Programme Support Rationale – 2016

This document is intended to accompany national health and immunisation plans, budgets, and other reporting (e.g. performance framework and operational work plan & budget) submitted to Gavi as part of routine monitoring.

Part A: Country information, current Gavi support and lessons learned

1. Country Information

Country name	*Liberia*
Years of National Health Plan:	*2011-2021*
Years of immunisation strategy (e.g. cMYP):	*2016-2020*
Start and end dates of fiscal period	*July 1 – June 30*
Total annual immunisation budget (past yr.):	*US$ 500,000 (GOL)*
Total health expenditure/per capita (past yr.):	*US$ 11.23 (FY 2014/15)*
Start and end dates of annual operational work-planning	July 1- June 30
Target date for submission of Gavi's annual operational work plan and budget	*December 15, 2016*
Target date for funds arriving in country	*January 2017*
Transition status from Gavi support (if relevant)	*NA*
Next portfolio review (final year of immunisation strategy)	*2020*
Investment in routine immunisation per child	

2. Existing portfolio of Gavi support (vaccines to be renewed)

Vaccines (Routine, SIAs)	*Routine: Pentavalent, Pneumococcal conjugate vaccine, Rotavirus vaccine, Inactivated Polio Vaccine, Yellow Fever, MCV 2nd D and HPV*
Financial (HSS, Ops, VIGs)	*IPV & HPV*

3. Status of country's performance against key immunisation indicators aligned to the Gavi Strategy (2016-2020), based on the country's updated performance framework (including source and year).

Routine coverage: Penta 3 coverage at national level (Penta 3)	*65% (2015)*
Measles containing vaccine (first dose) coverage at national level (MCV1)	*64% (2015)*
Fully immunised child (define the vaccines included: BCG, OPV, Penta, PCV, Measles, YF and Rota)	*54% (2015)*
Drop-out rate between Penta 1 and Penta 3	*15% (2015)*
Equity of vaccine coverage by geography: percentage of districts or equivalent administrative area with Penta 3 coverage greater than 80%	*20% (2015)*
Equity of vaccination coverage by poverty status: percentage point difference in penta3	*22% (2013)*

coverage in highest vs. lowest wealth quintile)	
Vaccination coverage by education status of mother/caretaker: percentage point difference in penta3 coverage among children whose mother/caretaker received no education vs. completed secondary education or higher	*14% (2013)*
Data quality: percentage point difference between Penta 3 national administrative coverage and survey point estimate	*15% (2015)*
Country composite score on last Effective Vaccine Management (EVM) (year and aggregate score)	*61% (2015)*
Other relevant information…. (add as needed)	

4. Past grant performance, implementation challenges and lessons (3-4 pages)

To complement the data as reported in the updated performance framework and financial reports, explain any issues such as the under achievement of targets, associated implementation challenges and key lessons from the past reporting period.

Briefly comment across vaccine (NVS) and health systems and immunisation strengthening support (HSS, Ops, VIGs):

- Implementation progress: actual vs. planned activities
- Implementation performance: achievements of coverage targets, HSS targets and of intermediate results
- Financial performance: significant over or under expenditures
- Participation of key stakeholders during the past year of implementation
- If relevant, the use of HSS performance payments
- Status / findings from data quality assessments or surveys completed since last reporting to Gavi

Implementation Progress

NVS

1. Between 2014-2016, the below new vaccines were introduced into the Country's routine immunization program:
    - January 9, 2014, Pneumococcus Conjugate Vaccine was introduced and 142,294 (90%) children received the first dose of PCV - 13 and 71,144 (45%) received the third dose by December 31, 2014.
    - April 22, 2016, Rotavirus Containing Vaccine was introduced nationwide into the routine immunization as well as the Human Papillomavirus Vaccine (HPV). At the end of HPV dose one administration in Bong and Nimba counties, the below results were obtained:
        - 14,218 girls 10 years in and out of schools were targeted across the two counties. In Bong County, 5,345 (98%) against the target of 5,452 received HPV vaccine dose one. While in Nimba County, 7,540 (89%) against the target of 8,765 received HPV vaccine dose one. This gives an overall coverage of 93.5% or 94% for the country.
2. Two EPI quarterly review meetings were held
3. Immunized 65% of infants with penta-3, 64% with Measles, 74% with BCG, 57% with Yellow Fever, 64% with OPV-3, 53% with Pneumo-3 and 54% were fully immunized in 2015
4. Continuous strengthening of VPD surveillance activity

HSS # 2

- Conducted nationwide health facility micro-planning exercise
- Implementing Urban Immunization Strategy phase 2 to address low coverage and equity issues in urban Montserrado districts

- Procured 100 pieces of solar direct drive (SDD) to strengthen cold chain capacity at health facility level
- Procured and installed two Regional walk-in cold rooms
- Completed the construction of two Regional cold store buildings to improve vaccines management
- Purchased 15 vehicles to strengthen monitoring, supervision and distribution of vaccines
- Procured two trucks (one refrigerated and one dry goods) to strengthen Vaccines Supply Chain
- Supported training in data use for decision making to drive data quality
- Conducted rapid assessments, stringent pre-testing of message among non-compliant groups and active rumour tracking to ensure that faulty perceptions and beliefs are addressed and key to rebuilding confidence for facility-based measles campaign
- Conducted successful integrated nationwide measles campaign
- Intensive community engagement contributed to the high coverage during the measles and polio campaigns in 2015.
- Conducted Service Availability Readiness Survey (SARA) in 2016
- Printed health facility ledgers for data quality improvement
- 57% of health facilities submitted HMIS reports in time in 2015 compared to 47% in 2014
- 78% of health facilities reported in 2015 through the HMIS compared to 73% in 2014

HSS 1 & EPI Recovery

During the period under review, the below listed activities were conducted:

1. Outreach – 19.5% (20,525) children under one year were immunized through outreach
2. Supportive supervision:
    a. 75% of health districts received supportive supervision
    b. 52% of health facilities received supportive supervision
3. Periodic Intensification of Routine Immunization in all counties with focus on measles as a response intervention targeting children 9-23 months
4. Produced and distributed EPI data tools to all health facilities
5. Purchased and distributed rain gears to 530 health facilities vaccinators and certified midwives to enhance outreach services
6. EPI quarterly review meetings held to discuss immunization performance

Stakeholders' Participation

During implementation of the HSS grant # 2, the below tasks were performed by stakeholders: These stakeholders include: World Health Organization (WHO), UNICEF, Liberia Immunization Platform (LIP), Ministry of Finance and Development Planning (MFDP), and USAID.

- Regular meetings;
- Planning and implementation of Integrated Measles Campaign as well as the post measles coverage survey and the Service Availability Readiness Assessment (SARA); and
- Measles outbreak preparedness and response interventions

Challenges

HSS

- Inadequate number, distribution, and capacity of human resources to implement the grant
- Poor quality and incomplete data at subnational levels (county and facility) due to inadequate support for

appropriate implementation requires additional support to be implemented appropriately

- Rebuilding trust of caregivers/mothers across the continuum of communication services to utilize immunization services due to the impact of the EVD crisis
- The level of outreach activities is insufficient to deliver immunization to under-served or high-risk populations (29% of Liberia's population live beyond 5 KM or more of a health facility-lack access to health care)
- Absence of a continuum of communication services from the household to health facility, outreach and community levels
- Rumours about vaccination during and after EVD outbreak – Misperception from the public regarding vaccination services. For instance, the public harboured notion that routine immunization vaccines were EVD vaccine for children
- Impact of rumours - This led to dip in immunization coverage rates from 89% and 74% for the third dose of Pentavalent vaccine and measles containing vaccine to 65% (Penta 3) and 58% (Measles). As a consequence, the country experienced sporadic outbreaks of measles and pertussis

4.1. Financial management

Describe, for example: utilization rate of past financial support and financial capacity constraints; modifications from previous financial management arrangements; major issues arising from Programme Capacity Assessment, cash programme audits or monitoring review; degree of compliance with Financial Management Requirements.

Utilization of the Gavi grant is very low because of many factors. As of September 30, 2016, less than fifty percent (42.1%) of the total fund managed by the MOH was expended. The sum of US$ 3,072,828 was available for the year, of which US$ 1,294,368.39 was expended leaving a balance of US$ 1,778,460.35. Factors contributing to low utilization of funds include; low absorptive capacity, internal bottlenecks and many competing program priorities with very few competent and qualified staff. Please see table below for budget summary:

Grant Type	Opening Balance/Amount BF	Total Expenditure	Balances as of Sept. 30, 2016
HSS	$2,441,284.00	$1,095,814.03	$1,345,469.97
Recovery	$400,254.39	$137,176.73	$263,077.66
HSS Old (2007)	$231,290.00	$61,377.28	$169,912.72
Total	**$3,072,828.39**	**$1,294,368.39**	**$1,778,460.35**

Although the Ministry of Health has a financial management system that is capable and competent to manage the grant, it would be very resourceful were we to have a dedicated GAVI HSS grant manager that will focus specifically on the day -to -day implementation and monitoring of the grants. For instance, the Office of Financial Management (OFM) is managing funds from multiple sources (i.e.: USAID/FARA, Pool Fund, UNICEF, WHO, WAHO, AfDB, etc.) currently and will continue to manage all MOH financial resources within its custody.

There has been no major change from the previous financial management arrangement except with the introduction of new financial management software (NetSuite), from SAC ACCPAC. NetSuite is said to have better financial management features than SAC ACCPAC. It has features that include stock (drugs and medical supplies), assets (non-medical items) and personnel (payroll) management.

Overall, the grant management has conformed to the Government's financial management requirements. The Ministry's Office of Financial Management (OFM) ensures that the grant expenditures follow the 2009 Public Financial Management (PFM) and the 2010 Public Procurement Concession Commission (PPCC) Acts that guides public sector financial management. The MOH is committed to the adherence of public financial management instruments and will endeavour to maintain that during the implementation of the Gavi grants.

The grant is audited annually and recommendations emanating from these audits are acted upon. However, since the implementation of the Gavi grant, there has been no report of fraud, and the MOH will ensure that measures are

instituted to reduce financial management risk and the safety of funds within its coffers.

The Health Sector Pool Fund was established in April 2008 by the Government of Liberia because of the large number of health actors presented a major challenge to achieving alignment behind the National Health Plan (NHP), which translated into excessive transactional costs for the government. The objectives of the pool fund are three-fold: (1) to help finance priority unfunded needs within the NHP; (2) to increase the leadership of MOH in the allocation of sector resources; and (3) to reduce the transaction costs associated with managing multiple projects from different donors.

The United Kingdom's Department for International Development (DFID), Irish Aid, the Swiss Agency for Development and Cooperation (SDC), the French Development Agency (AFD) and UNICEF currently use the pool fund to provide financial support for the health sector in Liberia. A Pool Fund Steering Committee reviews funding proposals and reports and is the decision making body for the fund. The Steering Committee was set up by the MOH when the Fund was established to ensure transparency, reinforce coordination, and provide a forum for dialogue. It is chaired by the Minister of Health and co-chaired by UNICEF. The committee is comprised of contributing donors to the fund, other GOL ministries and invited representative from major organizations active in the health sector (e.g., USAID and WHO).

4.2. Progress on improving financial sustainability

For areas of Gavi's existing support that represented major investments in recurrent costs, briefly explain progress in planning/sustaining these.
Activities in the current grant that require major investments in recurrent costs are: a) Two regional cold stores (Gbarnga in Bong and Zwedru in Grand Gedeh), b) New National Vaccine Store, c) Two refrigerated trucks for vaccine management, d) Vehicles and motorcycles for central and county level supervision and monitoring, e) Monthly EPI central level staff top-up incentives. The county health teams are absorbing recurrent costs through government budgetary allocation and the monthly incentive payment of EPI staff would be sustained by enrolling all staff receiving incentive under the grant on the MOH payroll. In addition, the regional and national cold stores will be managed under the grant for a short period (1-2 years) and later absorb by the National Drug services (NDS). Refrigerated trucks recurrent cost will be covered by the MOH.

