurity and bad roads, all vaccines are shipped by air, while devices and heavy cold chain equipment are sent only during dry season and when humanitarian convoy is available. The operational cost for both vaccine distribution and backhauling is high.

3. PERFORMANCE OF THE IMMUNISATION SYSTEM IN THE REPORTING PERIOD

3.1. Coverage Improvement and Equity

Combination of fixed, outreach, mobile strategies and periodic intensification of routine immunisation (PIRI) were used to deliver immunisation services in 2017. PIRI was used to reach more children in partially accessible and some accessible areas with all antigens provided through routine immunisation which has contributed to the improved coverage and reduction in dropout rate observed between 2016 and 2017.

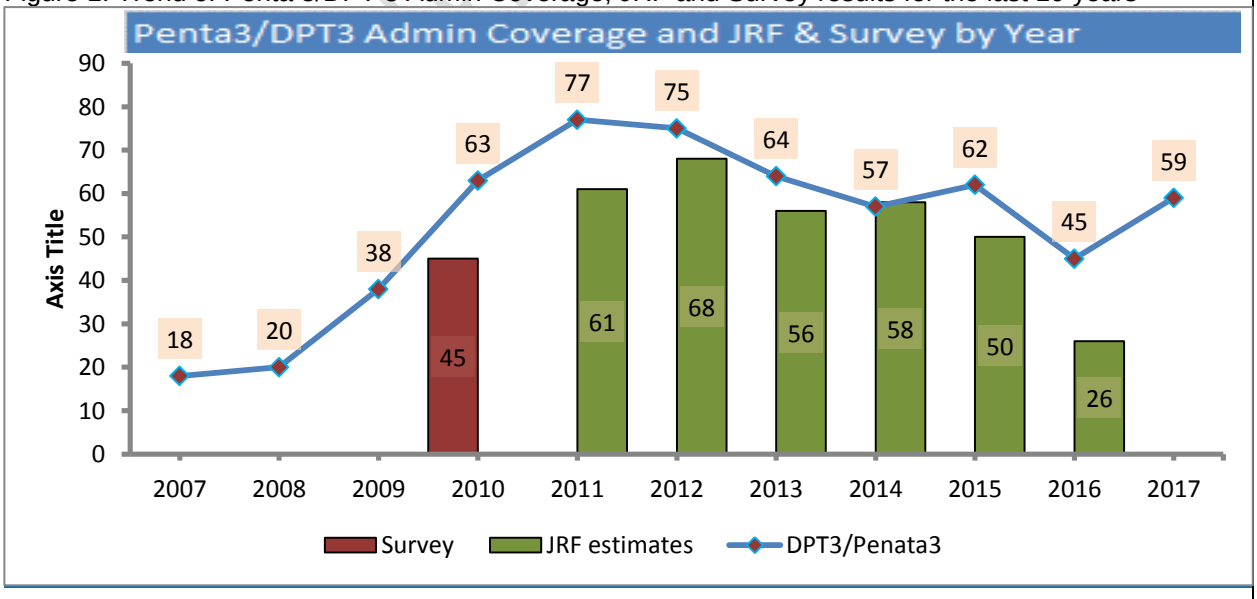
In addition, due to the context in South Sudan, Rapid Response Missions (RRMs) were used to deliver immunisation services especially in areas which are inaccessible due to persistent conflicts. RRMs are mobile teams comprising of technical specialists including WASH, Health, Nutrition, Child Protection and Education who are deployed to hard-to-reach locations where they assess and respond to immediate needs on the ground.

EPI Technical Working Group, has taken this opportunity to introduce SIAs activities among the package to be delivered to children in this area especially Polio, measles and TT immunisation in order to reduce the number of 0 doses of vulnerable people. The selection of the areas for RRM were informed by triangulated analysis of county specific gaps focusing on status of access, functionality of cold chain, burden of unimmunised children, and best fit of mixed approaches. In the absence of limited funding to Implementing Partners for Immunisation, the Gavi HSS funds formed the key driver for coverage improvement in 2017.

The update on functionality of health facilities after the crisis is unknown, however, Service Availability and Readiness Assessment (SARA) is planned in 2018 to address this difficulty. The Health Facility Assessment Report in 2012 showed that 44% of the population have access to health facilities, a situation which is worsened by the destruction of health facilities after the 2013 crisis. It is estimated that over 60% of the population does not access health facilities due to deteriorated socio-economic status.

The administrative coverage of Penta3 in 2017 is 59%, with 24/80 counties reaching >80%. In 2016, the coverage was at 45% with 11/80 counties reaching >80%. The WHO/UNICEF Joint Reporting Form (JRF) reported a decline in routine Penta3 coverage from 75% in 2012 to 26% in 2016 as shown in Figure 1 below.

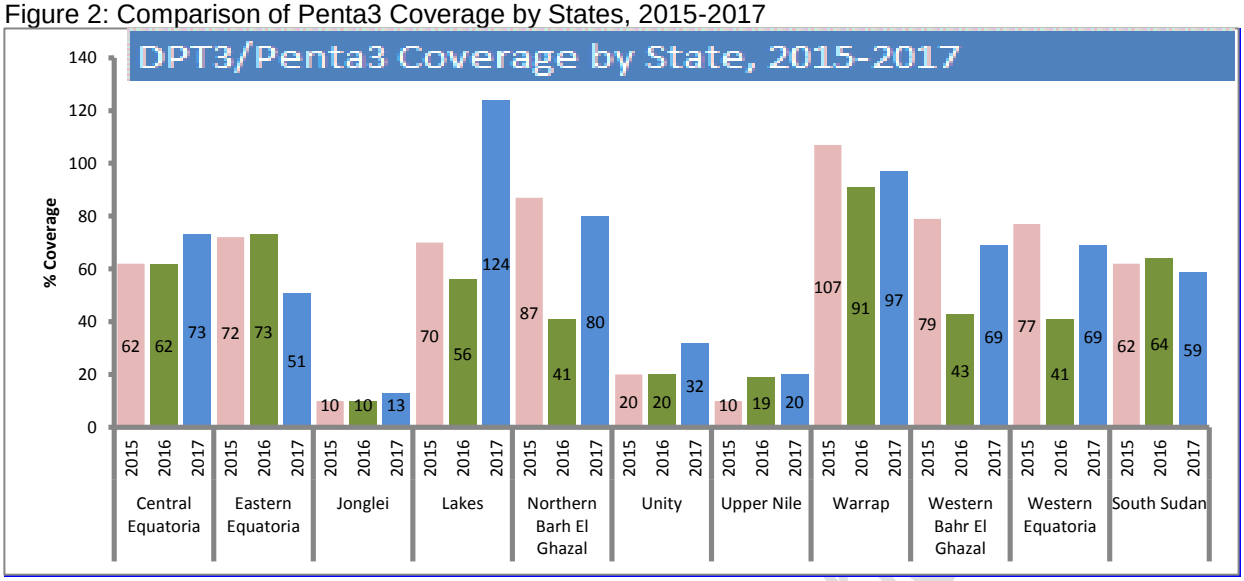
Figure 1: Trend of Penta 3/DPT 3 Admin Coverage, JRF and Survey results for the last 10 years



Routine immunisation coverage at the state level shows varying trends per Hub for 2015 - 2017. The Penta3 coverage shows lower coverage in all hubs but worse coverage among state that have been severely affected by the conflict. A decline in coverage is attributed to the persisting systemic gaps

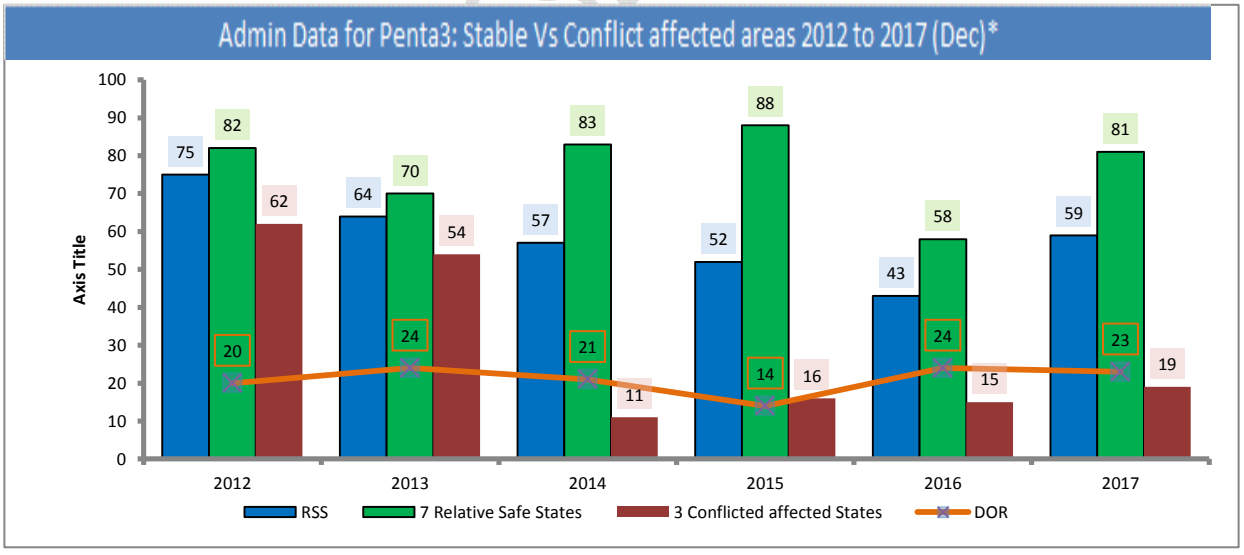
including insecurity, limited infrastructure, human resources, and displacement of the population. In Northern Bahr El Ghazal, which is the only state not directly affected by the crisis, the trend demonstrates the spill over of the political effects of the conflict.