For countries with a transition plan, describe implementation progress of planned transition activities.
Not Applicable (N/A)

Part B: Overview of plans for the duration of the national immunisation strategy[1]

5. Planned vaccine introductions over the duration of the national immunisation strategy

This section should include any future vaccines currently under consideration (including recurrent campaigns) by the country. This document is indicative of countries plans and does not represent a commitment by the country to introduce the vaccines listed below. While high level information critical to advance planning and preparation is requested here, countries will provide greater detail in the annual work plan and budget process.

[1] The funding duration can be discussed in consultation with the Gavi Secretariat

5.1. New Vaccine Introductions and recurrent campaigns

For introductions and SIAs planned in the next 5 years:

- Indicate the vaccine expected to be introduced, the month/year of introduction or SIA, preferred presentation, whether it is routine or campaign, and the additional annual co-financing requirement
- Briefly describe the rationale for inclusion, as well as a description of internal consultation (NITAG, ICC, MoH) and decision-making process including timing for decision, programmatic and financial sustainability considerations, and identification of Technical Assistance needs in the coming years. For countries in transition, describe any changes required to the transition plan for coming years, including rationale and costing/proposed financing.
- Briefly summarise major programmatic challenges to be addressed prior to introduction for each vaccine or SIA (i.e. cold chain expansion). Greater details on activities preparing for vaccine introduction should be reflected in the country's annual work plan.
- *Add additional rows below as necessary…*

Vaccine 1	**Month / year of introduction or SIA**	**Preferred presentation**	**Routine or campaign**	**Estimated annual co-financing**
MR 1	2020	10 doses per vial	Routine	$77,120.00

Comments on the above (optional):

For long term plans, rationale for inclusion, description of decision making process, lessons learned from past introductions, and TA needs:

The Ministry of Health will need technical support over the five years period to strengthen in the Immunization program and increased coverage for all antigens. The areas identified for technical support are described below:

Short term

A. CCL Strengthening Platform for EVM IP implementation
   1. Cold Chain Inventory and rehabilitation and expansion plan,
   2. Temperature Mapping of national cold store and 2 regional cold stores,
   3. Temperature Monitoring Study of the Distribution routes throughout all levels of the supply chain,
   4. Cold Chain Equipment Maintenance Plan,
   5. National, County-level capacitation exercises in cold chain and logistics management

B. Planning for NUVI and PIE e.g. IPV, Rota, HPV, SWITCH tOPV - bOPV
   1. National country level capacitation exercises in immunization service delivery
   2. Review and revitalization of Urban EPI Strategy
   3. Preparation and implementation of Integrated SIAs, NIDs, PIRIs, AVW
   4. Evidence-informed advocacy and social mobilization and community engagement for new vaccine introduction and post-Ebola recovery

C. Coverage survey and external EPI review

Long term assistance and capacity building

A. Immunization Supply Chain Management (iSCM) Strengthening
B. Strengthening of surveillance systems for VPDs and data management
C. Application of evidence-based equity approach for coverage improvement
D. Strengthening involvement of community engagement and civil society in immunization service delivery at national level and subnational levels
E. Capacity building for front line workers and mid-level EPI managers

Technical assistance to support the MOH (EPI program) in day -to -day program management support, Gavi EPI recovery activities, and strengthening of immunization program to address inequities under the broader HSS platform.

Major programmatic challenges to be addressed prior to introduction of each vaccine or SIA and associated steps/timing to prepare for introduction:

Generally, the country has human resources dearth that impedes smooth and effective program management and

implementation. Couple with the health workforce insufficiency is the critical issue of demotivation (i.e.: low financial incentive, poor work environment, etc.) that hinders the health sector performance including the immunization program. However, the Ministry will ensure that measures will be taken to have a success introduction of new vaccines and adopt cost effective strategies to minimize risks and poor utilization of new vaccines.

Key steps towards the introduction of new vaccines include:

a). Conduct public education and community engagements with stakeholders and caregivers

b). Train service providers to administer new vaccines

c). Develop and distribute IEC and BCC materials

Vaccine	Month / year of introduction or SIA	Preferred presentation	Routine or campaign	Estimated annual co-financing
MCV	2018 (1 round)	10 doses per vial	Campaign	$183,722.00

Comments on the above (optional):	

For long term plans, rationale for inclusion, description of decision making process, lessons learned from past introductions, and TA needs:

As a consequence of the EVD outbreaks, huge cohort of susceptible accrued in the country overtime. This led to frequent outbreaks of measles virus (about 1,194 cases from week 34 of 2014 to date) in almost all counties as evident by low coverage rate of (i.e. MCV-58%, 2014). Therefore, in an effort to close the immunity gap created due to low utilization rate and huge un-immunized children and in accordance with the measles elimination strategies, the Ministry of Health along with its partners and in line with the comprehensive multi-year plan reached a decision to:

- Conduct nation-wide follow-up measles campaign in 2018;
- Apply for measles second dose introduction using MR 1;
- Heightening of vaccines preventable disease (VPD) surveillance, monitoring and evaluation;
- Strengthen its capacity to manage case(s) of measles at each level of the continuum of care;
- Conduct formative research to understand the pattern and trend of the outbreaks; and
- Develop detailed and robust measles preparedness and response plan

Major programmatic challenges to be addressed prior to introduction of each vaccine or SIA and associated steps/timing to prepare for introduction:

5.2. Request for vaccine presentation switches for existing support

Vaccine	Month / year of switch	Preferred presentation	Comments
Pentavalent	**January 2018**	**10 doses per vial**	The rationale for the switch is due to limited capacity to store vaccines.

Indicative financial support US $ (HSS, CCEOP, VIG, Ops, & product switch grants)
HSS may be adjusted from year to year.

Total HSS ceiling for the coming 5 years [2]	US$11.84 million

Estimated/projected amount	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
HSS[3]	$4,039,783	$3,549,983	$2,067,834	$1,248,850	$933,550	11,840,000
CCEOP[4]	1,189,181	310,970	220,652	494,295	193,680	2,408,778
CCEOP Gavi joint investment[5]	951,344.8	248,776	176,521.6	395,436	154,944	1,927,022.4
CCEOP country joint investment[6] *Indicate sources e.g:* • *National funds*	-	-	-	-	-	-
• *Gavi HSS*	237,836.2	62,194	44,130.4	98,859	38,736	481,755.60
• *Other partners*	-	-	-	-	-	-
Vaccine introduction grant						
Operational support for campaigns						
Product switch grant						
Total HSIS[7]						

Regarding Performance Based Funding (PBF), choose which data verification options to be used for calculating the performance payments:	Use of country admin data:	*No*
	Use of WHO/UNICEF estimates:	*Yes*
	Use of surveys:	*No*

Commented [VO1]: MR VIG to be added

Commented [VO2]: MCV and MR campaign op cost to be added

Commented [VO3]: Pentavalent switch grant to be added

[2] If the source of the CCEOP country co-investment is Gavi HSS, this should be deducted from the HSS ceiling
[3] HSS amount should be the sum of the amounts which are allocated to HSS objectives
[4] CCEOP = CCEOP country joint investment + CCEOP Gavi joint investment
[5] CCEOP Gavi joint investment should be 50% or 80% of the total amount for CCEOP, depending on the World Bank GNI group
[6] CCEOP country joint investment should be 20% or 50% of the total amount for CCEOP, depending on the World Bank GNI group
[7] Total HSIS = total HSS ceiling + CCEOP Gavi joint investment + VIG + Ops + product switch grant

Programmatic Investments

6. Description of priority interventions for the duration of the national immunisation strategy[8], specific to Gavi investments

6.1 Briefly summarize how Gavi's support fits within the overall context of national health strategy, priority setting and immunisation plan.

a). The Gavi investment aligns well with Liberia's national Health Policy priorities of improving the health status of the populace through:

Increasing access of the populace to high impact evidence-based health interventions: Gavi investment in health systems and EPI are high impact interventions;

Increasing utilization of health services: this priority also aligns well with Gavi investment priorities of increasing the demand for and uptake of EPI and other priority RMNCAH services equitably in all beneficiary countries-thereby increasing utilization of EPI and other RMNCAH services.

Emphasis on equity: Gavi investment, too, puts emphasis on equitable access to EPI and other priority RMNCAH services- and Liberia's National Health Policy as well highlights equity off access to health and other social services;

Effective coordination will be enhanced through data/information sharing, joint strategy formulation and planning, regular joint meetings and deliberations for action. Gavi, similarly, stresses health system leadership and governance that seeks to strengthen coordination of health interventions, improvements in sharing strategic information of health system resources and making evidence based management decisions for effective and efficient performance of health systems in beneficiary countries.

Hence, Liberia MOH priorities in this strategic period of five years align well with Gavi investment priorities.

b). Alignment of Gavi Investment with the National Strategy 2015-2021

The MOH Investment Plan 2015-2021 for Building a Resilient Health System in Liberia, embraces universal access to quality health services; robust health system that is responsive to complex public health emergencies; and providing an enabling environment through effective leadership and governance that builds strong and accountable partnerships with communities and other health partners. Equity in use of health resources, including establishing fair and sustainable health financing are ideals stipulated by the MOH Investment Plan. Strengthening service delivery, logistics and supplies management, strategic information, and establishing quality community workforce are strategic intervention areas planned over the next five years. These align well with Gavi's high impact health system investment areas.

c). Alignment of Gavi Investment with the cMYP 2016-2020

The overall objective of the cMYP is to increase card-validated immunization coverage from 71.4% to 90% nationally with at least 80% coverage in all counties- in addition to reducing measles mortality by 90%. These will be achieved in the next five years through:

- Strengthening cold chain integrity and performance
- Improving stock management of vaccines and other EPI commodities
- Strengthening integration of health services
- Introducing new vaccines
- Building the technical capacity of health workers to be more efficient and productive
- Improving national surveillance
- Improving financial sustainability
- Improving management of immunization program

Therefore, Gavi investment also aligns well with the cMYP 2016-2020, and vice versa.

[8] The funding duration can be discussed in consultation with the Gavi Secretariat

6.2 How did the government ensure Gavi's support was transparently planned with development partners, complementary to, and coherent with Government and partners' support?

The following EPI/MOH led consultative meetings and consensus workshop, tabulated below, ensured the Gavi HSS-3 proposal development process was transparent.

S.No	Type of MOH-Led Consultative Meeting	Timing of the Meeting	Stakeholders that Participated in the Consultative Meeting
1	**Tele-conference between Gavi Secretariat Geneva, MOH and other Key Stakeholders**	**May 2016**	• Gavi Secretariat Geneva • MOH • UN Family Organizations: WHO & UNICEF • USAID • HSS Consultant
2	**Gavi HSS 2016 Proposal Development Consultative Meeting in Monrovia 16th June 2016** **The following were the participants:**	**16th – 17th June 2016**	• Gavi Secretariat Geneva • MOH • UN Family Organizations: WHO, UNICEF, UNFPA • USAID • Liberia Immunization Platform • Ministry of Finance and Development Planning • MOH: Pool Fund, Global Fund Program Coordination Unit & World Bank Project Unit
3	**EPI Coverage & Equity Workshop organized by UNICEF** **The following were the participants:**	**28th – 29th June 2016**	• MOH • UNICEF • WHO • UNFPA • Liberia Immunization Platform • County Health Teams: Margibi, River Gee, Grand Kru, Maryland & Montserrado
4	**EPI Coverage & Equity Rapid Qualitative Study in Nimba County by WHO and MOH**	**4th – 8th July 2016**	• MOH • WHO • CHT Nimba • DHT Members of Sanniquellie Mah and Zoe-GEH • Government Health Facility Staff • FBO Health Facility Staff • Communities as FGD members
5	**MOH Organized Gavi HSS Proposal Development Consensus Workshop in Buchanan, Grand Bassa:**	**18th – 22nd August 2016**	• MOH • WHO • UNICEF • MOH: Pool Fund, Global Fund Program Coordination Unit • CSO (LIP)

6.3 Objectives and priority interventions for Gavi financial support HSIS, as per national health strategy and immunisation plan

For each objective:

- Provide an **indicative budget amount** (total amount requested for the duration of the national immunisation strategy per each objective).
- List the **health system bottlenecks and how the objective and activities address these to sustainably increase immunisation coverage and equity.** Refer to available data or evidence to describing **the issue to** be addressed. *(e.g., EVM score is less 80% due to distribution and cold chain volume)*

- Indicate the **key activities** (top 2-3 priority interventions per objective), which will lead to achievement of the objective.
- Provide a **short rationale** explaining why these activities have been prioritised as such, to achieve improved outcomes; including the rationale for targeting certain geographic zones or populations. Also address how the vaccine introduction and/or SIA will specifically be used to strengthen the immunisation system.
- Describe how you would **monitor the progress** against each objective.
- List the top 2-3 prioritised **technical assistance needs** per objective (*technical assistance is not applicable for countries in final year of Gavi support)

The Overall Goal of Gavi HSS 2016 Proposal:

To strengthen the national health system to sustainably deliver effective, efficient, equitably accessible and quality EPI and other RMNCAH services countrywide in order to improve immunization and other health outcomes in the country.