Figure 2: Comparison of Penta3 Coverage by States, 2015-2017



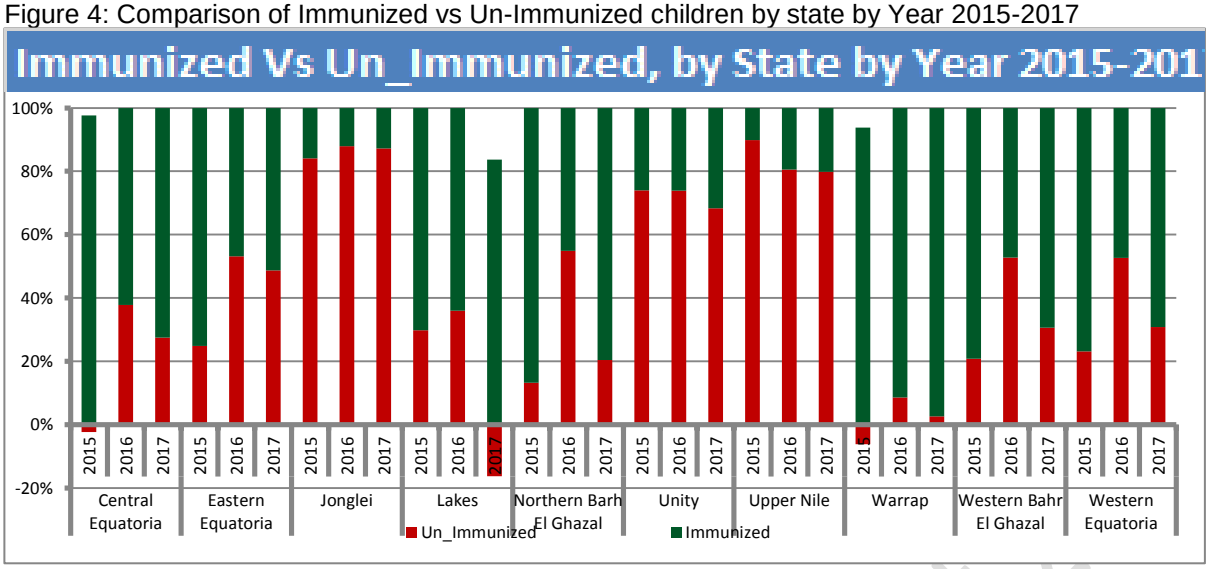
As shown in Figure 3 below, Penta3 coverage in 7 relatively safe former states increased from 58% in 2016 to 77% in 2017. There is no significant change observed in the 3-former conflict affected hubs. The three-former conflict affected areas suffered most from displaced population to Sudan, Ethiopia and other neighbouring countries due to the on-going conflicts as well as destruction of cold chain and other health infrastructure. Evidence from Polio, Measles and MenA SIAs show low coverage at the county levels and geographic coverage hampered by reoccurring incidences of insecurity.

Figure 3: Comparison of Penta 3 coverage from admin data between 2012 to 2017 for the Stable and Conflict affected areas



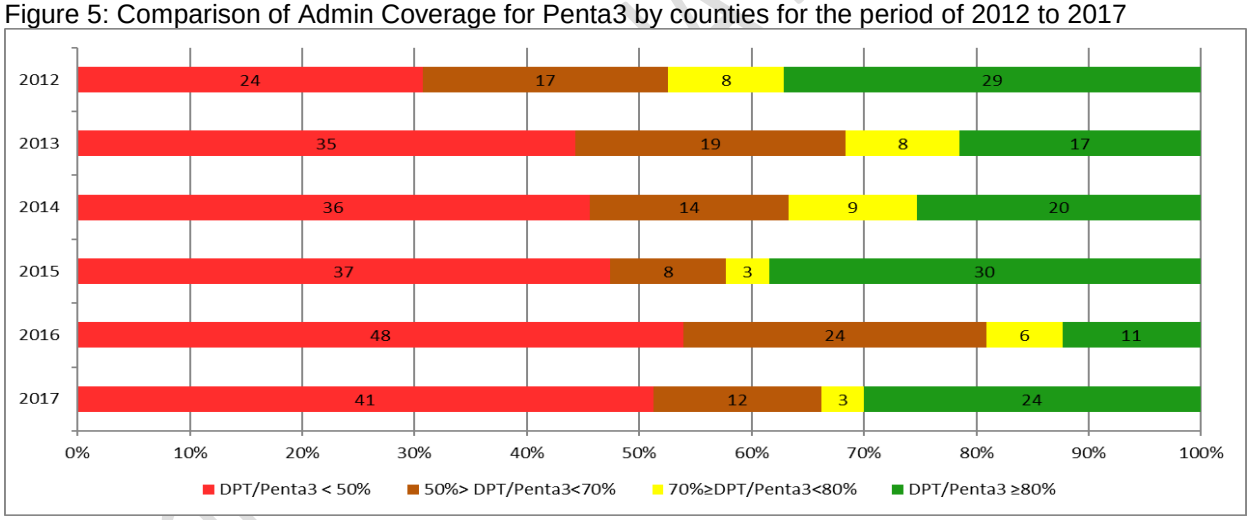
Without discounting for the number of displaced population, the burden of unimmunised children for Penta3 is very high in conflict affected hubs as shown in Figure 4 below. The residual numbers found in relatively safe hubs as shown in the negative bars below are indicative of internally displaced population.

Figure 4: Comparison of Immunized vs Un-Immunized children by state by Year 2015-2017



The county level analysis of Penta3 coverage, as shown in figure 5 below, reflects an improvement in coverage from 2016 to 2017. The Number of counties with Penta3 coverage of >80% increased from 11 to 24. 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), partly attributed to the spread of conflict in 2017 to relatively safer areas and other underlying systemic challenges. As depicted in the map, the 41 counties with Penta3 coverage below 50% lies most at the conflict affected hubs and counties bordering neighbours were arm clashes have been severe in 2017.

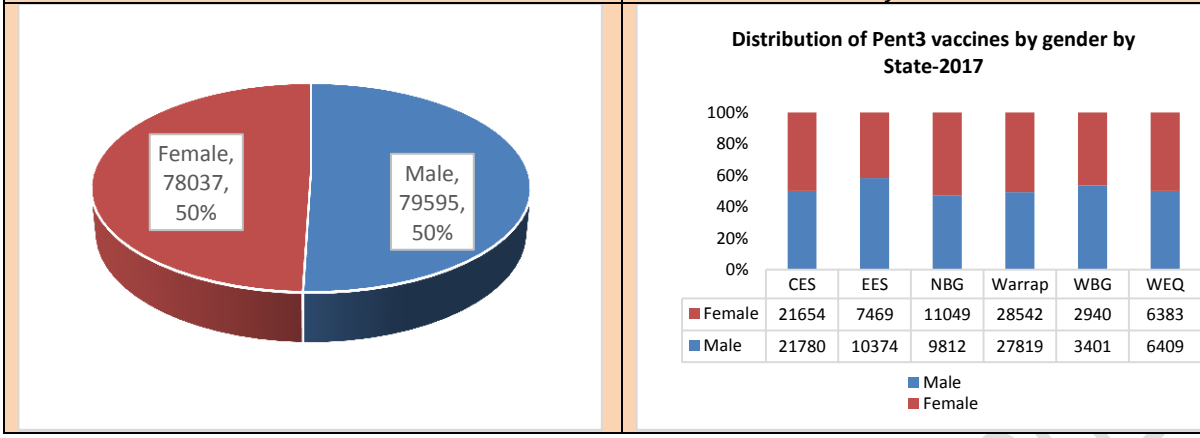
Figure 5: Comparison of Admin Coverage for Penta3 by counties for the period of 2012 to 2017



In 2017, South Sudan started recording and reporting on gender distribution of vaccines on routine data collection tools and further customized in the DHIS1. As of December 2017, 6 out of 10 Hubs have recorded data by gender in the DHIS. Analysis of the available data reports show even distribution in the proportion of girls and boys (50%) who have received vaccination during this period.

Figure 6: Gender distribution of population vaccinated in 2017

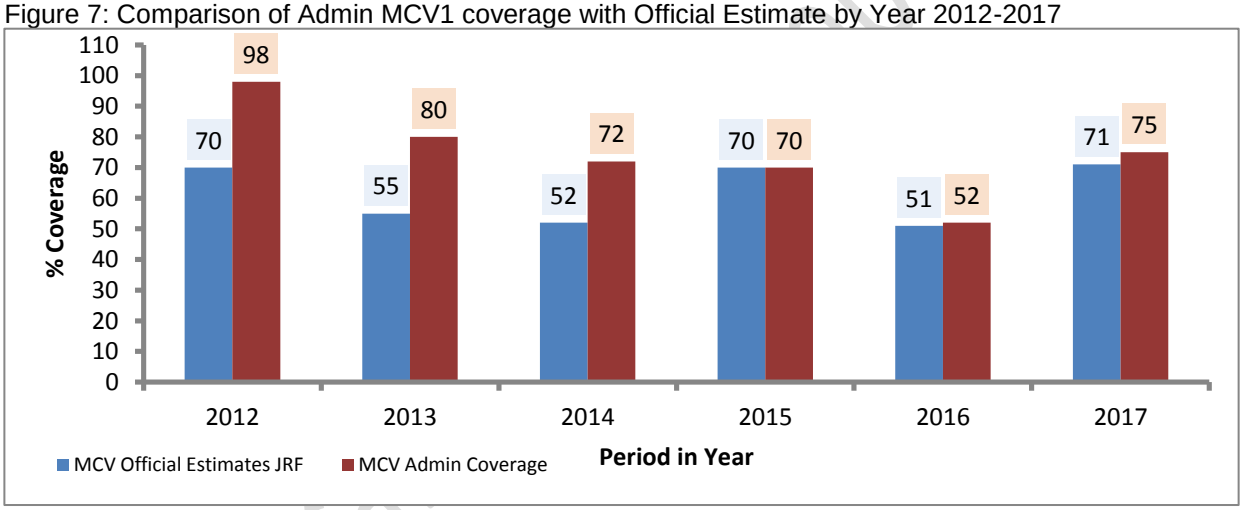
Gender distribution: National	Gender distribution by State



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. Data quality and missed opportunity concerns persist when coverage is compared between MCV and Penta3 coverage.

Figure 7: Comparison of Admin MCV1 coverage with Official Estimate by Year 2012-2017



In 2017 the second measles follow-up campaign recommended in the Measles Control and Elimination Strategic Plan was implemented though postponed in 2016 because of the crisis. 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 December 2017, total of 1,742,725 (75%) children <5years were vaccinated country wide.

Table 1: Report on coverage of MFUP Campaign Implemented in 2017, data as of 12th December 2017

S/N	Former States	County	County Covered	County Not Covered	Target Populations	Children Immunized	% Coverage	Level of Completion
1	Central Equatoria	6	4	2	310,206	205,285	66%	Incomplete
2	Eastern Equatoria	8	8	0	247,941	231,886	94%	Completed
3	Lakes	8	8	0	192,050	278,023	145%	Completed
4	Northern Bahr el Ghazal	5	5	0	211,187	249,611	118%	Completed
5	Warrap	7	7	0	271,415	320,681	118%	Completed
6	Western Bahr el Ghazal	3	2	1	95,319	89,667	94%	Incomplete
7	Western Equatoria	10	10	0	167,998	151,417	90%	Incomplete

8	Jonglei	11	3	8	372,413	107,620	29%	Incomplete
9	Upper Nile	13	7	6	277,911	88,644	32%	Incomplete
10	Unity	9	1	8	178,127	19,891	11%	Incomplete
	Total	80	55	25	2,324,567	1,742,725	75%	55/80

The estimates of susceptibility build-up show that, about 465,133 children less than 1year 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. Key drivers of low coverage/ equity

3.2.1 Health Work Force

- There is shortage of health staff for services delivery. 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.
- Immunisation services delivery has largely relied on unskilled staff. According to the comprehensive EPI and VPD Surveillance review, 67% of Immunisation staff and Community Health Volunteers trained on the job, 16% are auxiliary nurses and 17% are nurse midwives. The lack of professionally skilled staff for immunisation poses a greater risk on sustaining confidence in vaccines by the community. There is shortage of qualified human resource for vaccine and cold chain management, especially at county and health facility levels. Similarly, there are limited complimentary and formal social mobilization focal points especially at county and payam level. The EPI and VPD Surveillance review report recommends the production of new calibre of multipurpose skilled staff for community health focusing on Immunisation and Disease Control in a Training Institution.
- Due to the low salary wages and economic hardship, staff members currently at post are less committed and demotivated. Consequently, there continue to be very high attrition of staff including the Community Health Volunteers. This affects sustained capacity building from the state to the health facility levels.

3.2.2. Gender-related barriers

- Currently there is limited evidence on gender-based barriers for immunisation in the country. Findings of the Knowledge Attitude and Practice (KAP) rapid assessment which is on-going will be shared should there be relevant observations.

3.2.3 Supply chain

- Low coverage of cold chain at services delivery point level (37% of functional health facilities)
- Frequent looting and/or vandalization of cold chain equipment especially in counties in the former three conflict affected States of Unity, Jonglei and Upper Nile. In the period, 2015 - 2017, 129 cold chain equipment were vandalized including 77 solar refrigerators. To mitigate the frequent looting of the equipment, UNICEF is carrying out pre-assessment and installations of equipment in locations that are considered reasonably safe and secure. In addition, cold boxes are used to support vaccine storage in locations where vandalization is very pronounced. In 2018, Long Term Passive Devices (i.e., Arktek) are procured and being dispatched to facilities to improve vaccine storage.
  Gavi approved South Sudan's CCEOP proposal which would improve the cold chain capacity and coverage at counties and health facilities.
- Inadequate transport to support last mile distribution affects uninterrupted vaccine availability, and weak support supervision contributes to poor vaccine utilization.
  Through Gavi HSS, 11 vehicles, 75 motorbikes, and 650 bicycles were procured in 2016 to support immunisation services. However, the distribution of these fleet equipment to the field were delayed due to the change in the political and administrative context. In March 2017, UNICEF handed over the 11 vehicles to the Ministry of Health. To avert risk of carjacking, MOH recommended fitting of

tracking devices to the vehicles, which are to be installed by end of April 2018. MoH will centrally monitor the utilization of the vehicles once the devices are fitted.
The MoH have allocated 10 of these vehicles to BHI coordinators (3 for Greater Equatoria, 4 for Greater Bahr el Ghazal, and 3 for Greater Upper Nile) in a bid to enhance effective implementation of BHI activities, in addition to delivery of planned immunisation related services (e.g., RI, SIAs, etc.). The remaining one vehicle is being used for facilitation of National Immunisation Programme activities.

- Similarly, by the end of December 2017, 60 motorbikes and 440 bicycles were dispatched to various state hubs and have been assembled. Subsequent to this, MOH informed UNICEF to hand over these motorbikes and bicycles to the Implementing Partners in the counties for improvement of immunisation service delivery.
- High cost of fuel ($2.5million/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, there are plans to solarise 50% of the State cold chain Stores.
- The high cost of vaccines and devices distribution using air transport (due to insecurity and poor road infrastructure) poses greater burden on sustainable distribution systems.
- Weak Logistic Management Information System (LMIS) at county and health facility levels. At National level, automated Stock Management Tool (SMT) and Visibility for Vaccines (ViVa) are used for monitoring and managing stocks. At State, counties, and health facilities, however, only manual vaccines and injection material control books are used for stock management. Logistimo was piloted in 2012 in 1 of 10 former states without scale-up to other areas until subscription was discontinued in 2013 due to shortfall in funding.

3.2.3 Demand generation/demand for vaccination

- Approximately two-third of the population cannot be reached with media (radio).
- The effects of multiple SIAs including Polio, Measles, MenA and Cholera limit opportunities for a systematic communication intervention for routine immunisation.
- Low literacy and limited access to media technologies make access to communication messaging a challenge.
- High levels of displaced and seasonal movement of some population (the Nomadic communities) create barriers for regularity of communication interventions

3.2.4 Leadership, management and coordination

- There is a need to strengthen the management capacity of the EPI at the national level. Due to the economic situation, key positions in the programme including the Director General of Primary Health Care and the EPI Manager are occupied by persons in acting capacity. The workload as well as other competing priorities affects programme management. Partners including WHO and UNICEF continue to perform key operational functions to fill the gap in the National EPI. To address this, the new cMYP 2018-2022 proposes an increase and expansion of the sub unit in the EPI Department from 4 to 7 and increase required staff from 15 to 22. Ministry of health will be funding these positions with support from donors/stakeholders.
- EPI Staff members have not been recruited for the 22 newly created states. The Gavi HSS reprogrammed work plan has availed opportunity to recruit 3 staff members per state (Operations, Cold Chain, and Monitoring and Evaluation Officers) to respond to the immunisation needs.
- Weak managerial skills at county level contribute to inadequate programme planning, coordination, monitoring, supervision and reporting.

3.2.5 Public financial management:

- Accountability of disbursed fund is still in process with MoH.
- The economic crisis has led to heavy reliance on donor support.
- The hyperinflation rate has resulted in liquidity challenges at the limited available banks. This is causing delays in disbursement of funds from the banks to the states for operational activities. In addition, the volumes of cash disbursed have substantially increased posing security risks in delivery to the operational sites.
- Where the use of commercial cash transfer is the only option, addition cost of at least 20% of the value of transaction is charged. The country can also explore other options that attract less than 20% fees for transactional charges.

3.3. Data

South Sudan is in the process of transitioning from DHIS1 to DHIS2. 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. The MoH EPI Department maintains a backup reporting system from the levels of the structures (health facility, county, state and national). In both data sets, 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 DQA report highlights the availability and use of new EPI tools at various levels. It also presents weaknesses including limited human resource capacity, presence of old forms, mal-distribution of tools and limited ICT use in facilitating recording and reporting. There exists a case-based surveillance system for AFP and Measles grounded in the polio network. The IDSR system in the MoH is being strengthened with the addition of an electronic kit for Early Warning and Alert System network in displaced population and places hardly hit by conflict.

Capacities for regular data analysis and use at the health facility, county and state levels remain a challenge due to the human resources inadequacies highlighted above. 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 for county EPI supervisors and M&E officers in 5 states, provided new EPI tools, laptops and LCD projectors to the 10 hubs using the Gavi HSS funds.

In addition, nSTOP mentees were also trained on data management system. The nSTOP mentees are paying visits to counties and health facilities and providing support on proper utilization of EPI tools for recording and reporting of EPI data. In addition, they are involved in the review, consolidation and reporting of county and health facility reports to the national level.

Despite these interventions, the quality of data remains a concern. The new cMYP will outline strategic interventions for sustained improvement in data quality including carrying out regular Data Quality assessment, training, supportive supervision, and the use of ICT. WHO proposes to recruit Data Quality Improvement Officer, as part of 2018 TCA, to support MOH's EPI Data Management and fast-track implementation of strategic initiatives in the cMYP.

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.

The on-going house-to-house survey and implementation of BHI are expected to contribute to improvement denominator challenges facing the NIP. With support from UNICEF, the house-to-house survey has started in all the 10 states aiming to gather comprehensive household demographic data including birth registration, state of immunisation, size of households and age structure, etc. Upon completion, the survey will greatly enhance the accuracy of catchment population data and address the challenges of denominator.

The on-going EPI Coverage Survey, will provide insight on coverage and disparities in access to immunisation. However, due to the time lag recommended for repeating the EPI Coverage Survey, an interim Rapid Coverage Verification strategy needs to be conducted in 2019 as part of quarterly Data Quality Assessment to inform operational practices and measures for coverage improvement.

3.4. Role and engagement of different stakeholders in the immunisation system.

National Coordination Forum and other EPI Committees

- The South Sudan Immunisation Technical Advisory Group (SSITAG) met twice in 2017 to review and advise the MoH on 1) the National AEFI protocol and the event in Nachodokopele; 2) Briefing on the RITAG recommendations 3) Endorsement of the SSITAG operational Manual.
- The National AEFI Committee held three meetings in 2017 that included training on their roles and responsibilities as well as development of the National AEFI protocol. This was supported by WHO IST/AFRO. The Committee conducted field investigations and causality assessment of AEFI cases from the integrated measles vitamin A and Deworming campaign in May 2017 and the Polio campaign in November 2017.
- The EPI Technical Working Group (TWG) holds a regular 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 Mobilisation 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.
- The comprehensive EPI and VPD Surveillance review was conducted in October 2017 by external teams from WHO (IST, RO, HQ), UNICEF ESARO, and JSI HQ. Following the findings of the review, a new cMYP for the period 2018 – 2022 is being finalized. The cMYP is aligned with the Health Sector Strategic Plan 2018 – 2022.
- Fund Managers such as HPF and IMA coordinate the delivery of health services including immunisation at health facilities by sub-contracting to implementing partners.
- 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; data quality improvement.
- Core Group for Polio, funded by BMGF, supports MOH on community surveillance for AFP and routine immunisation.

4. PERFORMANCE OF GAVI GRANTS IN THE REPORTING PERIOD

4.1. Programmatic performance

The number of counties achieving Penta3 coverage of above 80% increased from 11 to 21 in 2016 and 2017 respectively. In 2017, Gavi funding was the key driver for EPI achievements by provided support in the areas of HSS, NVS, MenAfrVac and CCEOP.