Introduction to the Objectives & Activities:

In this proposal, two levels of objectives have been formulated to provide programmatic and operational implementation clarity:

- *Strategic Objectives: each strategic objective is a medium term goal to be achieved by the EPI/MOH and their partners in the five years of this Gavi HSS grant period (2016 - 2021). Each strategic objective has a set of specific objectives that lead to achieving the strategic objective;*
- *Specific Objectives: each specific objective has a set of activities that contribute to achieving the specific objective.*
- *The key activities have been selected from a set of activities of each specific objective. A full list of all objectives and activities can be found in Annex-I of this proposal*

Strategic Objective (Medium Term Goal) 1: Service Delivery	***Increase access to quality EPI and other priority RMNCAH services (including ANC, PMTCT, FP, etc.) by target populations, especially populations that are inadvertently deprived[9] from immunization services so as to increase equitable coverage and uptake of EPI and other priority RMNCAH services by December 2021***
Indicative budget:	***USD 2,839,200.00 ($ 2.839M)***
Health system bottleneck(s) to be targeted:	**1. Limited Access to Immunization Services by the Community:** a. ***Difficult geographical access to health facilities for static EPI services due to***: remote communities- most being very far (beyond 10Kms) from health facilities; desolate forested expanses to cross before reaching health facilities; no company to walk along with for immunization services except on market days; no motorbike services in vicinity; prohibitive motorbike services even in places where they are available *b.* ***Impact of Ebola Virus Disease (EVD) on the health seeking behaviour of the community:*** Health facilities are regarded as source of EVD, hence feared by the community
	2. Weak Outreach Services to Deserving Communities: a. ***Outreach services are either weak or not being done at all by health facilities (***some health facilities have not been providing outreach services for at least one year) due to multiple problems: Lack of transport for reaching the outreach sites (no functional health facility owned motorbikes or vehicle); hiring commercial motorbikes is very expensive and therefore not sustainable by the health facility; shortage of staff. b. ***Some outreach sites are in hard-to-reach (HTR) areas: access of extremely***

[9] Populations that are inadvertently deprived from immunization services in Liberia may include: those distant from health facilities, very remote and extremely hard-to-reach, the urban poor, etc.

	remote communities by outreach teams is often difficult due to: swollen rivers, muddy roads or broken bridges to cross. c. ***Lack of funds for outreach allowances due to:*** inadequate CHD budget to support outreach services
	3. Weak Implementation of Supportive Supervision a. ***Weak support supervision at all levels due to:*** Lack of transport, shortage of staff at all levels and lack of time due to competing priorities b. ***No evidence of scheduled MOH/EPI support supervision at County, District and health facility levels*** c. ***No evidence of practice of mentorship in immunization services*** and other priority RMNCAH services
	4. Low Quality of Immunization Services a. ***Poor sensitization during the immunization of clients/caregivers*** at service points on the importance of completing vaccination *b.* ***High Dropout Rates with a national average of 22.2%; high dropout rates in both densely populated and sparsely populated regions (***24% in Nimba County, a densely populated county, hence translating into a very high number of children dropping out; and 26% in Grand Kru, a sparsely populated county-LDHS 2013). *c.* ***No tracking of children that have dropped out of the immunization program*** d. ***Weak/no Integration of RMNCAH service delivery*** at points of service delivery to minimise missed opportunities e. ***Immunization service delivery is predominantly carried out by personnel (Vaccinators) with inadequate technical skills-*** this might have been compromising effectiveness of some technical aspects of EPI services (e.g. health education on immunization & management of AEFIs) f. ***Many health professionals have not had EPI refresher training in the past 1-2 years*** g. ***Low motivation of health workers;*** many vaccinators not on payroll resulting to frequent absenteeism
Specific Objective 1.1	***To strengthen outreach services with emphasis on poor performing districts below 70% of penta 3 coverage using three pronged approach (fixed, outreach and mobile) so as to increase coverage and equitable access of target populations, including hard-to-reach communities, for EPI and other priority RMNCAH services in the grant period***
Activity 1.1.1	Conduct monthly conventional (one-day) immunization focused integrated outreaches in communities that are far (beyond 5Kms) from the health facility
Activity 1.1.5	Procure 300 motorbikes for all health facilities providing immunization services to transport health workers to provide outreach services to distant communities
Rationale for prioritizing activities: *1.1.1* & *1.1.5* of Specific Objective 1.1	One of the service delivery objectives of Liberia's cMYP 2016-2020 is to increase EPI coverage to 90% nationally and at least 80% in all the 15 counties (as measured by Penta 3 coverage). One of the strategies EPI/MOH has planned to use for increasing coverage is to strengthen outreach services up to hard-to-reach communities in a sustainable way. The three-pronged-outreach approaches will ensure even the extremely hard-to-reach communities are reached by immunization services. Activities 1.1.1 and 1.1.5, in addition to activities (1.1.2 and 1.1.3 are outlined in the annex), are very crucial to providing immunization services to all communities (including those hard-to-reach communities) through outreach services; this will in turn contribute substantially to increasing outreach coverage in all the 15 counties. Well-coordinated SIAs will further augment EPI coverage and equity of access to EPI services.
Specific Objective 1.2	***To strengthen EPI focused supportive supervision in order to improve the quality and uptake of EPI services in the 91 health districts in the grant period***
Activity 1.2.3	On rotational basis, five-members of the DHT/CHT in the 91 health districts to conduct

	quarterly EPI mentorship-based support supervision of health facilities using the IIP approach
Activity 1.2.5	Procure 25 vehicles for support supervision of EPI and other support systems and operations (18 for CHTs; 2 for Regional Vaccine Stores; 5 for National / MOH EPI Program and Project Management
Rationale for prioritizing activities: *1.2.3* & *1.2.5* of Specific Objective 1.2	Activities 1.2.3 and 1.2.5 are a priority because currently EPI supportive supervision of DHOs and health facilities by CHTs has been severely constrained by lack of appropriate means of transport to take staff at supervision sites in almost all counties. The IIP-approach, a mentorship based supportive supervision approach, will enable the supervisors to assess, mentor and guide health workers being supervised in technical and managerial areas of their roles and responsibilities. Activity 1.2.5 will also enable MOH to carryout supportive supervision of all the 15 counties, their respective DHOs and selected health facilities in all the five LISGIS geographical regions. This is envisaged to subsequently contribute to improvement of the demand for, quality, uptake and outcome of EPI services in all counties. Assessments for new vaccine introductions and SIAs will also provide opportunity to identify the strengths, weaknesses and health system strengthening needs of the structures at sub-national levels of the health system (CHOs/CHTs, DHOs/DHTs and health facilities).
Specific Objective 1.3	***To update the EPI curriculum for health training institutions to reflect all the new WHO approved approaches, technologies and emerging Public Health issues in the country's immunization program and health system for improving EPI outcomes in the first two years of the grant period***
Activity 1.3.1:	Review/update the EPI curriculum and set timeline for commencement of the New EPI Curriculum
Activity 1.3.2:	Orient 25 tutors from ten health training institutions (especially nursing/midwifery, clinical officers and medical school for doctors) on the updated EPI curriculum
Rationale for prioritizing activities: *1.3.1* & *1.3.2* of Specific Objective 1.3	The current EPI Curriculum for pre-service training of health professionals does not capture the new developments, technologies and approaches in the Public Health practice of immunization: it is overdue for review. While activity 1.3.1 will ensure the EPI Curriculum for pre-service training of health professionals is accomplished, activity 1.3.2 will ensure the health tutors are inducted and updated on the current developments, technologies and approaches in the practice of immunization. The orientation will facilitate tutors to adequately train and skill students before graduating to join the health workforce. Graduates with good skills in immunization will immediately boost health facility and outreach outputs and subsequently outcomes of immunization at both institutional and population levels in all counties. This will particularly relieve underserved areas like the South Eastern counties and districts in mountainous areas in the Central North region.
Specific Objective 1.4	***Improve vaccine preventable disease surveillance and strengthen the monitoring mechanism of Adverse Events Following immunization (AEFI) at all levels of the health system in the context of ensuring patient safety in EPI service delivery and other healthcare settings during the entire grant period***
Activity 1.4.1:	Revise the general Patient Safety Policy to include Patient Safety in EPI service delivery and significance of AEFI surveillance
Activity 1.4.6:	Train 1200 health workers in health facilities and all DHOs on patient safety, AEFI surveillance, reporting system and case management within five years
Rationale for prioritizing activities: *1.4.1* & *1.4.6* of Specific Objective 1.4	The current Patient Safety Policy is general and does not specifically highlight patient safety in immunization, yet occasions of AEFI have been reported in some health facilities. However, most health professionals including those at the frontline directly manning immunization services have not been inducted on AEFI and its management. In this regard, while activity 1.4.1 will make the Patient Safety more comprehensive, activity 1.4.6 will ensure that adequate number of health workers and managers are inducted to competently manage AEFI. This will minimize dropout in immunization due to fear and rumours since clients/caregivers will be given sufficient health education on AEFI during routine

	immunization as well as SIAs in the country.
Monitoring progress against the Strategic Objective (the Medium Term Goal) 1:	**The following performance indicators will be used for progress monitoring:** 1. Number of health facilities with at least one trained health professional on AEFI monitoring 2. Number of counties with at least one trained DHO on AEFI monitoring 3. Number of AEFI cases reported timely *4.* Number of tutors from health training institutions trained on immunization curriculum development
Technical assistance needs for the Strategic Objective (the Medium Term Goal) 1:	Technical Assistance (Immunization Program Specialist, immunization supply chain specialist (CCL) and communication for immunization (C4I) specialist will be required in the following areas: 1. To conduct training of Master Trainers (TOT) in IIP 2. To review the EPI Curriculum of health training institutions to reflect current developments in the practice of immunization 3. To revise the general Patient Safety Policy to incorporate Patient Safety in Immunization service delivery, and develop a harmonised Implementation Guideline 4. To review and aid in the update and harmonization of supportive supervision tools and processes. *5.* To induct the Independent AEFI Experts Review Committee for causality assessment, and also conduct training of Master Trainers (TOT) in AEFI