4.1.1 HSS Grant

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

Indicator	Coverage 2016	Targets in GPF 2017	Achievement in 2017
Pentavalent 3 coverage at the national level (Penta 3)	45%	66%	59%
Measles containing vaccine (first dose) coverage at the national level (MCV1)	52%	81%	75%
Drop-out rate between Penta1 and Penta3	24%	20%	23%
Percentage of counties with Penta3 coverage ≥ 80% -	14%	**22%**	30%
Percentage of counties with Penta3 coverage ≥ 70% to 80%	7.5%	**49%**	3.8%
Percentage of counties with Penta3 coverage between ≥ 50% and <70%;	17.4%	**18%**	15%
Percentage of counties with Penta3 coverage below 50;	60%	11%	45%
Penta3 coverage difference between males and females	-	<2%	<0.001%
TT2+ coverage	37%	66%	49%
Timeliness	Not captured	60%	30% started in 2017
Completeness	80%	70%	84%

The Gavi HSS grant contributed towards organization of the 3rd Health Summit for South Sudan held from 23rd – 31st March 2017. The Summit witnessed the launching of the National Health Policy (2016 – 2026) and the Boma Health Initiative (BHI) - a community health system strategy. Successive calls for action were made by the high-level decision makers and donors and six position papers on the health system pillars endorsed to address bottlenecks. The summit served to advocate for increased investment in health including immunisation. Once operational, the BHI will contribute to increase in the reach of immunisation services across the country. Following recommendations from 2016 Joint Appraisal report, the reprogrammed HSS work plan include support for rolling out BHI in Jubek State (former Juba County).

The Gavi HSS grant was also used to conduct the comprehensive EPI and VPD Surveillance Review following which the new cMYP 2018 – 2022 is drafted and to be finalised. In addition, the grant funded the EPI Coverage Survey and KAP assessment for 2017/18, currently at advanced stages towards

completion. The findings of the two surveys will be used to update the cMYP and will be used for fine tuning the key milestones and strategies for addressing the challenges facing the immunisation programme.

Commendable activities were conducted to scale-up access to quality routine immunisation and to address inequities in access to EPI service delivery. Some of the activities conducted during this period include:

- Trainings of 642 service providers, EPI supervisors and community leaders on REC approach
- Developed the new Health Facilities micro planning covering 214 health facilities and engaging and building the capacity of 1020 health facility staff, community leaders and opinion leaders, and EPI supervisors.
- Periodic Intensification of Routine Immunisation (PIRI).
- Targeted supportive supervision at all levels
- Regional training of National Staff on Data Quality Improvement, Strategic Planning for Immunisation, Vaccinology and Accountability Framework.

In the context of highly displaced populations and challenges with denominator in addition to expansion of conflict, the county specific analysis triangulated with status of insecurity and access, cold chain functionality, unimmunized children, informed the use of PIRI as the key strategy for the year. The strategy mop-up high levels of unvaccinated population displaced into relative safe locations but who by virtue of weakened health functionality did not access fixed sessions.

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

Evidence building:

- Rapid KAP on immunisation completed data analysis on going- findings to inform development of communication plan for EPI
- Social mapping has been done for 32 counties of 3 conflict affected states. 9 have been printed, and remaining 23 is being updated, and will be printed soon. Data collection and mapping have been done in 2 other states, and currently on-going in 5 states.
- Expanded social mapping exercise into 48 counties (Printing on going)

Community and media partnerships and engagements:

- Partnership with 9 implementing partners operating in 75 former counties formed.
- Over 2,506 community mobilizers routinely engaged in community mobilization and additional 2000 during SIAs.
- Over 700,000 people were reached during house to house visits
- New community platforms facilitated -1326 Mothers forum and 366 youth forum meetings conducted.
- A total of 3,353 community level advocacy and immunisation educational meetings
- A total of 352 launching, planning, coordination events at state, county, Payam and community levels
- A total of 739 school orientation and 790 traditional media events were conducted.
- Sustainably working with 32 radio stations in 9 local languages on
- Community training and guide tool developed and field tested
- 194 County and Payam supervisors (ICMN-trainers) trained.
- 600 megaphones and 7024 batteries procured and used by ICMN to mobilize communities.

Improving Health Workers IPC Skills

- 495 vaccinators and 24 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 Health facilities and vaccination sites

In line with the objective of strengthening MoH's capacity for cold chain and vaccine management, the following activities were also conducted:

- Procurement of cold chain equipment and spare parts.
- Installation of 178 Solar Fridges and 8 generators as power sources,
- Assessment of 229 cold chain equipment (CCE) and maintenance of about 148 CCE.
- Procurement and prepositioning of Technicians´ Basic tool kits and monitoring their utilization.
- Training of health staff on Effective vaccine and cold chain Management practices

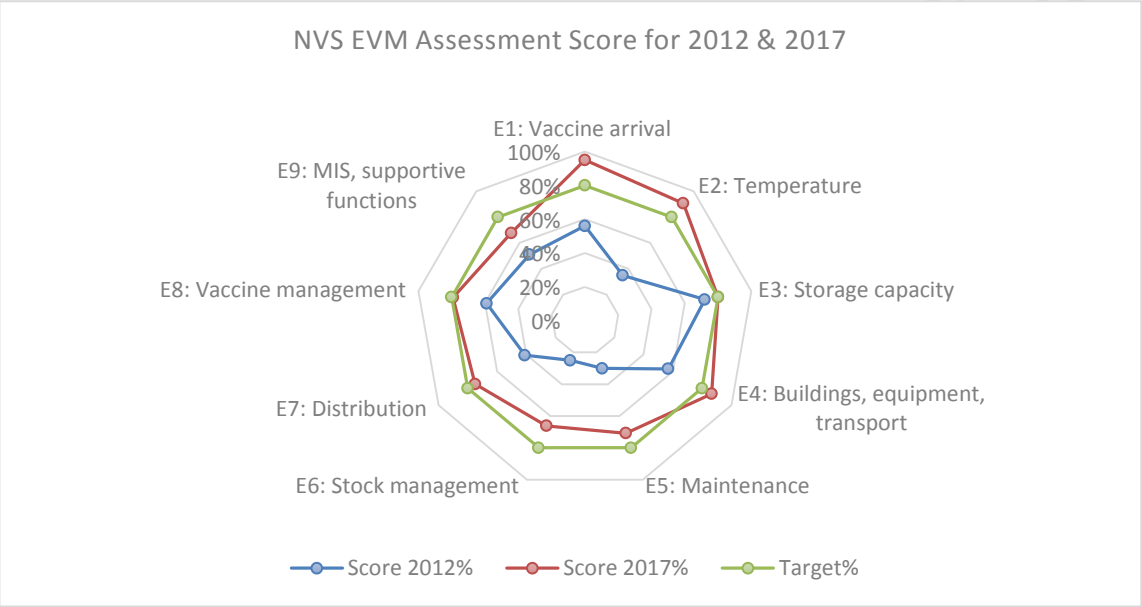
- CCEOP application submitted and endorsed by Gavi

Vaccines and devices for routine immunisation services have regularly been transported to the states using chartered flights. Thus, in 2017, no stock-out of vaccines supplies was reported at national and state cold chain level. At national level, stock management tool (SMT) was used for routine monitoring of vaccine and other supplies. At subnational levels, vaccines are monitored using manual ledger books.

To improve the Logistics Management Information System (LMIS), Standard Operating Procedures (SOPs) were developed and distributed to all levels; and 303 health workers from 48 counties were trained on the SOPs during the Effective Vaccine Management (EVM) trainings. Computers and accessories have been procured to support stock and data management systems at national level.

In 2017, EVM Self-assessment for the National Vaccine Store was conducted and the findings were used to update the EVM improvement plan. Composite score of greater than 80% (target) was observed in 4 out of the 9 indicator areas i.e. Vaccine Arrival Procedures (95%), Temperature Monitoring (91%), Buildings, Cold Chain Equipment and Transport systems (87%), and Storage and Transportation capacity (80%) as shown in figure 9 below.

Figure 9: Comparison of composite score for the 9 indicators measured in EVM self-assessment against result for 2012.



Data quality is critical for making informed decisions for improved EPI service delivery. Towards this end, set of activities were conducted in 2017 to improve the quality of EPI data, including:

- Reviewing, updating, printing and distribution of various recording and reporting tools (1200 copies of registers for Infants and Women of Reproductive Age (WRA), tally sheet booklets, summary sheet booklet, drop out cards, child health cards, monitoring charts among others),
- Training on Data Management targeting 79 health workers in 27 counties in 5 states
- Training on data management for VPD surveillance.

Regarding Strengthening MOH stewardship, the grant support to MoH faced multiple challenges during the reporting period. Delays in the disbursement in 2016 was because of the crisis that led to evacuation of UN agencies including WHO, coupled with the delay by MoH in issuing of the required account details. In line with the recommendation put-forth in the JA report of 2016, WHO advanced USD 541,000 out of the total of USD 1.72M targeted at stewardship activities to the MoH in March 2017, however, MoH finally clarified receipt in June 2017. In October 2017, the status of implementation was discussed during the Gavi reprogramming negotiation meeting held in Juba, South Sudan. Gavi requested MoH for relevant documents including bank statement on the utilization of the disbursed funds. As of January 2018, MoH is in the process of submitting the relevant documents. WHO had sent two reminders to the MoH on the subject and have held higher level meetings for the MoH to expedite submission of the documents.

4.1.2 Cold Chain Equipment Optimization Platform (CCEOP):

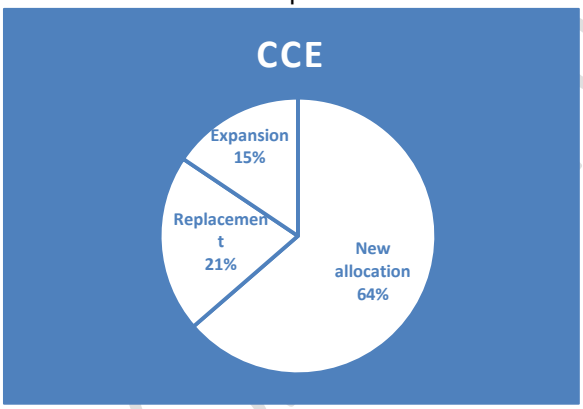
Gavi approved South Sudan's Cold Chain Equipment Optimization Platform (CCEOP) proposal and

informed the country through decision letter sent on 31st March 2017 highlighting the number and types of cold chain equipment for year 1 implementation. As a requirement for year 1 disbursement of funding for the procurement of the cold chain equipment, the National EPI Logistics Technical Working Group (NEPI LTWG), otherwise regarded as the Project Management Team, with technical support from UNICEF Supply Division (SD) developed submitted the Operational Deployment Plan (ODP) to UNICEF SD for commencement of the procurement process. UNICEF SD prepared and shared the Cost Estimates to the country for service bundle covering in-country transportation, warehousing, installation of CCEs, commissioning and training of end-users at health facility level. Such cost estimates were reviewed and approved by the Ministry of Health in November 2017. This was followed by the submission to GAVI the authorization letter requesting the release of the country's 20% co-financing contribution to UNICEF Supply Division.

There was a funding gap of about USD 500,000 between the original approved CCEOP amount and the cost estimates provided. The country requested additional financial support from GAVI to fill the gap and this request was approved. The country will receive first set of 268 cold-chain equipment for year 1 starting March 2018.

The CCEOP Project will help to replace old and faulty equipment and as well expand the cold chain system to newly established health facilities as shown in figure 10 below. In the first year of implementation, the project will target 268 facilities in 27 counties across 8 former states.

Figure 10: Year I CCEOP implementation in South Sudan



4.1.3 MenAfriVac Grant:

In 2016, Phase I of MenAfriVac Campaign was completed in 6 out 10 former states. Some of pre-campaign implementation activities conducted include:

- Training of over 18,000 health workers and community volunteers on standard guidelines and training materials on how to conduct of micro plans, handling of vaccines and data tools.
- Over 22,000 data tools kits and field guide were printed and distributed.
- Over 7000 social mobilisers were trained and deployed to disseminated message on MenAfriVac and immunisation to communities, groups, churches and at market places.
- Radio talk shows, focus groups discussions and community meetings were held.
- Vaccines and supplies were also procured and distributed using flights to all targeted locations.
- Launching of the campaign was conducted at the National and state levels.

Table 3: Administrative coverage of 2016 MenAfriVac Campaign.

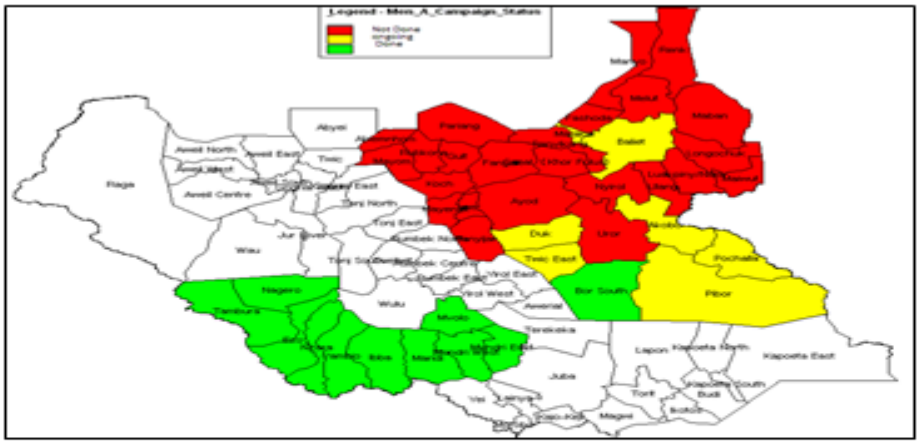
South Sudan MenAfriVac Campaign Final Summary Call-in-Data Analysis as at 16th June, 2016

S/No	State	Population		Total Number Vaccinated with MenAfriVac				State Cumulative % Coverage
		Total Pop	Target Pop.	1-5 Years	6-15 Years	16-29 Years	Total Immunized	
1	Central Equatoria	1,481,460	1,037,022	231,394	336,534	322,546	890,474	86%
2	Eastern Equatoria	1,216,381	851,467	213,384	250,641	263,848	727,873	85%
3	Lakes	906,744	634,721	169,191	198,797	208,686	576,674	91%
4	Northern Bahr el Ghazal	939,546	657,682	237,804	231,595	207,510	676,909	103%
5	Warrap	1,268,017	887,612	267,177	340,075	290,290	897,542	101%
6	Western Bahr el Ghazal	434,560	304,192	70,145	94,101	89,941	254,187	84%
	Total	**6,246,709**	**4,372,696**	**1,189,095**	**1,451,743**	**1,382,821**	**4,023,659**	**92%**

Phase II of MenAfriVac campaign for the remaining 4 former states planned to take place in 2017 have faced delays due to multiple SIAs planned for the year. As of February 9, 2018, the campaign was completed in 11 of remaining 42 former counties. Preliminary data shows that 602,034 individuals of age 1 – 29 years have been reached at a reporting rate of 71.9% (details are shown in Figure 11 below).

Figure 11: Preliminary results for Phase II MenAfriVac Campaign implementation as of February 2018

Preliminary Results of MenAfrVac Phase II Implementation



Hub	Total counties	# counties completed	Target (1 – 29yrs)	Preliminary data	% report received	AEFI Mild/severe
Western Equatoria	10	10	628,763	465,853	72%	81/3
Jonglei	11	1	207,484	136,181	70%	0
Unity	9	0	-	-	-	-
Upper Nile	12	0	-	-	-	-
Total	42	11	836,247	602,034	71.9%	1

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

Provide a succinct review of the performance in terms of financial management of Gavi's cash grants. This should take the following aspects into account:

- *Financial **absorption** and utilisation rates[5];*
- ***Compliance** with financial reporting and audit requirements;*
- *Major issues arising from cash programme **audits** or programme capacity assessments;*
- *Financial management **systems**[6].*

[5] If in your country substantial amounts of Gavi funds are managed by partners (i.e. UNICEF and WHO), it is recommended to also review the fund utilisation by these agencies.
[6] In case any modifications have been made or are planned to the financial management arrangements please indicate them in this section.

4.2.1 HSS Grant

In 2016 – 2017, Gavi disbursed USD 13,316,658 of HSS Grant through WHO (USD 7,454,900) and UNICEF (USD 5,861,668). The burn rate of the Grant is 75.5% an increase from 9% in 2016.

The burn rate in WHO has improved for funds assigned for Direct Implementation for the EPI however the amount assigned through the HSS programme of WHO which was mainly Direct Funds Corporation (DFC) to the MoH had not been used. In March 2017, WHO disbursed USD541, 000 of the DFC funds to MoH based on recommendations in the JA Report of 2016.

Table 4: Summary of HSS Grant Utilisation

Partner	Total Budget for 2016 and 2017	Budget spent in 2017	Annual Utilization 2016 (%)	Annual utilisation 2017
WHO	7,454,900	4,471,873	**2.9%**	**64.3%**
UNICEF	5,861,668	5,616,287	32	95.8%
Total	13,316,568	10,052314	**9%**	**75.5%**

**USD 541,000 was disbursed to MoH in 2017 but not yet liquidated. Amounts reflected does not include PSC*.

4.2.2 MenAfriVac Grant

Table 5: Financial Performance for MenAfriVac Grant

	Phase I disbursement	Phase II disbursement	Phases I & II	Expenditure	Balance	Utilisation Rate
WHO	$ 1,998,535.00	1,025,709.00	3,024,244.00	2,544,219.00	480,025	84.1%
UNICEF	$ 1,034,406.00	333,873.44	1,368,279.44	1,368,279.44	0.00	100%

In August, 2017 Gavi approved MoH's proposal to use the balance of IPV introduction grant ($ 58,252.00 with WHO) to support Post Campaign Evaluation for the Phase II of the MenAfriVac campaign.

Table 6: Summary of other grant allocated to UNICEF and utilization for 2016 and 2017.

Grant reference	Expiration date	Purpose	Amount programmable	Amount Spent/committed	Balance	Utilization rate (%)
SC140165	31-12-16	RI	102,500.00	102,500.00	0.00	100
SC150016	31-3-16	GBP	393,000.00	393,000.00	0.00	100
SC150017	31-12-16	RI	102,500.00	102,500.00	0.00	100
SC150197	7-7-16	IPV	157,200.93	157,200.93	0.00	100
SC160101	31-7-17	TCA 2016	313,360.00	313,360.00	0.00	100
SC170152	30-6-18	TCA 2017	435,520.00	338,770.44	96,749.56	78
TOTAL			**8,299,829.82**	**7,957,699.26**	**342,130.56**	**96**

4.3. Sustainability and (if applicable) transition planning

Financing of the immunisation programme

4.3.1 Costing and Financing for South Sudan Multi-Year Plan, 2018-2022

The economy of South Sudan is heavily dependent on oil (71%) and agriculture. The estimated Gross National Income (GNI) Per Capita was 820 US$ in 2015[7]. Following the decline in oil inflow, short-term projections from the Ministry of Finance and Economic planning of South Sudan show that, foreign loans or Petroleum/Mining Concessions shall finance nearly 60% of the national priorities. As earlier elaborated in the background section of this report, financing to the health sector has drastically declined from 4% to 2% and allocation to EPI remain less than 1%.

Based on the 2016 costing profile, the projections of future resource requirements for the next five years were made using the global cMYP costing tool. The total budget for the program ranges from USD 17,686,878 in 2018 to USD 46,945,711 in 2021. The programme costs will be highest (USD 46,945,711) in the year 2021 due to vaccine supply and logistics (new vehicles and cold chain equipment) and campaigns.

Multi-year plan costing by program components, South Sudan, 2018 – 2022

cMYP Component	2016 (USD)	2018	2019	2020	2021	2022	Total 2018-2022
Vaccine supply and logistics (routine only)	2,958,257	3,752,474	8,272,850	14,956,692	32,425,136	20,577,787	79,984,938
Service delivery	1,733,333	2,399,343	2,052,189	6,835,229	2,049,517	2,118,582	15,454,860
Advocacy and Communication	568,000	630,360	523,321	533,788	544,463	682,322	2,914,254
Monitoring and disease surveillance	1,104,424	1,489,524	1,560,210	1,614,875	1,153,152	1,324,318	7,142,079
Program management	3,624,250	4,539,459	4,692,412	8,203,095	7,842,082	8,109,657	33,386,706
Supplemental immunization activities (SIAs)	-	4,520,366	-	6,660,662	1,430,865	-	12,611,893
Shared Health Systems Costs (EPI Portion)	147,455	355,352	1,502,690	1,423,833	1,500,495	1,672,451	6,454,820
Grand Total	**10,135,719**	**17,686,878**	**18,603,671**	**40,228,174**	**46,945,711**	**34,485,116**	**157,949,550**

It is assumed that based on the 2016 costing profiling, the main sources of financing for the immunisation programme will remain same over the period 2018 - 2022, while Government contributions may continue to dwindle. The National Immunisation Programme is highly dependent on donor financing while Gavi remains the principal donor. The government of South Sudan has not yet started funding vaccines, injection materials, cold chain equipment procurement and operational costs for cold chain management.