Strategic Objective (Medium Term Goal) 2: Procurement & Supplies Management (PSM)	***Strengthen the logistics and supply chain management system of MOH/EPI in order to improve the efficiency of stock management and distribution of vaccines and other essential medical commodities at all levels of the health system in all the 15 counties by December 2021***
Indicative budget:	***USD 4,736,000.00 ($4.736M)***
Health system bottleneck(s) to be targeted:	***1. Limited Cold and Dry Storage Capacities at Central, County and Health Facility levels:*** *a.* ***Marked cold and dry storage capacity gaps exist at National, Regional, County & Health Facility vaccine stores:*** b. ***The current national medicine store/depot has inadequate space, is congested and has compromised efficient stock management of EPI commodities***; the cold and dry storage spaces are shared with non-EPI cold-chain dependent medicines and lab products NVS is not suitable; c. In light of the above issues, ***EVMA strongly recommended immediate need to construct a new NVS (EVMA 2015)*** d. ***The two regional vaccine stores have inadequate dry storage capacities*** that should be immediately addressed (Country assessment) e. ***56 (10%) health facilities use only passive containers for storing vaccines***
	2. ***Cold chain integrity of the entire national vaccine supply chain is under threat from CCE technical inefficiencies:*** ***a. Obsolete CCEs*** (Fridges, Freezers, Cool boxes & vaccine carriers) that have outlived their discounted lifespans b. ***CCE that have high operational costs:*** solar battery powered CCEs, *c.* ***CCE that do not meet prevailing WHO Prequalification Standards***
	3. ***Weak vaccine stock management skills, with notable occurrence of stock outs of some antigens, e.g. BCG- for health facility static & outreach services.***
	4. ***CCE temperature management challenges, highlighting notable temperature excursions; possible causes include:*** a. Most CCE in health facilities still use thermometers but not fridge tags b. Most fridges do not have in-built thermometers *c.* Vaccine temperature studies / reviews not carried out for timely remedial

	actions. Similar issues have existed in the last EVMA.
	5. ***High EPI commodity distribution costs:*** a. No updated Distribution Plans & SOPs for all levels b. Lack of refrigerated trucks at Regional Vaccine Stores (RVS) for collecting vaccines from the National Vaccine Store (NVS) & subsequent distribution to Health Facilities. *c.* Lack of transport at health facilities for collecting vaccines from County Vaccine Store (CVS) *d.* Challenging terrains/roads in some regions, e.g. South Eastern region
	6. Logistic Inventory not comprehensive and not up to date at all levels: ***a.*** No comprehensive LMIS database in place at national, county, district & health facility levels ***b.*** EVMA 2015 also captures this information
	7. There is no Preventive Maintenance Plan (PMP) for CCE at county level: a. No County Cold Chain Technicians to implement County specific CCE PMP *b.* No MOH guidelines for CCE PMP
Specific Objective 2.1	***Expand the cold and dry storage capacities for vaccines and other EPI and medical commodities in the National Vaccine Store (NVS), Regional Vaccine Stores (RVS), County Vaccine Stores (CVS) and Health Facility Vaccine Storage equipment to adequately accommodate all vaccines in the grant period***
Activity 2.1.1	Construct a National Vaccine Store (NVS) to sufficiently accommodate: four 40M^3 Walk-in Cold Rooms; one 20M3 Freezer Rooms; dry storage capacity of 4,584M^3, EPI Office Space for all MOH EPI staff and two Board Rooms; and EPI Central maintenance Workshop for CCE and other equipment
Activity 2.1.2	Procure and install four 40M^3 Walk-in Cold Rooms for the new NVS and one 20M^3 Freezer Rooms with continuous temperature monitoring device and voltage stabilizer at central level store at the new location of the NVS
Activity 2.1.3	Extend the dry storage space of each of the two RVS (one in Bong and one in Grand Gedeh) by 1,146M^3 to adequately accommodate the projected volume of EPI dry commodities
Activity 2.1.4	Expand vaccine storage capacity in all 15 county Depots.
Activity 2.1.5	Procure and installed 51 Solar Direct drive refrigerator (20% of GOL contribution, CCEOP)
Rationale for prioritizing activities: *2.1.1* & *2.1.2* of Specific Objective 2.1	EVM assessment conducted in August 2015 strongly recommended, as part of the EPI Improvement Plan, construction of a standalone National Vaccine Store since the current facility being used was designed for an ordinary general medicine store / depot for the country. The medicine store/depot is currently congested and has inadequate shelving, making it very difficult to organize and identify EPI commodities for convenient monitoring of their expiry dates. The cold storage space is also shared with other general cold-chain dependent medicines and medical/lab items. This setting is a threat to cold chain integrity, vaccine potency and pharmaceutical integrity of other EPI commodities as well. Following the EVMA August 2015 recommendation, MOH has identified an adequate space on the eastern part of the MOH compound for constructing a standalone NVS; activities 2.1.1 and 2.1.2 project the space and cold chain requirements of the standalone NVS. A well designed and constructed standalone NVS will adequately accommodate the country's vaccine needs, including projected future vaccine and EPI commodity storage needs. This will not only ensure and sustain vaccine potency but also provide adequate EPI office space and space for EPI Central Equipment Maintenance Workshop.
Specific Objective 2.2	***Improve the efficiency of distribution of vaccines and related supplies from the national and regional stores to 15 county depots to ensure delivery of potent vaccines***
Activity 2.2.1:	Procure one medium-size refrigerated truck and provide fuel and maintenance cost during grant period for delivery of vaccines/cold-chain dependent medicines and other EPI/Medical commodities to sub-national levels
Activity 2.2.2:	Procure one medium-size all weather (non-refrigerated) truck and provide fuel and maintenance cost during grant period for delivery of EPI dry equipment and consumables to

	sub-national levels
Activity 2.2.3:	Procure two hardy all-terrain double cabin pick-up trucks for multi-purpose logistic use by the NVS and multi-purpose use by the Urban Strategy EPI Project in Montserrado county
Rationale for prioritizing activities: *2.2.2* & *2.2.3* of Specific Objective 2.2	EPI has currently one small size refrigerated truck that can carry enough vaccines for only one Regional Vaccine Store. Procurement of an additional medium sized refrigerated truck will reduce strain on the only one small refrigerated truck that has to supply both RVS- yet Grand Gedeh RVS in the hard to travel and hard-to-reach South Eastern part of the country is nearly 1,000Kms from the NVS in Monrovia. There is no EPI specific truck for transporting non-cold chain dependent EPI commodities. While activity 2.2.2 will safeguard the potency of vaccines, the two activities will prevent occurrence of stock out of vaccines and other EPI commodities. Hence, EPI client confidence in immunisation services will remain high. Activities 2.2.2 and 2.2.3 will, therefore, improve the efficiency of distribution of vaccines and other EPI commodities.
Specific Objective 2.3	***Protect the cold-chain integrity and vaccine potency by improving both vaccine stock management and safeguard mechanisms in vaccine handling from the port of entry at the airport/customs up to health facility level throughout the grant period***
Activity 2.3.1:	Train District EPI Focal Persons, health facility OICs (Officers-in-Charge) and a Midwife / Nurse in-charge of immunization in the health facility in effective management of vaccines/EPI commodities and other essential medical supplies with emphasis on Quantification, Forecasting, Vaccine Tracking and Vaccine Temperature Monitoring.
Activity 2.3.2:	Train 534 health facilities OICs (Officers-in-Charge) and a Midwife / Nurse in-charge of immunization in the health facility to mentor vaccinators and other health facility staff in effective management of vaccines/EPI commodities and other essential medical supplies with emphasis on quantification, forecasting, Vaccine Tracking and Vaccine Temperature Monitoring.
Activity 2.3.3:	Procure assorted critically needed WHO PQS compliant CCE that do not qualify for the CCE Optimization platform funding (Cold boxes and vaccine carriers.
Rationale for prioritizing activities: *2.3.2* & *2.3.3* of Specific Objective 2.3	EVM assessment 0f August 2015 showed that only 3 out of 9 parameters of the entire immunization cold chain 'exceeded the benchmark score of 80%. Stock management, vaccine storage temperature management and good vaccine management practices are three of the six parameters with a score below the benchmark. Activities 2.3.2 and 2.3.3 have been formulated to improve the effective management skills of health professionals and vaccinators in all counties, thereby improving the management and safeguarding potency of the vaccines.
Specific Objective 2.4	***Establish/operationalize Preventive Maintenance System for effective maintenance of cold chain and other critical equipment at the NVS and at county and health facilities in the 15 counties throughout the grant period***
Activity 2.4.1	Conduct refresher training for fifteen County Cold Chain Technicians (CCCTs) to ensure effective maintenance of cold chain equipment.
Activity 2.4.2	Trained five cold chain technicians for central and regional level vaccine stores.
Activity 2.4.3	Procure spare parts for all types of CCE at all levels
Rationale for prioritizing activities: *2.4.1* & *2.4.5* of Specific Objective 2.4	Preventive maintenance of CCE provides a crucial backing to immunization cold chain integrity through scheduled maintenance of CCE and other equipment, continuous monitoring of CCE, other EPI equipment and the entire cold chain integrity with respect to CCE and prompt response to trouble shooting in the cold chain integrity beyond the technical management by the CCCTs (NB; currently there are no CCCTs in the immunization supply chain of the country). It also provides a data set/trail of the most critical spare parts to always have in adequate quantity and quality in the Central EPI Workshop. Two indirect outcomes of activity 2.4.1 and 2.4.5 are: providing suitable environment for vaccine storage thereby minimizing vaccine stock outs that may arise from compromised cold chain integrity, and effective buttressing good vaccine management practices of quantification, forecasting, vaccine tracking and Vaccine temperature monitoring at all levels of the cold chain.

Specific Objective 2.5	***Establish an electronic Integrated Logistics Management Information System (LMIS) for MOH that captures EPI vaccine inventory, other essential medical supplies and logistic entities at national level, all County Health Offices, all District Health Offices and all MOH/EPI-supported health facilities within the first two years of the grant period***
Activity 2.5.1	Develop and roll out an electronic integrated LMIS integrating stock management, including CCE and other EPI at programmatic and operational levels (Design the electronic LMIS system and tools, test/pilot the functionality of the system and systematically roll-out the system up to health facility level)
Activity 2.5.2	Conduct internal Effective Vaccine Management (EVM) assessment every two years (last quarter 2017 & last quarter 2019)
Rationale for prioritizing activities: *2.5.1* & *2.5.4* of Specific Objective 2.5	MOH HMER Division has conceived and planned to establish an integrated LMIS to provide readily available data for policy, program and operational managers and officials at all levels of the health system. One of the beneficiary programmes of the integrated LMIS will be EPI. Subsequently, EPI logistic management and taking strategic decisions by EPI management will be quite facilitated since they will have enhanced access to EPI logistic data of EPI from the health facility/community level in all counties up to the NVS- in addition to inter-operability with and access to logistic data of other programs. The LMIS will therefore improve performance of the immunization logistics, general supply chain and monitoring cold chain integrity and addressing issues that arise. An integrated LMIS will, therefore, commendably contribute to strengthening the performance of EPI.
Monitoring progress against the Strategic Objective (the Medium Term Goal) 2:	**The following performance indicators will be used for progress monitoring:** 1. National Vaccine Store capacity improved 2. Two regional EPI dry stores capacity expanded. 3. All Fifteen County Vaccine and dry Stores capacity expanded 4. Number of service delivery sites reporting Stock outs of vaccines 5. Number of counties receiving vaccines and supplies timely against agreed Distribution Plan 6. Integrated eLMIS is in place 7. Number of counties with preventive maintenance capacity in place 8. Number of internal EVM assessment conducted during grant period
Technical assistance needs for the Strategic Objective (the Medium Term Goal) 2:	Technical Assistance will be required in the following areas: 1. Selection/installation of CCE for new Vaccine Storage facility 2. Training in Immunization Supply Chain Management and development of iSC SOPs 3. Integration iSC components into LMIS 4. Training in Preventive Maintenance of CCE and other Equipment 5. EVM Assessment