Multi-year plan financing South Sudan, 2018-2022

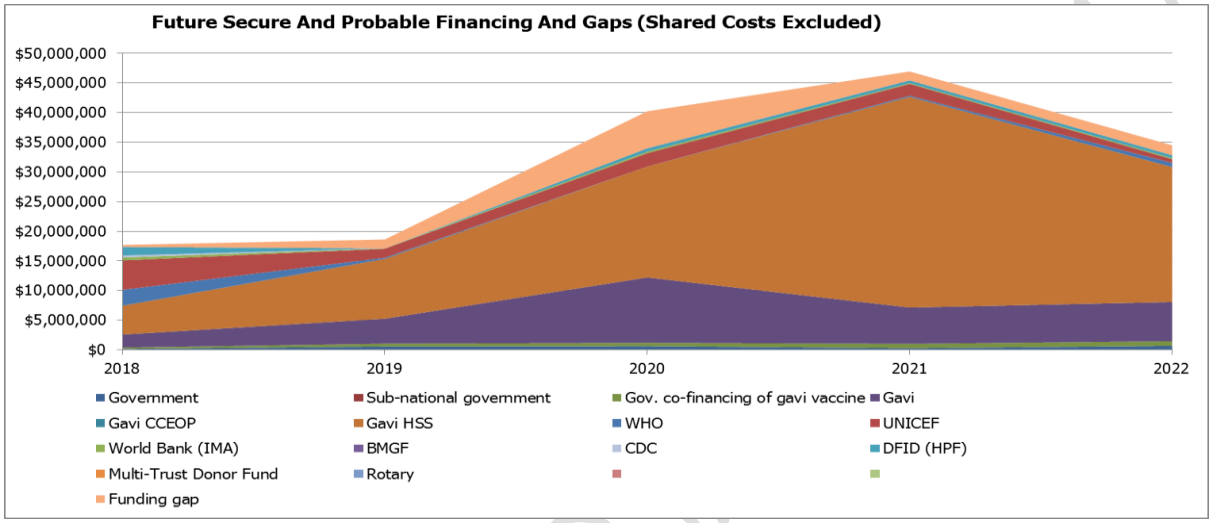
	Projection year					
Metric	2018 (USD)	2019 (USD)	2020 (USD)	2021 (USD)	2022 (USD)	TOTAL 2018 -2022
Total resources needed:	*17,686,878*	*18,603,671*	*40,228,174*	*46,945,711*	*34,485,116*	*157,949,550*
Secured Funding:	10,755,263	487,661	571,895	742,770	794,295	13,351,884

[7] World Bank Report. World Bank national accounts data, and OECD National Accounts data files. Available at: https://data.worldbank.org/indicator/NY.GNP.PCAP.CD?locations=SS

Probable funding gap:	6,931,615	$18,116,010	$39,656,279	46,202,941	33,690,821	144,597,667
Probable funding:	6,117,262	$16,582,109	$33,410,619	$44,702,445	32,018,369	132,830,804
Possible funding gap:	814,353	1,533,901	6,245,660	1,500,496	1,672,452	11,766,863

As shown in the table above (Table 12) the total funds required for the five years cMYP period is USD 157, 949,550 out of which USD 13,351,884 (8.5%) is secured, and USD 144,597,667 (91.5%) is probable funding gap.

Future Secure and Probable Financing and Gaps for EPI in South Sudan (Shared costs excluded)



- **New Vaccine Introduction**

During the next five years of this cMYP South Sudan will be able to introduce measles second dose (MCV2), Men A and Yellow Fever vaccines in 2019; Rotavirus vaccine in 2020; Pneumococcal conjugate vaccine (PCV) and MR in 2021; and Human Papillomavirus vaccines (HPV) in 2022.

- **Financial Sustainability Analysis**

The strategies for Government to mobilize resources for the cMYP would be based on mix of options but underpinned by: mobilization of additional resources (local and external), increase in reliability of resources, and strategies to increase programme efficiency.

Sources for resource mobilization include:

- Additional resources from the government budget for the health sector;
- Additional resources from the Ministry of Health budget for immunisation;
- Increased resource input from decentralized local governments

4.3.2 Status of Outstanding Co-financing

As part of the Basic Package of Health and Nutrition services (BPHNS), the Government of South Sudan is committed to provision of immunisation services to women and children. The Government's contribution to strengthening immunisation services includes, among others, the payment of staff salaries at all levels, infrastructure development, recurrent expenditure and provision of county cash transfer for health service delivery. However, due to economic difficulties, the South Sudan Government has not been able to meet its co-financing obligations since 2015 amounting to USD 923,000.00. On 5th December 2017, the Ministry of Health submitted a proposal to Gavi to stagger payment of the co-financing obligations as indicated in the table below. Gavi's High Level Review Panel accepted and maintained its commitment to support funding for Penta and IPV for South Sudan.

Table 7: Staggered payment plan for co-financing obligations by MOH

Year	Amount Due (USD)	Staggered Payment/ Remark on payment		
		2018	2019	2020
2015	272,000.00			
2016	310,000.00			
2017	341,000.00			
Total	923,000.00	350,000.00	300,000.00	273,000.00

During the joint appraisal session, the Gavi team informed South Sudan that co-financing obligations for 2015 and 2016 have been waived while the decision to waive co-financing obligation for 2017 is pending approval by the High-Level Review Panel. This implies that the MOH will re-submit another proposal to Gavi on commitments to impending co-financing obligations. Gavi conducted a consultative mission in February 2018 to identify the outline of an approach with the MoH and the main NIP partners.

4.3.2 Polio Transition Plan

South Sudan started polio transition process in 2016 with asset mapping. As of December 2017, all stakeholders are aware of the polio transition with the ramp down of funding from GPEI. Polio transition planning committee has been established with the following achievements; polio asset mapping, documentation of lesson learned and best practices, with 3 health priorities identified (EPI, IDSR and health system strengthening through the Boma Health Initiative (BHI) and conducted polio simulation exercise. Polio transition plan and business case was presented to the ICC on 14th December 2017.

During the October 2017 Gavi HSS reprogramming meeting, some gaps in vaccines distribution and cold chain management was agreed to be covered by Gavi under HSS.

As of January 2018, the country is finalizing costing of the Transition Plan, the Business Case and organizing a high-level advocacy meeting to mobilize resources for the polio transition. The transition plan will be finalized before end of June 2018 as recommended in the Transition Independent Monitoring Board's report of December 2017 which highlighted the need for new donors to fill in gaps after GPEI withdrawal.

4.4. Technical Assistance (TA)

Note: New Technical Assistance requirements for the next calendar year should be indicated in section 6 rather than this section.

Currently existing TCA Support that need to be extended in 2018

***WHO*:** Coverage improvement activities, data management, capacity building and technical guidance for new vaccine introduction support, financial management, are the key components of the TCA informing the Technical Assistance (TA) to WHO South Sudan. The TAs roll out of direct implementation of activities contained in the HSS work plan. The following TA are supported

1. Immunisation Services Officer (100%)
2. NPO Routine Immunisation Officer (100%)
3. NPO Vaccine Preventable Diseases Surveillance (100%)

UNICEF: To provide technical and management support for cold chain and logistics operations aiming at improving vaccine management indicators. The officer's work at all levels from national to the health facility conducting both quality improvement and cold chain expansion activities.

1. Cold Chain Logistics Advisor to MOH – P3 (100%)
2. Cold Chain & Logistic Specialist – P3 (100%)
3. Cold Chain Officer. (NOA) (100%)
4. 5 UNICEF Field Health Officers (NOB)

5. One Immunisation Manager P4 (50%)
6. One C4D Specialist P3 (100%)
7. One C4D Officer NOB (100%)

JSI's Technical Assistance in 2016 to 2017 with Gavi-SRI Project

1. Immunisation Technical Advisor to provide TA to the MOH EPI Department

Under Gavi-Strengthening Routine Immunisation, (Gavi-SRI) project JSI supported the MoH in collaboration with partners to achieve the following objectives:

Objective 1: Strengthen leadership & governance
Objective 2: Support CSOs for communication and demand generation
Objective 3: Strengthen MoH and partner skills in program management
Objective 4: Support cold chain and logistics
Objective 5: Improve information sharing, data quality and use

1. Strengthen leadership & governance

- JSI assisted EPI Manager in day to day EPI activities such as planning, coordination and management and response to some correspondences
- JSI worked together with other partners to strengthen coordination of immunization activities at national and state Level by developing TORs for Cold Chain & Logistic Working Group,
    - EPI Technical Working Group,
    - State Coordination &
    - Revised Inter-Agency Coordinating Committee and followed up on the functionality of the various coordination bodies to strengthen leadership
- JSI Co-facilitated in-service IIP training in Terekeka, Palouch, for Core Group in Juba, Measles follow up Micro Planning TOT in Juba and EVM training in CES & WES
- Conducted on Job trainings and mentoring during supportive supervision at states, counties and health facilities to strengthen leadership and governance of immunization programme.

2. Support CSOs on communication and demand creation

JSI structured this support through a CSO platform which was disintegrated in 2016 because of some internal issue in the lead CSO. Most of the planned activities to support the CSOs in demand creation could not take place. Lesson learned here is that CSOs Mobilization and activity coordination can be easy when the Civil Society organizations work under a platform for easy Monitoring and follow up.

However, a few CSOs benefited from technical assistance and advocacy mainly during Supportive Supervision visits; AVSI in Torit, OPEN in Maridi, CDTY in Yambio, SMC in Bor, ARC in Kapoeta and Magwi etc

3. Capacity Enhancement of MOH & Partners in Program management

- JSI facilitated development of routine immunization road map 2016 to revitalize the entire EPI programme. The RI road map was ratified by all partners and the activities were in cooperated in the annual work plans of 2016 and 2017.
- JSI also carried out Supportive Supervision visits in; Former Central Equatoria State (Former Eastern Equatoria State (Torit, Kapoeta North, East and South), Western Bahr El Ghazal State (Jur and Wau), Western Equatoria (Yambio, Nzara, Ibba and Maridi) to strengthen the capacity of the government staff and partners in the program management at sub national level
- JSI participated in annual work Planning, meetings for reviews events launching and in Coordination meetings of ICC, EPI TWG, EPI Log WG etc.