Strategic Objective (Medium Term Goal) 3: Health Information System (HIS)	***To strengthen quality of data management and utilization of routine and real time data in the entire HIS (including HMIS, IDSR/VPD Surveillance, CBIS & Surveys) so as to institute responsive management of EPI and other priority RMNCAH services at all levels of the health system by December 2021***
Indicative budget:	***USD 1,776,000.00 ($1.776M)***
Health system bottleneck(s) to be targeted:	***1. There are widespread discrepancies in HMIS data quality, esp.:*** a. Incompleteness of data b. Reliability of data *c.* Lack of timeliness of data transmission ***Reasons given for the occurrence of the above included:*** Skill deficits in quality data management, lack of training opportunities in data management skills and unreliable internet connectivity / low band width for fast transmission of data
	2. Data utilization as evidence for decision making is weak, especially at sub-national levels (County, District and health facility levels): this connotes M&E skill deficits at the mentioned levels
	3. There is human resource shortage for effective management of HMIS and M&E functions: apart from the CHO, DHOs and health facilities use data clerks *a.* Lack of funds for recruitment of personnel sighted
	4. No evidence of data quality assessments (DQA) & data quality audits at sub-national levels
	5. Irregular or inadequate supportive supervision
	6. No evidence of Operational Research in health offices & facilities on key issues such as
	7. Community based information system is very rudimentary and not fed into the main HMIS
	8. Lack of coordination between EPI program and DPC: ***a. During outreach & NIDs / SIAs*** ***b. In data sharing and reporting cases e.g. Pertussis, TB, etc.***
Specific Objective 3.1	***To build the technical capacity of 100 District HMIS Focal Persons, 100 District EPI/VPD Surveillance Focal Persons & 15 Regional IDSR Regional Focal Persons in M&E skills with emphasis on data quality improvement and utilization of data for management decision making on performance improvement of EPI & other priority RMNCAH services by the end of the grant period***
Activity 3.1.1	Conduct annual integrated refresher training (hands-on training) for 200 health professionals (HMIS, EPI/VPD & IDSR focal persons) in data quality improvement and data utilization for management decision making
Activity 3.1.2	Support County DQITs to conduct quarterly follow-up support supervision / mentorship of health workers in data quality improvement at DHOs and health facilities
Rationale for prioritizing activities: *3.1.1* & *3.1.2* of Specific Objective 3.1	One of the most salient challenges seen in health facilities, DHOs and CHOs is poor data quality and very limited use of data for management decision-making. To address these inherent challenges, well-trained data managers and M&E officers at central and county levels will help in data quality improvement efforts at central, county and health facilities levels. It is envisaged that through activities 3.1.1 and 3.1.2, objective 3.1 will be achieved at various levels of the health system. This will improve monitoring and tracking of EPI performance, hence early detection of issues to address and taking timely decisions to address identified issues. Overall, this will improve effectiveness and efficiency of EPI performance- and therefore achievement of better immunization outcomes.

Specific Objective 3.2	***Strengthen Community Based Information System to enable capture and transmission of community level health / vital data to be fed into the mainstream HMIS in health facilities in all the 15 counties throughout the grant period***
Activity 3.2.1	Develop and roll out the CBIS (Community Based Information System) to programmatic and operational (County, District & health facility) levels (Design the CBIS and tools, test/pilot the functionality of the system at community level and systematically roll-out the system up to health facility level where CHAs report)
Activity 3.2.3	Train 4000 CHAs, within two years, on the use of the CBIS tool in the community
Rationale for prioritizing activities: *3.2.1* & *3.2.3* of Specific Objective 3.2	In July 2016, Liberia has launched a policy for improving the quality of community based health services. Three key interventions in this regard are: establishing a cadre of CHWs called CHAs (Community Health Assistants) who will be enrolled over 5 years period on the government payroll as civil servants; the establishment of CBIS and CEBS (community events based surveillance). Under the auspices of the HMER/HIS, CBIS will collect data right from communities for transmission into the mainstream HMIS. This therefore largely completes the spectrum of HMIS. This setting will enable access to real time data and events in any community in the country; this in turn will evoke quick response within and between the health system levels. Responsive management will in turn enhance achievement of immunization outcomes.
Specific Objective 3.3	***Strengthen the EPI/VPD surveillance system at Central MOH, CHO, DHO, health facility levels, as well as the community based VPD surveillance (CEBS) by the end of the grant period***
Activity 3.3.1	Conduct six-monthly integrated IDSR/VPD supportive supervision by county EPI/IDSR Teams with participation of the central MOH EPI & IDSR officials
Activity 3.3.3	Follow-up weekly all laboratory confirmed vaccine preventable diseases (VPDs) especially polio, measles, pertussis, yellow fever as well as AEFI
Rationale for prioritizing activities: *3.3.1* & *3.3.3* of Specific Objective 3.3	Activities 3.3.3 will ensure all laboratories confirmed VPDs are followed up. Further, all suspected VPDs will also have to be qualitatively investigated thoroughly in addition to lab investigations. This will enable tracing of cause and contacts of the VPDs. Activity 3.3.1 will add more rigour in further investigation of causation and formulation of strategies for remedial actions. The two activities are synergistic and form part of EWS for IDSR.
Specific Objective 3.4	***Strengthen EPI Performance Monitoring and Tracking by the EPI M&E Unit to continue evidence generation for management decision making in the health system using regular surveys and operational research throughout the grant period***
Activity 3.4.1	Carryout Annual JARs of EPI and Gavi supported activities
Activity 3.4.5	Conduct EVM assessment in the third quarter of 2020
Activity 3.4.11	Conduct End Term Evaluation Gavi HSS in 2020
Rationale for prioritizing activities: *3.4.1, 3.4.5* & *3.4.11*of Specific Objective 3.4	To gauge how the EPI program is performing, it is critical to have sound M&E system that: has relevant MOH sanctioned PMIs (performance monitoring indicators); carries regular WHO/MOH sanctioned studies to assess EPI performance. Key studies that have demonstrated rigour of EPI performance assessment include those mentioned in activities 3.4.1, 3.4.5 and 3.4.11. Interventions formulated in line with the findings and recommendations of these studies have been tested to strengthen achievement of immunization outcomes.

Monitoring progress against the Strategic Objective (the Medium Term Goal) 3:	***The following performance indicators will be used for progress monitoring:*** *1. Percentage of timely and complete EPI monthly data (and or reports) submitted to the MOH* *2. Percentage timeliness and completeness of IDSR reports submitted to the MOH annually* *3. Number of health facilities that have operationalized CBIS in their HMIS reports* *4. Number of CHAs trained on community based infromation system (CBIS) by 2018* *5. Number of counties Data Quality Implementation Teams (DQITs) that have conducted at least one supportive supervision/mentorship/coaching annually* *6. Number of health professionals (county, district and health facilities) trained on data quality improvement, management and decision making by 2017* ***7.** Number of national EPI review meetings held annually*
Technical assistance needs for the Strategic Objective (the Medium Term Goal) 3:	*Technical Assistance will be required in the following areas:* *1. To assist in developing data quality improvement plan, including inducting the County DQIT* *2. To develop the CBIS* *3. To assist development of tools and system for semi-annual performance appraisals*

Strategic Objective (Medium Term Goal) 4: CSS (Community Systems Strengthening)	***Enhance community demand for and uptake of quality EPI and other priority RMNCAH services so as to improve EPI and other health outcomes countrywide by December 2021***
Indicative budget:	***USD 1,776,000.00 ($1.776M)***
Health system bottleneck(s) to be targeted:	1. ***The revised National Community Health Services Policy in which CHAs are to provide essential preventive, promotive and basic health services in the communities is not yet effectively functional on the ground / at community level:*** a. Despite being functional, recognized and accepted by the community and health authorities in the health system, no organization claims substantive ownership of the CHAs and CHVs; their sense of belonging, to date, therefore, remains vague b. Various organizations used to train General Community Health Volunteers (gCHVs) (to be replaced by CHAs and CHVs) a la carte to serve their own programmatic successes without synergistic inputs for comprehensive capacity enhancement c. Organizations using the services of gCHVs pay paltry salaries cum allowances while engaging them
	2. ***Interface between Health Facilities and Communities is still weak:*** a. No health facilities carrying out regular Community Dialogues for effective community sensitization- apart from EVD related community sensitization Low awareness of the benefits of Routine Immunization of caregivers / both parents b. Rumors and misinformation around routine immunization c. County and District Health Forums not occurring in the study county & districts d. Some members of the community cannot walk alone to health facilities (even if they are 5-10Kms away) to get immunization and other priority RMNCAH services except on market days when they have company of other community members to walk with
	3. ***The Communication Strategy is out dated and needs to be revamped:*** a. Limited research/study on effective communication strategies in different settings (rural versus urban settings) b. Uneven and at times limited communication network (phone) distribution across the country c. Weak partnership between the media and MOH for information dissemination

	4. ***Community Based Information System (CBIS) is still weak and rather ad hoc:*** a. CBHIS is not well established and overseen by MOH. b. The existing MOH generic tools for CBHIS are not continuously updated to meet health service demands
	5. ***Supportive Supervision of community based health services by MOH is weak:*** a. Supervision of CHWs by government health facilities is weak and irregular
	6. ***Participation of community leaders in health interventions is so limited as to boost demand for and uptake of health services:*** a. Participation of community leaders in health system interventions is hampered by lack of financial resource for meeting the attendant incentives
Specific Objective 4.1	***Enhance the quality of community based health services by improving the skills of Community Health Assistants (CHAs) in public service and Community Health Volunteers (CHVs) to make them more effective in delivering integrated priority community health services, including EPI services by December 2021***
Activity 4.1.1	Conduct supportive supervision of CHAs and CHVs to provide quality community based health services. *Initial trainings of the CHAs are supported by USAID and other partners
Activity 4.1.2	CHAs and CHVs will be engaged in community dialogue to sensitize communities on the importance and availability of immunization services. They will also carry out immunization defaulter tracking in their respective communities.
Rationale for prioritizing activities: *4.1.1* & *4.1.2* of Specific Objective 4.1	MOH seeks to improve the quality of community based health services through a new cadre called Community Health Assistants (CHAs). Four thousand CHAs will be trained using MOH designed modules, and will be compensated by MoH through other donor mechanisms. USAID will finance the training of the CHAs (as stated in activity 4.1.1 above). The CHAs will be involved in various community engagement activities including community dialogue, data collection from the communities using the CBIS that links community level data to the mainstream HMIS. Tracking defaulters/drop-outs from programs (EPI, TB, ART, etc.) will be one of their responsibilities- as stated in activity 4.1.2. The strengthening of CHA program will certainly improve demand for and uptake of immunization and other RMNCAH services. This will translate into improvements in immunization outcomes in the populace.
Specific Objective 4.2	***Strengthen Communication and Social Mobilization for EPI in all the 15 counties to increase demand for and uptake of EPI and other priority RMNCAH services in the entire grant period***
Activity 4.2.1	Conduct formative / baseline communication research (including media assessment for audience reach, coverage & impact) to guide development of health promotional materials
Activity 4.2.3	Conduct high impact mass media IEC activities on immunization (TV, radios, newspapers, IEC print materials) with special focus on targeting the hard-to-reach areas/populations
Rationale for prioritizing activities: *4.2.1* & *4.2.3* of Specific Objective 4.2	Most health communication messages are not based on communication research for audience reach, coverage & impact so as to guide development of high impact health promotional materials / packages for specific target communities. Activity 4.2.1 has been formulated to ensure communication research generates quality evidence for design of high impact mass media engagement (outlined in 4.2.3) with appropriate media houses. Such media engagements will boost community demand, uptake of immunization services and achievement of immunization outcomes.
Specific Objective 4.3	***Revitalize community ownership and uptake of immunization services by strengthening EPI focussed advocacy engagements with national policy makers, religious leaders and sub-national stakeholders in all counties nationwide by the end of the grant period***
Activity 4.3.1	MOH to hold national level advocacy meetings on strengthening immunization with key policy makers: The Social Services Committee of the Parliament and the Parliamentary Group on Immunization; MOE; Ministry of Gender & Social Welfare; Monrovia City Council and Religious Leaders