4. Support cold chain and logistics

- JSI Supported EVM in-service trainings by co-facilitation of trainings
    - Yambio former Western Equatoria State and Juba former Central Equatoria State
    - Participate in EPI Logistic Working group to Plan and implement the group's work plan and will Participate in the planned EVMA in 2018
    - Supported CCOP & ODP data/information collection coordination

5. Improving information sharing, data quality and use

- JSI participated in the revision of data collection tools such as EPI register, Child Health card,

Talley sheets, monthly reporting form and defaulter tracking card that were printed in 2017

- Through Supportive Supervision, JSI supported EPI staff in sub-national level to visualize their data in the counties visited during SS visits
- Supported Data quality assessment that was led by CDC AFENET and will take part in improvement planning and implementation
- Advocacy to present data regularly in EPI TWG meetings
- Works with other partners to establish Data working group. The TOR is drafted and ratified

CDC - In 2017, CDC was funded to conduct national data quality review and use the findings to develop a data quality improvement plan to mitigate the system bottlenecks. The report and the quality improvement plan are being finalized and will be shared with the country in March 2018.

5. UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

Prioritised actions from previous Joint Appraisal	Current status
Enhance human resource capacity (including the staff of implementing partners/Fund managers) and numbers at all levels (including CC technician)	**Done** - Training were conducted at all levels covering REC, EVM, Data Management and Surveillance especially in the seven relatively safe states. Implementing partners participated.
Enhance financial management system and build capacity to enable proper fund managements at all levels	UNICEF has implemented harmonised approach to cash transfers and WHO through other funding supported has recruited 12 Finance Admin and Logistics Officer in 12 field operations sites, and established SOPs for funds handling and reporting. In addition, WHO has established and integrated funds transfer mechanisms and further engaging with other suppliers to enhance timely delivery of funds.
Develop evidence based Social and behavioural change communication strategy for EPI including state specific plans	**70% complete** – KAP assessment has completed data collection and at the stage of analysis.
Develop new cMYP for 2017 to 2020 and EPI/Surveillance review and PIE should be completed as planned	**90% complete** – Final stages of consultation are to be conducted after sharing of Draft Zero.
Implementation of EVM improvement activities'	**Partially done** – Training of 303 health workers in 7 states (48 counties) was conducted in 2017; National EVM Self-Assessment conducted.
Establishment of sentinel surveillance for Rota and PBM	**Not Done –** This will be done in 2018. Key persons identified in MoH and will be trained.
Strengthen the existing DHIS to meet the EPI data requirements	**Done –** DHIS now captures gender data, however incorporation of other data including vaccine stock information, supportive supervision, and programme management for EPI are being considered.
Transition planning process for polio assets	**70% complete** – Assets mapped, simulation exercise done, best practice and lesson learnt documented, life polio transition plan completed and Business Case in process and consultant to develop investment case is to be hired.
Men A campaign	**80% complete-** Phase I completed in 6/10 states with 4M persons 1 – 29yrs vaccinated representing 92% and Phase II is on-going in 4 former states of which 1, Western Equatoria is completed and the rest, Jonglei, Unity and Upper

	Nile in progress.
Additional significant IRC / HLRP recommendations (if applicable)	**Current status**

If findings have not been addressed and/or related actions have not taken place, provide a brief explanation and clarify whether this is being priorities in the new action plan (section 6 below).

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 (2018):

In line with the recommendations of the JA Report of 2016, Gavi Secretariat, WHO, UNICEF, JSI and WHO conducted two rounds of meetings in June and October 2017 in Nairobi and Juba respectively to complete the reprogramming of the Gavi HSS grants. This was in response to the low utilisation rate (9%) of the funds after the first year (2016) of disbursements as already shown above. Following that key activities planned in the year 2018 are as follows**:**

Key Gavi Activities in 2018 South Sudan EPI Calendar	**Lead agency**	**Timeline**			
		Q1	Q2	Q3	Q4
Accelerate coverage improvement activities (outreaches, PIRI, RRMs)	WHO & UNICEF	x	x	x	X
Conduct integrated Service Availability, Readiness and Assessment, and Cold Chain Equipment Inventory	WHO	x	x	x	
Recruit staff for the 22 new states and implement the performance based incentive package	WHO	x	x	x	x
Implement CCEOP plan and conduct installation of new, assessment and maintenance of existing cold chain infrastructure.	UNICEF	x	x	x	X
Solarization of 16 Counties and 5 State Cold Chain Stores.	UNICEF	x	x	X	x
Construct three regional vaccine stores	UNICEF	x	x	x	X
Conduct EVM Assessment	UNICEF, JSI	x	x	X	x
Programme Capacity Assessment	Gavi		x		
Implement the Boma Health Initiative in Jubek State	WHO	x	x	x	X
Develop EPI Demand Creation Strategy and expand on demand creation activities through integration of social mapping into current micro plans	UNICEF	x	x	X	
Sustain the gains made by supporting the current national STOP mentorship project	CDC	x	x	x	X
Trainings covering leadership, middle level management, EVM, and Immunisation in Practice; CSOs skills for immunisation advocacy, demand generation and service provision	WHO, UNICEF & JSI		x	x	x
Develop and implement data quality improvement plan	CDC, WHO, JSI	x	x	x	x

Strengthening coordination committees and TWGs at national and state levels	JSI, WHO, UNICEF	X	X	X	X
Develop communication strategy and facilitate implementation	UNICEF, JSI	X	X	X	X
Establish and ensure the functionality of the Vaccine Independence Initiative	WHO		x	x	

Key Issues Discussed in JA for 2017

- **Asset Register**

Extensive discussion on establishing asset register for Gavi supported asset was discussed. A committee consisting MoH, UNICEF and WHO was to convene and develop mechanisms to ensure that assets are utilised in accordance with the Grant Agreement.

- **Utilisation of Gavi Procured Vehicles for Immunisation Services**

Alliance partners were concerned about the current modality of the MoH on the use of the 10 vehicles initially intended for distribution for the EPI activities in the former 10 states. Though the alliance partners appreciate the current challenges with the political environment as well as increase in the number of states to 32, the modality of assigning the vehicles to the three coordination zones for the Boma Health and its impact on immunisation service outcomes was not clear. Alliance partners were to continue to engage the MoH to understand and device a strategy to ensure the effective use of the vehicles in accordance with the objectives of the HSS grant.

- **Disbursement of USD541,000 to MoH**

The MoH is to respond to the utilisation of the funds disbursed through WHO. WHO with other Alliance partners are to continue to engage the MoH leadership to respond to resolve the issue before the PCA.

Currently, MOH is putting together DFC disbursement report to be shared with WHO and Gavi once the report is finalized.

- **National Vaccine Store Complex**

The National Vaccines Store is a multi-purpose EPI complex comprising of both Vaccine Stores and EPI Offices planned to be constructed in Juba to avert limitation of the existing facility (primarily, highly crowded cold rooms and lack of space for future expansion or replacement of aged ones, lack of dry storage spaces, lack of EPI offices for oversight, etc). The architectural designs are near completion with support from GAVI HSS. In 2017 Reprogramming meetings in Nairobi and Juba, the MoH prioritised the National Vaccine Store Complex for strengthening the immunisation system. In the JA session, the MoH expressed concern about omission of its priority item in the reprogrammed activity. Gavi explained that the funds for reprogramming could not accommodate the request over the 2years period, noting other priorities tabled by the MoH, and advised that National Vaccine Store investment should be considered in the HSS proposal after 2019.

New TCAs requested for 2018

WHO: Following the Gavi reprogramming meeting in Nairobi and Juba in 2017, a TA need was requested to support implementation of the Boma Health Initiative (BHI) and strengthening support to the Policy Planning and M&E Directorate to address leadership, policy and planning challenges to implementation of the HSS. This was in view of the rolling of the new Health Policy. The following proposals were made

1. Consultant for implementation of BHI (100%) for 1year (2018)
2. Consultant for Policy and Planning leadership strengthening at MoH (100%) for 1year (2018)
3. Data Quality Improvement Officer NPO (100%)
4. Technical Officer/Coordinator (1yr) – Coverage improvement activities for conflict affected counties at the Routine Immunisation Control Room
5. Short term consultancy for building consensus and development of the Health Education and Promotion Policy focusing on Demand Creation for Health Services

JSI

Following the Gavi Reprogramming meeting in Nairobi and Juba, JSI revised its objectives to cover the following: strengthen coordination, leadership and governance at all levels; support county implementing partners and Civil Society Organization for equitable service delivery and demand generation; and strengthen system to improve access and use of data. Based on these, 3 additional TA was requested for the 2018-19 TCA as below.

1. HSS Technical Officer to support HSS
2. Communication Officer to Strengthen RI communication
3. Finance and Administration Officer to offer administrative support for JSI Office in South Sudan and the EPI
4. Consultant to provide technical support

CDC

As part of efforts to bridge HR gaps in EPI, the National STOP project was developed in 2013 and implemented in 2015. This three-year mentorship programme has recruited 56 mentees distributed at National (8) and State (48) levels. The project is in the second year; however, due to the economic crisis the MoH is unable to fulfil its financial obligations for transitioning of the staff into the mainstream to fill vacancies in Routine Immunisation, VPD Surveillance, Data Management, Cold Chain and Logistics, and Communication and Social Mobilisation (Demand creation). CDC is also unable to fund 100% of the cost. The latest assessment conducted by the programme to measure the progress of learning of the mentees revealed that over 60% of the state mentees are able to perform 60% of the deliverables while 80% of the national mentees could perform 85% of the minimum deliverables. Because of the above gains, the MOH (in the JA report 2018), is requesting that the program scale up to the 22 additional states. A detailed background of the project is attached as an **addendum** to the JA report. Thus, the following request is made by the MoH

1. Sustaining the cost of incentive for the 56 mentees
2. Recruiting a full complement of mentees for the 22 new states (5 per state).

Key finding 1	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.
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 outreaches 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 2018; the dry season that ends in April should be maximised
Technical assistance needs	Technical Officer/Coordinator for the Routine Immunisation Control Room for Conflict affected counties - **WHO**
Key finding 2	There are gaps in quality of data, coverage of DHIS2, low reporting rate, and inadequate analysis and use of data by the lower levels for decision making Poor Data quality
Agreed country actions	▪ Develop and operationalize the data quality improvement plan as part of the cMYP ▪ Continue to roll out the Data quality improvement training in the six remaining

	former states ▪ Institute Data quality audit at least twice a year ▪ Develop and implement a Dash board for monitoring of Timeliness and Completeness at all levels. ▪ Develop and disseminate EPI Monthly Bulletin ▪ Develop and disseminate immunisation ranking system and share with High level panel (DG's, Parliamentarians etc.).
Associated timeline	Jan – October 2018
Technical assistance needs	Data Quality Improvement Officer
Key finding 3	Inadequate Cold Chain coverage (37%) and vaccines management at lower levels affecting coverage improvement efforts and risk high vaccine wastage rates.
Agreed country actions	▪ Implementation of CCEOP & Fund raising for cold chain maintenance (post CCEOP) ▪ Strengthening of Logistics Management Information System & Enhancing Data Visibility ▪ Training and capacity building on EVM, LMIS, and SOPs for vaccines and cold chain management. ▪ Solarization of County and State Cold Chain Stores. ▪ Building of Cold Chain stores (NVS, 3 regional vaccine stores). ▪ Conduct Cold Chain Equipment Inventory and Effective Vaccine Management assessment through the SARA survey. ▪ Cold Chain Equipment installation & maintenance ▪ Implementation of EVM Improvement Plans
Associated timeline	January – December 2018
Technical assistance needs	Short term consultancy for EVMA and CC inventory - **UNICEF**
Key finding 4	Low demand creation
Agreed country actions	▪ Update of health education policy to incorporate Communication for EPI ▪ Develop comprehensive communication plan for EPI ▪ Capacity building of communities and frontline Health Workers ▪ Dissemination of Rapid Assessment Report ▪ Integrated social mapping into micro planning for all service delivery strategies
Associated timeline	2018 for Health education policy
Technical assistance needs	Short term consultancy for building consensus and development of the Health Education and Promotion Policy focusing on Demand Creation for Health Services – ***WHO*** Communication Officer to support the Health Education Department of MoH to take leadership on coordination of EPI Communication interventions- ***JSI***
Key finding 5	There is need to strengthen coordination capacity of the EPI through establishing a monitoring mechanism that addresses implementation rates as well as ensure that key commitments including co-financing decisions and financial sustainability decisions are implemented.
Agreed country actions	• Produce new calibre of professional immunisation staff to handle and administer vaccines to sustain confidence in the benefits of vaccines • Establish performance-based incentive for current staff re-ignite commitment • Address challenges with co-financing commitments • Strengthening leadership and management capacities of state and county EPI team

	• Expand the NSTOP project to cover the 22 additional new states
Associated timeline	**2018**
Technical assistance needs	Technical Officer to support HSS - **JSI**
Key finding 6	The nSTOP project is at risk of sustaining gains made for the 56 mentees mentored for the past 2years because MoH is unable to fulfil its financial obligations as per the transition agreements with CDC-AFENET, and CDC does not have 100% funding for the project.
Agreed country actions	• Sustained financial support for mentees for the national and 10 hubs. • Expand the NSTOP project to cover the 22 additional new states
Associated timeline	2018
Technical assistance needs	Nil

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

Briefly describe how the Joint Appraisal was reviewed, discussed and endorsed by the relevant national Coordination Forum (ICC, HSCC or equivalent), including key discussion points, attendees, key recommendations and decisions, and whether the quorum was met. Alternatively, share the meeting minutes outlining these points.

If applicable, provide any additional comments from the Ministry of Health, Gavi Alliance partners, or other stakeholders.

The Ministry of the Health and the Gavi Secretariat scheduled the 2017 Joint Appraisal on 5th – 9th February 2018. In January 2018 Gavi Secretariat reminded the Ministry of Health of the Joint Appraisal on the agreed date.

The Ministry of Health convened the Expanded Programme on Immunisation Technical Working Group (EPI TWG) meeting on 19th January 2018 to form an in- country JA Committee comprising the Ministry of Health, WHO, JSI and UNICEF and CDC/AFENET. The committee established sub committees on Programme Management, Service Delivery, Communication and Social Mobilisation, Vaccines and Cold Chain as well as Data Management were formed.

Preliminary JA report was shared with the External JA team on 24th and 26th January 2018. Also shared were the new cMYP, the Final comprehensive EPI and VPD Surveillance Review Report and Data Quality Appraisal Report and programme files.

On 5th – 7th February 2018, the external JA team comprising WHO IST/ESA and Gavi Secretariat worked with the in-country team to review the draft JA report. Four Groups were formed to review assigned sections of the draft JA report after which comments were discussed by the whole team.

The ICC meeting was held on 8th February 2018, chaired by Dr Samson Paul Baba, Advisor on Community Health and Special Programmes in the Minister 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 ICC fixed the next JA on 5th – 9th November 2018.

8. 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.

	Yes	No	Not applicable
Grant Performance Framework (GPF) reporting against all due indicators		No	
Financial Reports			
Periodic financial reports	Yes		
Annual financial statement		No	
Annual financial audit report		No	
End of year stock level report	Yes		
Campaign reports	Yes		
Immunisation financing and expenditure information	Yes		
Data quality and survey reporting	Yes (on-going)		
Annual desk review	Yes		
Data quality improvement plan (DQIP)	No		
If yes to DQIP, reporting on progress against it			
In-depth data assessment (conducted in the last five years)	Yes (final report expected)		
Nationally representative coverage survey (conducted in the last five years)	Yes (on-going)		
Annual progress update on the Effective Vaccine Management (EVM) improvement plan	Yes (for NVS)		
Post Introduction Evaluation (PIE)			NA*
Measles-rubella 5-years plan	Yes		
Operational plan for the immunisation program	Yes		
HSS end of grant evaluation report			NA
HPV specific reports			NA
Transition Plan	Yes		

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.

Ministry of Health conducted Immunisation & surveillance Information system assessment (IISA) was conducted with support CDC and other partners (UNICEF, JSI, WHO), the report will be available by June 2018

EPI coverage survey conducted in 2017, report will be available by end of April 2018

[i] South Sudan Humanitarian crisis of catastrophic proportion, UN OCHA, September 2017; https://www.unocha.org/story/south-sudan-humanitarian-crisis-catastrophic-proportions

Addendum I
Priority activities of CDC AFENET for funding consideration 2018-2019

Background/Justification:
The EPI capacity building programme strives to contribute to the goal of the development of a functional Immunisation programme at the central, state and administrative levels of the Republic of South Sudan. The goal arose from the Technical Advisory Group (TAG) meeting in 2013, who recommended that South Sudan develop a long-term plan for transitioning key technical support from external partners to national staff. The country proposed a 3-year MoH EPI human resources development and staffing project to sustainably address the chronic staffing gaps in the EPI.

In line with the current staffing structure of the national EPI program (cMYP 2018-2022), the EPI capacity building programme recruited 56 South Sudan nationals as mentees in the following EPI competency areas: routine immunisation (operations), supplemental immunisation activities, data management, vaccine preventable diseases, EPI communication, cold chain and vaccine logistics (national), cold chain technicians (national).

The recruitment of the mentees is conducted by the MOH (according to MOH recruitment policy) with CDC-AFENET ensuring that the process and the candidates meet the required standards. There are 8 mentees at national level and 48 mentees at state level in all the 10 hubs and the 2 administrative areas. The recruitment at state level is based on need.

The primary mentor to the mentees is the project advisor, deputy advisor and the STOP programme consultants. In addition, the national EPI manager the deputy EPI manager, immunisation partners at national and state levels, composed of WHO, UNICEF and BMGF consultants play critical roles in the mentorship of the mentees.

Minimum deliverables:
The programme has defined clear minimum deliverables that mentees must achieve before they are certified as being successful. These include being able to conduct the following activities:

Routine immunization mentees:
1. Conduct supportive supervision at all levels
2. Plan and deliver the Immunisation in Practice training
3. Conduct a REC training and assist facilities to develop facility micro plans

EPI communication
1. Conduct periodic exit interviews at facility level to assess the quality of IPC during vaccination sessions
2. Conduct community behavioural surveillance to understand reasons behind children not getting vaccinated
3. Use the above information to develop action plans to improve on routine immunisation.

Vaccine Preventable Disease (VPD) surveillance mentee
1. Prepare and report VPD
2. Summary report of active surveillance visits
3. Quarterly epidemiological descriptive report of VPD in your state with focus on measles

EPI Data mentees
- Prepare state level monthly EPI performance report; analyse and share with national and county levels
- Monitor timeliness and completeness of reporting at state level

- Conduct data related supportive supervision of M&E officers and vaccinators

SIA mentees

- Conduct a pre-campaign assessment and assist with the preparations
- Conduct intra-campaign supervision
- Write an SIA report

Logistics and cold chain:

- Conduct national vaccine forecasting and planning for the distribution of the vaccines
- Monitor vaccine and devices at NVS using the stock management tool (SMT) at national level and ledger books at subnational levels
- Conduct EVM trainings and supportive supervision.
- Conduct CCE assessments, repairs and installations of new equipment

Achievements

Although the focus of the program in the first 2 years was on building the capacity of the mentees to undertake the above deliverables, the programme has made numerous significant contributions to strengthening the EPI as follows:

- In 3 states, the RI mentees have been appointed acting state EPI managers
- Majority of supervisory visits to states, counties and facilities have been conducted by both national and state mentees.
- For the first time, timeliness of reporting was tracked in 2017. As at end of December 2017, 68% of states were reporting to the national level on time.
- Thirty-five CCE have been assessed, 25 repaired and 7 installed.
- The national cold chain logistician and the RI mentees have conducted EVM trainings in 4 states.
- National and state RI mentees supported 18 counties to develop micro plans in 6 states.
- National and state VPD mentees manage measles case based surveillance and in some state the mentees manage the measles surveillance data base.
- National and state SIA mentees are routinely deployed to supervise SIAs in hard to reach and insecure areas because of their local knowledge of the country.

The latest assessment conducted by the program to measure the progress of learning of the mentees revealed that over 60% of the state mentees are able to perform 60% of the above deliverables while 80% of the national mentees could perform 85% of the minimum deliverables. Because of the above gains, the MOH (in the JA report 2018), is requesting that the programme scale up to the 22 additional states.

Sustainability and exit plan

At the initiation of the project, a transition plan outlining how full salary support for the mentees would be assumed by the MoH was agreed between CDC, AFENET and MOH. It was agreed that during the project implementation period, CDC will cover 100% of the mentee stipend in the first year and 80% in the second year. MoH EPI will cover 20% of the stipend in the second year. In the 3rd year of the project, CDC and the MoH will equally cover the cost of mentees' stipend. However, due to the economic difficulties occasioned by the on-going conflict, the MoH is not able to fulfil their costs. CDC is unable to fund 100% of the program, which has almost doubled its costs from what was originally anticipated.

Interrupting the programme at this stage will lead to a loss of the huge investment in EPI human resources that have been made and the gains made in strengthening the South Sudan Immunisation programme since December 2015.