Activity 4.3.2	The consortium of Civil Society Organizations viz. Liberia Immunization Platform (LIP) to hold community engagement activities, including advocacy meetings with key sub-national stakeholders, e.g. County and District Local Government, Community Leaders (local chiefs, religious leaders) and house to house Inter-personal Communication (IPC), KAP study and other social mobilization activities.
Rationale for prioritizing activities: *4.3.1* & *4.3.2* of Specific Objective 4.4	Activities 4.3.1 and 4.3.2 are crucial policy advocacy engagements at national and county levels led jointly by MOH and the Liberia Immunization Platform. Once national and county leadership, governments and community leaders sanction and become part of immunization services advocacy, communities will easily embrace, own and utilize immunization services. While increasing community demand for and uptake of immunization services, these activities will also contribute to reduction of dropouts from the immunization program, a key outcome of EPI.
Monitoring progress against the Strategic Objective (the Medium Term Goal) 4:	The following performance indicators will be used for progress monitoring: **1.** Percentage of communities with at least one active CHW **2.** Number of community structures trained in RI messaging **3.** Number of communication outreach activities conducted **4.** Percentage of parents/caregivers with increased knowledge in RI **5.** Number of consultative/advocacy meetings conducted with key policy makers **6.** Percentage of districts in which community mobilization meetings are led by community leaders **7.** Number of quality RI information dissemination events supported by media workers **8.** Percentage of health facilities regularly receiving quality CBIS data from trained CHWs
Technical assistance needs for the Strategic Objective (the Medium Term Goal) 4:	Technical Assistance will be required in the following areas: 1. Strengthening the defaulter tracking system and modify the existing tools, and train the users for effective implementation of defaulter tracking system 2. Technical assistance/consultancy to support planning of social mobilization and community engagement activities at all levels 3. Technical assistance to update present EPI communication strategies to reflect alignment with the cMYP

Strategic Objective (Medium Term Goal) 5: Leadership & Governance and Health Financing	***1. To improve coordination and collaboration of immunization activities at National, County, District and Health Facility levels by 2021*** ***2. Improved financial management system by 2021 at county level***
Indicative budget:	***USD 712,800.00 ($ 0.712M)***
Health system bottleneck(s) to be targeted:	*1.* ***Weak oversight and coordination of EPI services at county level*** ***a.*** Signs of weak oversight and coordination of immunization services by the CHD include: weak intra-county support supervision; no regular County level EPI Coordination meetings; and no regular reports on overall EPI performance ***b.*** No mapping of HTR areas by the counties and districts despite existence of health facility micro-plans
	2. ***There have been protracted financial management constraints at all levels, but worse at sub-national levels:*** a. Inadequate CHO budgets for meeting the health needs of the county; GOL support to EPI is therefore inadequate. b. Quarterly disbursement of funds to sub-national levels are often not timely c. Once missed, quarterly disbursements to districts are usually either not recoverable or arduously recovered by sub-national officials (which is costly due to inevitable related opportunity costs) d. County level liquidation of funds / absorptive capacity of counties for disbursed

	funds is very low e. At MOH, there are delays in financial audits, delays in PPCC approvals and lack of financial updates on fund utilization
	3. ***Procurement delays are a notable common occurrence.*** a. This always leads to delays in implementation of EPI and other health interventions
	4. ***Information on financial support by partners is very scanty and constraints equitable planning:*** a. Funding by Health Development Partners through direct MOH budget support is often transparent. b. Financial information through off-budget support by Health Development Partners is hardly obtainable for planning. This often leads to inequity of development support across the 15 counties.
	5. ***There is no MOH sanctioned certification-based training program for vaccinators*** a. No service scheme or profile for vaccinators to date
	6. ***Lack of a clear terms of reference EPI Cold Chain Biomedical Technicians:*** a. DCCTs b. CBTs
Specific Objective 5.1	***Strengthen development / review of policies and strategies that improve the performance of EPI at all levels of the health system throughout the grant period***
Activity 5.1.1	Review and Update the National EPI Policy to reflect current to reflect all the new WHO approved approaches, technologies and emerging Public Health issues in the country's immunization program and health system
Activity 5.1.4	Conduct research to know the total cost for a fully immunized child
Rationale for prioritizing activities: *5.1.1* & *5.1.4* of Specific Objective 5.1	The EPI policy was last updated in 2010. A lot of developments have occurred in immunization since 2010, including emergence of new and better technologies in the practice of immunization. The EPI policy (2010) is, therefore, quite overdue for review- which has necessitated formulation of activity 5.1.1. The policy review will also capture the need to steer immunization financing towards sustainable funding through creation of Immunization Trust Fund. Activity 5.1.4 enables the actual cost and needs of immunization to be determined at national, county and district levels. This will enhance better planning for better performance of the immunization program.
Specific Objective 5.2	***Improve the technical performance of health professionals working in EPI at all levels through level-specific technical capacity development throughout the grant period***
Activity 5.2.1	Develop a formal training program and certification for EPI vaccinators who are currently trained on-the-job
Activity 5.2.5	Train EPI management team at central level in Program Management, Financial Management (for Non-Finance Professional), M&E, Basic Procurement & Supplies Management, and Master MLM training
Rationale for prioritizing activities: *5.2.1* & *5.2.5* of Specific Objective 5.2	Most, if not all the vaccinators in health facilities were and continue to be trained on-the-job. Activity 5.2.1 seeks to ensure that a formal training program is established for all vaccinators using MOH / GOL approved curriculum and certification. Activity 5.2.5 is another priority activity because it will skill Central/MOH EPI management Team with requisite technical skills to effectively and efficiently manage the immunization program of the country. These activities should, therefore, discretely contribute to improvement of performance of immunization and achievement of planned EPI outcomes.
Specific Objective 5.3	***Institute timely financial resource flow, timely financial accountability and financial reporting at Central, County, District and Health Facility levels by December 2021***
Activity 5.3.1	Develop a Comprehensive EPI Financial Management Operational Manual to guide timely flow of funds and timely utilization of and accountability for funds from Central

	Government, Gavi and other Health Development Partners
Activity 5.3.2	Hold an induction meeting for five CHT members from each county on the Comprehensive EPI Financial Management Operational Manual
Activity 5.3.4	Support MOH EPI and MOH OFM to carryout joint Supportive Supervision of the financial management performance of the sub-national level (counties, Districts and health facilities) at four-monthly intervals in the first two years of the grant period, then at six-monthly intervals in the remaining three years of the grant period
Rationale for prioritizing activities: *5.3.1, 5.3.2* & *5.3.4* of Specific Objective 5.3	MOH reports are awash with constrained flow of funds in addition to poor financial resource absorption capacity at sub-national (especially CHO and DHO) levels. Activities 5.3.1, 5.3.2 and 5.3.4 should be able to influence constructive changes in financial management at all levels due to quest for responsive financial management at all levels. This should in turn enable interventions results to be achieved as planned- consequently leading to better immunization outcomes.
Specific Objective 5.4	***Strengthen the effectiveness of Leadership, Governance and Management of EPI at MOH Central Level throughout the grant period***
Activity 5.4.2	Conduct monthly technical coordinating Committee (TCC) meetings and follow-up / implement action points from the meetings
Activity 5.4.4	Provide salary / salary top-ups / incentives for 42 EPI officials
Rationale for prioritizing activities: *5.4.2* & *5.4.4* of Specific Objective 5.4	Programmatic coordination and good incentivization of EPI management will be synergistic in improving leadership, governance and management of EPI. While activity 5.4.2 will improve program effectiveness through coordinated EPI interventions, activity 5.4.4 sets an incentive base for committed oversight on implementation of planned programmatic interventions at Central EPI (MOH) and in all counties.
Monitoring progress against the Strategic Objective (the Medium Term Goal) 5:	**The following performance indicators will be used for progress monitoring:** **1.** Number of policy documents reviewed/updated **2.** MOH approved training program for vaccinators in place **3.** Comprehensive MOH/EPI Financial Management Operational Manual in effective use **4.** Number of counties providing timely liquidation reports for immunization activities
Technical assistance needs for the Strategic Objective (the Medium Term Goal) 5:	Technical Assistance will be required in the following areas: *1.* Review and Update the National EPI Policy to reflect all the new WHO approved developments in the practice of immunization *2.* Support legislative synthesis of the Immunization Bill *3.* Review and finalize the MOH draft Fixed Assets Policy *4.* Conduct a study to know the cost of a fully immunized child in the country *5.* Develop a training course curriculum for vaccinators at certificate level *6.* Develop a Comprehensive EPI Financial Management Operational Manual

7 Cold Chain Equipment Optimisation Platform (CCE OP)

If you intend to request additional support from the CCE OP, please address the following questions:

- Recognising that the CCE OP as a key function of the supply chain system, should contribute, among other immunisation components, to achieving immunisation coverage goals and should address inequities and gender barriers to immunisation delivery, what are the country **CCE rehabilitation and equipment needs** (i.e. type of equipment, capacity, number, location etc.)? What is the proposed strategic equipment deployment plan (i.e. what type of equipment to what region or district)?
- What are the proposed preventive and corrective **maintenance strategies** for requested CCE OP-supported CCE and how will these be monitored and with what funding(s)? Who (outsourced and/or internalised) is accountable for these maintenance activities?
- How does the requested CCE OP support **complement and link with other on-going and/or planned Gavi support** (e.g. HSS) and other partner supports.
- How will the country **sustainably invest in CCE acquisition and maintenance** in the post-CCE OP support period?
- What strategies exist to **dispose of obsolete and irreparable equipment** to be replaced by CCE OP investment?

8 Financial sustainability and transition

8.1 Describe how the government is going to ensure programmatic sustainability of the results achieved by the Gavi support. Where Gavi is being asked to support recurrent costs, please justify.

The Ministry of Health will adopt and institute cost effective strategies for improving and maintaining immunization coverage and other indicators accomplished by this grant. The MOH will sustain gains made through the below mechanisms:

a). Periodically assess and monitor the grant performance

b). Work with partners and CSOs to advocate for increase in immunization support from Government

c). Improve resource mobilization and ensure effective and efficient use of resources

d). Expand immunization to underserve and vulnerable population

e). Improve demand for immunization service through community engagement and public education

f). Allocate internal/domestic resources to immunization program

Recurrent costs supported by Gavi will be covered by the Ministry at the end of the grant by instituting the following:

a). HRH payment: MOH will gradually absorb staff that are paid by the grant on government's payroll and increase monthly incentive for those that are receiving top up incentive

b). Infrastructure: Government resources will maintain warehouses and regional stores constructed by the grant in the county budgetary allocations and the National Drugs Services (NDS) management arrangement.

c). Vehicles and Motorcycles: purchased vehicles and other logistics will be annually insured by government and their repair and maintain cost will be managed by the various counties operational budgetary allocation from national government

8.2 How has a government-led process ensured transparency and coherence regarding co-financing, partner and other donor support?

The Ministry has conducted regular annual health sector review conferences since 2007 to account for resources and demonstrate progress. Apart from the annual sector review meetings, the Ministry prepares and disseminates annual performance reports and conducts quarterly health sector coordination committee meetings to share information, set the sector development agenda and make critical decisions.

Part C: Country documentation

The following documents are typically shared with Gavi as part of routine monitoring of Gavi support, and already available, there is no need to resubmit. However, these should be referred to alongside this Programme Support Rationale to help inform discussions and decisions on future Gavi support.

Retrospective documents	Forward-looking documents
Insights into Gavi's grant support and implementation • Joint appraisal from previous year • Performance framework • Operational work plan & budget • Financial reports **Data on programme status, challenges** • EPI review • Assessments related to coverage & equity of immunisation • EVM Assessments and progress on improvements • Surveys on coverage data and/or quality (coverage surveys, DHS or MIC survey) • An explanation of specific geographic areas and populations (hard to reach, marginalised populations, or low coverage areas) that will be targeted through the Gavi HSS support • Past SIA reports **Data on programme functioning** • Programme and financial audits • Programme Capacity Assessment	National strategies, plans, and budgets for health and immunisation (e.g. cMYP), including the transition plan when relevant

ANNEX 1

OBJECTIVES and ACTIVIVITIES for GAVI HSS 2016 Liberia _Draft 1_v 10th August 2016

STRATEGIC OBJECTIVE 1: SERVICE DELIVERY-HRH
STRATEGIC OBJECTIVE (Medium Term Goal) 1*: Service Delivery:* *Increase access to quality EPI and other priority RMNCAH services (including ANC, PMTC, FP, etc.) by target populations, especially populations that are inadvertently deprived[10] from immunization services so as to increase equitable coverage and uptake of EPI and other priority RMNCAH services by December 2021*
Specific Objective 1.1: ***To strengthen outreach services with emphasis on poor performing districts below 70% of penta 3 coverage using three pronged approach (fixed, outreach and mobile) so as to increase coverage and equitable access of target populations, including hard-to-reach communities, for EPI and other priority RMNCAH services in the grant period***
Activity 1.1.1: Conduct monthly conventional (one-day) immunization focused integrated outreaches in communities that are far (beyond 5Kms) from the health facility
Activity 1.1.2: Conduct monthly (one-day) immunization focused integrated Market-Day outreaches to offer opportunity for more children and mothers to receive immunization and other RMNCAH services
Activity 1.1.3: Conduct quarterly 5-day immunization focused integrated **Camping Outreaches** to very remote extremely hard-to-reach communities with support of community leaders
Activity 1.1.4: Do mapping of all the major rural markets with GPS coordinates and indicate the specific market days of each market to enable accurate planning of market-day outreaches in each district
Activity 1.1.5: Procure 300 motorbikes for all health facilities providing immunization services to transport health workers to provide outreach services to distant communities
Activity 1.1.6: Procure fuel for the 600 motorbikes used for transporting health workers to provide outreach services to distant communities
Activity 1.1.7: Provide support for maintenance of 600 motorbikes used for transporting health workers to provide outreach services to distant communities
Activity 1.1.8: Provide allowances for all staff carrying out the three types of outreach services (the conventional, Market-day and Camping outreach services) to distant communities
Specific Objective 1.2: ***To strengthen EPI focused supportive supervision in order to improve the quality and uptake of EPI services in the 91 health districts in the grant period***
Activity 1.2.1 Conduct central level training of Master Trainers in IIP (Immunization In Practice) for 30 health professionals for 5 days.
Activity 1.2.2 Conduct County level IIP training of 2 members from each DHT (District Health Team) in all the 15 counties
Activity 1.2.3: On rotational basis, five-members of the DHT/CHT in the 91 health districts to conduct quarterly EPI mentorship-based support supervision of health facilities using the IIP approach
Activity 1.2.4: Print 1200 copies of the IIP Manual for dissemination to all health facilities
Activity 1.2.5: Procure 25 vehicles for support supervision of EPI and other support systems and operations (18 for CHTs; 2 for Regional Vaccine Stores; 5 for National / MOH EPI Program)

[10] Populations that are inadvertently deprived from immunization services in Liberia may include: those distant from health facilities, very remote and extremely hard-to-reach, the urban poor, etc.

Activity 1.2.6: Provide fuel for the 25 vehicles for support supervision of EPI and other RMNCAH services
Activity 1.2.7: Provide support for maintenance of the 25 vehicles for supportive supervision of EPI and other RMNCAH services
Activity 1.2.8: Provide allowances for all staff carrying out supportive supervision of EPI services
Specific Objective 1.3: ***To update the EPI curriculum for training institutions to reflect all the new WHO approved approaches, technologies and emerging Public Health issues in the country's immunization program and health system for improving EPI outcomes***
Activity 1.3.1: Review/update the EPI curriculum and set timeline for commencement of the New EPI Curriculum
Activity 1.3.2: Orient the 25 tutors of health manpower training institutions (especially nursing/midwifery, clinical officers and medical school for doctors) on the updated EPI curriculum
Activity 1.3.3: Print 100 copies of the New EPI Curriculum for distribution to the 15 health manpower training institutions
Specific Objective 1.4: Improve the surveillance of Adverse Events Following immunization (AEFI) at all levels of the health system in the context of ensuring patient safety in EPI service delivery and other healthcare settings in the entire grant period
Activity 1.4.1: Revise the general Patient Safety Policy to include Patient Safety in EPI service delivery and significance of AEFI surveillance
Activity 1.4.2: Develop harmonised guideline on general Patient Safety and Patient Safety in EPI services, its implementation plan and related AEFI surveillance tools
Activity 1.4.3: Print 1,320 Patient Safety Policy Guidelines, 1,320 AEFI Guidelines and 1,320 Reporting Tools to cover the entire grant period
Activity 1.4.4: Establish independent AEFI expert review committee, train them for causality assessment and facilitate them to sit every four/six months per year
Activity 1.4.5: Train Master Trainers for five days for 30 CHT officials on patient safety, AEFI surveillance, reporting system and case management
Activity 1.4.6: Train 1200 health workers in health facilities and all DHOs on patient safety, AEFI surveillance, reporting system and case management within five years
Activity 1.4.7: Include AEFI surveillance reporting and support supervision in the IDSR/VPD reporting and support supervision ***NB: This is a cost-free activity***

STRATEGIC OBJECTIVE (Medium Term Goal) 2: Logistics and Supply Chain Management (LSCM) Or Procurement & Supplies Management (PSM)
Strategic Objective 2: PSM/LSCM: Strengthen the logistics and supply chain management system of MOH/EPI in order to improve the efficiency of stock management and distribution of vaccines and other essential medical commodities at all levels of the health system in all the 15 counties by December 2021
Specific Objective 2.1: Expand the cold and dry storage capacities for vaccines and other EPI and medical commodities in the NVS, Regional Vaccine Stores, County Vaccine Stores and Health Facility Vaccine Storage equipment to adequately accommodate all vaccines in the grant period
Activity 2.1.1: Construct a National Vaccine Store (NVS) to sufficiently accommodate: four 40M^3 Walk-in Cold Rooms; one 20M^3 Freezer Rooms; dry storage capacity of 4,584M^3; EPI Office Space for all MOH EPI staff and two Board Rooms; and EPI Central Workshop for CCE and other equipment
Activity 2.1.2: Procure and install four 40M^3 Walk-in Cold Rooms for the new NVS and one 20M^3 Freezer Rooms with continuous temperature monitoring device and voltage stabilizer at central level store at the new location of the NVS
Activity 2.1.3: Extend the dry storage space of each of the two RVS (one in Bong and one in Grand Gedeh) by 1,146M^3 to adequately accommodate the projected volume of EPI dry commodities
Activity 2.1.4: Expand vaccine storage capacity in all 15 county Depots.
Activity 2.1.5: Procure and installed 51 Solar Direct drive refrigerators (20% of GOL contribution, CCEOP)
Specific Objective 2.2: Improve the efficiency of distribution of vaccines and related supplies from the national and regional stores to 15 county depots to ensure delivery of potent vaccines
Activity 2.2.1: Procure one medium-size refrigerated truck and provide fuel and maintenance cost during grant period for delivery of vaccines/cold-chain dependent medicines and other EPI/Medical commodities to sub-national levels
Activity 2.2.2: Procure one medium-size all weather (non-refrigerated) truck and provide fuel and maintenance cost during grant period for delivery of EPI dry equipment and consumables to sub-national levels
Activity 2.2.3: Procure two hardy all-terrain double cabin pick-up trucks for multi-purpose logistic use by the NVS and multi-purpose use by the Urban Strategy EPI Project in Montserrado county
Activity 2.2.4: Procure fuel for the one medium-size refrigerated trucks for delivery of vaccines and cold-chain depended medicines to sub-national levels
Activity 2.2.5: Provide support for maintenance of the one medium-size refrigerated truck for delivery of vaccines and cold-chain depended medicines to sub-national levels
Activity 2.2.6: Procure fuel for one medium-size all weather (non-refrigerated) truck for delivery of EPI dry equipment and consumables to sub-national levels
Activity 2.2.7: Provide support for maintenance of one medium-sized all weather (non-refrigerated) truck for delivery of dry EPI/VPD equipment and consumables to sub-national levels
Activity 2.2.8: Procure fuel for the two hardy all-terrain double cabin pick-up trucks for multi-purpose logistic use by the NVS and multi-purpose use by the Urban Strategy EPI Project in Montserrado county
Activity 2.2.9: Provide support for maintenance of the two hardy all-terrain double cabin pick-up trucks for multi-purpose logistic use by the NVS and multi-purpose use by the Urban Strategy EPI Project in Montserrado county

Specific Objective 2.3: Protect the cold-chain integrity and vaccine potency by improving both vaccine stock management and safeguard mechanisms in vaccine handling from the port of entry at the airport/customs up to health facility level throughout the grant period
Activity 2.3.1: Train 15 teams (of two people) to be County EVM Trainers in effective management of vaccines/EPI commodities and other essential medical supplies with emphasis on quantification, forecasting, Vaccine Tracking and Vaccine Temperature Monitoring.
Activity 2.3.2: Train District EPI Focal Persons, health facility OICs (Officers-in-Charge) and a Midwife / Nurse in-charge of immunization in the health facility in effective management of vaccines/EPI commodities and other essential medical supplies with emphasis on quantification, forecasting, Vaccine Tracking and Vaccine Temperature Monitoring.
Activity 2.3.3: Health facility OICs (Officers-in-Charge) and a Midwife / Nurse in-charge of immunization in the health facility to mentor vaccinators and other health facility staff in effective management of vaccines/EPI commodities and other essential medical supplies with emphasis on quantification, forecasting, Vaccine Tracking and Vaccine Temperature Monitoring. ***NB: Cost-free / Zero Cost but Mentorship Plan and Reports over three subsequent months (i.e. back to back) to be submitted to EPI/MOH.***
Activity 2.3.4: Train 6 customs / ports of entry personnel and 45 NVS, RVS and CVS staff for two days in proper handling of vaccines ***(NB: 6 NVS / Central EPI Officials; 6 RVS Officials; 15 CVS Officials; 1 NVS Driver; 2 RVS Drivers; & 15 EPI Drivers)***
Activity 2.3.5: Print / distribute level specific SOPs for proper management of vaccines: Airport/Customs; NVS; RVS; CVS: DVS; Health Facilities; and Point Service Delivery
Activity 2.3.6: Procure assorted critically needed WHO PQS compliant CCE that do not qualify for the CCE Optimization platform funding (Vaccine Carriers, Cold Boxes)
Specific Objective 2.4: Establish/operationalize Preventive Maintenance System for effective maintenance of cold chain and other critical equipment at the NVS, RVS, CVS and health facilities throughout the grant period
Activity 2.4.1: Retain fifteen County Cold Chain Technicians (CCCTs) to ensure effective maintenance of cold chain equipment.
Activity 2.4.2: Develop/print SOPs for key EVM and cold chain maintenance tasks and distribute them to all health facilities and CVS
Activity 2.4.3: Provide sets of assorted CCE spare parts for critical non-CCE Opt compliant equipment to be kept at NVS and regional vaccine stores for prompt deployment to identified districts/health facilities that are in need.
Activity 2.4.4: Equip and furnish a central level workshop for repair and maintenance, spare parts storage and hands-on training on cold chain maintenance
Specific Objective 2.5: Establish an electronic Integrated Logistics Management Information System (LMIS) for MOH that captures EPI vaccine inventory, other essential medical supplies and logistic entities at national level, all County Health Offices , all District Health Offices and all MOH/EPI-supported health facilities within the first two years of the grant period
Activity 2.5.1: Develop and roll out an electronic integrated LMIS integrating stock management, including CCE and other EPI at programmatic and operational levels (Design the electronic LMIS system and tools, test/pilot the functionality of the system and systematically roll-out the system up to health facility level)
Activity 2.5.2: Train programmatic and operational level users /officials in LMIS
Activity 2.5.3: Carry out EPI cold chain inventory annually in the last quarter of each year ***NB: Cost-free activity since it will be based on the integrated LMIS***

Activity 2.5.4: Conduct internal Effective Vaccine Management (EVM) assessment every two years (last quarter 2017 & last quarter 2019)

STRATEGIC OBJECTIVE (Medium Term Goal) 3: Health Information System (HIS)
Strategic Objective 3: Health Information System (HIS): To strengthen quality of data management, utilization of routine and real time data in the entire HIS (including HMIS, IDSR/VPD Surveillance, CBIS & Surveys including DQS) so as to institute responsive management of EPI and other priority RMNCAH services at all levels of the health system by December 2021
Specific Objective 3.1: To build the technical capacity of 100 District HMIS Focal Persons, 100 District EPI/VPD Surveillance Focal Persons & 15 Regional IDSR Regional Focal Persons in M&E skills with emphasis on data quality improvement and utilization of data for management decision making on performance improvement of EPI & other priority RMNCAH services by the end of the grant period
Activity 3.1.1: Conduct one two-weeks' training of Master Trainers in data quality improvement and data analysis in the first year of the grant for 45 health professionals (made up of fifteen 3-member County Data Quality Improvement Teams- DQITs) in any two of the following Statistical Software Packages for quality data management: Epi Info, SPSS, STATA, CSpro & Advanced Excel ***NB: Each 3-member County Data Quality Improvement Team (DQIT) is consisting of County M&E Officer, County Data Officer and County Surveillance Officer***
Activity 3.1.2: Conduct Annual (five times) ten-days hands-on training for (200 Appx.) health professionals (HMIS, EPI/VPD & IDSR focal persons) at central, county and district levels in data quality improvement and data utilization for management decision making
Activity 3.1.3: Support County data quality implementation team (DQITs) to conduct quarterly follow-up support supervision and mentorship of health workers in data quality improvement at DHOs and health facilities
Activity 3.1.4: Support the national HIS, EPI and IDSR officers to conduct annual national Data Quality Self-Assessment (DQSA) of HMIS and VPD/IDSR using sampled health facilities in counties ***NB: Consider meeting cost of the consensus workshop thru other funding sources or partners***
Activity 3.1.5: Procure one all-weather all-terrain vehicle for HMER quarterly support supervision of county level HIS interventions, including IDSR/VPD surveillance and CBIS
Activity 3.1.6: Procure fuel for the all-weather all-terrain vehicle for HMER quarterly support supervision of county level HIS interventions, including IDSR/VPD surveillance and CBIS
Activity 3.1.7: Provide support for maintenance of the all-weather all-terrain vehicle for HMER quarterly support supervision of county level HIS interventions, including IDSR/VPD surveillance and CBIS
Specific Objective 3.2: Strengthen Community Based Information System to enable capture and transmission of community level health / vital data to be fed into the mainstream HMIS in health facilities in all counties throughout the grant period
Activity 3.2.1: Contribute to the development (Design the CBIS and tools, test/pilot) and systematically roll-out the system up to health facility level where CHAs report)
Activity 3.2.2: Train programmatic and operational (County, District & Health Facility) level officials in the field-operations and health facility-level-operations of the CBIS
Activity 3.2.3: Train 4000 CHAs, within two years, on the use of the CBIS tool in the community ***NB: Cost-free activity since it will be included in one of the modules for training CHAs funded by USAID***

Activity 3.2.4: Support HMER and Community Health Services Division (CHSD) to carry out joint supportive supervision of the CBIS in all counties (quarterly in the first year, six monthly in the second year and once annually in the last three years of this grant)
Specific Objective 3.3: Strengthen the EPI/VPD surveillance system at national, county, district health facility levels, as well as the community based VPD surveillance (CEBS) by the end of the grant period
Activity 3.3.1: Conduct six-monthly integrated IDSR/VPD supportive supervision by county EPI/IDSR Teams with participation of the central MOH EPI & IDSR officials
Activity 3.3.2: Conduct 2-day annual national joint IDSR /VDP Surveillance Review meetings with County EPI/VPD, HMIS and IDSR officials on IDSR and VPD/EPI Surveillance performance ***NB: This activity should precede the MOH annual JAR***
Activity 3.3.3: Timely dissemination of Laboratory results at the operational level, followed by Weekly review of all laboratory database regarding vaccine preventable diseases (VPDs) especially polio, measles, pertussis, yellow fever as well as AEFI
Activity 3.3.4: Collect samples from disease outbreaks for molecular surveillance (Usually WHO receives funds for this directly from GAVI Alliance)
Specific Objective 3.4: Strengthen EPI Performance Monitoring and Tracking by the EPI M&E Unit to continue evidence generation for management decision making in the health system using regular surveys and operational research throughout the grant period
Activity 3.4.1: Conduct 2 In-depth EPI Review during the grant period ***NB: thru Gavi HSS, please budget***
Activity 3.4.2: Conduct EPI Coverage survey in 2021 ***NB: thru WHO or UNICEF- do not budget***
Activity 3.4.3: Conduct vaccines wastage rate study in 2017 ***NB: thru WHO or UNICEF- do not budget***
Activity 3.4.4: Conduct study for estimation of average cost per Fully Immunized Child in 2019 ***NB: thru WHO or UNICEF- do not budget***
Activity 3.4.5: Conduct EVM assessment in the third quarter of 2020 ***NB: thru WHO or UNICEF- do not budget***
Activity 3.4.6: Conduct post-introduction evaluation for new vaccines (IPV and Measles 2nd dose) ***NB: thru WHO or UNICEF- do not budget***
Activity 3.4.7: Carryout EPI KAP survey in the first year and 5th year of the grant ***NB: thru Gavi HSS, please budget***
Activity 3.4.8: Conduct external EPI review in 2018 ***NB: thru WHO or UNICEF- do not budget***
Activity 3.4.9: Conduct SARA in the second quarter of 2021 ***NB: thru WHO- do not budget***
Activity 3.4.10: Conduct MTR GAVI HSS in June / July 2018 ***NB: thru Gavi HSS, please budget***
Activity 3.4.11: Conduct End Term Evaluation Gavi HSS in 2020

NB: thru Gavi HSS, please budget

STRATEGIC OBJECTIVE (Medium Term Goal) 4: CSS, including CSOs
Strategic Objective 4: CSS: ***Enhance community demand for and uptake of quality EPI and other priority RMNCAH services so as to improve EPI and other health outcomes countrywide by December 2021***
Specific Objective 4.1: Enhance the quality of community based health services by improving the skills of Community Health Assistants (CHAs) in public service and Community Health Volunteers (CHVs) to make them more effective in delivering integrated priority community health services, including EPI services by December 2021
Activity 4.1.1: Enhance the quality of community based health services by improving the skills of Community Health Assistants (CHAs) in public service and Community Health Volunteers (CHVs) to make them more effective in delivering integrated priority community health services, including EPI services by December 2021 ***NB: Cost handled by USAID***
Activity 4.1.2: CHAs and CHVs will be engaged in community dialogue to sensitize communities on the importance and availability of immunization services. They will also carry out immunization defaulter tracking in their respective communities.
Specific Objective 4.2: Strengthen Communication and Social Mobilization for EPI in all the 15 counties to increase demand for and uptake of EPI and other priority RMNCAH services in the entire grant period
Activity 4.2.1: Conduct formative / baseline communication research (including media assessment for audience reach, coverage & impact) to guide development of health promotional materials
Activity 4.2.2: Review/Disseminate the EPI Communication Strategy
Activity 4.2.3: Conduct high impact mass media IEC activities on immunization (TV, radios, newspapers, IEC print materials) with special focus on targeting the hard-to-reach areas/populations
Activity 4.2.4: Conduct community sensitization meetings on immunization and surveillance led by the following community leaders: Traditional Chiefs, Religious Leaders and Market Women ***(NB: This is jointly for LIP/CSOs & MOH)***
Specific Objective 4.3: Revitalize community ownership and uptake of immunization services by strengthening EPI focussed advocacy engagements with national policy makers, religious leaders and sub-national stakeholders nationwide by the end of the grant period ***(NB: This is jointly for LIP/CSOs & MOH)***
Activity 4.3.1: MOH to hold national level advocacy meetings on strengthening immunization with key policy makers: The Social Services Committee of the Parliament and the Parliamentary Group on Immunization; MOE; Ministry of Gender & Social Welfare; Monrovia City Council and Religious Leaders
Activity 4.3.2: The consortium of Civil Society Organizations viz. Liberia Immunization Platform (LIP) to hold community engagement activities, including advocacy meetings with key sub-national stakeholders, e.g. County and District Local Government, Community Leaders (local chiefs, religious leaders) and house to house Inter-personal Communication (IPC), KAP study and other social mobilization activities.

STRATEGIC OBJECTIVE (Medium Term Goal) 5: Leadership & Governance and Health Financing
Strategic Objective 5: Leadership & Governance and Health Financing: To improve the effectiveness and efficiency of the EPI at Central MOH, County, District and Health Facility levels countrywide by 2021
Specific Objective 5.1: Strengthen development / review of policies and strategies that improve the performance of EPI at all levels of the health system throughout the grant period
Activity 5.1.1: Review and Update the National EPI Policy to reflect all the new WHO approved approaches, technologies and emerging Public Health issues in the country's immunization program and health system
Activity 5.1.2: Support legislative synthesis of the Immunization Bill and protracted follow-up up to its passing into Immunization Act
Activity 5.1.3: Support the MOH to review and finalize the draft Fixed Assets Policy
Activity 5.1.4: Conduct research to know the cost per fully immunized child
Specific Objective 5.2: Improve the technical performance of health professionals working in EPI at all levels through level-specific technical capacity development throughout the grant period
Activity 5.2.1: Develop a formal training program and certification for EPI vaccinators who are currently trained on-the-job
Activity 5.2.2: Review/adapt the Immunization in Practice (IIP) course for vaccinators to be trained through a well-designed Pre-Service Health Training Institution Curriculum for EPI Vaccinators
Activity 5.2.3: Develop a standardized module for In-service training on Immunization in Practice
Activity 5.2.4: Review and adapt the midlevel managers training module on Immunization
Activity 5.2.5: Train EPI management team at central level in Program Management, Financial Management (for Non-Finance Professional), M&E, Basic Procurement & Supplies Management, and Master MLM training
Specific Objective 5.3: Institute timely financial resource flow, timely financial accountability and financial reporting at Central, County, District and Health Facility levels by December 2021
Activity 5.3.1: Develop a Comprehensive EPI Financial Management Operational Manual to guide timely flow of funds and timely utilization of and accountability for funds from Central Government, Gavi and other Health Development Partners
Activity 5.3.2: Hold an induction meeting for five CHT members from each county on the Comprehensive EPI Financial Management Operational Manual
Activity 5.3.3: Notify through SMS / text messaging counties, districts and health facility officials on EPI financial disbursements to their respective accounts so as to fasten financial management processes
Activity 5.3.4: Support MOH EPI and MOH OFM to carryout joint Supportive Supervision of the financial management performance of the sub-national level (counties, Districts and health facilities) at four-monthly intervals in the first two years of the grant period, then at six-monthly intervals in the remaining three years of the grant period
Specific Objective 5.4: Strengthen the effectiveness of Leadership, Governance and Management of EPI at MOH Central Level throughout the grant period
Activity 5.4.1: Conduct Technical Working Group (TWG) meetings fortnightly (every two weeks) and follow-up / implement action points from the meetings
Activity 5.4.2: Conduct monthly technical coordinating Committee (TCC) meetings and follow-up / implement action points from the meetings
Activity 5.4.3: Conduct quarterly ICC/HSCC meetings and follow-up / implement action points from the meetings

Activity 5.4.4: Provide salary / salary top-ups / incentives for 42 EPI officials
Activity 5.4.5: Recruit an EPI Grant Manager and Routine Immunization Officer to follow-up and support the operational performance of the immunization program at all levels
Activity 5.4.6: MOH Top Management to conduct annual oversight visits to all the 15 counties to provide oversight support to the region and their respective cluster of districts